



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

12-11-90

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

*Dec 28 5*  
*amended*

RE: Proposed:

MC \_\_\_\_\_  
DHC X \_\_\_\_\_  
NSL \_\_\_\_\_  
NSP \_\_\_\_\_  
SWD \_\_\_\_\_  
WFX \_\_\_\_\_  
PMX \_\_\_\_\_

Gentlemen:

I have examined the application for the:

Campbell & Hedrick      Lockhart #2-m      17-21-37  
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

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

CAMPBELL & HEDRICK

P. O. BOX 401 220 MID-AMERICA BLDG.

MIDLAND, TEXAS 79701

November 15, 1990

COMMISSION

NOV 16 AM 9 38

Re: Request for Exception  
to Rule 303-A  
Down-Hole Commingling  
Campbell & Hedrick  
Lockhart No. 2  
Unit M, 660' FSL & 990'  
FWL, Sect. 17, ~~21S-~~21S-  
37E, Lea County,  
New Mexico  
Blinebry Oil, Tubbs  
Oil & Drinkard Oil.

Energy & Minerals Department  
Oil Conservation Division  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Gentlemen:

Campbell & Hedrick, P. O. Box 401, Midland, Texas 79702, request administrative approval for an exception to Rule 303-A to permit the commingling within the well bore of production from the Blinebry Oil zone, the Tubbs Oil zone and the Drinkard zone in captioned well. All three zones are very low marginal.

The Drinkard zone was TA'd November 6, 1978 with a #45A Baker Model C Bridge Plug. The Tubb Oil and the Blinebry Oil zones were perforated, treated and tested. Campbell & Hedrick applied for permission to DHC the Blinebry Oil-Tubbs Oil zones and was authorized to do so in DHC #285. Removing the Bridge Plug which shuts off the Drinkard zone as the well now is completed so as to commingle down-hole the three zones will enhance the economics of this well and permit the recovery of oil and gas that otherwise may not be recovered by this well.

All three zones in this well are classified as oil zones. Since the Drinkard was pumping when it was TA'd and since the Blinebry-Tubbs no longer will flow consistently, it is proposed to put the well to pumping after down-hole commingling is approved. This will eliminate any possibility of fluid thieving into the old Drinkard completion and thereby maximize recovery of oil. Total combined production is estimated to be  $\pm$  10BOPD, 1BWPD and 160Mcfpd.

Ownership of the three zones to be commingled is common as to working interest, royalty and overriding royalty. Other information requested in Section 2 follows:

- (a) Campbell & Hedrick  
P. O. Box 401  
Midland, Texas 79702

1

2

3

- (b) A M Lockhart Well No. 2 (Federal Lse. No. 032096(a) ).  
660' FSL & 990' FWL  
Sect 17, T-21S, R-37E  
Lea County, New Mexico

- (c) Plat of the area Attachment 1.

- (d) Form C-116 for the Blinebry-Tubbs DHC #285.  
Attachment 2.  
No recent test data is available on the Drinkard zone.

- (e) Production decline curves Blinebry-Tubbs DHC #285  
Attachment 3.

Production decline curves Drinkard Attachment 4.

Complete resume of the well's history including description  
of treating, testing, etc. each zone and prognostication of  
future production from each zone Attachment 5.

- (f) Estimated BHP each zone

Blinebry	310
Tubbs	310
Drinkard	275

- (g) Crude from all three zones is classified West Texas-New  
Mexico Intermediate and on other leases in the area surface  
commingling confirms there are no incompatibilities.

- |  |          |
|--|----------|
| (h) Value of Blinebry-Tubbs production | \$123.50 |
| Value of Drinkard production           | 160.32   |
| Value of combined production           | 283.82   |
| Value of commingled production         | 283.90   |

- (i) It is requested that production as to oil be allocated

Blinebry 37% Tubbs 8% Drinkard 55%

and that production as to gas be allocated

Blinebry 48% Tubbs 7% Drinkard 45%

- (j) All offset operators have been notified by a copy of this  
application as has the Bureau of Land Management.

Bureau of Land Management, P.O. Box 1778, Carlsbad, N.M. 88220  
Texaco, P. O. Box 3109, Midland, Texas 79702-3109  
Oryx, P.O.Box 1861, Midland, Texas 79702-1861



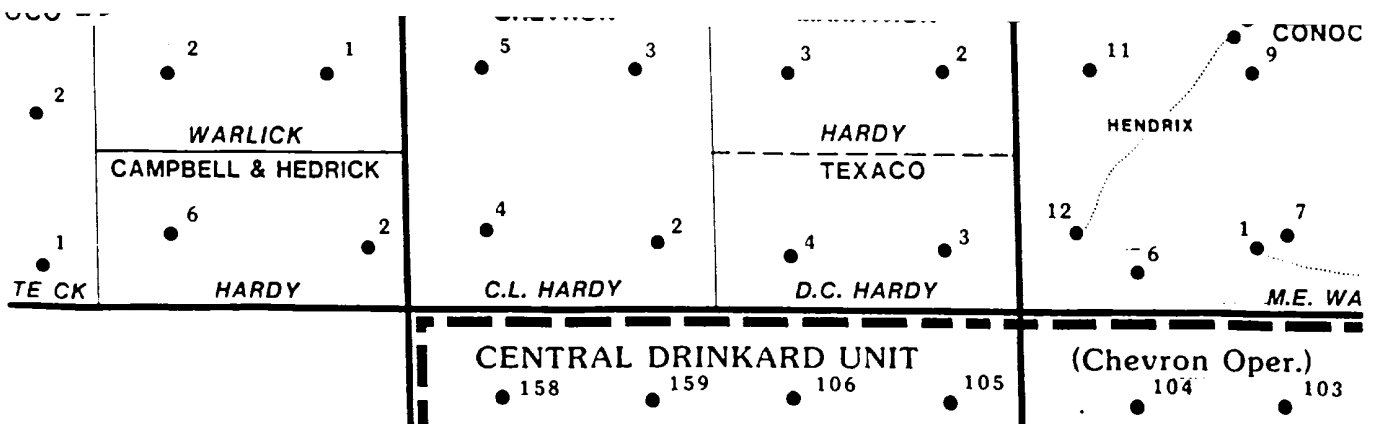
Page 3

Chevron, P.O. Box 1150, Midland, Texas 79702-1150

Very truly yours,

Partner

OFH:mes



**R - 37 - F**

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Campbell & Hedrick Lockhart -2  
Well Sketch  
Blinebry/Tubbs/Drinkard Fields

10 3/4" Surface csg set  
at 304' with 200 sax neat  
cement. circulated cement.

7 5/8 24lb H-40 csg set at  
2788'. Cemented with 1150  
sax 3% Gel and 100 sax neat.  
circulated cement.

Blinebry Perfs  
5670-5735 with 3 1/8'  
WJM, 20 holes

Tubbs Perfs 2 shots  
per foot 6542, 6547,  
6532, 6517, 6406, 6373,  
6347, 6309, 6291, 6270,  
6241, 6212

5 1/2" 15.50 and 14lb J55 csg set at  
6600'. cemented with 200 sax 4%  
Gel and 100 sax neat. Top  
cement 3450'.

6585 Baker Retrievable  
B.P.

Drinkard Open hole  
6600 to 6690.

TD 6690'



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

# OIL CONSERVATION DIVISION

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

## GAS-OIL RATIO TEST

Operator		Pool		County											
CAMPBELL & HEDRICK		BLINEBRY OIL TUBBS OIL		LEA											
Address		TYPE OF		Completion		Special									
P. O. BOX 401, MIDLAND, TEXAS 79702		TEST - (X)		<input type="checkbox"/>		<input checked="" type="checkbox"/>									
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	SITING	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 BRLS	GRAV. OIL		OIL BRLS
LOCKHART	2	M	1 /	21 S	37 E	11/8/90 F	24/64	25/20	#M 33	24	Tr	34.0	1.64	84.0	51219
Downhole Commingling Permit No. <u>DHC #285</u>															
Oil Percentages - Zones Involved 83% - Blinebry Oil & Gas - <b>1.36</b> 17% - Tubbs Oil & Gas - <b>.28</b> 100% - Total <b>1.64</b> all zones															

**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)

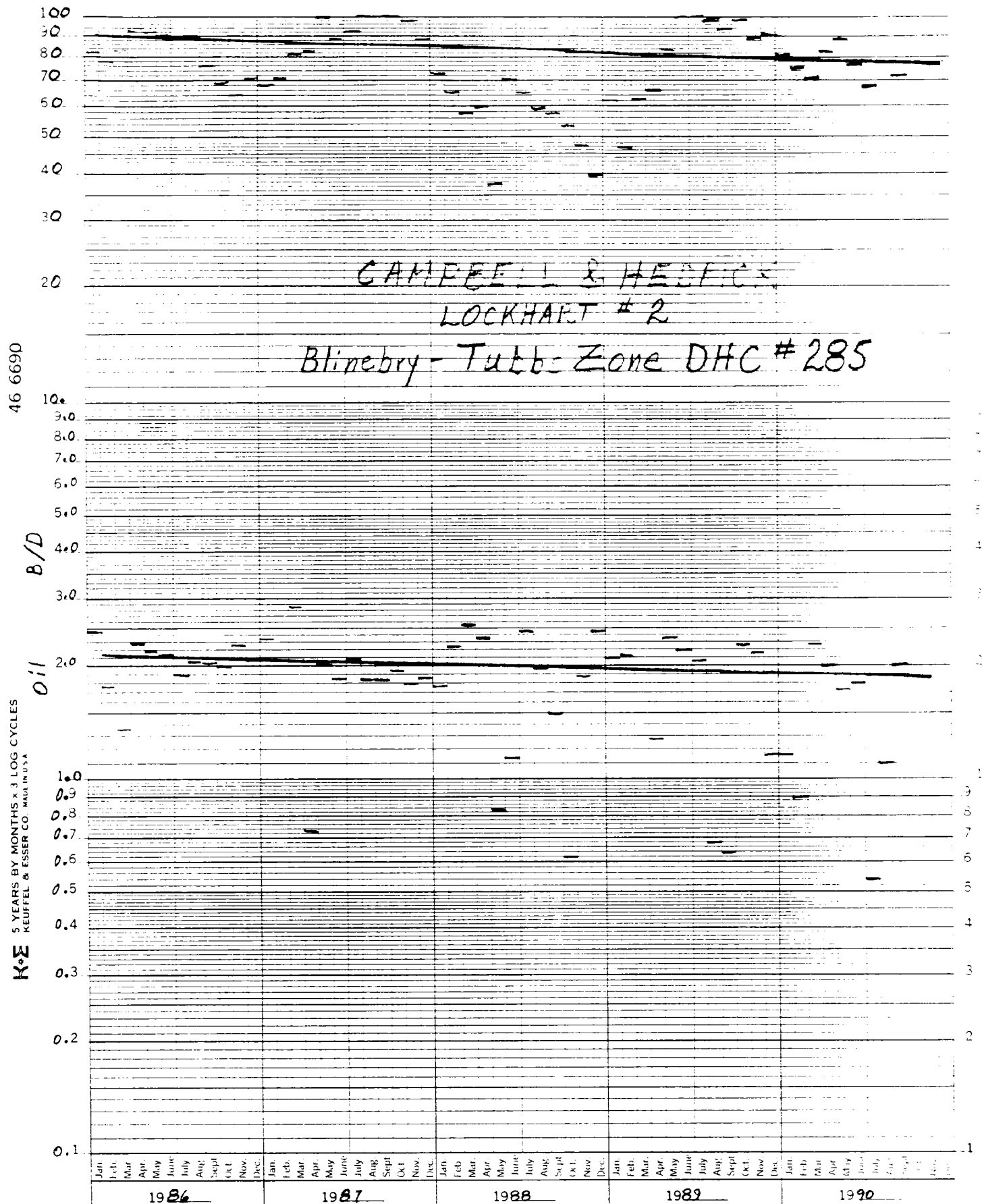
**I hereby certify that the above information is true and complete to the best of my knowledge and belief.**

**Signature**

O. F. HEDRICK, JR., PARTNER  
Printed name and title

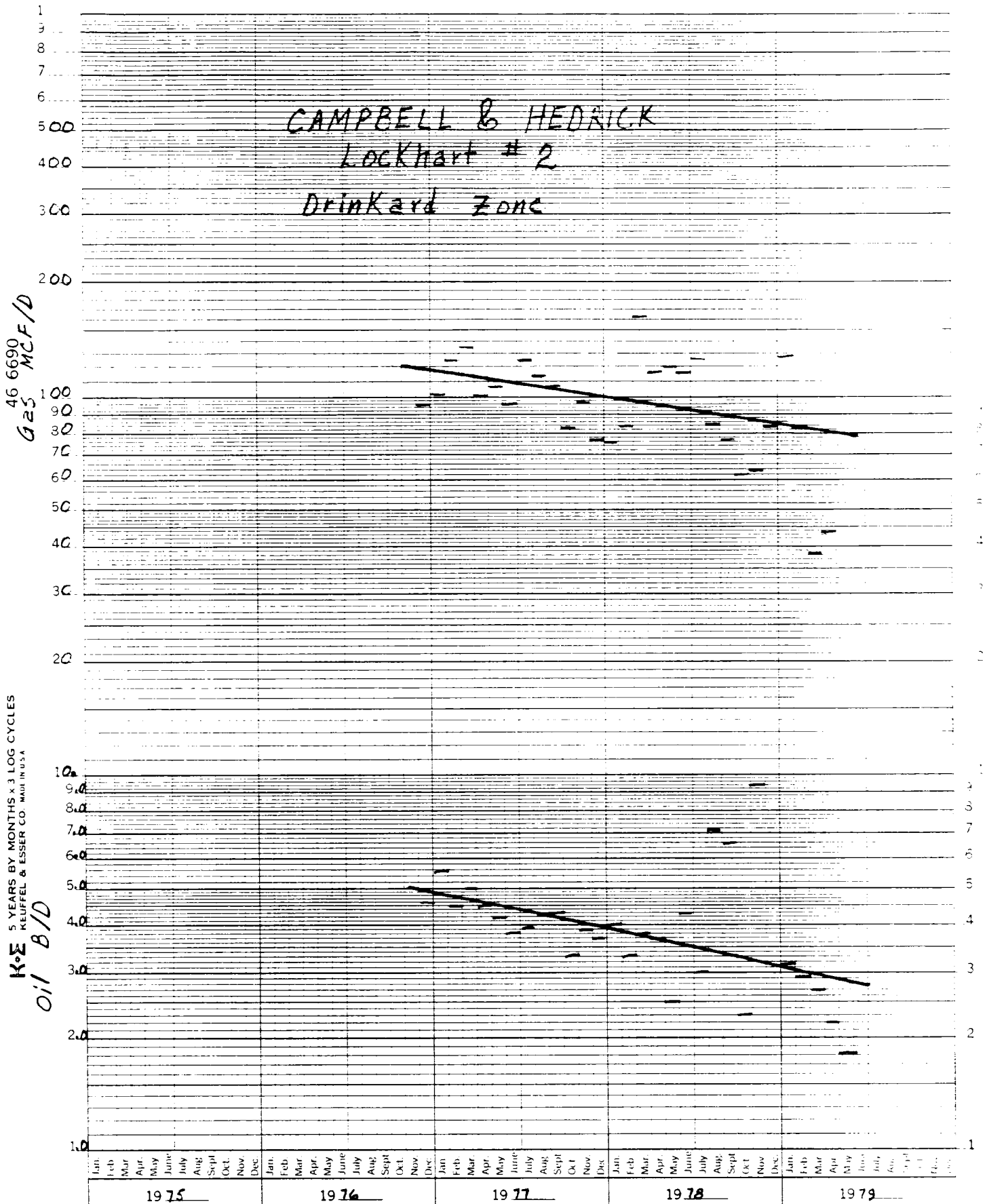
Date 11/15/90 Telephone No. 915-684-4393





The following information is provided for informational purposes only and is not intended to be used for any other purpose. It is not a contract and does not constitute an offer. The information is provided for informational purposes only and is not intended to be used for any other purpose. It is not a contract and does not constitute an offer. The information is provided for informational purposes only and is not intended to be used for any other purpose. It is not a contract and does not constitute an offer.

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Blinebry zone: Perforate interval 5670-5735 with 3 1/8" WJM, 20 holes. Run Baker RTBP and Baker Full Bore on 2 7/8" OD frac tubing. Tested Tubing to 5000psi and casing to 1500#. Set RTBP at 5781 spot 150 gal 15% DS-30 acid and treat with 15000 gal gelled 9lb. brine and 11,250 lbs. 20/40 sand. Max treat pressure 5600psi, min 4000psi, ave inj rate 21 BPM. Swab and flow back load. Flow at rate of 9.7BOPD 8bbl treating fluid and 151mcf gas per day. GOR 15,567.

Tubb zone: Ran perf log and perforated 5 1/2" csg. w/2 shots per foot, 6562', 6547', 6532', 6517', 6406', 6373', 6347', 6309', 6291', 6270', 6241', and 6212'. Acidized above perfs with 3000 gal 15% acid and sand-fractured w/35000gal gelled 9.2 brine with 45,000lb. 20/40 sd using 2 7/8" tubing. Ave inj rate 23BPM, Pressure 5350psi. Well tested 2 BOPD, GOR 10,000. Blinebry and Tubbs zones were commingled under DHC #285 in July 1979.

Drinkard zone: Drinkard production is from open hole, 6600 to 6690'. 12/27/1951 acidize with 1000 gal 15% LT acid. Max pressure 1800psi. ave rate 1.6 BPM. 1/10/1952 acidize with 5000 gal LTXR special. Max pressure 1650psi ave rate 2.4 BPM. 12/8/1956 Frac open hole with 20000 gal refined oil and 40000lb 20/40 sd. Max pressure 2600psi ave rate 25 BPM. Well flowed 80 BOPD. GOR 1861. March 1979 production 2 BOPD and 43Mcf gas per day November 6, 1978 set Baker #45A Model C Ret Bridge Plug at 6585.

Down hole commingling will protect correlative rights, permit the recovery of additional oil from the Drinkard Oil zone and extend the economic life of the well, which will result in additional oil being recovered from the Blinebry and Tubbs zones as well.

