

CASE 5731: TEXACO, INC. FOR  
DOWNHOLE COMMINGLING, LEA  
COUNTY, NEW MEXICO

CASE NO.

5731

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APPLICATION,  
TRANSCRIPTS,  
SMALL EXHIBITS,  
ETC.

BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
August 18, 1976

EXAMINER HEARING

IN THE MATTER OF:

Application of Texaco, Inc. for down-  
hole commingling, Lea County,  
New Mexico.

CASE  
5731

BEFORE: Richard L. Stamets, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the New Mexico Oil Conservation Commission: William F. Carr, Esq.  
Legal Counsel for the Commission  
State Land Office Building  
Santa Fe, New Mexico

For the Applicant: William Booker Kelly, Esq.  
WHITE, KOCH, KELLY & MCCARTHY  
Attorneys at Law  
220 Otero Street  
Santa Fe, New Mexico

sid morrish reporting service  
General Court Reporting Service  
825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501  
Phone (505) 982-9212

# I N D E X

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## DONALD CRAIG

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## EXHIBIT INDEX

	<u>Offered</u>	<u>Admitted</u>
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1 MR. STAMETS: We will call next Case 5731.

2 MR. CARR: Case 5731, application of Texaco, Inc.  
3 for downhole commingling, Lea County, New Mexico.

4 MR. STAMETS: Call for appearances.

5 MR. KELLY: Booker Kelly of White, Koch, Kelly and  
6 McCarthy appearing for the applicant. I have one witness and  
7 ask that he be sworn.

8 (THEREUPON, the witness was duly sworn.)

9  
10 DONALD CRAIG

11 called as a witness, having been first duly sworn, was  
12 examined and testified as follows:

13  
14 DIRECT EXAMINATION

15 BY MR. KELLY:

16 Q Would you state your name, by whom employed and in  
17 what capacity?

18 A My name is Donald Craig, I'm employed by Texaco as  
19 District Production Engineer in Hobbs.

20 Q Have you previously qualified as an expert witness  
21 in the field of petroleum engineering before this Commission?

22 A No, I have not.

23 Q Will you give the Examiner a brief summary of your  
24 educational and professional background?

25 A I graduated from Texas Tech with a degree in

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1 chemical engineering and for the past two years I have been  
2 with Texaco in various positions as a petroleum engineer.

3 Q Do you have actual supervision and experience over  
4 the subject application?

5 A Yes, I do.

6 MR. KELLY: Are the witness's qualifications  
7 acceptable?

8 MR. STAMETS: What was the date of your degree from  
9 Texas Tech?

10 THE WITNESS: 1972.

11 MR. STAMETS: Are you familiar with the area of this  
12 application and the engineering of the application?

13 THE WITNESS: Yes, I am. I served as acting  
14 engineer of the Monument area which covers this lease for a  
15 period of three months and I have been in the position of  
16 District Production Engineer, in that position for about five  
17 months which is covering the whole Hobbs district.

18 MR. STAMETS: Your experience with Texaco has been  
19 in petroleum engineering?

20 THE WITNESS: Yes, sir, it has.

21 MR. STAMETS: The witness is considered qualified.

22 Q (Mr. Kelly continuing.) Mr. Craig, referring to what  
23 has been marked as Exhibit Number One would you please state  
24 what Texaco seeks by this application?

25 A Texaco seeks by this application to downhole

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1 commingle the Blinebry with the already downhole commingled  
2 Tubb-Drinkard in No. 6 on the C. H. Lockhart Federal Lease  
3 which is designated by the yellow line. This plat shows offset  
4 production in the producing zones with one exception which was  
5 omitted from the map, the No. 5 which is north and west of  
6 the subject well designated by the arrow. It is also completed  
7 in the Blinebry.

8 Q Is that a downhole commingled well?

9 A Yes, it is. It is downhole commingled in the Tubb-  
10 Drinkard and the Blinebry.

11 Q Similar to what you are seeking here?

12 A Yes, sir.

13 Q What is the present status of the subject well?

14 A The present status of the subject well is a down-  
15 hole commingled Tubb-Drinkard production only. We are seeking  
16 to recomplete in the Blinebry.

17 Q Now, referring to your data sheet, Exhibit Number  
18 Two, would you briefly explain this?

19 A Briefly, the well is currently a Tubb-Drinkard  
20 producer. We are proposing to recomplete in the Blinebry  
21 interval. Estimated production from the Blinebry is twenty  
22 barrels a day. We arrived at this particular estimated  
23 producing rate from offset producing wells. We have recently  
24 recompleted another well in the Blinebry and received a  
25 similar producing rate.

1 The estimated bottom-hole pressures of this  
2 particular well are derived from offset bottom-hole pressures  
3 that we have obtained in these particular zones.

4 Q The characteristics of the three zones are quite  
5 similar?

6 A Yes, sir, they are.

7 Also, through this downhole commingling we will  
8 obtain thirty-eight thousand barrels of primary reserves from  
9 this Blinebry interval, along with an additional three thousand,  
10 four hundred barrels from the Tubb interval and six hundred  
11 and ninety-nine barrels from the Drinkard interval which would  
12 not otherwise be economically producible.

13 Q Is there common royalty throughout this lease?

14 A Yes, there is.

15 Q Now, turning to Exhibit Number Three, would you  
16 explain that to the Examiner?

17 A Exhibit Number Three is the present completion of  
18 this particular well. We are producing the Drinkard below a  
19 Model D packer through a perforated nipple and it's up  
20 commingled with the Tubb, the producing interval above.

21 Q And Exhibit Number Four is your proposed completion,  
22 is that correct?

23 A Yes, sir. We will mill out the Model D packer over  
24 the Drinkard and downhole commingle all three zones.

25 Q Based upon your offset production in your Blinebry do

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 Phone (505) 982-9212

1 you feel it would be economically viable to drill a separate  
 2 well to get that production?

3 A. No, I do not.

4 Q. Now, Exhibit Number Six is a performance curve on  
 5 the Tubb Pool. Does that indicate that you are closely  
 6 approaching the economic limits?

7 A. Yes, sir, we would have already exceeded the economic  
 8 limit if the Tubb and Drinkard had not been downhole commingled  
 9 but the Tubb is below the economic limit now?

10 Q. And the same holds true, I take it, of the Drinkard  
 11 which is shown on Exhibit Number Six?

12 A. Yes, sir.

13 Q. Do you have a recommendation to the Commission as  
 14 to an allocation of production from the three zones if this  
 15 application should be granted?

16 A. Yes, sir, I would propose that the production split  
 17 be based on production, the current producing rates from the  
 18 Tubb-Drinkard and the estimated producing rate from the  
 19 Blinebry zone.

20 Q. Can you give that in figures?

21 A. Yes, sir. That production split would be eighty-  
 22 four percent from the Blinebry, thirteen percent from the  
 23 Tubb and three percent from the Drinkard.

24 Q. All right. In your opinion would the granting of  
 25 this application prevent waste by allowing you to recover

1 these hydrocarbons that would otherwise be left in place?

2 A. Yes, it would.

3 Q. Do you feel that there is any adverse effect on  
4 correlative rights by granting this application?

5 A. No, sir.

6 Q. Were Exhibits One through Six prepared by you or  
7 under your supervision?

8 A. Yes, sir.

9 MR. KELLY: At this time I would move the introduction  
10 of Texaco's Exhibits One through Six.

11 MR. STAMETS: These exhibits will be admitted.

12 (THEREUPON, Texaco's Exhibits One through  
13 Six were admitted into evidence.)

14 MR. KELLY: I have nothing further on direct.

15

16

CROSS EXAMINATION

17 BY MR. STAMETS:

18 Q. Mr. Craig, I wonder if it might not be better to  
19 base the division of production on well tests following  
20 completion of this Blinebry zone, wouldn't you have a better  
21 idea of what it actually will produce?

22 A. That will be satisfactory.

23 Q. On the other wells that you have completed in the  
24 Blinebry, has there been any problem with production, has the  
25 production declined in a different manner than you thought it

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1 would?

2 A. Oh, no, sir, not on the basis of the bottom-hole  
3 pressures that we see in this particular area now. We  
4 recently recompleted No. 5. I say recently, it was 1974. The  
5 current downhole commingled producing rate of these three zones  
6 is now currently eleven barrels a day.

7 Q. Have you experienced any particular production  
8 difficulty with that well?

9 A. No, sir, we have not.

10 Q. And the oils are compatible?

11 A. Yes, sir, they are. They are all sweet crudes with  
12 a gravity of thirty-seven point eight.

13 MR. STAMETS: Any other questions of the witness?  
14 He may be excused.

15 (THEREUPON, the witness was excused.)

16 MR. STAMETS: Anything further in this case? We  
17 will take the case under advisement.

18

19

20

21

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23

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25

## REPORTER'S CERTIFICATE

I, SIDNEY F. MORRISH, a Certified Shorthand Reporter,  
do hereby certify that the foregoing and attached Transcript  
of Hearing before the New Mexico Oil Conservation Commission  
was reported by me, and the same is a true and correct record  
of the said proceedings to the best of my knowledge, skill and  
ability.

*Sidney F. Morrish*  
Sidney F. Morrish, C.S.R.

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Phone (505) 982-9212

I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Examiner hearing of Case No. 573/  
heard by me on 8-15-76 1976  
*Richard A. Blum*, Examiner  
New Mexico Oil Conservation Commission



BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
COMMISSION OF NEW MEXICO FOR  
THE PURPOSE OF CONSIDERING:

CASE NO. 5731  
Order No. R-5272

APPLICATION OF TEXACO INC. FOR  
DOWNHOLE COMMINGLING, LEA COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on August 18, 1976, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 31st day of August, 1976, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Texaco Inc., is the owner and operator of the C. H. Lockhart Federal Well No. 6 located in Unit G of Section 18, Township 22 South, Range 38 East, NMPM, Lea County, New Mexico.

(3) That said well is currently completed to produce from the Tubb and Drinkard Pools.

(4) That from the Tubb and Drinkard zones, the subject well is capable of low rates of production only.

(5) That the applicant proposes to recomplete said well in such a manner as to also produce from the Blinebry zone.

(6) That from the Blinebry zone, the subject well is projected to be capable of low rates of production only.

(7) That the applicant seeks authority to commingle Blinebry, Tubb and Drinkard production within the wellbore of the above-described well.

(8) That the proposed commingling may result in the recovery of additional hydrocarbons from each of the subject pools, thereby preventing waste, and will not violate correlative rights.

Case No. 5731  
Order No. R-5272

(9) That the reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed commingling provided that the well is not shut-in for an extended period.

(10) That to afford the Commission the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the Hobbs district office of the Commission any time the subject well is shut-in for 7 consecutive days.

(11) That in order to allocate the commingled production to each of the commingled zones in the subject well, the operator, upon completion of the well, should consult with the supervisor of the Hobbs district office of the Commission to determine an allocation formula.

IT IS THEREFORE ORDERED:

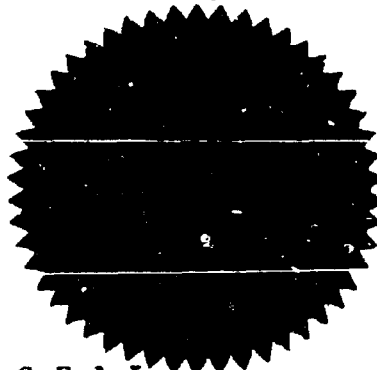
(1) That the applicant, Texaco Inc., is hereby authorized to commingle Blinebry, Tubb, and Drinkard production within the wellbore of the C. H. Lockhart Federal Well No. 6, located in Unit G of Section 18, Township 22 South, Range 38 East, NMPM, Lea County, New Mexico.

(2) That upon completion of said well to produce from the Blinebry, Tubb, and Drinkard formations, the applicant shall consult with the supervisor of the Hobbs district office of the Commission to determine the proper formula for allocation of oil and gas production to each zone open in the well.

(3) That the operator of the subject well shall immediately notify the Commission's Hobbs district office any time the well has been shut-in for 7 consecutive days and shall concurrently present, to the Commission, a plan for remedial action.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.



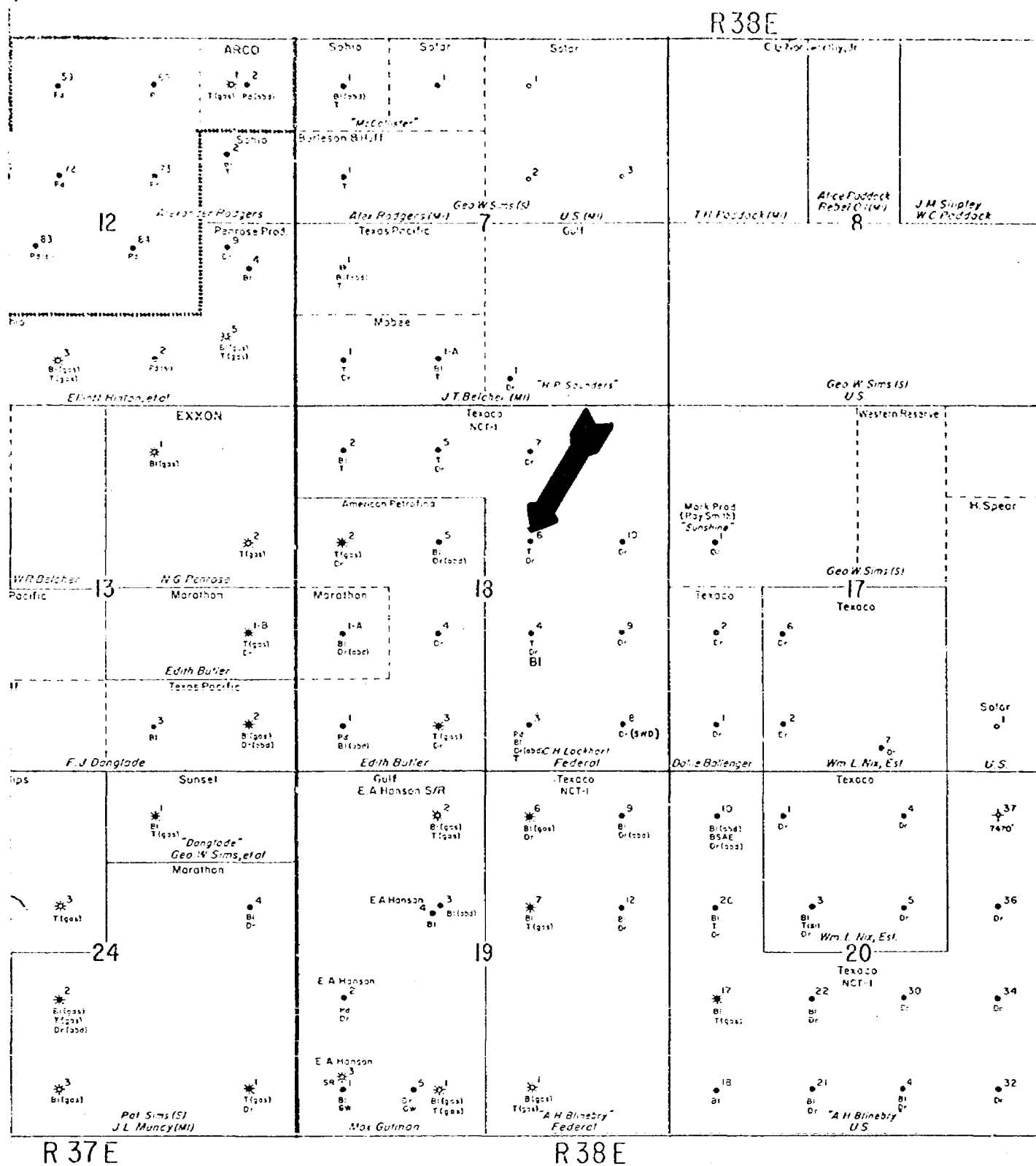
STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

*Phil R. Lucero*  
PHIL R. LUCERO, Chairman

*Emery C. Arnold*  
EMERY C. ARNOLD, Member

*Joe D. Ramey*  
JOE D. RAMEY, Member & Secretary

S E A L  
jr/



ABBREVIATIONS:

BEE - BRUNSON ELLENBURGER EAST	GW - GRANITE WASH (UNDESIGNATED)
BGW - BRUNSON GRANITE WASH	LM7RQ - LANGLIE MATTIX 7 RIVERS QUEEN
BGWE - BRUNSON GRANITE WASH EAST	Pd - PADDOCK
BI - BLINBERRY	PS - PENROSE SKELLY GRAYBURG
BWE - BRUNSON WCKEE EAST	SA - SANTA ROSA (UNDESIGNATED)
BSE - BRUNSON SAN ANDRES EAST	T - TUSE
Dr - DRINKARD	

**TEXACO INC.**  
MIDLAND DIVISION

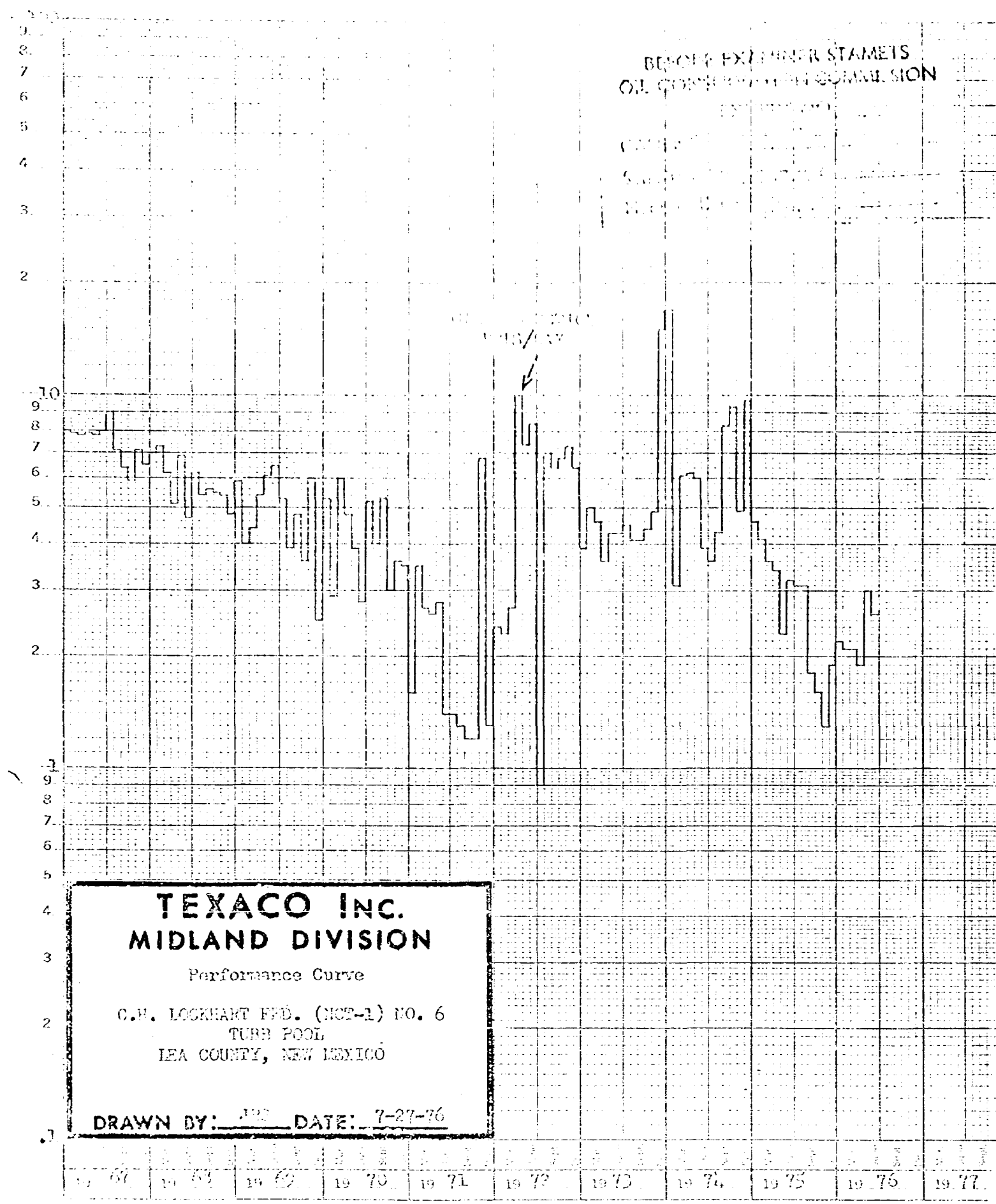
**BLINBERRY FIELD AREA**  
S.E. LEA COUNTY, NEW MEXICO

SCALE 0' 1000' 2000'

DRAWN BY: FMR



BEFORE EXAMINER STAMETS  
OIL COMMISSION



**TEXACO INC.**  
**MIDLAND DIVISION**

Performance Curve

C.W. LOCKHART FFD. (NCT-1) NO. 6  
TURN POOL  
IEA COUNTY, NEW MEXICO

DRAWN BY: JED DATE: 7-27-76

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BEFORE EXAMINER STAMETS  
OIL CONSERVATION COMMISSION  
EXHIBIT NO. \_\_\_\_\_  
CASE NO. \_\_\_\_\_  
Submitted by \_\_\_\_\_  
Hearing Date \_\_\_\_\_

OIL PRODUCTION  
BBL/DAY  
↓

**TEXACO INC.**  
**MIDLAND DIVISION**  
Performance Curve  
C.H. LOCKHART FLD. (NCT-1) NO. 6  
DRINKARD POOL  
LEA COUNTY, NEW MEXICO  
DRAWN BY: JBS DATE: 7-27-76

1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
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BEFORE EXAMINER STAMETS  
DATA SHEET FOR WELLBORE COMINGLING OIL CONSERVATION COMMISSION

EXHIBIT NO. \_\_\_\_\_

CASE NO. \_\_\_\_\_

Submitted by \_\_\_\_\_

Hearing Date \_\_\_\_\_

Operator: TEXACO INC.

Address: P. O. Box 728 - Hobbs, New Mexico 88240

Lease and Well No.: C. H. Lockhart Federal (HCT-1) Well No. 6

Location: Unit G; 1980' ENL & 1980' FEL of Section 18, Township 22-S, Range 38-E,  
Lea County, New Mexico

WELL DATA

	Pool	Pool	Pool
Name of Pool	Blinbry	Tubb	Drinkard
Producing Method	Pump	Pump	Pump
BHP	500 (Est.)	900 (Est.)	500 (Est.)
Type Crude	Sweet	Sweet	Sweet
Gravity	37.8 (Est.)	37.8	37.8
GOR Limit	6000	2000	6000
Completion Interval	Proposed 5618'-5804'	6192'-6243'	6822'-7142'
Current Test Date	--	June 28, 1976	June 29, 1976
Oil	20 (Est.)	3	1
Water	1 (Est.)	0	0
GOR	13,700 (Est.)	19,267	19,300

Selling Price of Crude -  
\$/BBL.

-- 12.22 12.22

Daily Income - \$/Day

-- 36.67 12.22

Tubb & Drinkard are downhole comingled (12-10-73) Order DHC-135

COMINGLED DATA:

Gravity of Comingled Crude 37.8

Selling Price of Comingled Crude - \$/BBL. 12.22

Daily Income - \$/Day 293.33

Net (Gain) ~~xxxxx~~ from Wellbore Comingling - \$/Day 244.44 (Production Increase of 20 BOPD)  
based on current producing rates.

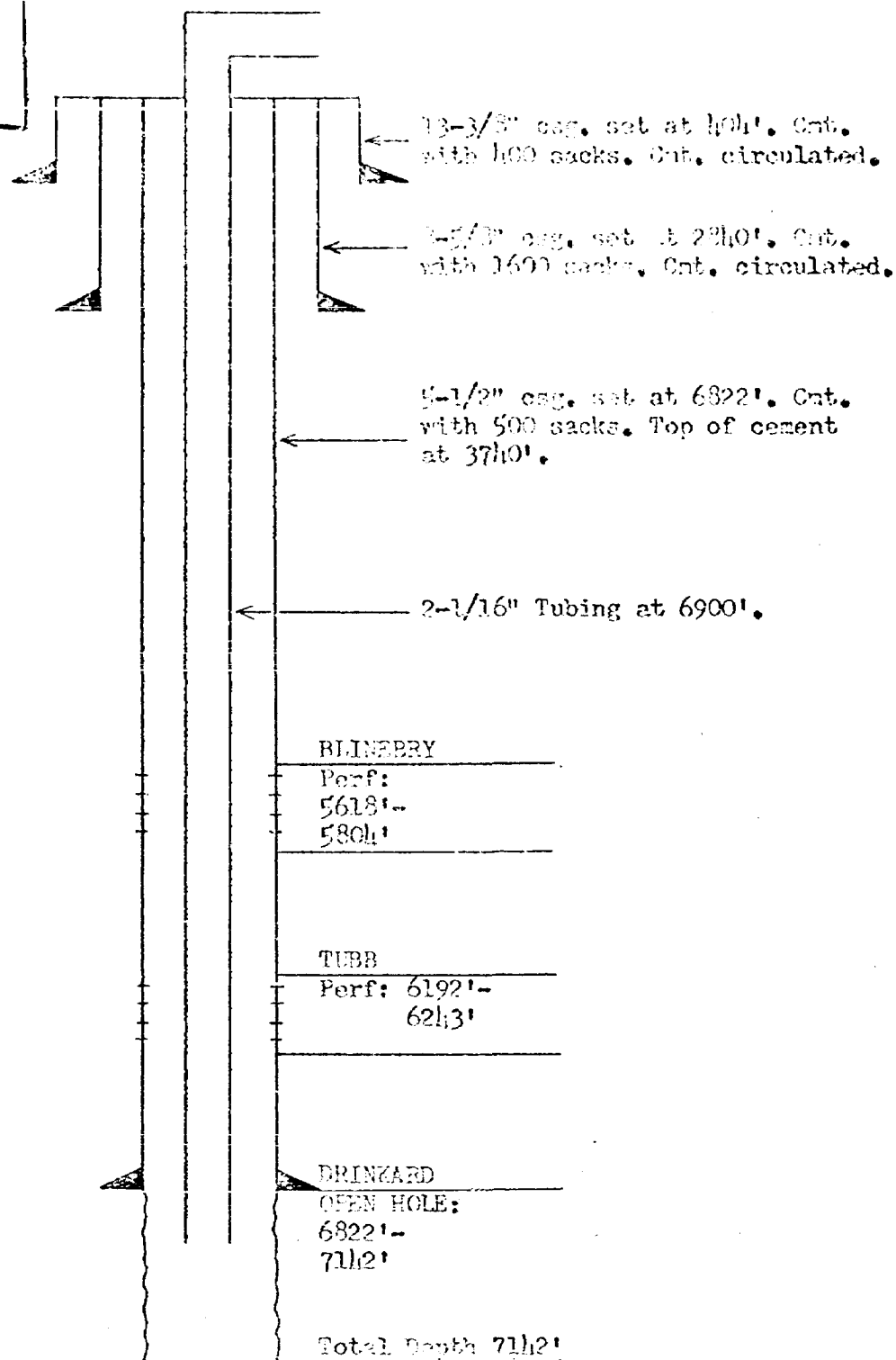
BEFORE EXAMINER STAMETS  
OIL CONSERVATION COMMISSION

EXHIBIT NO. \_\_\_\_\_

CASE NO. \_\_\_\_\_

Submitted by \_\_\_\_\_

Hearing Date \_\_\_\_\_



PROPOSED COMPLETION  
TAMACO INC.

C.H. LOCKHART (NCT-1) WELL NO. 6  
TUBB, BRINZARD AND BLINBERRY POOLS  
LEA COUNTY, NEW MEXICO

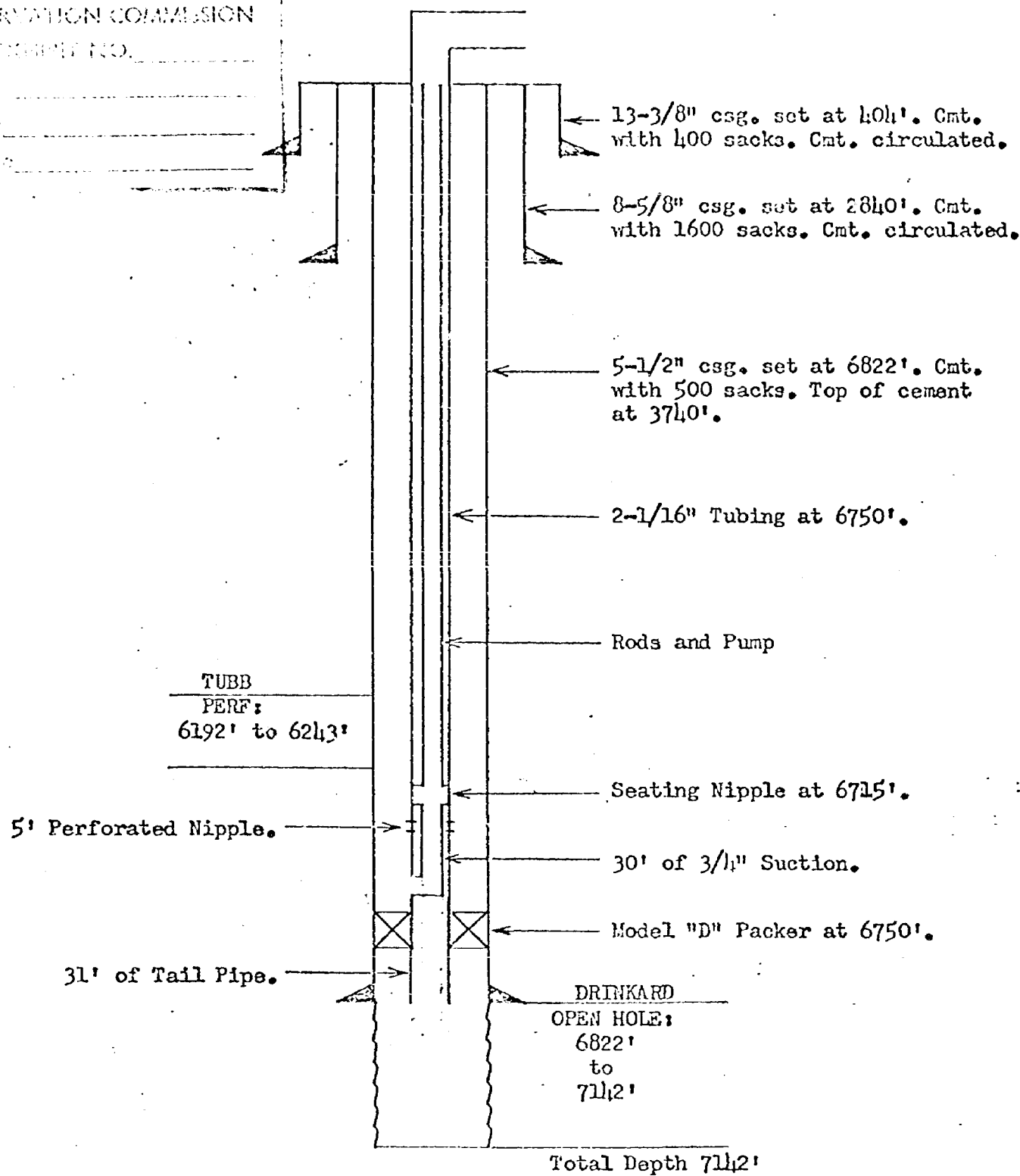
BEFORE EXAMINER STAMET'S  
OIL CONSERVATION COMMISSION

EXHIBIT NO.

CASE NO.

Submitted by

Hearing Date



PRESENT COMPLETION

TEXACO INC.

C.H. LOCKHART (NCT-1) WELL NO. 6

TUBB AND DRINKARD POOLS

LEA COUNTY, NEW MEXICO

OIL CONSERVATION COMMISSION  
Hobbs DISTRICT

*Case 5731*

OIL CONSERVATION COMMISSION  
BOX 2088  
SANTA FE, NEW MEXICO

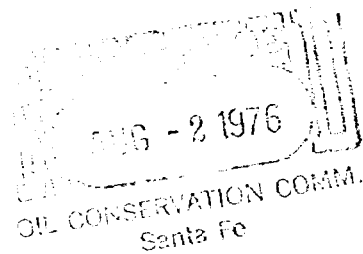
DATE July 30, 1976

RE: Proposed MC \_\_\_\_\_  
Proposed DHC X \_\_\_\_\_  
Proposed NSL \_\_\_\_\_  
Proposed SWD \_\_\_\_\_  
Proposed WFX \_\_\_\_\_  
Proposed PMX \_\_\_\_\_

Gentlemen:

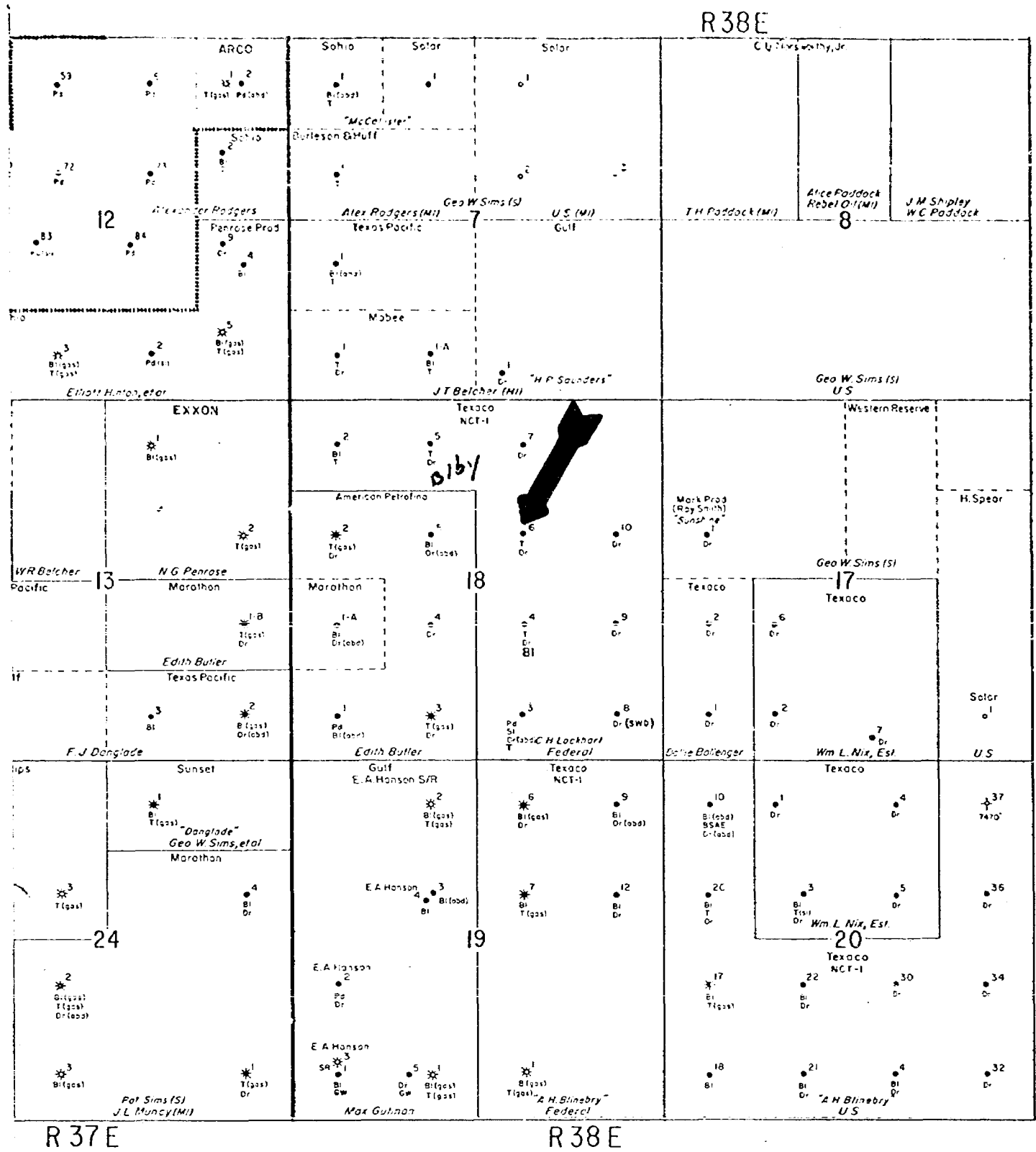
I have examined the application dated July 28, 1976  
for the Texaco, Inc. C.H. Lockhart Federal(NCT-1) #6-G 18-22-38  
Operator Lease and Well No. Unit, S-T-R  
and my recommendations are as follows:

O.K. --- Jerry Sexton



Yours very truly,

A handwritten signature, likely of Jerry Sexton, written in cursive over a horizontal line.



#### ABBREVIATIONS

BEE - BRUNSON ELLENBURGER EAST	GW - GRANITE WASH (UNDESIGNATED)
BGW - BRUNSON GRANITE WASH	LM7RQ - LANGLIE MATTIX 7 RIVERS QUEEN
BGWE - BRUNSON GRANITE WASH EAST	PS - PADDOCK
BI - BLINEBRY	PS - PENROSE SKELLY GRAYBURG
BME - BRUNSON MCKEE EAST	S4 - SANTA ROSA (UNDESIGNATED)
BSE - BRUNSON SAN ANDRES EAST	T - TUBS
Dr - DRINKARD	

**TEXACO INC.**  
MIDLAND DIVISION

**BLINEBRY FIELD AREA**  
S.E. LEA COUNTY, NEW MEXICO

SCALE: 0' 1000' 2000'

DRAWN BY: FMR

DATA SHEET FOR WELLBORE COMMINGLING

Operator: TEXACO INC.

Address: P. O. Box 728 - Hobbs, New Mexico 88240

Lease and Well No.: C. H. Lockhart Federal (HCT-1) Well No. 6

Location: Unit G; 1980' FHL & 1980' FEL of Section 18, Township 22-S, Range 38-E,  
Lea County, New Mexico

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Daily Income - \$/Day

-- 36.67 12.22

Tubb & Drinkard are downhole commingled (12-10-73) Order DHC-135

COMMINGLED DATA:

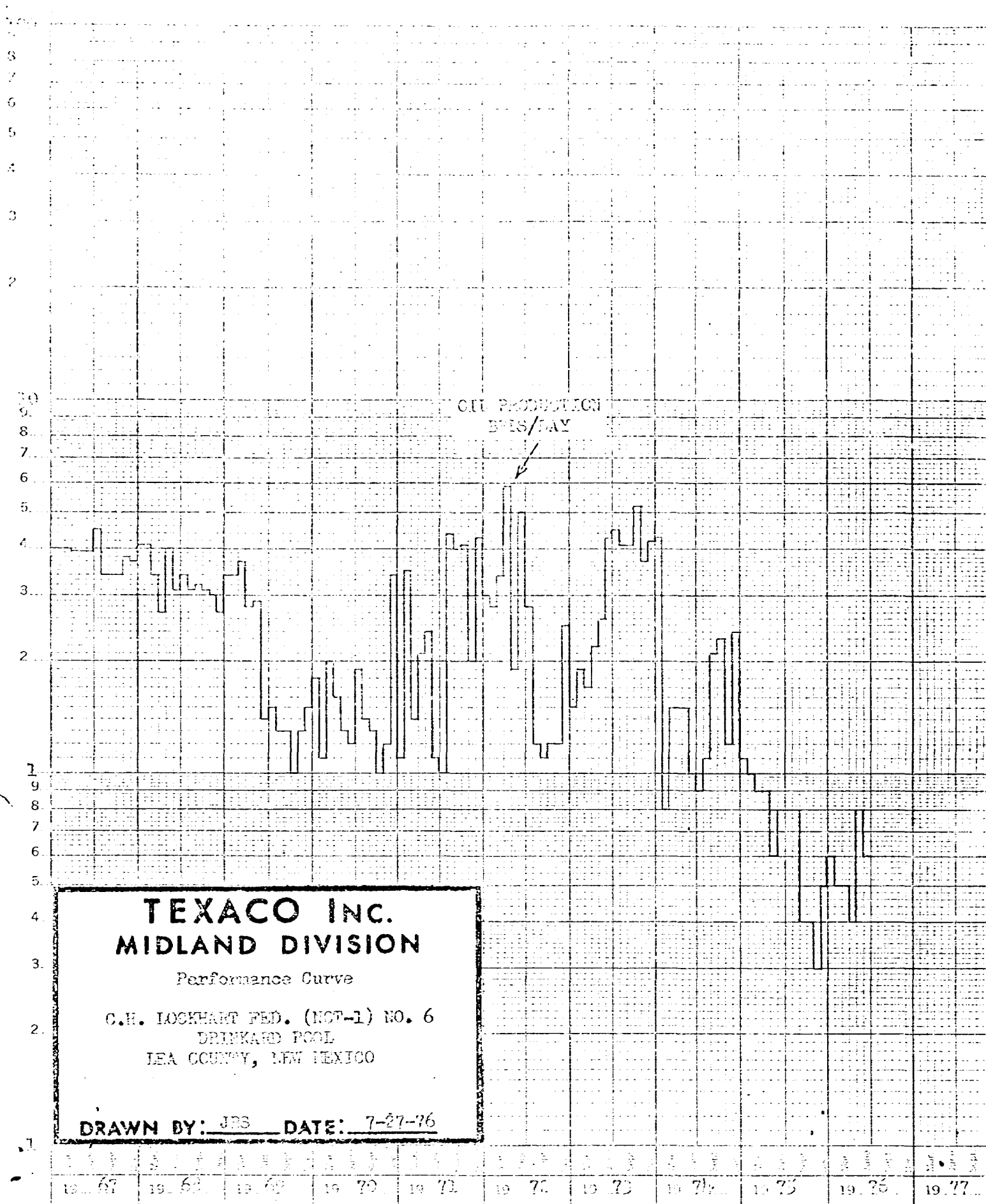
Gravity of Commingled Crude 37.8

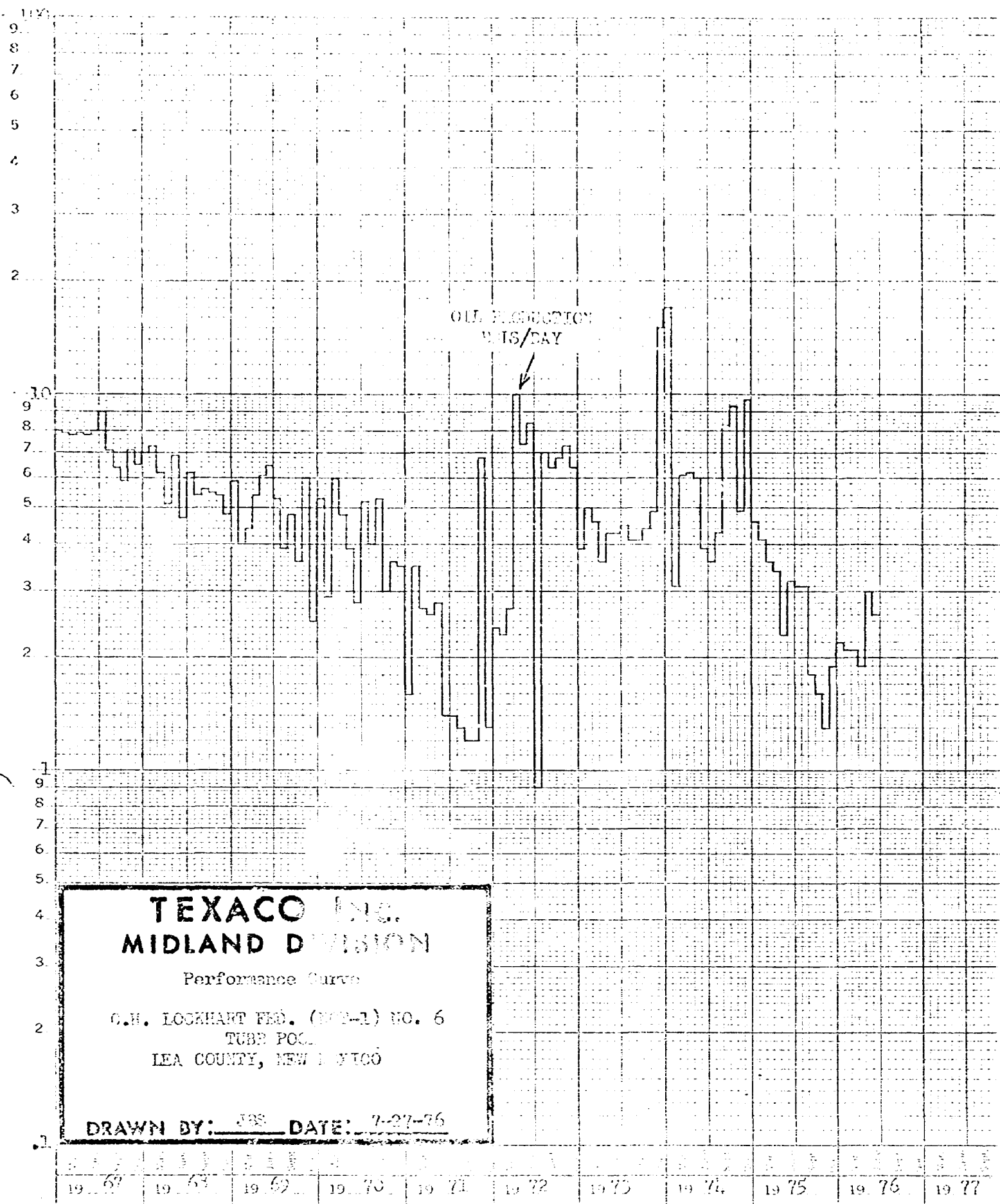
Selling Price of Commingled Crude - \$/BBL. 12.22

Daily Income - \$/Day 293.33

Net (Gain) ~~xxxxx~~ from Wellbore Commingling - \$/Day 244.44 (Production Increase of 20 BOPD)  
based on current producing rates.





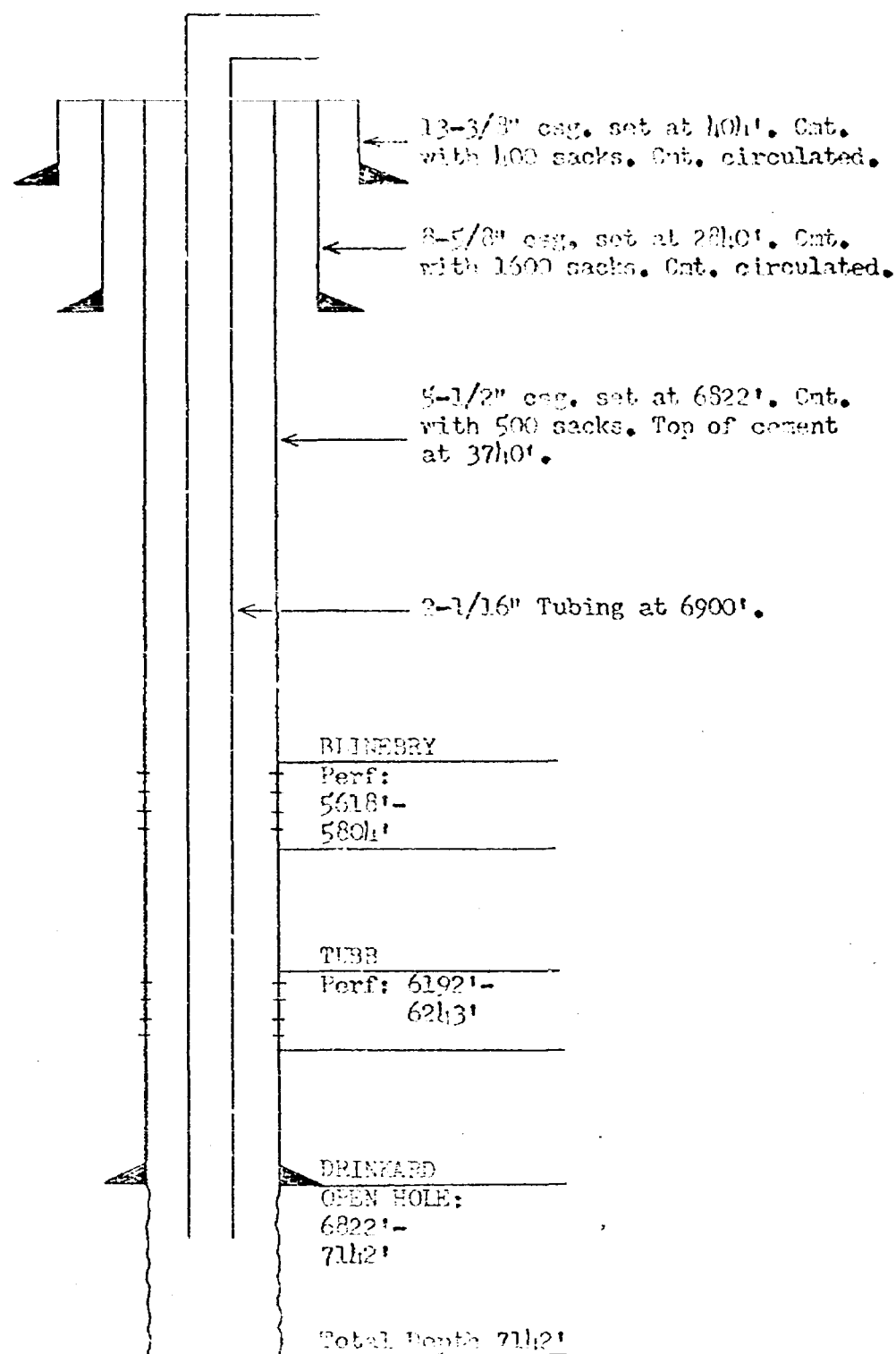


**TEXACO INC.**  
**MIDLAND DIVISION**

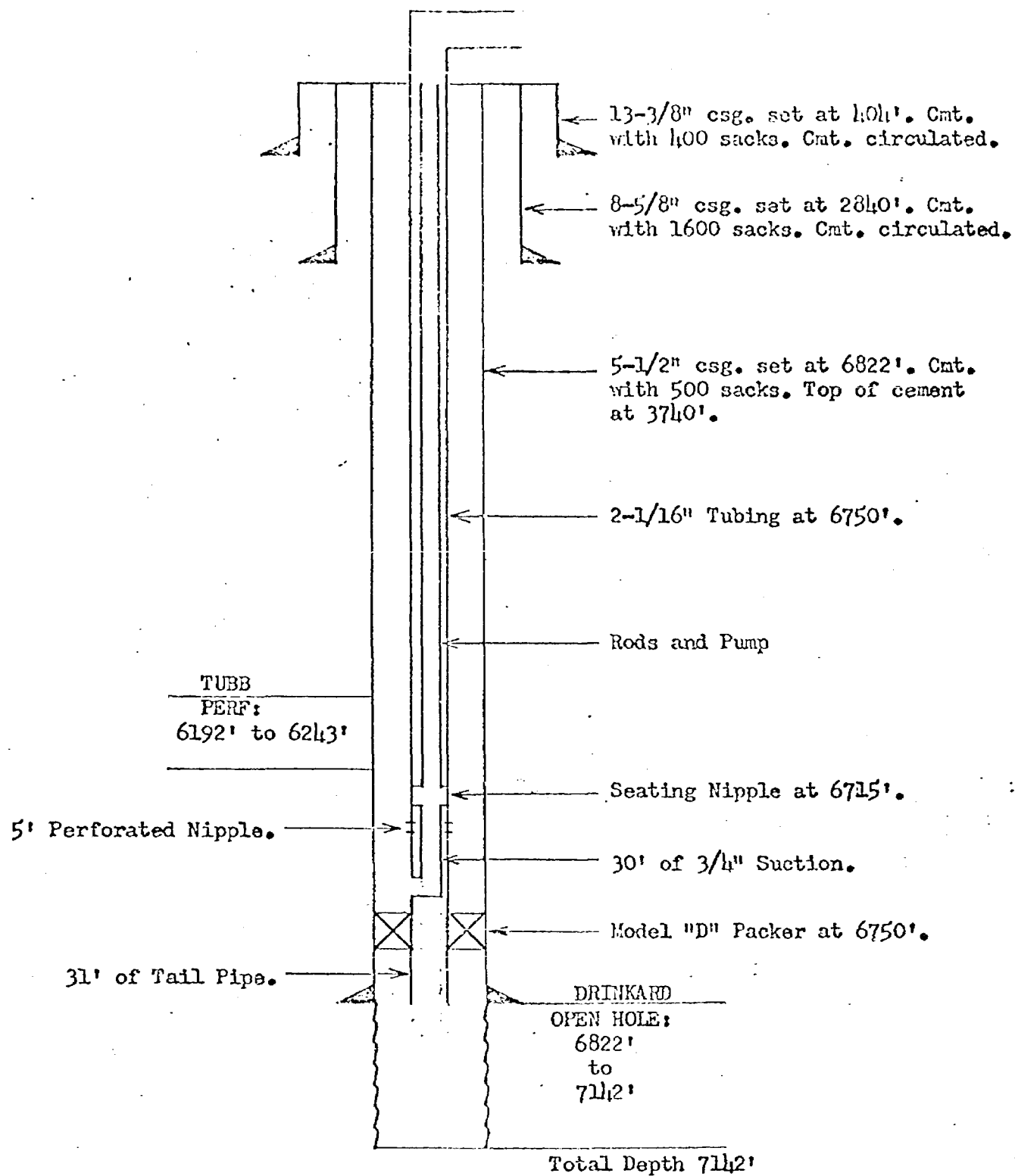
Performance Curve

G.H. LOCKHART FLD. (NO. 1) NO. 6  
TUBE POOL  
LEA COUNTY, NEW MEXICO

DRAWN BY: JRS DATE: 7-27-76



PROPOSED COMPLETION  
 TEXACO INC.  
 O.H. 100HART (NUT-1) WELL NO. 6  
 TUBB, BRINKARD AND BLINDBRY POOLS  
 LISA COUNTY, NEW MEXICO



PRESENT COMPLETION  
TEXACO INC.  
C.H. LOCKHART (NCT-1) WELL NO. 6  
TUBB AND DRINKARD POOLS  
LEA COUNTY, NEW MEXICO

Dockets Nos. 24-76 and 25-76 are tentatively set for hearing on September 1 and 15, 1976. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - AUGUST 18, 1976

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,  
STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

The following cases will be heard before Richard L. Stamets, Examiner, or Daniel S. Nutter, Alternate Examiner:

- ALLOWABLE: (1) Consideration of the allowable production of gas for September, 1976, from seventeen prorated pools in Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico.
- (2) Consideration of the allowable production of gas for September, 1976, from four prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico.

CASE 5731: Application of Texaco, Inc. for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle Blinbry, Drinkard, and Tubb production in the wellbore of its C. H. Lockhart Federal Well No. 6 located in Unit G of Section 18, Township 22 South, Range 38 East, Lea County, New Mexico.

CASE 5725: Application of General American Oil Company for extension of time for temporary abandonment, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks extension of time for temporary abandonment of certain wells in Eddy County, New Mexico, said wells being described as follows:

Township 16 South, Range 29 East:

Brewer Nos. 19 and 28 in Section 12; Brewer Nos. 11, 12, 14, 24, and 25 in Section 13; Brewer Nos. 3, 4, 5, 17, 18, 20, 21, 23, and 27 and Bosworth Nos. 1, 2, 3, and 4 in Section 14; and Nunlee Nos. 4, 5, and 6 in Section 35;

Township 16 South, Range 30 East:

Sivley No. 3 in Section 8;

Township 17 South, Range 29 East:

Keely "C" Nos. 10, 12, 18, 20, 25, and 37 in Section 25; Grayburg D. U. No. 5 in Section 25; Keely "B" No. 15 in Section 26; Green "A" Nos. 1 and 4 in Section 29; and State B1778 Nos. 1 and 3 and State B4458 No. 2 in Section 36;

Township 17 South, Range 30 East:

Burch "A" Nos. 23 and 24 in Section 19; Dexter "E" No. 2 in Section 20; Parke "E" No. 2 in Section 22; Maddren "B" Nos. 6 and 9 in Section 27; Beeson A No. 2 in Section 28; Beeson "F" No. 9 in Section 29; Grayburg D. U. Nos. 4 and 6 in Section 30; Beeson "F" Nos. 1, 3, 4, 5, 6, 12, 13, 14, and 16 in Section 31; State B4108 No. 1 in Section 32; and Arnold "D" Nos. 8 and 9 in Section 34.

Three of the above wells are undesignated and the others are variously located in the High Lonesome, West Square Lake, Grayburg Jackson, Loco Hills, and West Henshaw Premier Pools.

CASE 5732: Application of Yates Petroleum Corporation for downhole commingling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle Morrow and Strawn production in the wellbore of its Roden Federal GD Well No. 1 located in Unit I of Section 23, Township 19 South, Range 24 East, Eddy County, New Mexico.

CASE 5733: Application of Yates Petroleum Corporation for an unorthodox location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox gas well location of its Jackson GM Well No. 1 to be drilled at a point 660 feet from the South line and 1650 feet from the West line of Section 24, Township 17 South, Range 25 East, Eddy County, New Mexico, to test the Morrow formation, the W/2 of said Section 24 to be dedicated to the well.

CASE 5734: Application of Yates Petroleum Corporation for an unorthodox location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox gas well location of its Federal GL Well No. 1 to be drilled at a point 660 feet from the South and West lines of Section 33, Township 17 South, Range 25 East, Eddy County, New Mexico, to test the Morrow formation, the S/2 of said Section 33 to be dedicated to the well.

CASE 5724: Application of Yates Petroleum Corporation for an oil treating plant permit, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority for the construction and operation of an oil treating plant for the purposes of treating and reclaiming sediment oil at a site in the SE/4 of Section 25, Township 18 South, Range 25 East, Eddy County, New Mexico.



PETROLEUM PRODUCTS

July 28, 1976

TEXACO INC.

DRAWER 728

HOBBS, NEW MEXICO 88240

JUL 29 1976

NEW MEXICO OIL CONSERVATION COMM.

Santa Fe

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

RE: REQUEST FOR EXAMINER HEARING  
Application for Downhole Commingle  
C. H. Lockhart Federal (NCT-1) No. 6  
Blinebry, Drinkard and Tubb Pools  
Lea County, New Mexico


Gentlemen:

It is requested that an examiner hearing be scheduled to consider TEXACO's application to downhole commingle the Blinebry, Drinkard and Tubb Pools in the C. H. Lockhart Federal (NCT-1) Well No. 6 located in Unit G of Section 18, Township 22 South, Range 38 East, Lea County, New Mexico.

Please find enclosed three copies of exhibits required for hearing application.

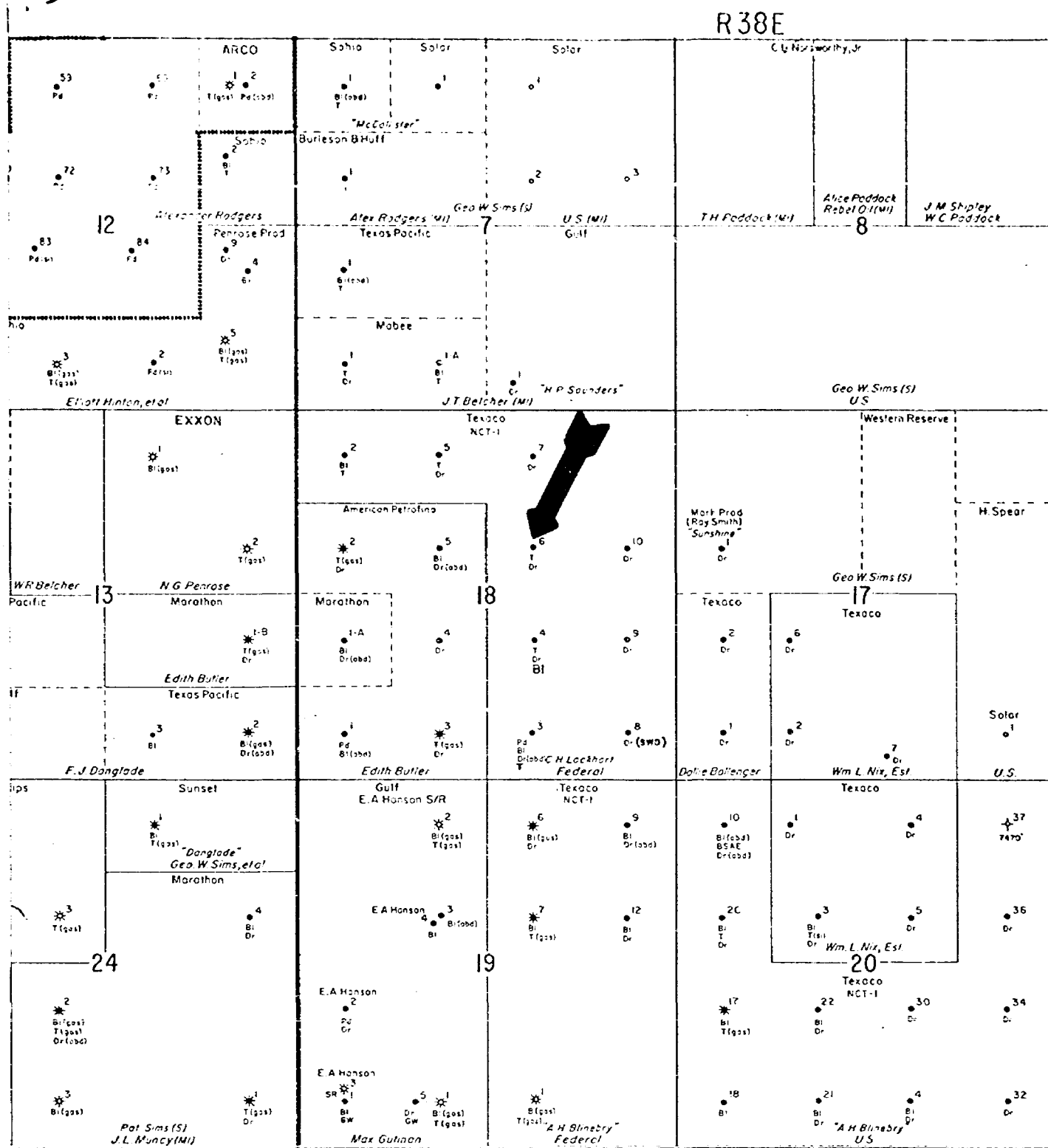
All offset operators and the USGS are being notified of this application by copy of letter.

Yours very truly,

  
J. V. Gannon  
District Superintendent

JBS:las  
Enclosures

NMOCC - Hobbs  
USGS - Hobbs  
Offset Operators



## ABBREVIATIONS

BEE - BRUNSON ELLENBURGER EAST	GW - GRANITE WASH (UNDESIGNATED)
BGW - BRUNSON GRANITE WASH	LM7RQ - LANGLEY MATTIX 7 RIVERS QUEEN
BOWE - BRUNSON GRANITE WASH EAST	Pd - PADDOCK
Bl - BLINBERRY	Ps - PENROSE SKELLY GRAYBURG
BME - BRUNSON MCKEE EAST	SA - SANTA ROSA (UNDESIGNATED)
BSE - BRUNSON SAN ANDRES EAST	T - TUBS
Dr - DRINKARD	

**TEXACO INC.**  
MIDLAND DIVISION  
**BLINBERRY FIELD AREA**  
S.E. LEA COUNTY, NEW MEXICO

SCALE: 0' 1000' 2000'

DRAWN BY: FMR

## DATA SHEET FOR WELLBORE COMMINGLING

Operator: TEXACO INC.

Address: P. O. Box 728 - Hobbs, New Mexico 88240

Lease and Well No.: C. H. Lockhart Federal (HCT-1) Well No. 6

Location: Unit G; 1980' FILL & 1980' FEL of Section 18, Township 22-S, Range 38-E,  
Lea County, New MexicoWELL DATA

	Pool	Pool	Pool
Name of Pool	Blinebry	Tubb	Drinkard
Producing Method	Pump	Pump	Pump
DHP	500 (Est.)	900 (Est.)	500 (Est.)
Type Crude	Sweet	Sweet	Sweet
Gravity	37.8 (Est.)	37.8	37.8
GOR Limit	6000	2000	6000
Completion Interval	Proposed 5618'-5804'	6192'-6243'	6822'-7142'
Current Test Date	--	June 28, 1976	June 29, 1976
Oil	20 (Est.)	3	1
Water	1 (Est.)	0	0
GOR	13,700 (Est.)	19,267	19,300

Selling Price of Crude -  
\$/BBL.

-- 12.22 12.22

Daily Income - \$/Day

-- 36.67 12.22

Tubb &amp; Drinkard are downhole commingled (12-10-73) Order DHC-135

COMMINGLED DATA:

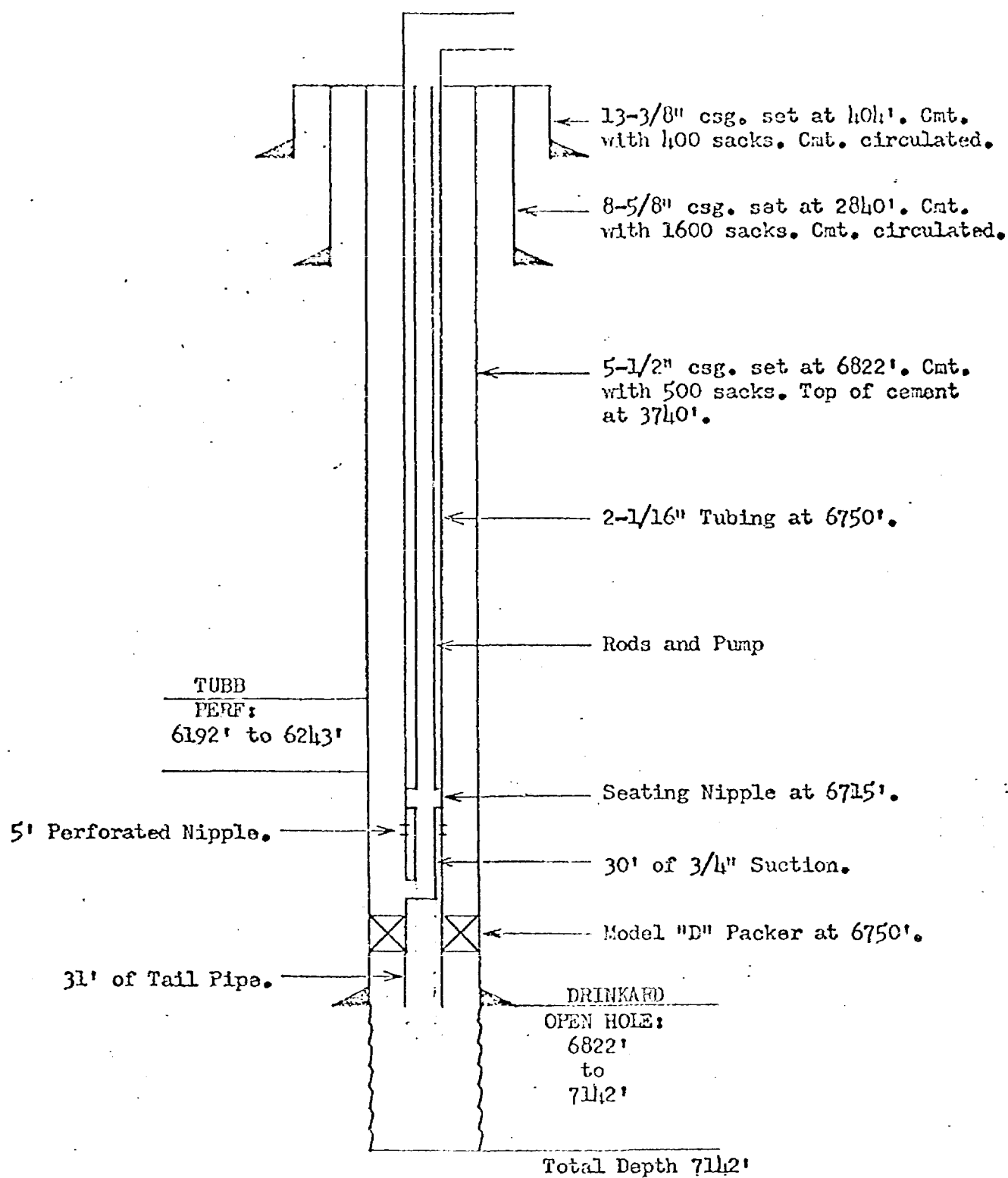
Gravity of Commingled Crude 37.8

Selling Price of Commingled Crude - \$/BBL. 12.22

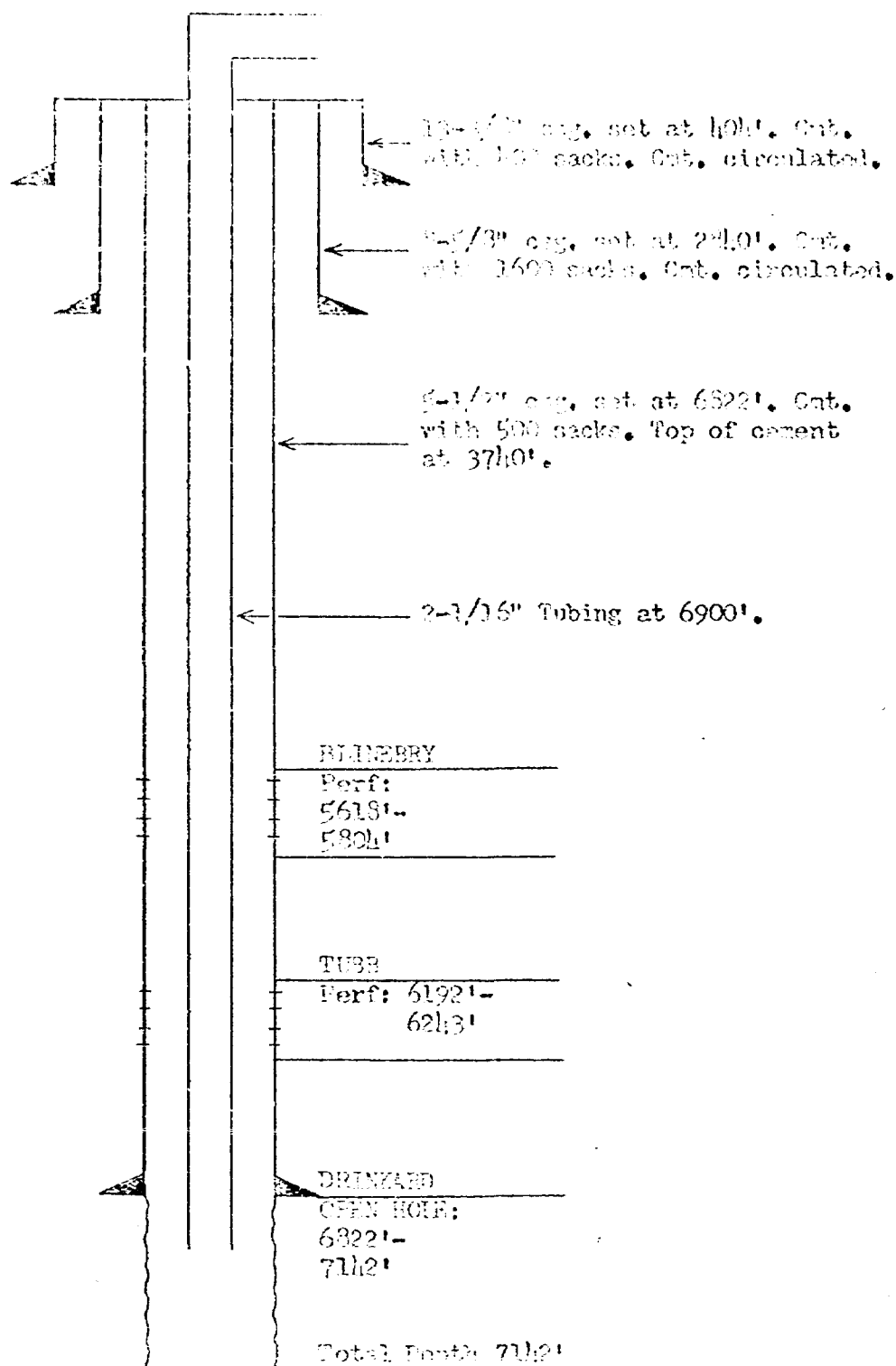
Daily Income - \$/Day 293.33

Net (Gain) ~~XXXXX~~ from Wellbore Commingling - \$/Day 244.44 (Production Increase of 20 BOPD)  
based on current producing rates.





PRESENT COMPLETION  
 TEXACO INC.  
 C.H. LOCKHART (NCT-1) WELL NO. 6  
 TUBB AND DRINKARD POOLS  
 IEA COUNTY, NEW MEXICO



PROPOSED COMPLETION  
 TRIVAGO INC.  
 C.E. JOHNSON (NOT-A) WELL NO. 6  
 TUB, DRINKARD AND BLINDERY FORM  
 LSA COUNTY, TEXAS

## LIST OF OFFSET OPERATORS

TEXACO Inc.  
C. H. Lockhart Federal NCT-1 Well No. 6  
Lea County, New Mexico

American Petrofina Company of Texas  
Drawer B  
Artesia, New Mexico 88210

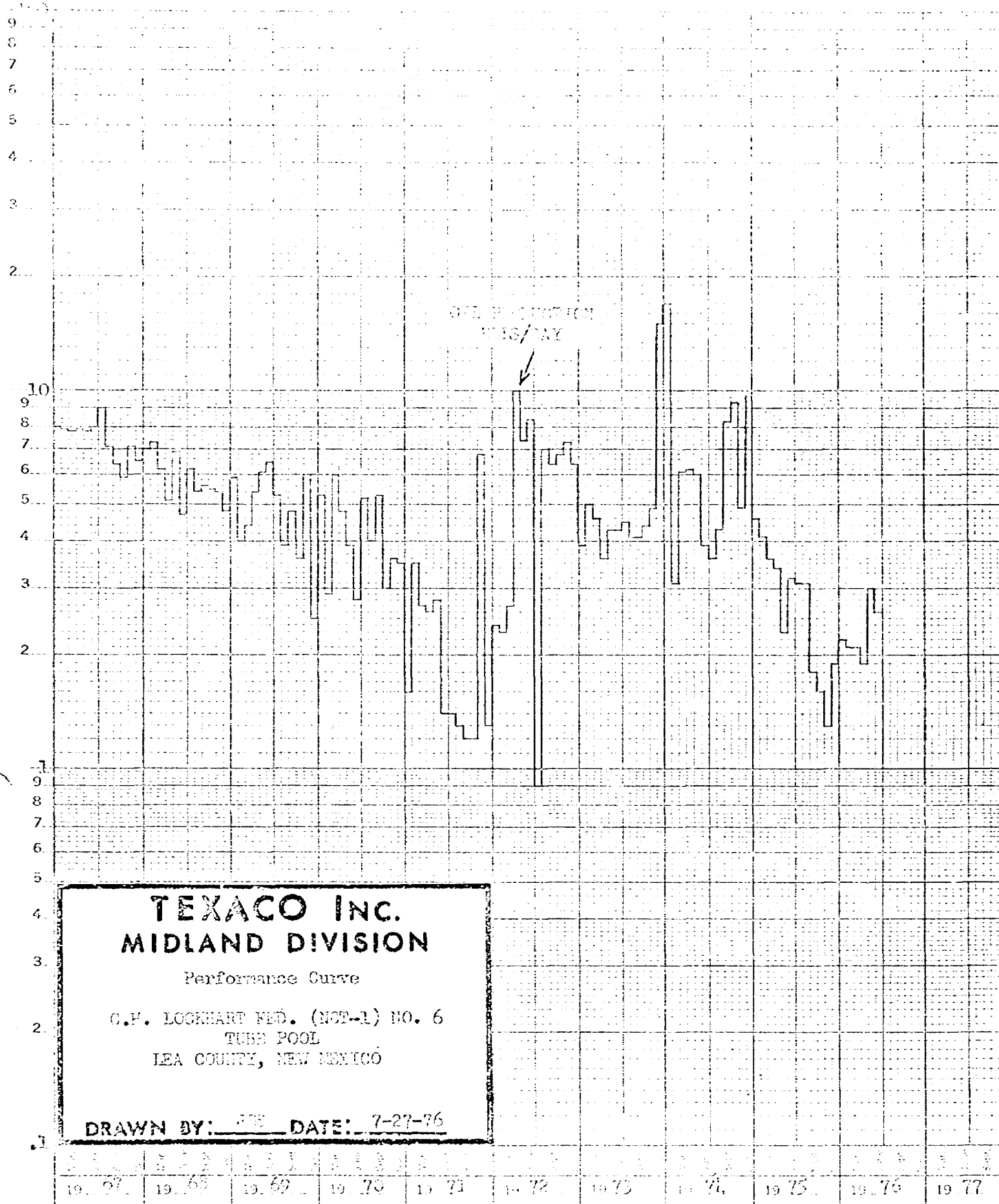
Gulf Oil Corp. - Hobbs Area  
P.O. Box 670  
Hobbs, New Mexico 88240

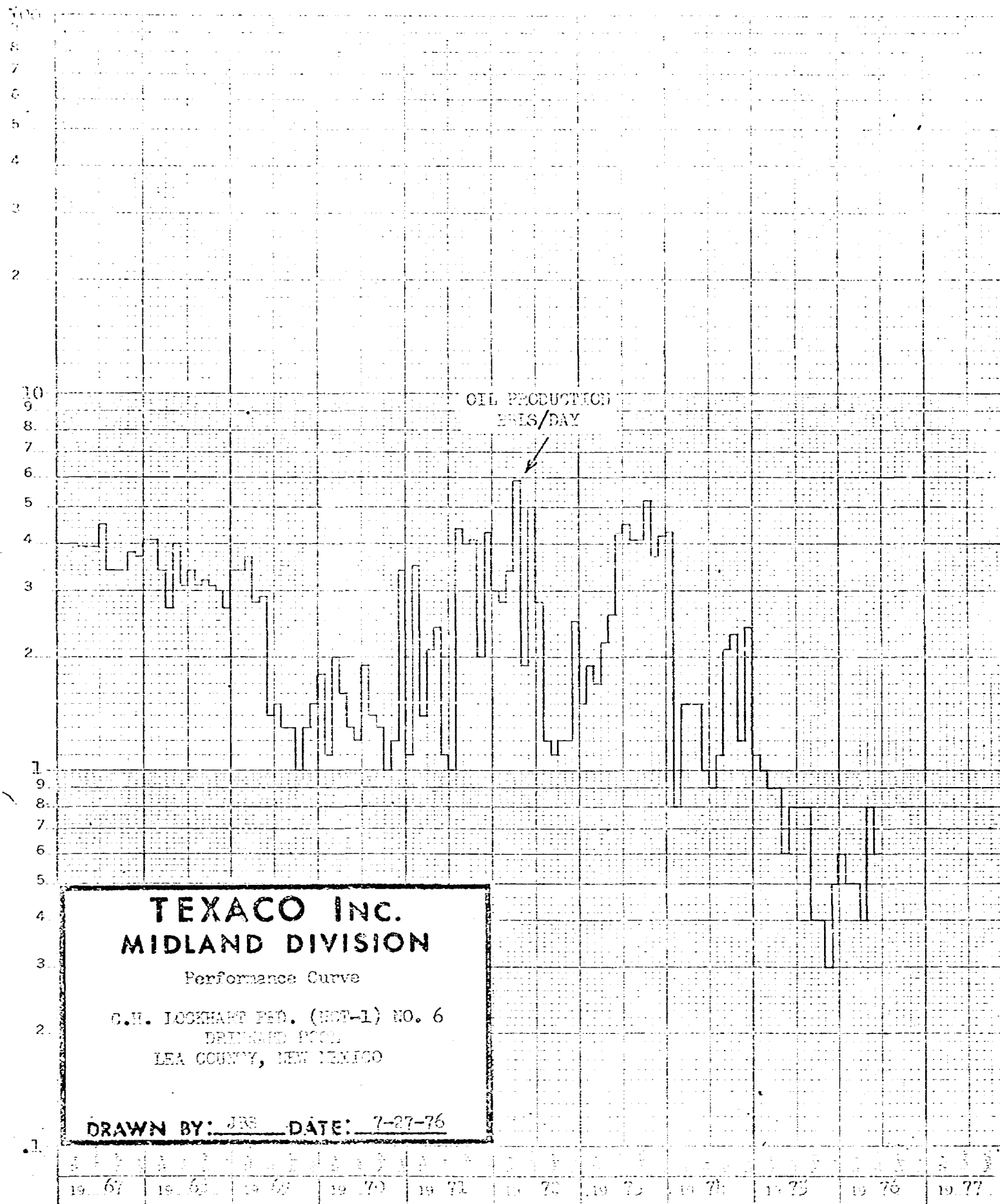
Exxon  
P.O. Box 2100  
Hobbs, New Mexico 88240

Mabee Petroleum Corp.  
201 1st Savings Building  
Midland, Texas 79701

Mark Production  
330 Citizens Bank Building  
Tyler, Texas 75701

Penrose Production Company  
P.O. Box 938  
Eunice, New Mexico 88231





NEW MEXICO OIL CONSERVATION COMMISSION  
GAS-OIL RATIO TESTS

G-116  
Revised 1-1-65

Operator <b>TEXACO INC.</b>		Pool <b>Tubb &amp; Drinkard</b>				County <b>Lea</b>									
Address <b>P. O. Box 728 - Hobbs, New Mexico 88240</b>						TYPE OF TEST - (X) <input checked="" type="checkbox"/>		Scheduled <input type="checkbox"/>		Completion <input type="checkbox"/>		Special <input checked="" type="checkbox"/>			
LEASE NAME	WELL NO.	LOCATION				DATE OF TEST	CHOKE SIZE	TBG. PRESS.	DAILY ALLOWABLE	LENGTH OF TEST HOURS	PROD. DURING TEST				GAS - OIL RATIO CU.FT./BSL
		U	S	T	R						WATER BBL.	GRAY OIL	OIL BBL.	GAS M.C.F.	
<b>C. H. Lockhart Fed. (HCT-1)</b>  <u>Tubb</u>  <u>Drinkard</u>	6	G	18	22-S	33-E	6-28-76	P		4	24	0	37.8	3	57.8	19250
						6-29-76	P		1	24	0	37.8	1	19.3	19300

No well will be assigned an allowable greater than the amount of oil produced on the official test.

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 Commission.

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.

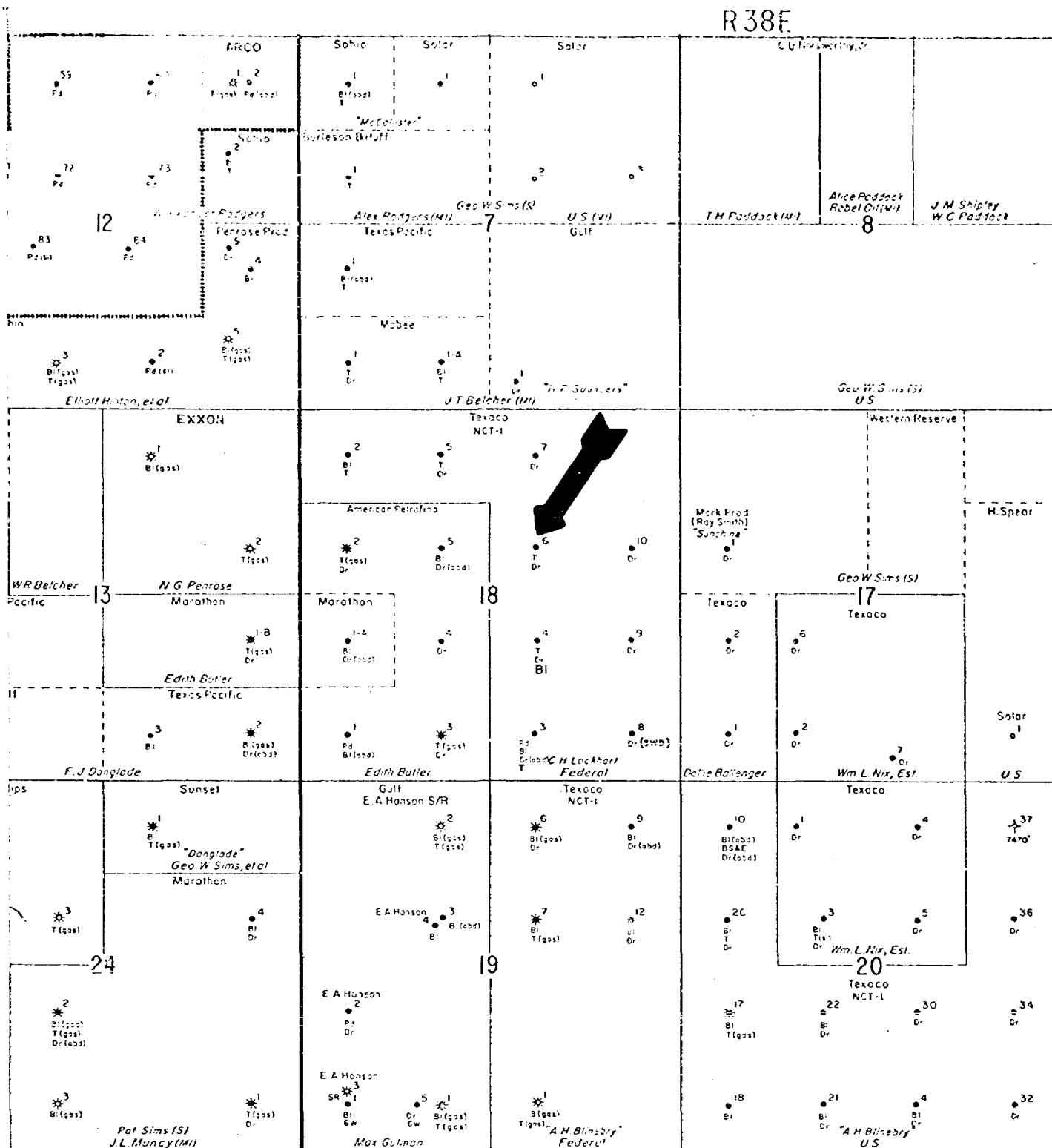
Report casing pressure in lieu of tubing pressure for any well producing through casing.

Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Commission in accordance with Rule 301 and appropriate pool rules.

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

*[Signature]*  
(Signature)  
**Assistant District Superintendent**  
(Title)  
**July 28, 1976**

Case  
5731



ABBREVIATIONS

- |                                  |                                     |
|----------------------------------|-------------------------------------|
| BEE - BRUNSON ELLENBURGER EAST   | GW - GRANITE WASH (UNDESIGNATED)    |
| BGW - BRUNSON GRANITE WASH       | LM7RD - LANGUE MATIX 7 RIVERS QUEEN |
| BGWE - BRUNSON GRANITE WASH EAST | PD - PADDOCK                        |
| BI - BLINEBRY                    | PS - PENROSE SKELLY GRAYBURG        |
| BWE - BRUNSON WAKEE EAST         | SA - SANTA ROSA (UNDESIGNATED)      |
| BSE - BRUNSON SAN ANDRES EAST    | T - TUBS                            |
| Dr - DRINKARD                    |                                     |

TEXACO INC.  
MIDLAND DIVISION  
BLINEBRY FIELD AREA  
S.E. LEA COUNTY, NEW MEXICO

0' 1000' 2000'  
SCALE:   
DRAWN BY: FWR

DATA SHEET FOR WELLBORE COMMINGLING

Operator: TEXACO INC.

Address: P. O. Box 723 - Hobbs, New Mexico 88240

Lease and Well No.: C. H. Lockhart Federal (HCT-1) Well No. 6

Location: Unit G; 1980' ENL & 1980' FEL of Section 18, Township 22-S, Range 38-E, Lea County, New Mexico

WELL DATA

	Pool	Pool	Pool
Name of Pool	Blinebry	Tubb	Drinkard
Producing Method	Pump	Pump	Pump
BHP	500 (Est.)	900 (Est.)	500 (Est.)
Type Crude	Sweet	Sweet	Sweet
Gravity	37.8 (Est.)	37.8	37.8
GOR Limit	6000	2000	6000
Completion Interval	Proposed 5618'-5804'	6192'-6243'	6822'-7142'
Current Test Date	--	June 28, 1976	June 29, 1976
Oil	20 (Est.)	3	1
Water	1 (Est.)	0	0
GOR	13,700 (Est.)	19,267	19,300

Selling Price of Crude -  
\$/BBL.

--	12.22	12.22
----	-------	-------

Daily Income - \$/Day

--	36.67	12.22
----	-------	-------

Tubb & Drinkard are downhole commingled (12-10-73) Order DHC-135

COMMINGLED DATA:

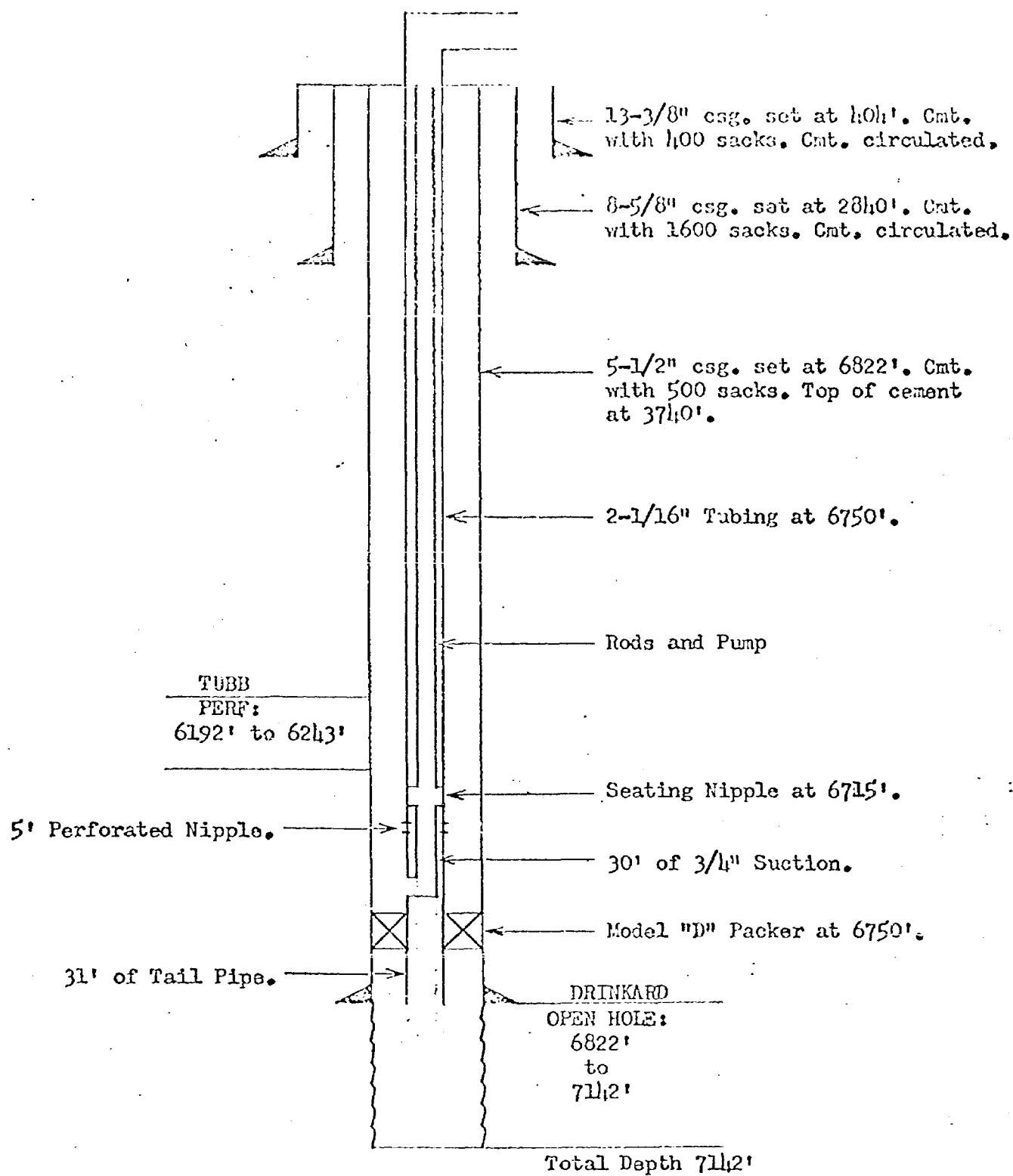
Gravity of Commingled Crude 37.8

Selling Price of Commingled Crude - \$/BBL. 12.22

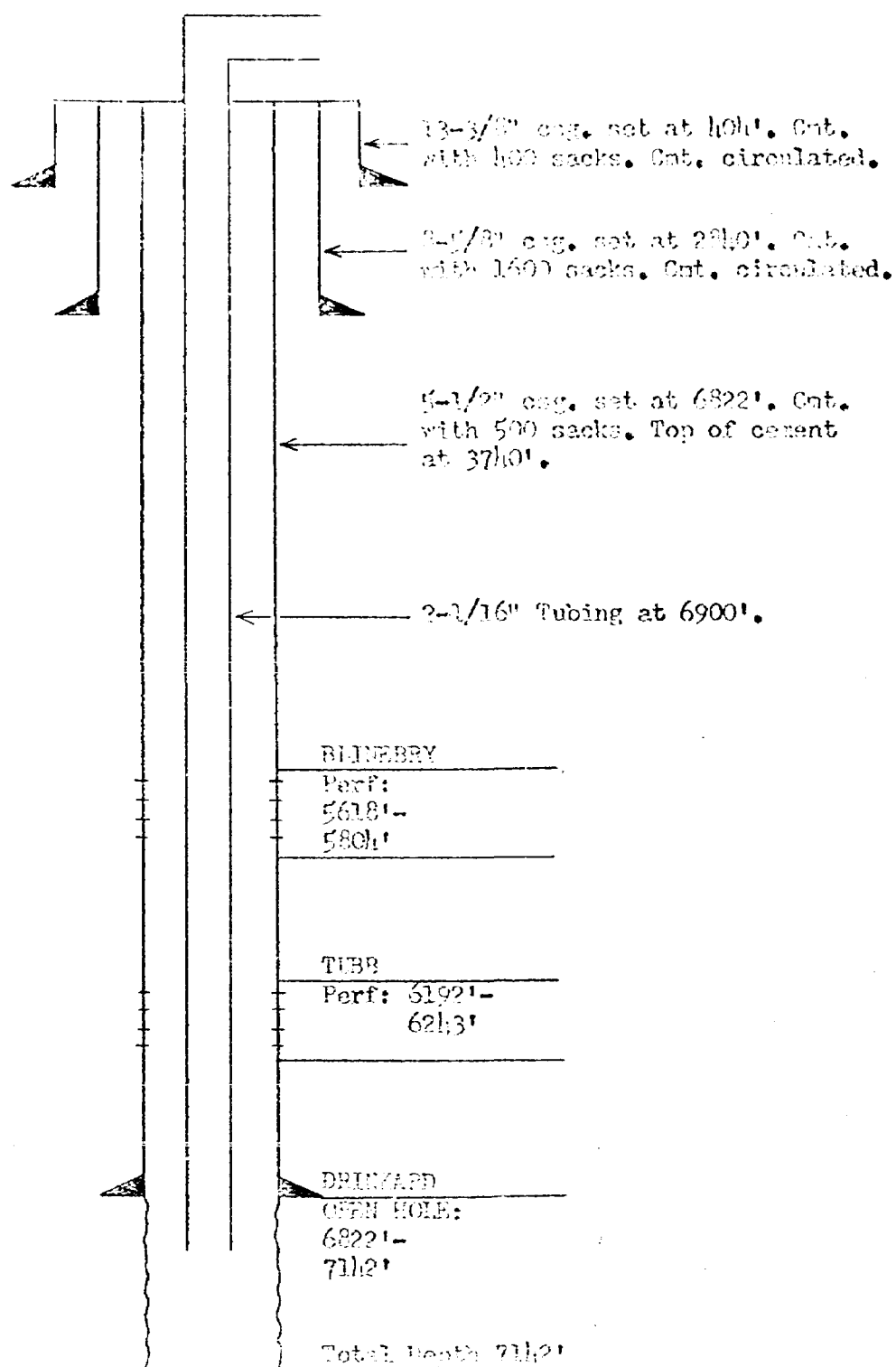
Daily Income - \$/Day 293.33

Net (Gain) ~~Loss~~ from Wellbore Commingling - \$/Day 244.44 (Production Increase of 20 BOPD) based on current producing rates.





PRESENT COMPLETION  
 TEXACO INC.  
 C.H. LOCKHART (NCT-1) WELL NO. 6  
 TUBB AND DRINKARD POOLS  
 LEA COUNTY, NEW MEXICO



PROPOSED CORRECTION

TAYLOR INC.

C.H. LOCHHEAD (NCT-1) WELL NO. 6  
 TOWN, DRINKARD AND MINEWELL FIELDS  
 BSA COUNTY, NEW MEXICO

## LIST OF OFFSET OPERATORS

TEXACO Inc.  
C. H. Lockhart Federal NCT-1 Well No. 6  
Lea County, New Mexico

American Petrofina Company of Texas  
Drawer B  
Artesia, New Mexico 88210

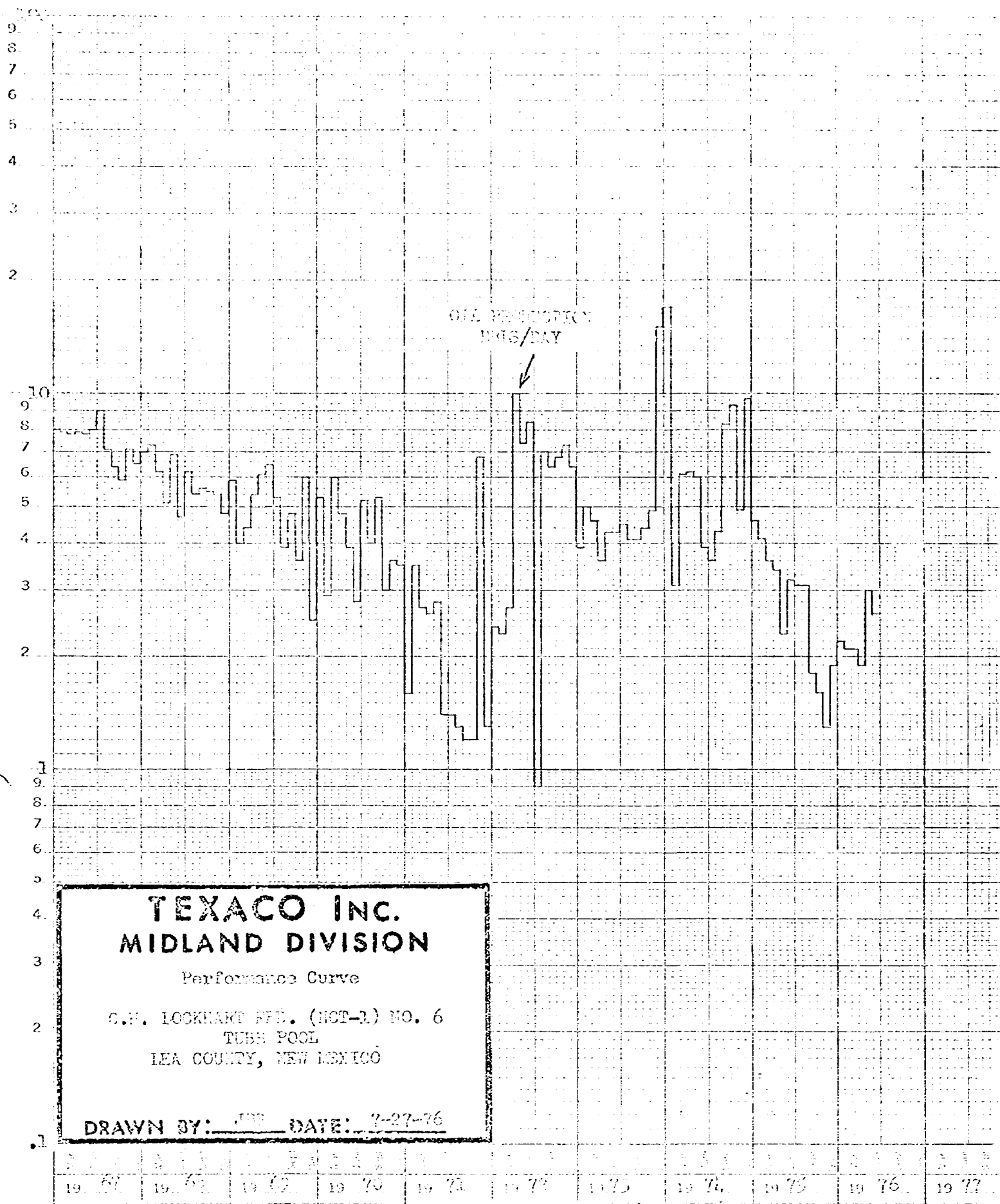
Gulf Oil Corp. - Hobbs Area  
P.O. Box 670  
Hobbs, New Mexico 88240

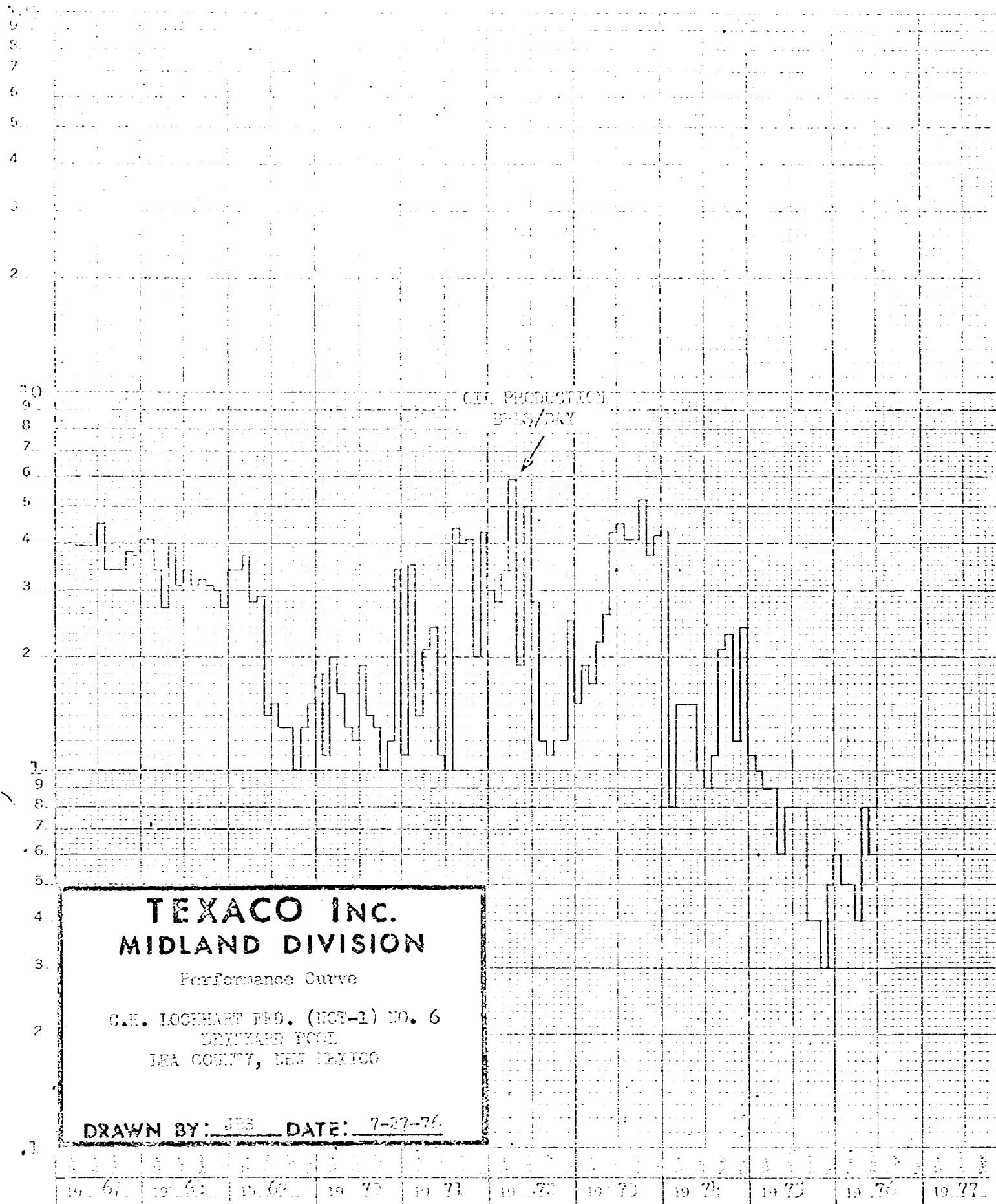
Exxon  
P.O. Box 2100  
Hobbs, New Mexico 88240

Mabes Petroleum Corp.  
201 1st Savings Building  
Midland, Texas 79701

Mark Production  
330 Citizens Bank Building  
Tyler, Texas 75701

Penrose Production Company  
P.O. Box 928  
Eunice, New Mexico 88231





**TEXACO INC.  
MIDLAND DIVISION**

Performance Curve

C.E. LOCKHART FLD. (NCT-1) NO. 6  
DREYARD POOL  
LEA COUNTY, NEW MEXICO

DRAWN BY: JES DATE: 7-27-76

1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
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NEW MEXICO OIL CONSERVATION COMMISSION  
GAS-OIL RATIO TESTS

G-116  
Revised 1-1-65

Operator <b>TEXACO INC.</b>		Pool <b>Tubb &amp; Drinkard</b>				County <b>Lea</b>									
Address <b>P. O. Box 728 - Hobbs, New Mexico 88240</b>						TYPE OF TEST - (X) <input checked="" type="checkbox"/>		Scheduled <input type="checkbox"/>		Completion <input type="checkbox"/>		Special <input checked="" type="checkbox"/>			
LEASE NAME	WELL NO.	LOCATION				DATE OF TEST	CHOKE SIZE	TSG. PRESS.	DAILY ALLOWABLE	LENGTH OF TEST HOURS	PROD. DURING TEST				GAS - OIL RATIO CU. FT./BSL
		U	S	T	R						WATER BBLs.	GRAV. OIL	OIL BBLs.	GAS M.C.F.	
<b>C. H. Lockhart Fed. (NCT-1)</b>  <u>Tubb</u>  <u>Drinkard</u>	6	G	18	22-S	38-E	6-28-76	P		4	24	0	37.8	3	57.8	19250
						6-29-76	P		1	24	0	37.8	1	19.3	19300

No well will be assigned an allowable greater than the amount of oil produced on the official test.

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 Commission.

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.

Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Commission in accordance with Rule 301 and appropriate pool rules.

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

*[Signature]*  
(Signature)  
Assistant District Superintendent

(Title)  
July 28, 1976

5731



## DATA SHEET FOR WELLBORE COMMINGLING

Operator: TEXACO INC.

Address: P. O. Box 728 - Hobbs, New Mexico 88240

Lease and Well No.: C. H. Luckhart Federal (NCT-1) Well No. 6

Location: Unit G; 1980' FHL & 1980' FEL of Section 18, Township 22-S, Range 38-E,  
Lea County, New MexicoWELL DATA

	Pool	Pool	Pool
Name of Pool	Blinbry	Tubb	Drinkard
Producing Method	Pump	Pump	Pump
BHP	500 (Est.)	900 (Est.)	500 (Est.)
Type Crude	Sweet	Sweet	Sweet
Gravity	37.8 (Est.)	37.8	37.8
GOR Limit	6000	2000	6000
Completion Interval	Proposed 5618'-5804'	6192'-6243'	6822'-7142'
Current Test Date	--	June 28, 1976	June 29, 1976
Oil	20 (Est.)	3	1
Water	1 (Est.)	0	0
GOR	13,700 (Est.)	19,267	19,300

Selling Price of Crude -  
\$/BBL.

-- 12.22 12.22

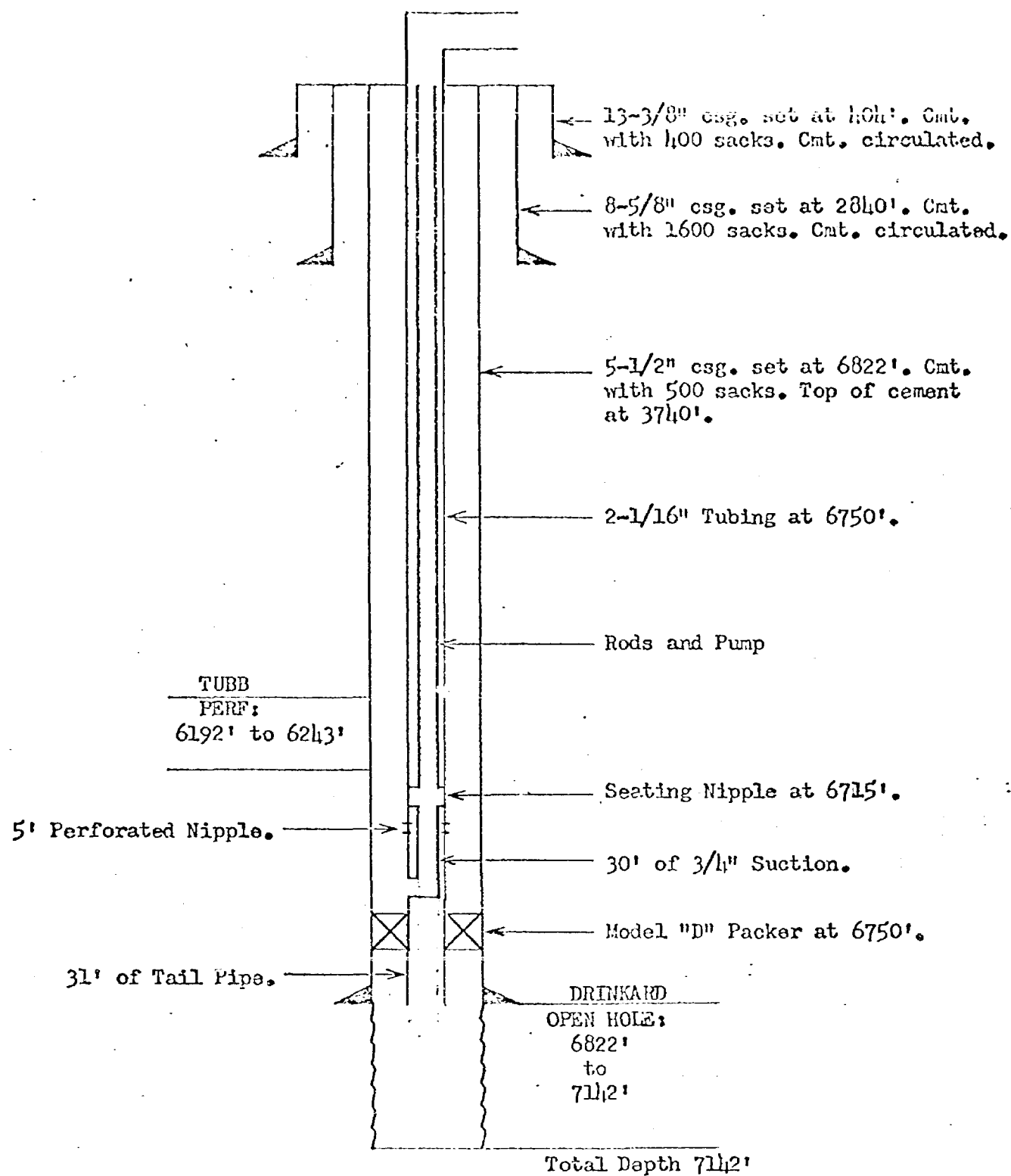
Daily Income - \$/Day

-- 36.67 12.22

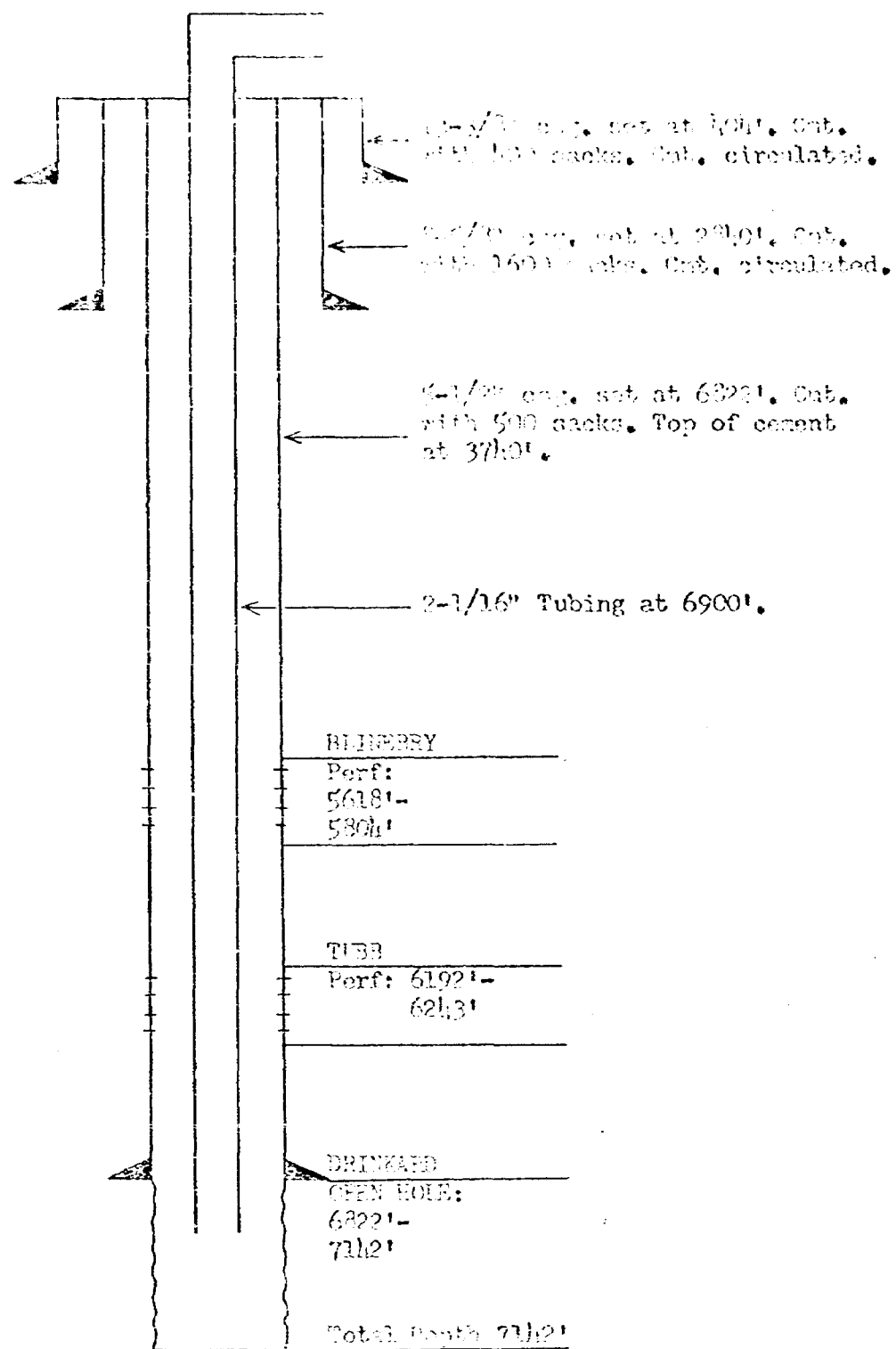
Tubb &amp; Drinkard are downhole commingled (12-10-73) Order DHC-135

COMMINGLED DATA:Gravity of Commingled Crude 37.8Selling Price of Commingled Crude - \$/BBL. 12.22Daily Income - \$/Day 293.33Net (Gain) ~~xxxxx~~ from Wellbore Commingling - \$/Day 244.44 (Production Increase of 20 BOPD)  
based on current producing rates.





PRESENT COMPLETION  
 TEXACO INC.  
 C.H. LOCKHART (NCT-1) WELL NO. 6  
 TUBB AND DRINKARD POOLS  
 IEA COUNTY, NEW MEXICO



PROPOSED COMPLETION  
 SERVICE INC.  
 C.F. LOWERY (NOT-1) WELL NO. 4  
 TRKS, BRINKARD AND BLINDESSY LOCAL  
 LISA COUNTY, NEW TEXAS

## LIST OF OFFSET OPERATORS

TEXACO Inc.  
C. E. Lockhart Federal HCT-1 Well No. 6  
Lea County, New Mexico

American Petrofina Company of Texas  
Drawer B  
Artesia, New Mexico 88210

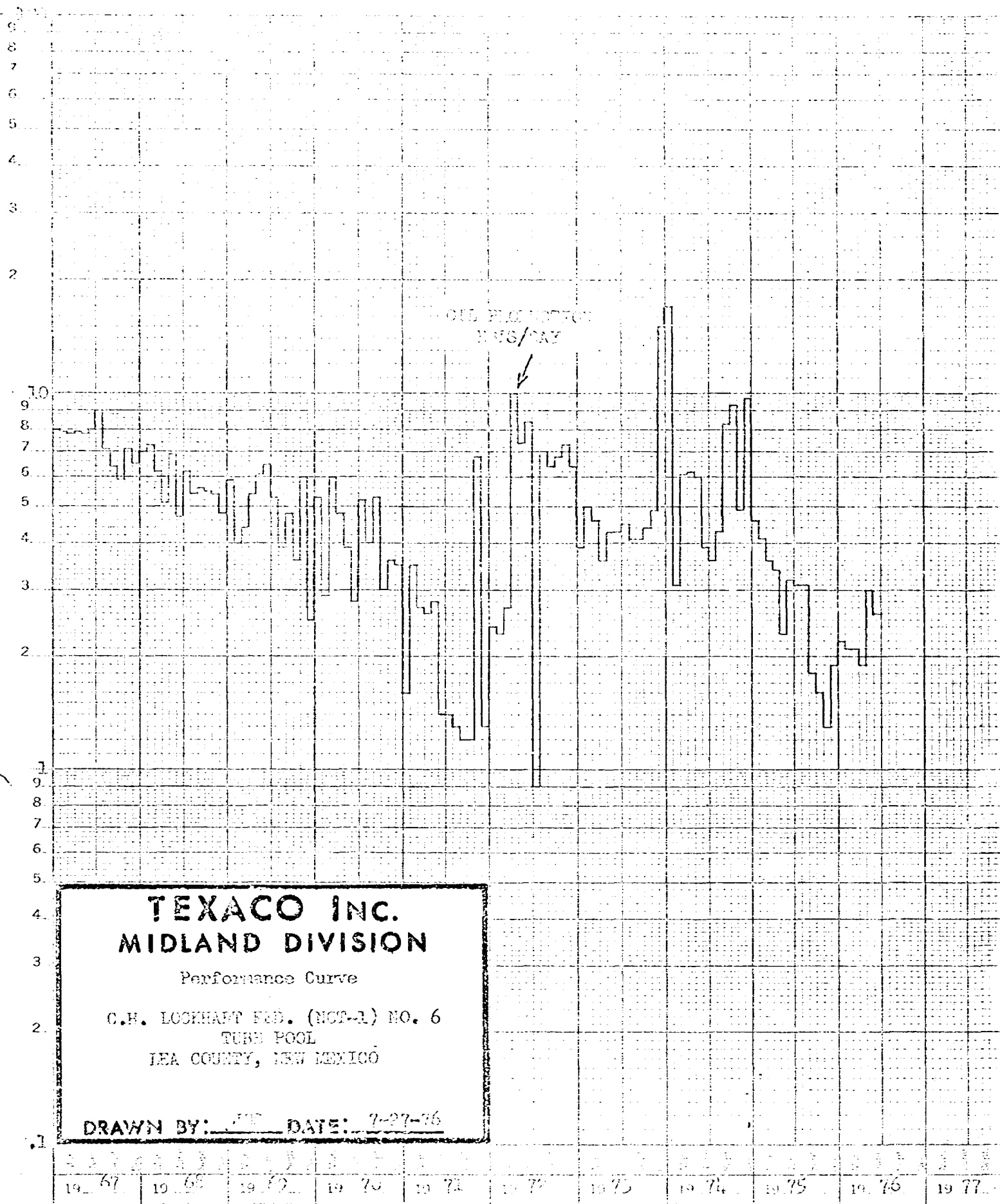
Gulf Oil Corp. - Hobbs Area  
P.O. Box 670  
Hobbs, New Mexico 88240

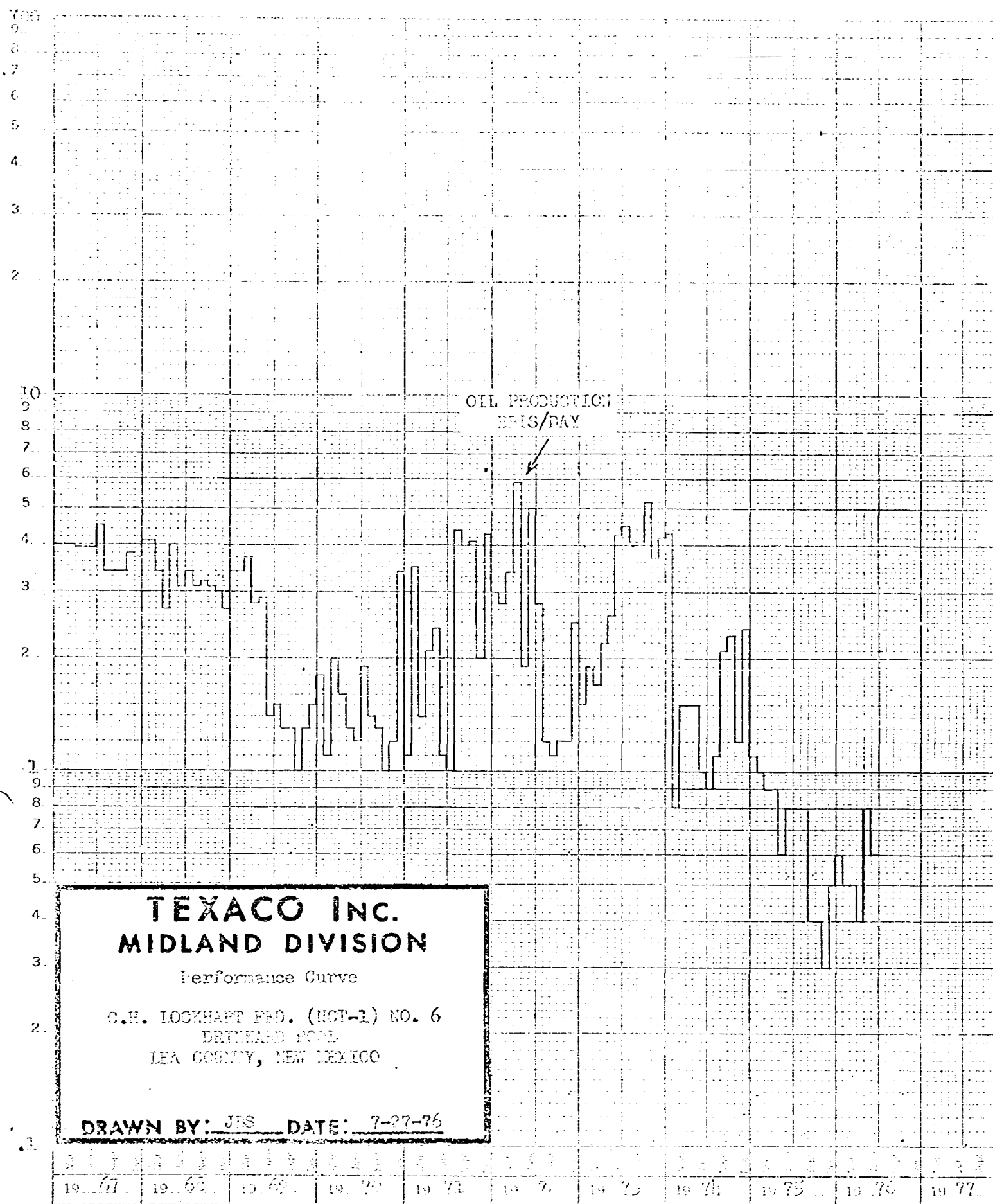
Exxon  
P.O. Box 2100  
Hobbs, New Mexico 88240

Mabee Petroleum Corp.  
201 1st Savings Building  
Midland, Texas 79701

Mark Production  
330 Citizens Bank Building  
Tyler, Texas 75701

Penrose Production Company  
P.O. Box 938  
Eunice, New Mexico 88231





dr/ *W*

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
COMMISSION OF NEW MEXICO FOR  
THE PURPOSE OF CONSIDERING:

CASE NO. 5731

Order No. R- 5272

*JJR*  
*BSL*  
APPLICATION OF TEXACO INC.  
FOR DOWNHOLE COMMINGLING, LEA  
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION *W*

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on August 18,  
19 76, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this        day of August, 1976, the Commission,  
a quorum being present, having considered the testimony, the record,  
and the recommendations of the Examiner, and being fully advised  
in the premises,

FINDS:

(1) That due public notice having been given as required by  
law, the Commission has jurisdiction of this cause and the subject  
matter thereof.

(2) That the applicant, TEXACO Inc., is the  
owner and operator of the C. H. Lockhart Federal Well/, located  
in Unit G of Section 18, Township 22 South, Range  
38 East, NMPM, Lea County, New Mexico.

(7) That the applicant seeks authority to commingle Tubb  
Blinebry, Drinkard and Tubb Drinkard production  
within the wellbore of the above-described well.

(3) That said well is currently completed to produce  
from the Tubb and Drinkard Pools.

(4) That from the Tubb and Drinkard zones, the  
subject well is capable of low rates of ~~marginal~~ production only.

(8) That the proposed commingling may result in the recovery  
of additional hydrocarbons from each of the subject pools, thereby  
preventing waste, and will not violate correlative rights.

(5) That the applicant proposes to recomplete said  
well in such a manner as to also produce from  
the Blinebry zone.

(6) That from the Blinebry zone, the subject  
well is projected to be capable of low  
rates of production only.

Case No. \_\_\_\_\_  
Order No. R- \_\_\_\_\_

(9) That the reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed commingling provided that the well is not shut-in for an extended period.

(10) That to afford the Commission the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the Hobbs district office of the Commission any time the subject well is shut-in for 7 consecutive days.

(11) That in order to allocate the commingled production to each of the commingled zones in ~~each of~~ the subject wells, the operator, upon completion of the wells, should consult with the supervisor of the Hobbs district office of the Commission to determine an allocation formula.

to the Blinebry zone, ~~and~~ <sup>XXXX</sup> \_\_\_\_\_ percent of the commingled \_\_\_\_\_ production to the Drinkard zone, and \_\_\_\_\_ percent of the commingled \_\_\_\_\_ production shall be allocated to the Tubb zone.

IT IS THEREFORE ORDERED:

(1) That the applicant, Texaco Inc., is hereby authorized to commingle Blinebry, Tubb, and Drinkard production within the wellbore of the C. H. Lockhart Federal Well No. 6, located in Unit G of Section 18, Township 22 South \_\_\_\_\_, Range 38 East \_\_\_\_\_, NMPM, Lea County, New Mexico.

(2) That upon completion of ~~each of~~ said well, to produce from ~~the~~ the Blinebry, Tubb, and Drinkard formations, the applicant shall consult with the supervisor of the Hobbs district office of the Commission to determine the proper formula for allocation of oil and gas production to each zone open in the well.

\_\_\_\_\_ shall be allocated to the Drinkard \_\_\_\_\_ zone, and \_\_\_\_\_ percent of the commingled \_\_\_\_\_ production shall be allocated to the Tubb zone.

(3) That the operator of the subject well shall immediately notify the Commission's Hobbs district office any time the well has been shut-in for 7 consecutive days and shall concurrently present, to the Commission, a plan for remedial action.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.