

Release Date
January 5, 1988

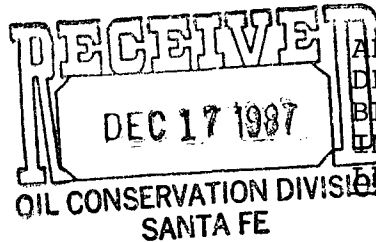
B, DEC



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

R. C. Anderson
Division Manager
Production Department
Hobbs Division

December 16, 1987



APPLICATION TO DOWNHOLE COMMINGLE
DRINKARD (NCT-B) WELL NO. 7
BLINEBRY AND TUBB ZONES, LOCATED
IN UNIT K, SECTION 30-T22S-R38E
LEA COUNTY, NEW MEXICO

W. J. Lemay - Director
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 Tubb pools. The subject well is currently a dual producer pumping both the Blinebry and Tubb through separate tubing strings. Both zones are marginal producers, therefore to continue to dually complete cannot be justified due to the high operating cost associated with dual tubing strings. In the interest of conservation and prevention of waste, we propose to downhole commingle the Blinebry and Tubb 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 Byron Hebert at (505) 393-4121.

Yours very truly,

J. G. M. Anderson
for R. C. ANDERSON

DJK/cjw

Attachments

cc: J. T. Sexton
Oil Conservation Division
P.O. Box 1980
Hobbs, NM 88240

Hobbs Division
Chevron U.S.A. Inc.
Downhole Commingle Application
Drinkard (NCT-B) Well No. 7
Data Sheet

1. Operator: Chevron U.S.A. Inc., P.O. Box 670 Hobbs, New Mexico 88240
2. Lease, Well, Well Location: Drinkard (NCT-B) Well No. 7, 1980' FWL and 2120' FSL of Section 30, Unit K, T-22-S, R-38-E, Lea County, New Mexico
3. Producing Zones: Blinebry and Tubb
4. Decline Curve: The Blinebry is expected to decline at 20% per year after an IP of 5 BOPD and 40 MCFGPD. The Tubb is expected to decline at 20% per year after an IP of 5 BOPD and 180 MCFGPD.
5. Bottom Hole Pressure: The calculated BHP for the Blinebry is 541 psi at a depth of 5705'. The measured BHP for the Tubb is 786 psi at 6298'.
6. Fluid Characteristics: The Blinebry and Tubb are currently surface commingled at the battery. There had been no evidence of fluid incompatibility to date.
7. Well History: This well was spudded 8/2/85 and completed to a total depth of 6450. Ten and three-fourths inch casing was set at 1195 with 775 sacks of cement which was circulated to surface. Seven inch casing was set at 6449 with 750 sacks and 1100 sacks of cement in two stages with both stages circulated. The DV tool is at 4471'. The well was plugged back to 6401'. The Tubb was perforated at 6049' - 6268', acidized with 7000 gals 15% NEFE HCL and fraced with 80,000 gals 70 Quality form pads and 122 lbs of sand. The upper Tubb was perforated at 5898' - 5992', acidized with 1800 gals 15% NEFE HCL and fraced with 39,000 gals 70 Quality form pad and 60,000 lbs of sand. The Blinebry was perforated at 5607' - 5803', acidized with 3500 gals 15% NEFE HCL and fraced with 114,000 gals X-linked gel pad with 273,000 lbs of sand.
8. Value of Commingled Fluids: The subject pools are surface commingled, therefore downhole commingling will not affect the price.
9. Current Production: The Blinebry was last tested on 6/17/87, at which time it was producing 16 BOPD, 4 BWPD and 390 MCFPD. The Tubb was last tested on 3/13/87 at which time it was producing 8 BOPD, 0 BWPD, and 473 MCFGPD.

10. Recommended Oil and Gas Allocations: Based on expected IP's and decline rates

<u>Blinebry</u>		<u>Tubb</u>
50%	Oil	50%
18%	Gas	82%

11. Ownership and Royalty Interests: Ownerships of the two pools is common and correlative rights will not be violated.
12. Future Secondary Recovery Operations: Commingling will not jeopardize the efficiency of future secondary recovery operations.
13. Production Methods: The commingled production will be rod pumped. The fluid level will be monitored to maintain a pumped off condition and to 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

Petro - Lewis Corporation
P.O. Box 90500
Houston, TX 77290

Summit Energy Inc.
1925 Mercantile Dallas Bldg.
Dallas, TX 75201

Texaco Producing Inc.
P.O. Box 3109
Midland, TX 79705

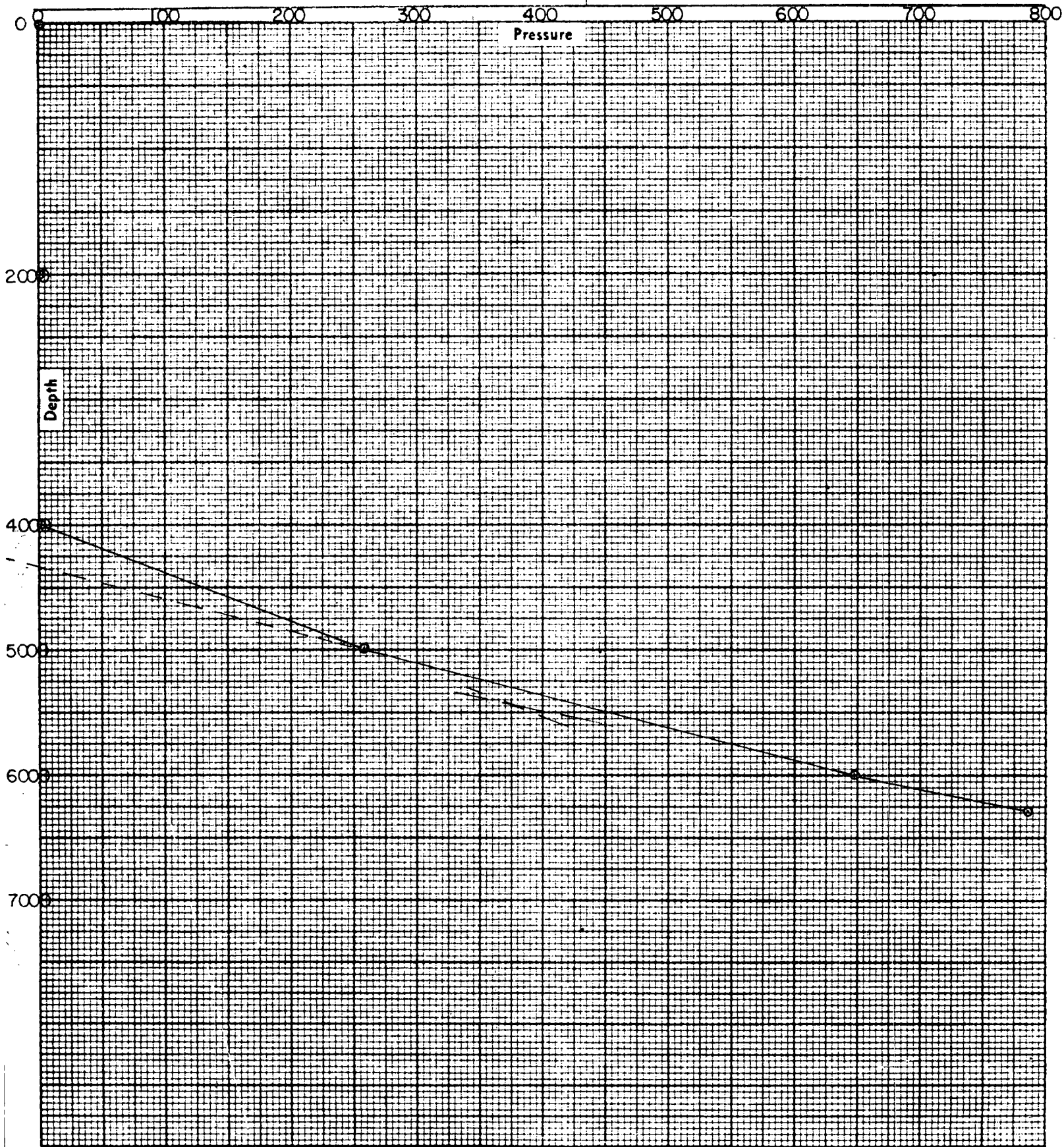
Amoco Production Company
P.O. Box 3092
Houston, TX 77210

Certified Mail - Return Receipt Requested

BOTTOM HOLE PRESSURE SURVEY REPORT

OPERATOR CHEVRON U S A, INC.
LEASE Drinkard "B"
WELL NO. 7
FIELD Tubbs
DATE 4-24-87 TIME 5:00 P.M.
STATUS Shut-in TEST DEPTH 6,298'
TIME S.I. 14 Days LAST TEST DATE _____
CAS. PRES. _____ BHP LAST TEST _____
TUB. PRES. 0 BHP CHANGE _____
ELEV. _____ FLUID TOP 4,340'
DATUM _____ WATER TOP 5,450'
TEMP _____ RUN BY B.T.
CLOCK NO. 23122 GAUGE NO. 19389
ELEMENT NO. 17664 (0-2150 PSI)

DEPTH	PRESSURE	GRADIENT
000	000	
2000	000	Neg.
4000	000	Neg.
5000	259	.259
5500	434	.350
6000	648	.428
6298	786	.463



NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form O-112
Supersedes O-128
Effective 1-1-85

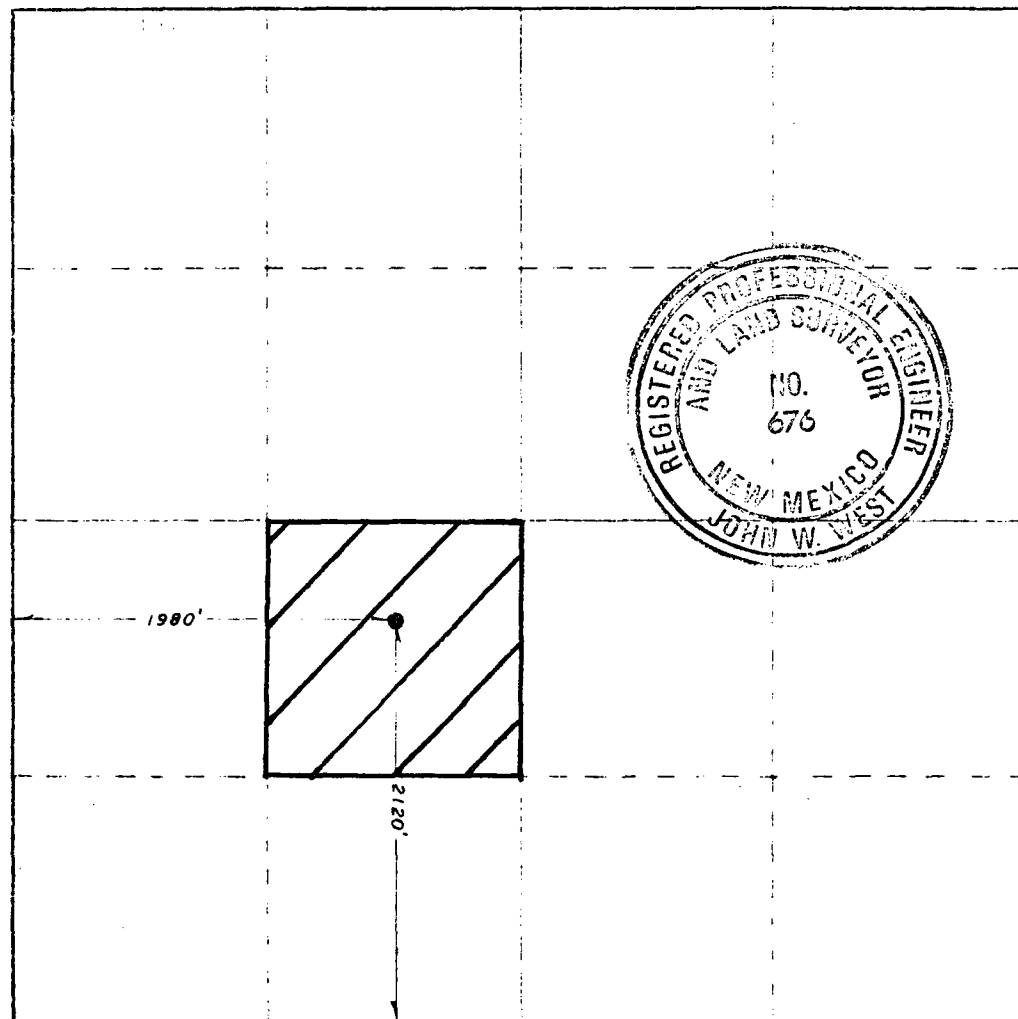
Section 30, Township 22S, Range 38E, County LEA

GULF OIL CORP.		DRINKARD NCT-B		7
K	30	22S	38E	LEA
2120	feet from the SOUTH	line and	1980	feet from the WEST
3338.2	Producing Formation TUBB	Oil	TUBB Oil & GAS	40

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- 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, force-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.

John W. West

Division Production Engineer

CHEVRON U.S.A. INC.

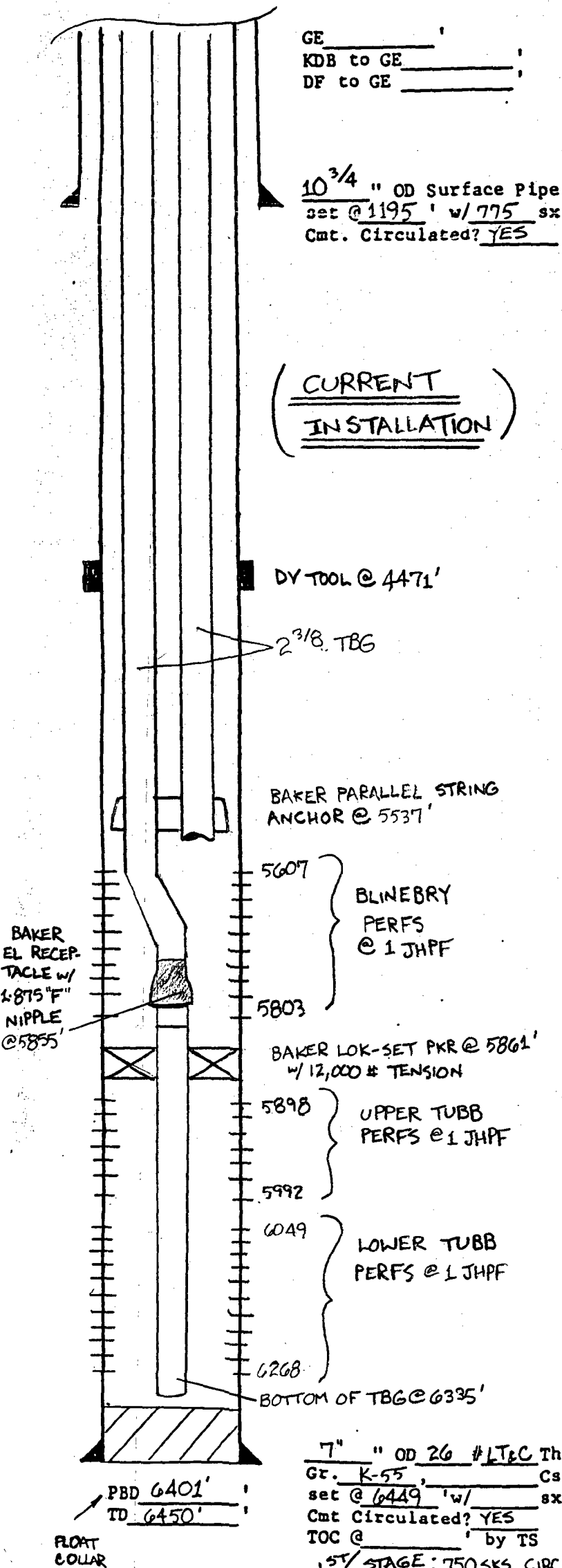
November 5, 1985

I hereby certify that the well location shown on this plat was determined 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.

Plat Restaked 1/15/85
1/24/84

John W. West
JOHN W. WEST
RONALD E. JOHNSON

WELL DATA SHEET

WELL NO. DRINKARD (NCT-B) #7 FIELD/POOL BLINEBRY OIL & GAS DATE 8-20-85ATION 1980 FEET FROM WEST LINE AND 2120 FEET FROM SOUTH LINESECTION 30 T22S R38E UNIT K COUNTY LEA STATE NMDate Completed AUG. 1985Initial Formation BLINEBRY & TUBB

From: _____ to _____ GOR _____

Initial: Production ☐ bopd _____ bwpd _____Or: Injection ☐ bwpd @ _____ psi

Completion Data:

PERF'D TUBB @ 6049, 50, 76, 77, 96, 97, 103, 04, 29, 30, 39, 40, 58, 59, 96, 97, 6210, 11, 24, 25, 44, 45, 67 & 68 w/ 1 JHPF. ACIDIZE w/ 7000 GALS 15% NEFE HCL w/ 1500 SCF N₂ PER BBL. DROPPED 1-1.3 SG RCNBS EVERY 5 BBLs FOR 1ST 3000 GALS & EVERY 2 BBLs FOR REMAINDER. FRAC'D w/ 80,000 GALS 70% FOAM & 122,000 # 20-40 SAND @ 20 BPM & 4700 PSI. SET RBP & PERF'D UPPER TUBB @ 5898-5900, 5918-20, 5960-62 & 5990-92 w/ 1 JHPF. BROKE DOWN w/ 300 GALS NEA & ACIDIZED w/ 1500

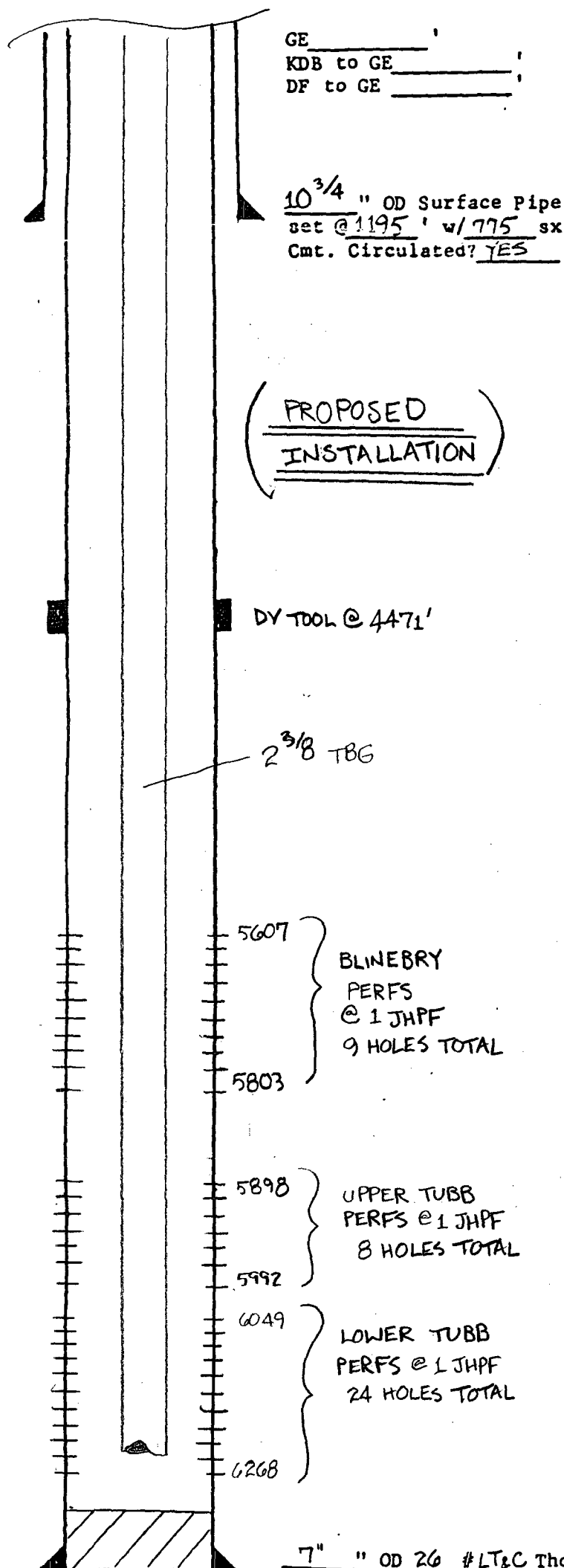
Subsequent Workover or Reconditioning:

GALS 15% NEFE HCL & 1500 SCF N₂/BBL @ 6 BPM. FRAC'D UPPER TUBB w/ 39,000 GALS 70% FOAM & 60,000 # 20-40 SAND @ 20 BPM

PERF'D BLINEBRY @ 5607, 38, 55, 71, 89, 5702, 35, 63 & 5803 w/ 1 JHPF. BROKE DOWN w/ 500 GALS 15% NEFE HCL & ACIDIZED w/ 3000 GALS 15% NEFE HCL DROPPING A TOTAL OF 21 GALS. AIR & P 4 BPM & 2500 PSI. FRAC'D w/ 114,000 GALS 40% X-LINKED GEL & 273,000 # 20-40 SAND @ 17 BPM & 3850 PSI. TUBED UP AS DUAL. BLINEBRY IFF 16 BOPD, 49 BWPD & 166 MCF GPD. TUBB CI PENDING GAS CONNECTION. (PUMPED 26 BOPD, 10 BWPD & 41 MCF GPD AFTER FRAC)

Present Inj. ☐ bwpd @ _____ psi Date _____
Present Prod. ☐ bopd _____ bwpd Date _____
GAS _____ MCFPD _____

Remarks Or Additional Data:

WELL NO. DRINKARD (NCT-B) #7 FIELD/POOL BLINEBRY OIL & GAS DATE 8-20-85ATION 1980 FEET FROM WEST LINE AND 2120 FEET FROM SOUTH LINE
SECTION 30 T22S R38E UNIT K COUNTY LEA STATE NMDate Completed AUG. 1985Initial Formation BLINEBRY & TUBB

From: _____ to _____ GOR _____

Initial: Production ☐ _____ bopd _____ bwpd _____Or: Injection ☐ _____ bwpd @ _____ psi

Completion Data:

PERF'D TUBB @ 6049, 50, 76, 77, 96, 97, 6103, 04, 29, 30
39, 40, 58, 59, 96, 97, 6210, 11, 24, 25, 44, 45, 67 & 68 w/ 1
JHPF. ACIDIZE w/ 7000 GALS 15% NEFE HCL w/ 1500 SCF
N₂ PER BBL. DROPPED 1-1.3 SG RCNBS EVERY 5 BBLs FOR 15'
3000 GALS & EVERY 2 BBLs FOR REMAINDER. FRAC'D w/
80,000 GALS 70 Q FOAM & 122,000 # 20-40 SAND @ 20
BPM & 4700 PSI. SET RBP & PERF'D UPPER TUBB @
5898-5900, 5918-20, 5960-62 & 5990-92 w/ 1 JHPF.
BROKE DOWN w/ 300 GALS NEA & ACIDIZED w/ 1500

Subsequent Workover or Reconditioning:

GALS 15% NEFE HCL & 1500 SCF N₂/BBL @ 6 BPM.
FRAC'D UPPER TUBB w/ 39,000 GALS 70 Q FOAM &
60,000 # 20-40 SAND @ 20 BPM

PERF'D BLINEBRY @ 5607, 38, 55, 71, 89, 5702, 35, 63
& 5803 w/ 1 JHPF. BROKE DOWN w/ 500 GALS 15%
NEFE HCL & ACIDIZED w/ 3000 GALS 15% NEFE HCL
DROPPING A TOTAL OF 21 GALLS. AIR & P 4 BPM & 2500
PSI. FRAC'D w/ 114000 GALS 40 # X-LINKED GEL &
273,000 # 20-40 SAND @ 17 BPM & 3850 PSI
TUBED UP AS DUAL. BLINEBRY IFF 16 BOPD, 49 BWPD
& 166 MCF GPD. TUBB CI PENDING GAS CONNECTION.
(PUMPED 26 BOPD, 10 BWPD & 41 MCF GPD AFTER FRAC)

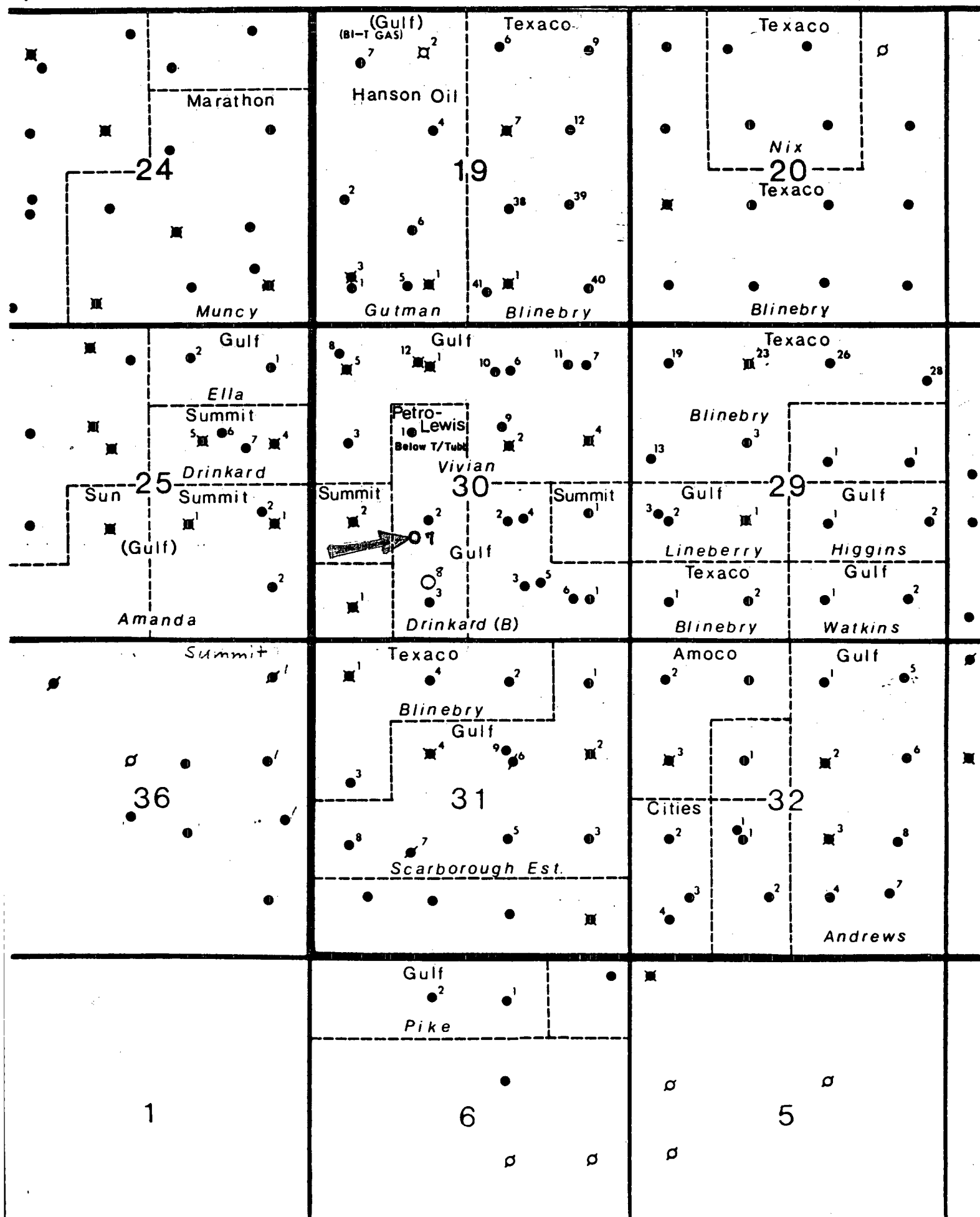
Present Inj. ☐ _____ bwpd @ _____ psi Date _____
Present Prod. ☐ _____ bopd _____ bwpd Date _____
GAS _____ MCFPD _____

Remarks Or Additional Data: _____

FLOAT
COLLAR

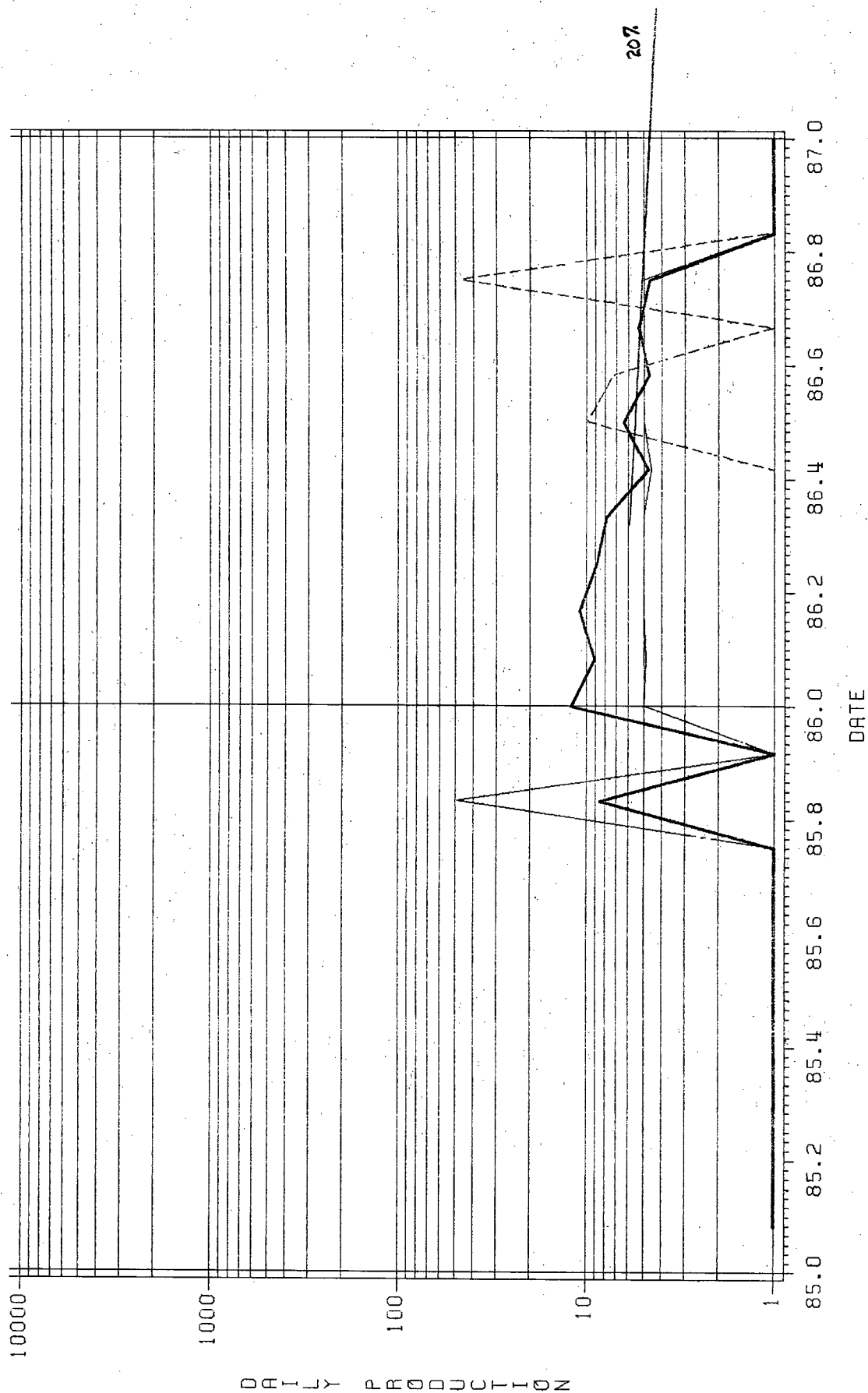
7" " OD 26 #LT&C Thd
Gr. K-55, _____ Csg.
set @ 6449 'w/ _____ sx
Cmt Circulated? YES
TOC @ _____ ' by TS
1ST STAGE: 750 SKS, CIRC 150 SKS
2ND STAGE: 1100 SKS, CIRC 178 SKS

R 38 E



PRODUCTION DATA PLOT

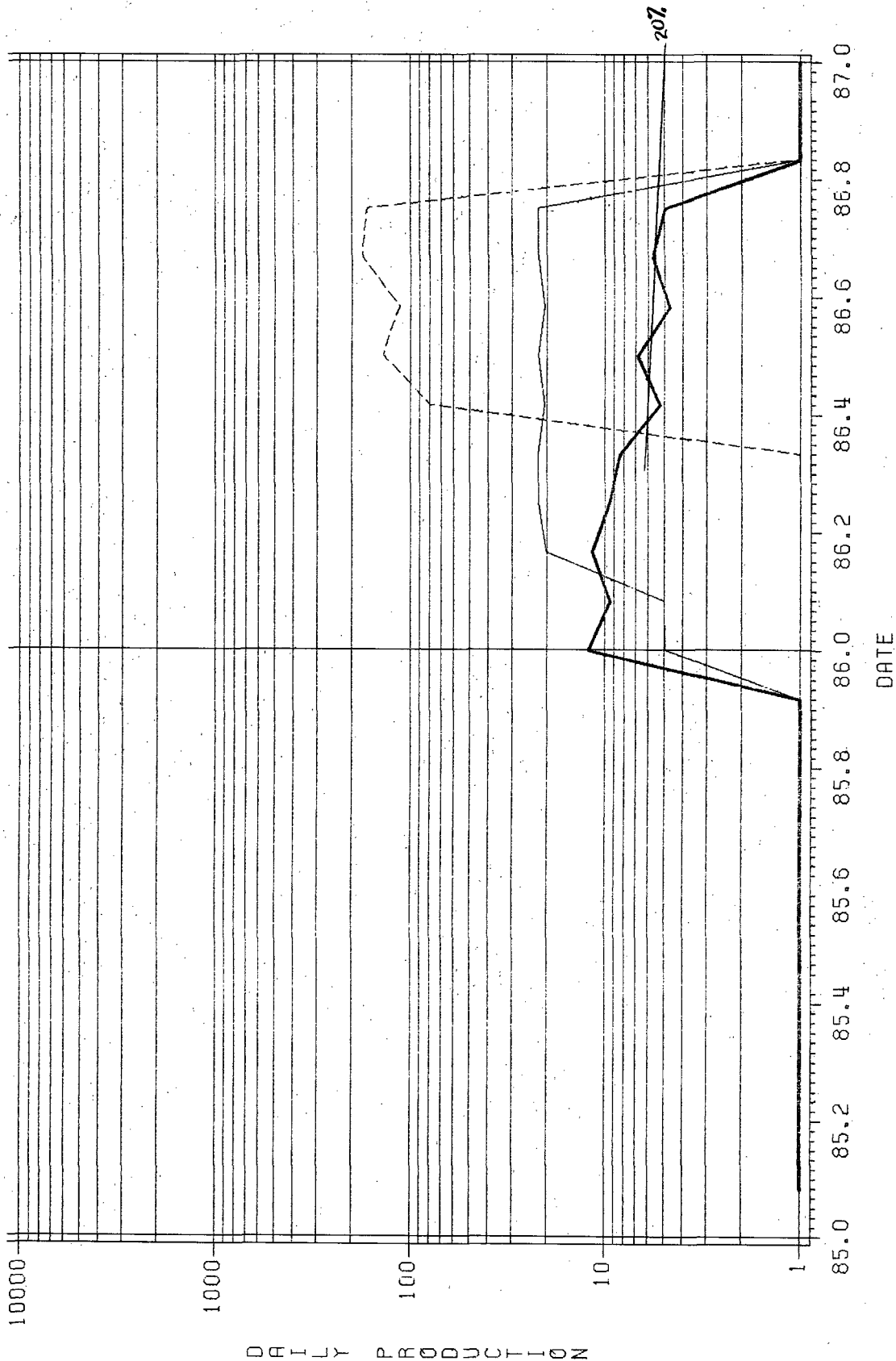
WELLN0=007 WELLN0=DRINKARD NCT 8 PETROLEUM INFORMATION OPERNA=CHEVRON U.S.A. INC. FLDRESNA=BLINEBRY OIL AND GAS



HEAVY SOLID LINE=BOPD
SOLID LINE=BWP
LIGHT DASHED LINE=MCFD

PRODUCTION DATA PLOT

WELLNO=007 WELLNA=DRINKARD NCT B PETROLEUM INFORMATION OPERNA=CHEVRON U.S.A. INC. FLORESNA=TUBB OIL AND GAS



HEAVY SOLID LINE=BOPD
SOLID LINE=BWP
LIGHT DASHED LINE=MCFD

TO: A.W. BOHLING
 FROM: B.P. HEBERT

MAY 6 1987

SUBJECT: DRINKARD B#7: DATA FOR DHC
 PERMIT APPLICATION

OUR FILE:

YOUR FILE:

BHP DATA

I) TUBB FORMATION: BHP = 786 PSI (SEE ATTACHED BUILDUP)

II) BLINEBRY FORMATION:

$$BHP = P_{GAS} + P_{LIQUID}$$

$$P_{GAS} = P_{WH} \left(\text{STATIC} \right) e^{\frac{0.01875 \times SG \times D}{S_{AVG} \times T_{AVG}}} \quad (\text{CRAFT \& HAWKINS CORRELATION})$$

$$= 95 \text{ PSI } e^{\frac{(0.01875)(.706)(4650)}{(0.831)(110+460)}}$$

$$= 108 \text{ PSI}$$

$$P_{LIQUID} = .052 \times MW \times H$$

WHERE: MW = DENSITY OF OIL-WATER MIXTURE (50% OIL & 50% WATER)

$$\gamma_{H_2O} = 8.8 \text{ LB/GAL}$$

$$\gamma_{OIL} = 7.0 \text{ LB/GAL } (37^\circ \text{ API})$$

H = HEIGHT OF FLUID COLUMN

= MID PERF - STATIC FLUID
 DEPTH LEVEL DEPTH

$$P_{LIQUID} = .052 \left[.50 (7.0 + 8.8) \right] (5705 - 4650)$$

$$= 433.4 \text{ PSI}$$

$$BHP = 541.4 \text{ PSI}$$

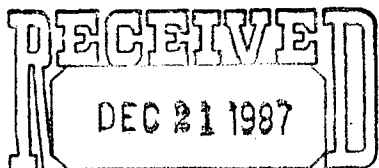


STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

GARREY CARRUTHERS
GOVERNOR

12-18-87

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 89241-1980
(505) 393-6161



OIL CONSERVATION DIVISION

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

RE: Proposed:

MC
DHC ☒
NSL
NSP
SWD
WFX
PMX

Gentlemen:

I have examined the application for the:

Chevron USA Inc. Drinkard NCT-B #7-K 30-22-38
Operator Lease & Well No. Unit S-T-R

and my recommendations are as follows:

THIS COMFORMS TO RULES BUT GAS
PRODUCTION IS NOT MARGINAL & OUR SYSTEM
NEED TO BE LOOKED AT

Yours very truly,

Jerry Sexton
Supervisor, District 1

/ed