

CASE 5457: TEXACO INC. for
downhole commingling, Lea County,
New Mexico

CASE No.

5457

Application,
Transcripts,
Small Exhibits

ETC.

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
April 16, 1975

EXAMINER HEARING

IN THE MATTER OF:

Application of Texaco, Inc.,
for downhole commingling,
Lea County, New Mexico.

CASE NO. 5457

BEFORE: Daniel S. Nutter, 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 87501

For the Applicant:

William Booker Kelly, Esq.
WHITE, KOCH, KELLY &
McCARATHY
220 Otero
Santa Fe, New Mexico 87501

CASE 5457

Page 2

I N D E X

PAGE

WAYNE C. PIERCE

Direct Examination by Mr. Kelly
Cross Examination by Mr. Nutter

3
12

E X H I B I T S

Applicant's Exhibits Nos. 1 through 7

12

PIERCE-DIRECT

Page. 3

MR. NUTTER: Case 5457.

MR. CARR: Case 5457. Application of Texaco, Inc., for downhole commingling, Lea County, New Mexico.

MR. KELLY: Booker Kelly of White, Koch, Kelly and McCarthy, Santa Fe, New Mexico, on behalf of the Applicant. I have one witness and I ask that he be sworn.

(Witness sworn.)

WAYNE C. PIERCE

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

DIRECT EXAMINATION

BY MR. KELLY:

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

A My name is Wayne Pierce. I am currently employed by Texaco, Incorporated, in Hobbs, New Mexico, as their District Production Engineer.

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

A Yes, I have.

Q Referring to the plat marked Exhibit 1, would you briefly state what Texaco seeks by their Application?

A Texaco seeks approval to downhole commingle

PIERCE-DIRECT

CASE 5457

Page 4

production from the Monument-Tubb, the Skaggs-Drinkard and the Weir-Blinebry East pools in the wellbore of our M. B. Weir B Federal Well No. 10 located in Unit P of Section 12, Township 20 South, Range 37 East, Lea County, New Mexico.

Q What is the present status of that well?

A The well is currently producing from all three zones. The Blinebry and Drinkard zones are being artificially lifted and the Monument-Tubb zone is currently flowing.

Q Referring to Exhibit No. 2, your data sheet of the three zones, would you briefly describe that to the Examiner?

A The upper zone which is the Weir-Blinebry East zone is currently being artificially lifted. It has an estimated bottomhole pressure of 900 PSI and the type of crude is sour. It has a gravity of 35.2 and it was completed in the interval of 5774 to 6036 feet. The current test on this zone is 11 barrels of oil per day and 24 barrels of water with a GOR of 5900. The middle zone is the Monument-Tubb. It is currently flowing and has a measured bottomhole pressure of 740 PSI. The type of crude here is sweet with a gravity of 45.3. The current

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PIERCE-DIRECT

Page 5

completion interval is 6366 to 6592. The current test on this zone is 2 barrels of oil per day and no water with a GOR of 72,000. The lower zone is the Skaggs-Drinkard. It is being artificially lifted and has an estimated bottomhole pressure of 500 PSI. The type of crude here is sour with a gravity of 35.2. The completion interval is from 6812 to 6866. The current test on this zone is one barrel of oil per day and no water with a GOR of 1200

Q Are the two sour zones presently commingled at the surface?

A That is correct.

Q And the sweet is separate?

A Yes. On this lease we have two batteries; one for our sour production and one for our sweet crude.

Q What do you estimate the increased production will be as a result of commingling these three zones?

A We are anticipating a total increase of 15 barrels per day, and we anticipate that this will be accomplished by all three zones in equivalent amounts. In other words, five barrels per day per zone.

Q Could you explain, as to each zone, why you feel the commingling will have this advantageous effect?

A The Blinebry Zone is very gassy and it is a slim

PIERCE-DIRECT

Page 6

hole completion and we are having to produce the gas, as well as our crude, up through our pump. We have run dynamometer surveys which indicate a severe gas interference and that with the downhole commingling, we will be able to vent this gas up the Blinebry string while producing the fluid up the Drinkard string which we have our pumping equipment in. The Monument-Tubb Zone is currently flowing and it is very gassy. It produces 146 MCF per day of two barrels of oil and the same reasoning applies to this zone also in that we will be able to vent the gas up the Tubb string and produce our oil out the Drinkard string. This zone here, we could place it on artificial lift, but it would be uneconomical based on the amount of expenditure required to place it on rod pump and for no more amount of production that will be realized from the zone. The Drinkard Zone is currently on pump and at the time of downhole commingling the three zones, we will acidize this zone and we anticipate as a result of this, we will get a five-barrel increase. This was based on a comparison of offset producers in their current producing rates.

Q How about the economics? What effect will this have on your increase of income?

A By downhole commingling all three zones, we will,

one, be able to recover an additional 2520 barrels of reserve and it will increase our revenue per day at \$135.55. This is based on the selling prices of the two crudes in question, the two batteries in question. In addition, we will be able to extend the life of the Tubb and Drinkard zones.

Q You figure that as far as your Tubb and Drinkard, they are about at economic limits?

A They are at economic limits now.

Q Going to Exhibit No. 3 and 4, would you explain the present and proposed completions?

A The M. B. Weir B Federal No. 10 was drilled in 1965 to a total depth of 6900 feet. There was a 9 and 5/8-inch casing set at a depth of 1400 feet and cement was circulated on the surface pipe. The well was then drilled to its total depth and three strings of 2 and 7/8-inch casing were set at TD and cemented with a total of 1000 sacks of cement. We have a calculated cement top of 3400 feet, and as indicated on here, the three zones were completed as a triple in 1965. The Blinebry is currently pumping and the Tubb is currently flowing and the Drinkard is currently being pumped.

Q You propose the completion as shown on Exhibit 4?

A This is the proposed completion of the subject well indicating where we intend to establish communication between the three zones. This will be accomplished by perforating across from each of the Blinebry and Tubb zones into the Drinkard zone from 6856 to 6866. Comparatively, it is in the interval of the lower ten feet of the existing Drinkard perforations. When we establish communication with all three zones, we will then run our pumping equipment into the Drinkard string and produce all three zones up the Drinkard side.

Q The other two zones will be for vented gas?

A That is correct. We would then vent gas up the Blinebry string and the Tubb string.

Q Now, referring to Exhibit 5, would you give the Examiner a history of the commingled production of the Blinebry zone?

A Exhibit 5 is a performance curve on the Weir-Blinebry East zone. This zone was completed in February of 1965 and on initial potential, the zone flowed 15 oil and no water. Production declined until October of 1971 when additional pay was opened. All perforations were acidized and fracture stimulated. The well was placed on rod pump and produced 30 barrels of oil per day with 34

barrels of water. Production, then, has declined down to the current rate of 11 oil and 24 water per day. This zone has a cumulative of 22,820 barrels of oil.

Q Now, Exhibit 6, would you explain the same thing for the Monument-Tubb?

A This is also a performance curve on the Monument-Tubb zone. It was also completed in February of 1965 and on initial potential, it flowed 3 barrels of oil and produced 964 MCF per day. In January of 1970, the well was worked over where we opened some additional pay in the Tubb and then acidized and fracture-stimulated all perforations. At this time the well produced 9 barrels of oil per day with 888 MCF per day. It has declined to its current rate of 2 barrels of oil per day and 147 MCF.

We have a measured bottomhole pressure on this well and it indicates that we do have fluid in the hole and by being able to vent the gas from this zone, we will be able to recover this additional oil up the Drinkard side.

Q Did you give the cumulative?

A No. It has a cumulative production of 5700 barrels.

Q Now, No. 7 on the Skaggs-Drinkard zone.

A The Drinkard zone was also completed in February of 1965 and on initial potential test, this zone flowed

PIERCE-DIRECT

CASE 5457

Page 10

97 oil with no water. Production declined until 1971 at which time the zone was placed on rod pump and pumped 20 barrels of oil and no water per day. Production, then, has declined down to its current rate of one barrel per day, and the anticipated increase of 5 barrels a day is based on a comparison of offset producers and their current rates and the fact that the well has not been stimulated for quite some time.

Q What is the cumulative production on this zone?

A The cumulative on this zone is 52,000 barrels of oil

Q In your opinion, will the commingling of these crudes have any disadvantageous effect as far as the quality of crudes?

A No, I don't. As indicated, there are two zones that are sour with the Tubb zone being sweet, but the differential or the net difference on a price-per-barrel basis is only 31¢ per barrel and since it is only producing 2 barrels per day, the net effect would be 62¢ a day loss in that respect, but again, the gain that we will realize in production increase by cutting down on commingling, this will be more than off set.

Q It is your recommendation, I understand, to the

Commission that any increased production be split equally between the three zones?

A That is correct.

Q How about the gas production?

A We recommend on the gas that it be allocated based on the current production with the zones segregated. This would be at the rate of 31 percent to the Blinebry zone, 68-percent to the Monument-Tubb zone and one-percent to the Drinkard zone.

Q In your opinion, would the granting of this Application allow you to recover hydrocarbons that would otherwise be left in place, thereby preventing waste?

A Yes.

Q Do you feel it would have any adverse effect on the correlative rights of any operators?

A No.

Q Were Exhibits 1 through 7 prepared by you or under your supervision?

A Yes, they were.

MR. KELLY: Mr. Examiner, I move the introduction of Texaco's Exhibits 1 through 7.

MR. NUTTER: Texaco's Exhibits 1 through 7 will be admitted in evidence.

(Whereupon, Applicant's Exhibits Nos. 1 through 7 were marked for identification, and were offered and admitted into evidence.)

MR. KELLY: We have no further direct testimony.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Pierce, you've got two kinds of gas being produced here also. Are they going into a common pipeline or is there a sweet gas line and a sour gas line here?

A There is a -- to the best of my knowledge, there is only one pipeline that we are selling the gas to and we do have a market for the gas.

Q So, there won't be any change as far as value of the gas or the pipeline it is going into?

A No, sir.

Q And the liquid production will be through the Drinkard casing string, correct?

A That is correct.

Q And both of the other two casing strings will be used for gas then?

A Yes, sir.

Q Do you expect that the Drinkard will have to be pumped, that that casing string will be pumped?

A Yes. That is the zone we will be pumping out of.

Q It will be pumping?

A Right. It is the lowermost zone.

MR. NUTTER: Are there any further questions of the witness? He may be excused.

(Witness dismissed.)

MR. NUTTER: Do you have anything further, Mr. Kelly?

MR. KELLY: No, sir.

MR. NUTTER: Does anyone have anything they wish to offer in Case No. 5457? We will take the case under advisement.

STATE OF NEW MEXICO)
) SS.
COUNTY OF SANTA FE)

I, RICHARD L. NYE, Court 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.

Richard L. Nye

COURT REPORTER

I do hereby certify that the foregoing is a complete record of the proceedings of the Hearing held at Santa Fe, New Mexico, on 4/16/75, in Case No. 5457, heard by the Honorable Judge [Signature] of the New Mexico Oil Conservation Commission.

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OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

P. O. BOX 2088 - SANTA FE

87501

May 6, 1975

I. R. TRUJILLO
CHAIRMAN

LAND COMMISSIONER
PHIL R. LUCERO
MEMBER

STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY - DIRECTOR

Mr. Booker Kelly
White, Koch, Kelly & McCarthy
Attorneys at Law
Post Office Box 787
Santa Fe, New Mexico

Re: CASE NO. 5457
ORDER NO. R-5006

Applicant:

Texaco Inc.

Dear Sir:

Enclosed herewith are two copies of the above-referenced
Commission order recently entered in the subject case.

Very truly yours,

A. L. Porter, Jr.

A. L. PORTER, Jr.
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC X
Artesia OCC _____
Aztec OCC _____

Other _____

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. 5457
Order No. R-5006

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 April 16, 1975,
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 6th day of May, 1975, 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 M. B. Weir "B" Well No. 10, located in Unit P
of Section 12, Township 20 South, Range 37 East, NMPM, Lea
County, New Mexico.
- (3) That the applicant seeks authority to commingle East
Weir-Blinebry, Monument-Tubb, and Skaggs-Drinkard production
within the wellbore of the above-described well.
- (4) That from the East Weir-Blinebry zone, the subject
well is capable of marginal production only.
- (5) That from the Monument-Tubb zone, the subject well is
capable of low marginal production only.
- (6) That from the Skaggs-Drinkard zone, the subject well
is capable of low marginal production only.
- (7) 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.

-2-

Case No. 5457
Order No. R-5006

(8) 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.

(9) 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.

(10) That in order to allocate the commingled production to each of the commingled zones in the subject well, 55 percent of the oil production and 31 percent of the gas production should be allocated to the East Weir-Blinebry zone, 24 percent of the oil production and 68 percent of the gas production to the Monument-Tubb zone, and 21 percent of the oil production and one percent of the gas production to the Skaggs-Drinkard zone.

IT IS THEREFORE ORDERED:

(1) That the applicant, Texaco Inc., is hereby authorized to commingle East Weir-Blinebry, Monument-Tubb, and Skaggs-Drinkard production within the wellbore of the M. B. Weir "B" Well No. 10, located in Unit P of Section 12, Township 20 South, Range 37 East, NMPM, Lea County, New Mexico.

(2) That 55 percent of the oil production and 31 percent of the gas production shall be allocated to the East Weir-Blinebry zone, 24 percent of the oil production and 68 percent of the gas production shall be allocated to the Monument-Tubb zone, and 21 percent of the oil production and one percent of the gas production shall be allocated to the Skaggs-Drinkard 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.

-3-

Case No. 5457
Order No. R-5006

DONE at Santa Fe, New Mexico, on the day and year herein-
above designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION



I. R. Trujillo
I. R. TRUJILLO, Chairman

Phil R. Lucero
PHIL R. LUCERO, Member

A. L. Porter, Jr.
A. L. PORTER, Jr., Member & Secretary

S E A L

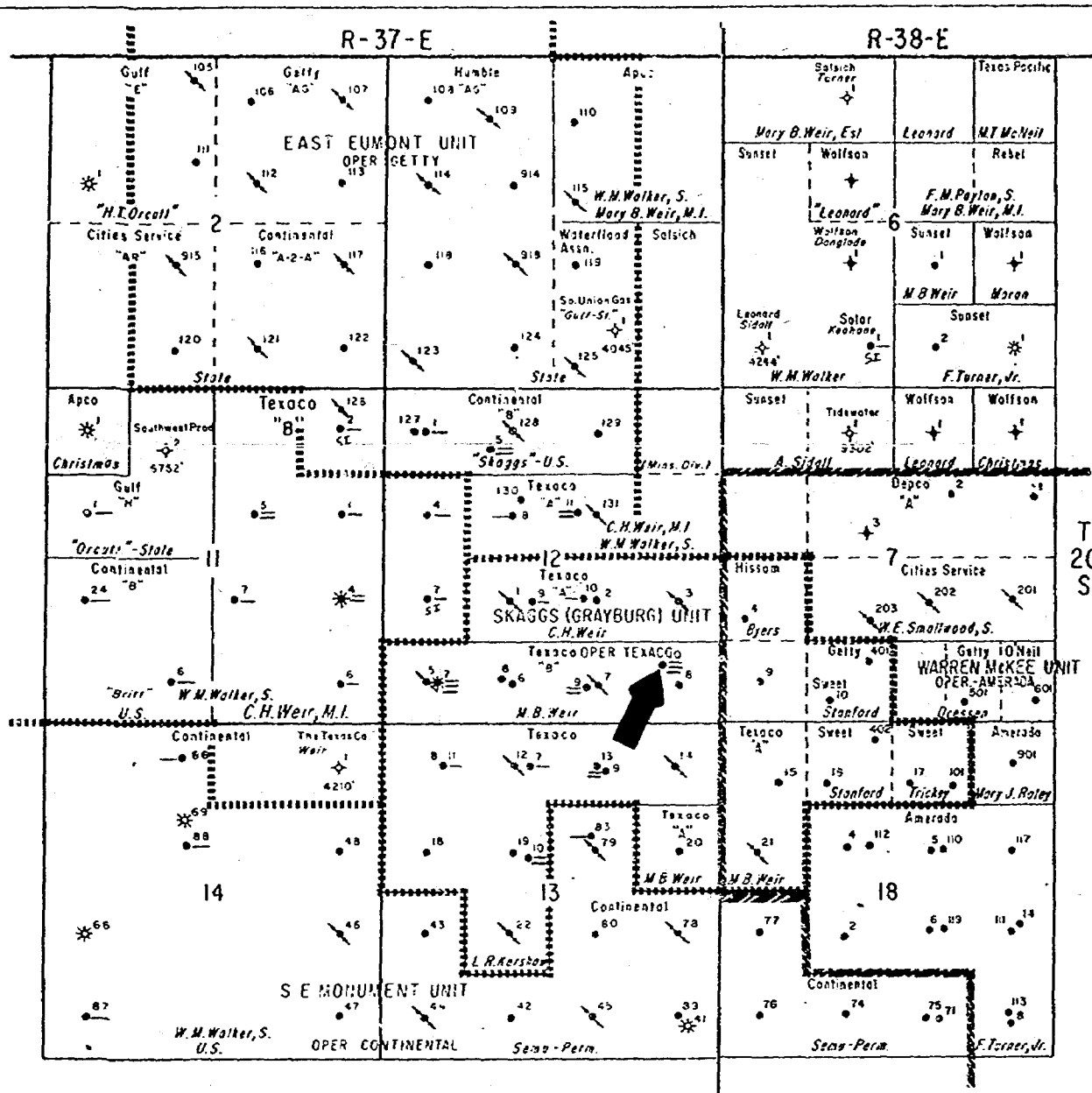
dr/

BEFORE EXAMINER NUTTER

OIL CONSERVATION COMMISSION

Texas EXHIBIT NO. 1

CASE NO. 5457



LEGEND

- PRODUCING WELL
- INJECTION WELL
- ✦ DRY HOLE
- UNIT BOUNDARY

TEXACO'S
M.B. WEIR "B" LEASE
LEA COUNTY, NEW MEXICO
SCALE: 1" = 2000'

- WEIR BLINEBRY EAST
- SKAGGS DRINKARD
- MONUMENT TUBB

DATA SHEET FOR WELLBORE COMMINGLING

Operator: TEXACO Inc.

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

Lease and Well No.: M. B. Weir "B" Federal No. 10

Location: Unit P, 987' FEL and 990' FSL, Section 12, Township 20 South, Range 37 East, Lea County, New Mexico

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
Texaco EXHIBIT NO. 2
CASE NO. 5457

WELL DATA

	Upper Pool	Middle Pool	Lower Pool
Name of Pool	Weir Blinebry East	Monument Tubb	Skaggs Drinkard
Producing Method	Pump	Flow	Pump
BHP	900 Est.	740	500 Est.
Type Crude	Sour	Sweet	Sour
Gravity	35.2	45.3	42.2
GOR Limit	2,000	4,000	2,000
Completion Interval	5774'-6036'	6366'-6592'	6812'-6866'
Current Test Date	2-25-75	2-26-75	2-28-75
<div>16 7 6 24</div> Oil	11 + 5 = 16 55%	2 + 5 = 7 24%	1 + 5 = 6 21%
Water	24	0	0
GOR	5,900	72,333	1,200
Selling Price of Crude - \$/BBL.	5.10	11.16	10.85
Daily Income - \$/Day	56.10	22.32	10.85

COMMINGLED DATA:

Gravity of Commingled Crude 35.5

Selling Price of Commingled Crude - \$/BBL. 10.85 *5.10 Blinebry*
+ 5 bopd increase for each zone
10.85 Monument Tubb & DRINKARD

Daily Income - \$/Day 34.55 234.60

Net (Gain) (Loss) from Wellbore Commingling - \$/Day 135.55
205.38 (Production increase of 15 BOPD
based on current producing rates. @ stripper oil price of \$10.85 per barrel)

allocate gas on current basis
31% Bl 68 Tb 1% Dr

2-7/8" csg. cemented with 1000 sacks. Calculated cement top at 3400'.

BLINEBRY (PUMP)

TUBE (FLOW)

DRINKARD (PUMP)

Drilled to 6900 in '65

9-5/8" csg. set at 1400'. Cemented with 750 sacks. Cement circulated.

Calc cement top 3400' on 3 strings

2-7/8" csg. set at 6896'.

2-7/8" csg. set at 6894'.

2-7/8" csg. set at 6898'.

Pumping

BLINEBRY

Perf:
5774'-6036'

Sour

35.2

900 psi

11 BOPD 24 BW 5500 HOR

BEFORE EXAMINER NUTTER

OIL CONSERVATION COMMISSION

Texas EXHIBIT NO. 3

CASE NO. 5457

146 MCF/day

Flowing

BHP 740

Surf 45.3

*2 BOPD OWL
72,000*

Presently

Commining

BL & DR (Sour)

on surf.

prod should increase

about 5 BOPD on

each zone or 15 BOPD

on Commining

TUBE

Perf:
6366'-6592'

DRINKARD

Perf:
6812'-6866'

TD 6900'

Present Completion

M.B. WEIR "B" FED. NO. 10

MONUMENT TUBB, SKAGGS DRINKARD AND WEIR BLINEBRY EAST POOLS

LEA COUNTY, NEW MEXICO

Pumping

BHP 5000 ft

Sour 35.2

1 BOPD OWL

1200 HOR

JBS 3-21-75

2-7/8" csg. cemented with 1000 sacks. Calculated cement top at 3400'.

BLINEBRY, TUBB AND DRINKARD
(PUMP)

9-5/8" csg. set at 1400'. Cemented with 750 sacks. Cement circulated.

5' hole inc due to gas venting

BLINEBRY
Perf:
5774'-6036'

2-7/8" csg. set at 6896'.

2-7/8" csg. set at 6894'.

2-7/8" csg. set at 6898'.

gas vent strings
oil prod string

BEFORE EXAMINED BY
OIL COMMISSION
Texaco PERMIT NO. 4
5457

TUBB
Perf:
6366'-6592'

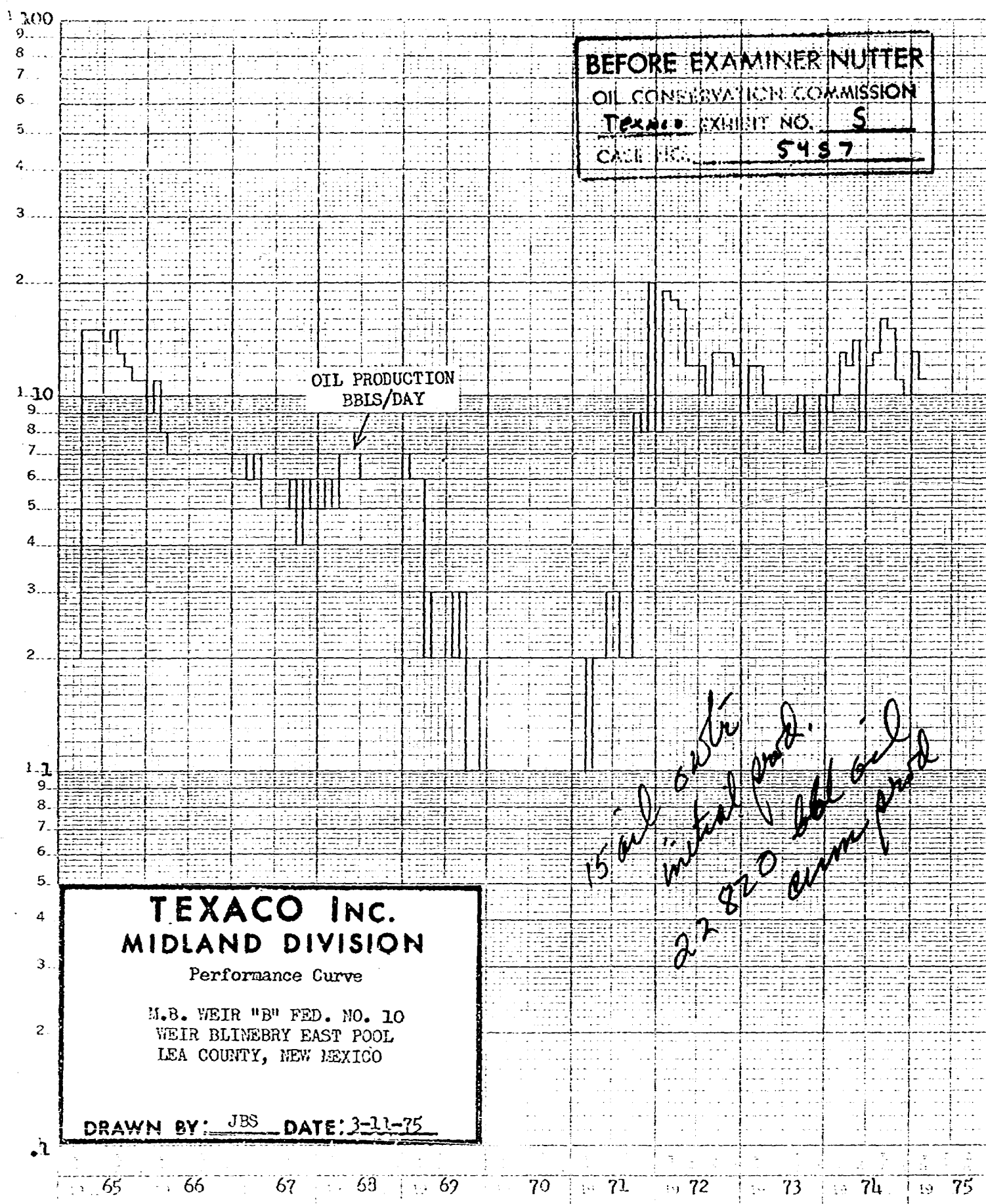
DRINKARD
Perf:
6812'-6866'

will be acidized expect 5' hole increase

TD 6900'
Proposed Completion

M.B. WEIR "B" FED. NO. 10
MONUMENT TUBB, SKAGGS DRINKARD AND WEIR BLINEBRY EAST POOLS
IEA COUNTY, NEW MEXICO

JBS 3-21-75



BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
TEXAS EXHIBIT NO. 5
CASE NO. 5487

TEXACO INC.
MIDLAND DIVISION
Performance Curve
M.B. WEIR "B" FED. NO. 10
WEIR BLINEBRY EAST POOL
LEA COUNTY, NEW MEXICO
DRAWN BY: JBS DATE: 3-11-75

15' oil
initial prod.
22 820
cum prod.

100

9

8

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6

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BEFORE EXAMINED NUTTER

CH. OF ... MISSION

Texaco ...

5457

OIL PRODUCTION
BBLS/DAY

TEXACO INC.
MIDLAND DIVISION

Performance Curve

M.B. WEIR "B" FED. NO. 10
MONUMENT TUBB POOL
LEA COUNTY, NEW MEXICO

DRAWN BY: JRS DATE: 3-11-75

initial prod
2/60
3 30 964 MCF/day
9 30 988 MCF
after ...
cum prod.
5700 bbls

70

71

72

73

74

75

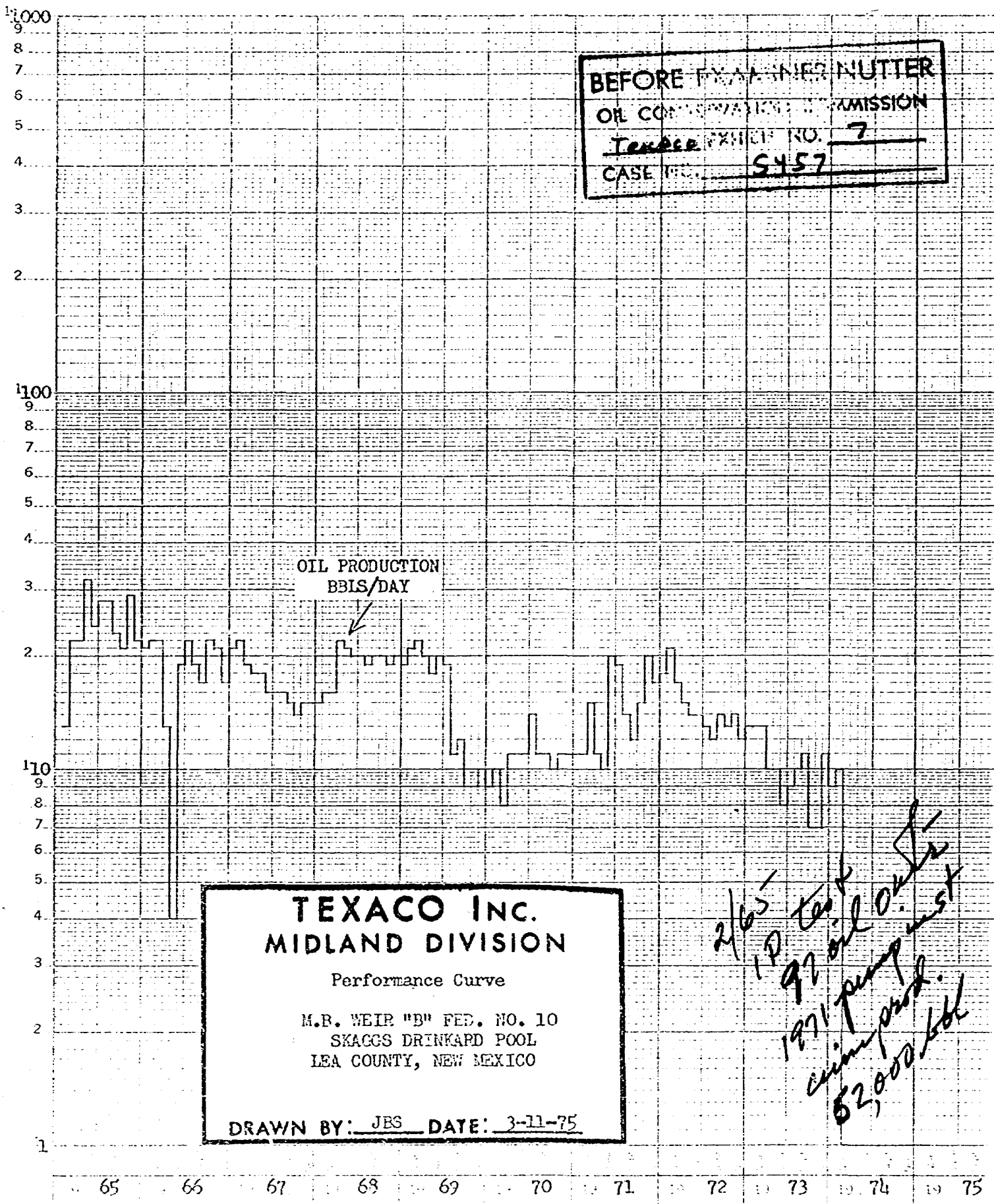
76

77

78

79

80



OFFSET OPERATORS

Continental Oil Co.
P. O. Box 460
Hobbs, New Mexico 88240

NEW MEXICO OIL CONSERVATION COMMISSION
GAS-OIL RATIO TESTS

C-116
Revised 1-1-65

Operator TEXACO Inc.		Pool See Below				County Lea										
Address P. O. Box 728, Hobbs, New Mexico 88240						TYPE OF TEST - (X)		Scheduled <input type="checkbox"/>		Completion <input type="checkbox"/>		Special <input checked="" type="checkbox"/>				
LEASE NAME	WELL NO.	LOCATION				DATE OF TEST	STATUS	CHOKE SIZE	T.B.G. PRESS.	DAILY ALLOWABLE	LENGTH OF TEST HOURS	PROD. DURING TEST				GAS - OIL RATIO CU. FT./BBL.
		U	S	T	R							WATER BBLs.	GRAV. OIL	OIL BBLs.	GAS M.C.F.	
M.B. Weir "B" Federal	10	P	12	20S	37E											
<u>Weir Blinebry East</u>						2-25-75	P			20	24	24	35.2	11	64.9	5900
<u>Monument Tubb</u>						2-26-75	F	36/64	100	3	24	0	45.3	2	144.6	72,333
<u>Skaggs Drinkard</u>						2-28-75	P			1	24	0	35.2	1	1.2	1200

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)

March 3, 1975

(Date)



COLEMAN PETROLEUM ENGINEERING COMPANY

PHONE 393-3813

3713 W. MARLAND ST.

P. O. BOX 1829

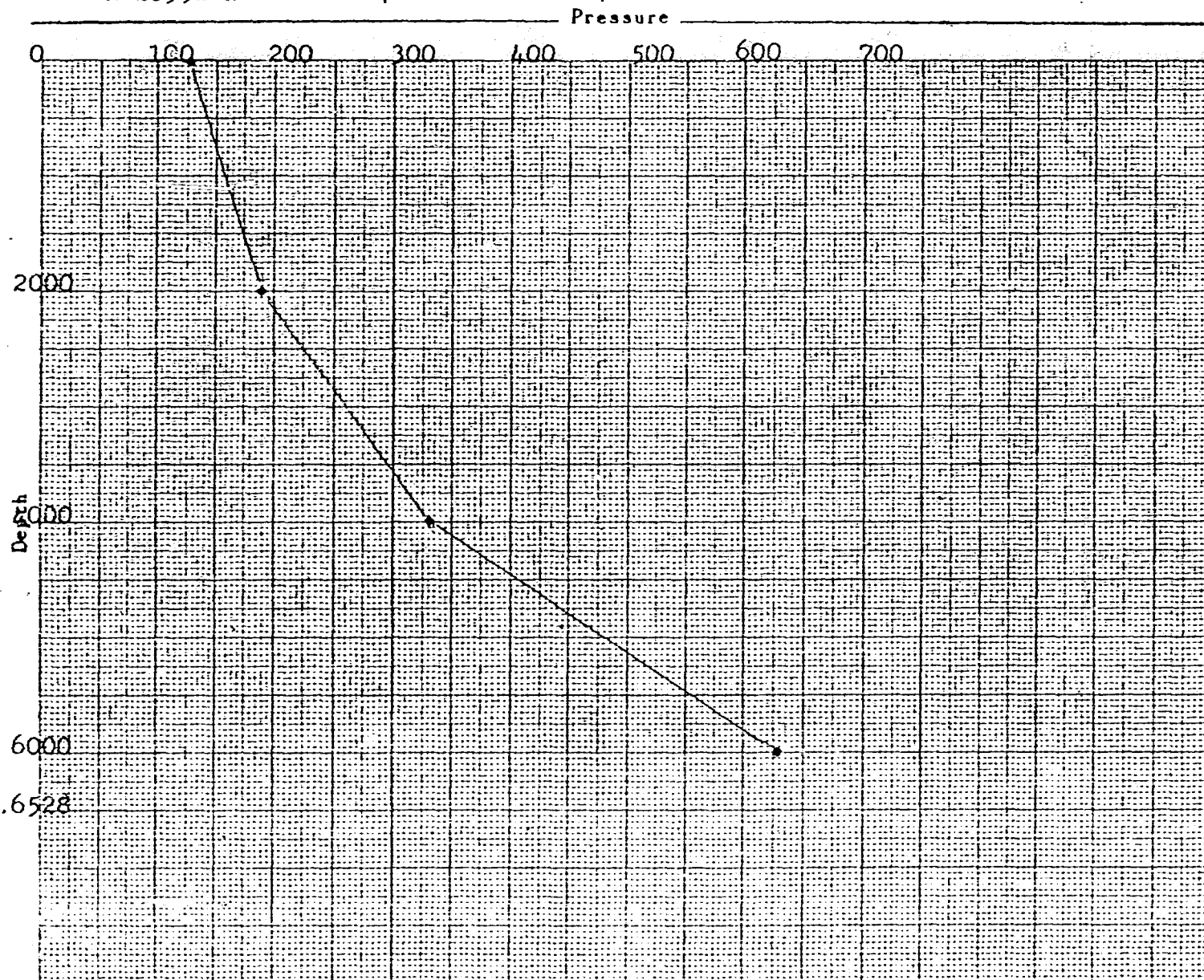
HOBBS, NEW MEXICO 83240

BOTTOM HOLE PRESSURE RECORD

OPERATOR Texaco, Inc.
FIELD Monument FORMATION Tubb
LEASE M.B. Weir B WELL No. 10
COUNTY Lea STATE New Mexico
DATE 1-28-75 TIME 12:00 N
Status Open Test depth 6528'
Time S. I. - Last test date -
Tub Pres. 152 BHP last test -
Gas. Pres. - BHP change -
Elev. 3565' KB Fluid top Flowing
Datum (-2963)** Water top -
Temp. @ 97 F Run by Peacock
Cal. No A 20592 N Chart No. 4

Depth	Pressure	Gradient
0	152	-
2000	189	.019
4000	331	.071
6000	628	.149
6528 (-2963)	740**	.212

** Mid Point of Casing Perforations



Examiner Hearing - Wednesday - April 16, 1975

Docket No. 9-75

-2-

CASE 5457: Application of Texaco Inc., for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of East Weir-Blinebry, Monument-Tubb, and Skaggs-Drinkard production in the wellbore of its M. B. Weir "B" Well No. 10, located in Unit P of Section 12, Township 20 South, Range 37 East, Lea County, New Mexico.

CASE 5219: (Reopened)

In the matter of Case 5219 being reopened pursuant to the provisions of Order No. R-4784, which order established temporary special pool rules for the South Empire-Wolfcamp Pool, Eddy County, New Mexico, including a provision for 80-acre spacing. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing.

CASE 5458: Application of Continental Oil Co. for two non-standard gas proration units and three unorthodox locations, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the two following described non-standard gas proration units in Township 20 South, Range 37 East, Eumont Gas Pool, Lea County, New Mexico:

A 240-acre unit comprising the SW/4 and S/2 NW/4 of Section 15 to be dedicated to applicant's Britt "B" Well No. 3 at an unorthodox location in Unit L of said Section 15; and

A 280-acre unit comprising the SW/4 NW/4 and SW/4 of Section 10 and the N/2 NW/4 of Section 15 to be dedicated to applicant's Britt "B" Wells Nos. 15 and 25 located, respectively, at unorthodox locations in Units M of Section 10 and C of Section 15.

Dockets Nos. 10-75 and 11-75 are tentatively set for hearing on April 30, and May 14, 1975. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - APRIL 16, 1975

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

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

- ALLOWABLE: (1) Consideration of the allowable production of gas from seventeen prorated pools in Lea, Eddy, Roosevelt and Chaves Counties, New Mexico, for May, 1975;
- (2) Consideration of the allowable production of gas from five prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico, for May, 1975.

CASE 5415: (Continued from the March 19, 1975, Examiner Hearing)

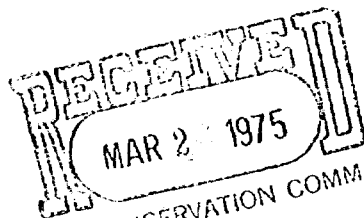
Application of Burk Royalty Co., for a unit agreement, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for the Double L Queen Unit Area, comprising 2670 acres, more or less, of Federal, State, and fee lands in Townships 14 and 15 South, Ranges 29 and 30 East, Chaves County, New Mexico.

CASE 5454: Application of Burk Royalty Co. for a waterflood project, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the Double L-Queen Pool, Chaves County, New Mexico, by the injection of water into the Queen formation through 17 wells located in Sections 23, 24, 25, and 36, Township 14 South, Range 29 East; Section 31, Township 14 South, Range 30 East; Sections 1 and 12, Township 15 South, Range 29 East, and Sections 6, 7, and 18, Township 15 South, Range 30 East.

CASE 5455: Application of Roger C. Hanks for the amendment of Order No. R-4158, as amended, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-4158, which, as amended, authorizes the disposal of produced salt water into the Devonian formation through 2 7/8-inch tubing set in a packer at approximately 10,000 feet via the perforated interval from 10,220 feet to 10,504 feet in his Monsanto Foster Well No. 1, located in Unit D of Section 5, Township 20 South, Range 25 East, Dagger Draw Area, Eddy County, New Mexico. Applicant proposes the amendment of said order to permit setting the packer at 6271 feet or in the alternative, to block squeeze said well from 4000 feet to 6500 feet and set said packer at approximately 4000 feet.

CASE 5456: Application of Southern Union Production Co. for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its Shelby Federal Well No. 1, located in Unit H of Section 13, Township 22 South, Range 24 East, Eddy County, New Mexico, in such a manner as to produce undesignated Strawn and Atoka gas through the casing-tubing annulus and tubing, respectively.

Case 5457



PETROLEUM PRODUCTS

TEXACO INC.
DRAWER 728
HOBBS, NEW MEXICO 88240

OIL CONSERVATION COMM. March 26, 1975
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
M. B. Weir "B" Federal No. 10
Monument (Tubb), Skaggs (Drinkard)
and Weir (Blinebry East) Pools
Lea County, New Mexico

Attention: Mr. A. L. Porter, Jr.

Gentlemen:

It is requested that an examiner hearing be scheduled to consider TEXACO's application to downhole commingle the Monument (Tubb), Skaggs (Drinkard) and Weir (Blinebry East) Pools in the M. B. Weir "B" Federal Well No. 10 located in Unit P of Section 12, Township 20 South, Range 37 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. G. BLEVINS
Assistant District Superintendent

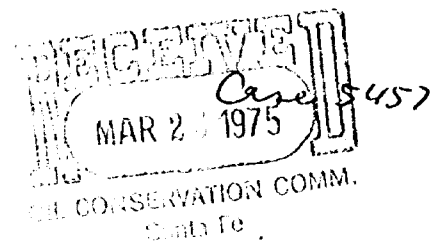
JBS/kw
NMOCC-Hobbs
USGS-Hobbs
Offset Operators

Enclosures

DOCKET MAILED

Date _____

DATA SHEET FOR WELLBORE COMMINGLING



Operator: TEXACO Inc.

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

Lease and Well No.: K. B. Weir "B" Federal No. 10

Location: Unit P, 987' FEL and 990' FSL, Section 12, Township 20 South, Range 37 East,
Lea County, New Mexico

WELL DATA

	<u>Upper Pool</u>	<u>Middle Pool</u>	<u>Lower Pool</u>
Name of Pool	✓ Weir Blinebry East	✓ Monument Tubb	✓ Skeegs Drinkard
Producing Method	Pump	Flow	Pump
BHP	900 Est.	740	500 Est.
Type Crude	Sour	Sweet	Sour
Gravity	35.2	45.3	35.2
GOR Limit	2,000	4,000	2,000
Completion Interval	5774'-6036'	6366'-6592'	6812'-6866'
Current Test Date	2-25-75	2-26-75	2-28-75
Oil	11	2	1
Water	24	0	0
GOR	5,900	72,333	1,200
Selling Price of Crude - \$/BBL.	5.10	11.16	10.85
Daily Income - \$/Day	56.10	22.32	10.85

COMMINGLED DATA:

Gravity of Commingled Crude 35.5

Selling Price of Commingled Crude - \$/BBL. 10.85

Daily Income - \$/Day 314.65

Net (Gain) (~~Loss~~) from Wellbore Commingling - \$/Day 225.38 (Production increase of 15 BOPD
based on current producing rates. 0 stripper oil price of \$19.85
per barrel)

Case 5457

OFFSET OPERATORS

Continental Oil Co.
P. O. Box 460
Hobbs, New Mexico 88240

**NEW MEXICO OIL CONSERVATION COMMISSION
GAS-OIL RATIO TESTS**

C-116
Revised 1-1-65

Operator TEXACO Inc.		Pool See Below				County Lea										
Address P. O. Box 728, Hobbs, New Mexico 88240						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	STATUS	CHOKE SIZE	T.B.G. PRESS.	DAILY ALLOWABLE	LENGTH OF TEST HOURS	PROD. DURING TEST				GAS - OIL RATIO CU. FT./BBL.
		U	S	T	R							WATER BBLs.	GRAV. OIL	OIL BBLs.	GAS M.C.F.	
M.B. Weir "B" Federal	10	P	12	20S	37E											
<u>Weir Blinebry East</u>						2-25-75	P			20	24	24	35.2	11	64.9	5900
<u>Monument Tubb</u>						2-26-75	F	36/64	100	3	24	0	45.3	2	144.6	72,333
<u>Skaggs Drinkard</u>						2-28-75	P			1	24	0	35.2	1	1.2	1200

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)

March 3, 1975

(Date)

Case 3457



COLEMAN PETROLEUM ENGINEERING COMPANY

PHONE 393-3813

3713 W. MARLAND ST.

P. O. BOX 1829

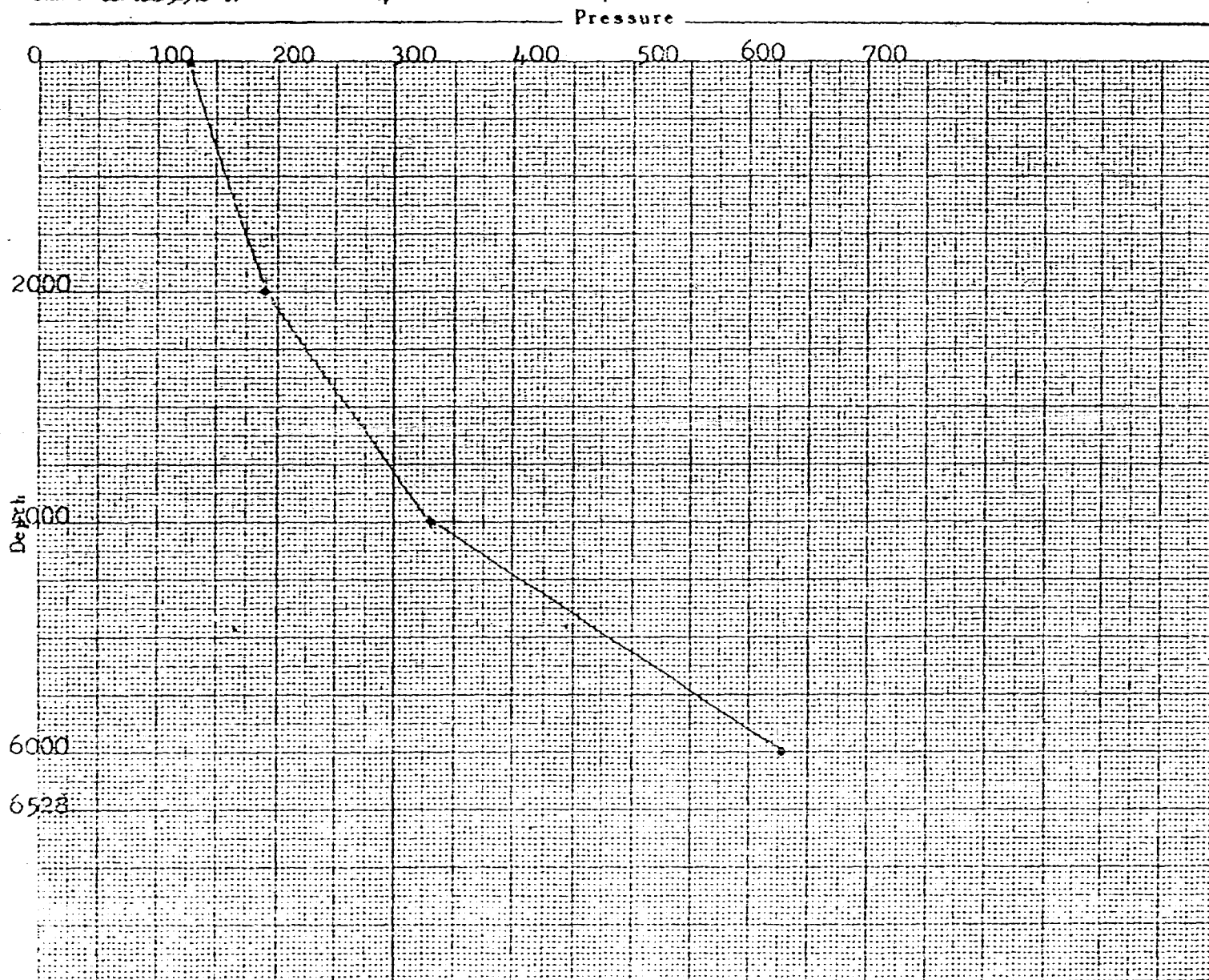
HOBBS, NEW MEXICO 88240

BOTTOM HOLE PRESSURE RECORD

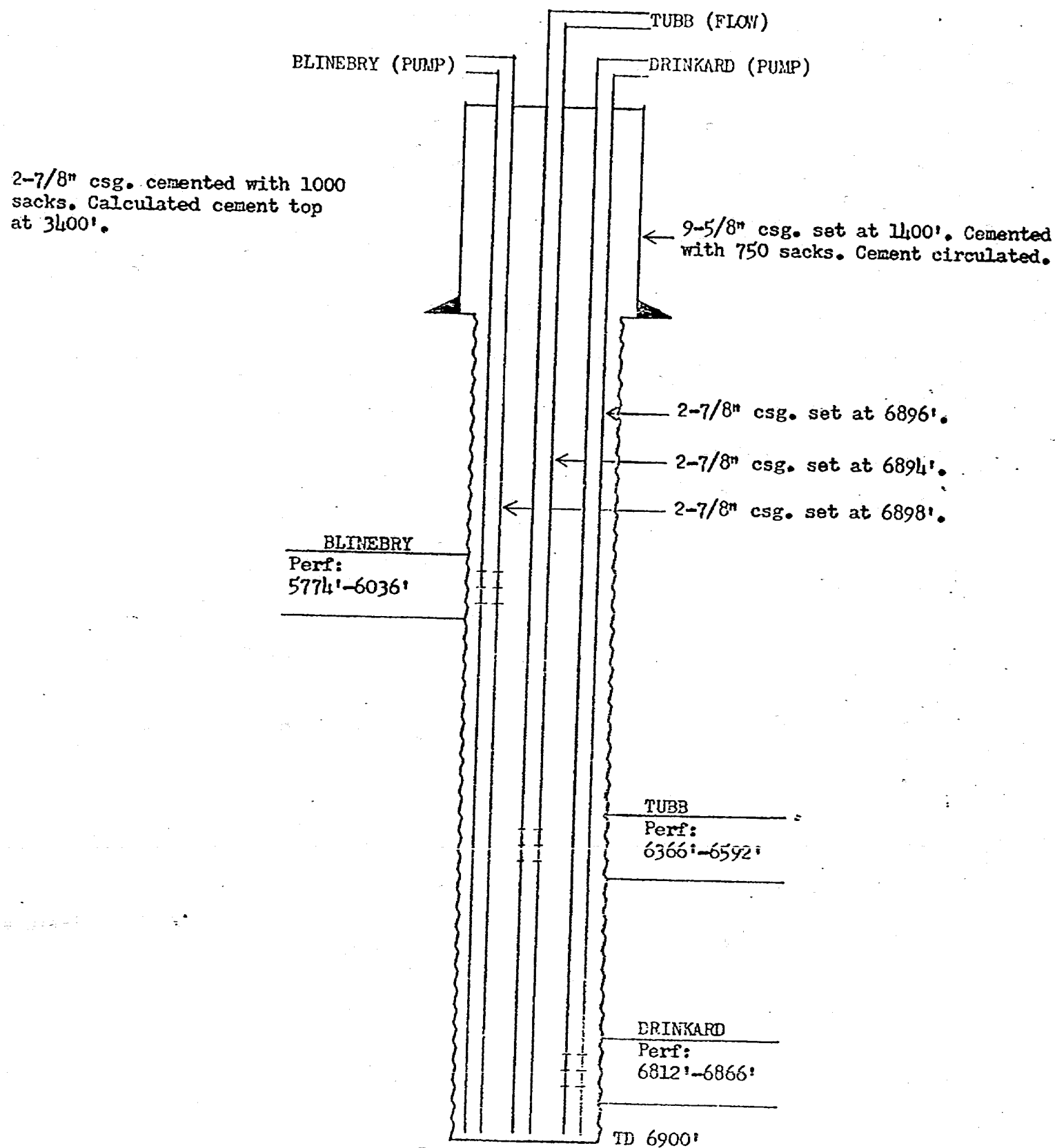
OPERATOR Texaco, Inc.
 FIELD Monument FORMATION Tubb
 LEASE M.B. Weir B WELL No. 10
 COUNTY Lea STATE New Mexico
 DATE 1-28-75 TIME 12:00 N
 Status Open Test depth 6528'
 Time S. I. - Last test date -
 Tub Pres. 152 BHP last test -
 Cas. Pres. - BHP change -
 Elev. 3565' KB Fluid top Flowing
 Datum (-2963)** Water top -
 Temp. @ 97° F Run by Peacock
 Cal. No A 20592 N Chart No. 4

Depth	Pressure	Gradient
0	152	-
2000	189	.019
4000	331	.071
6000	628	.149
6528' (-2963)	740**	.212

** Mid Point of Casing Perforations



Case 5457

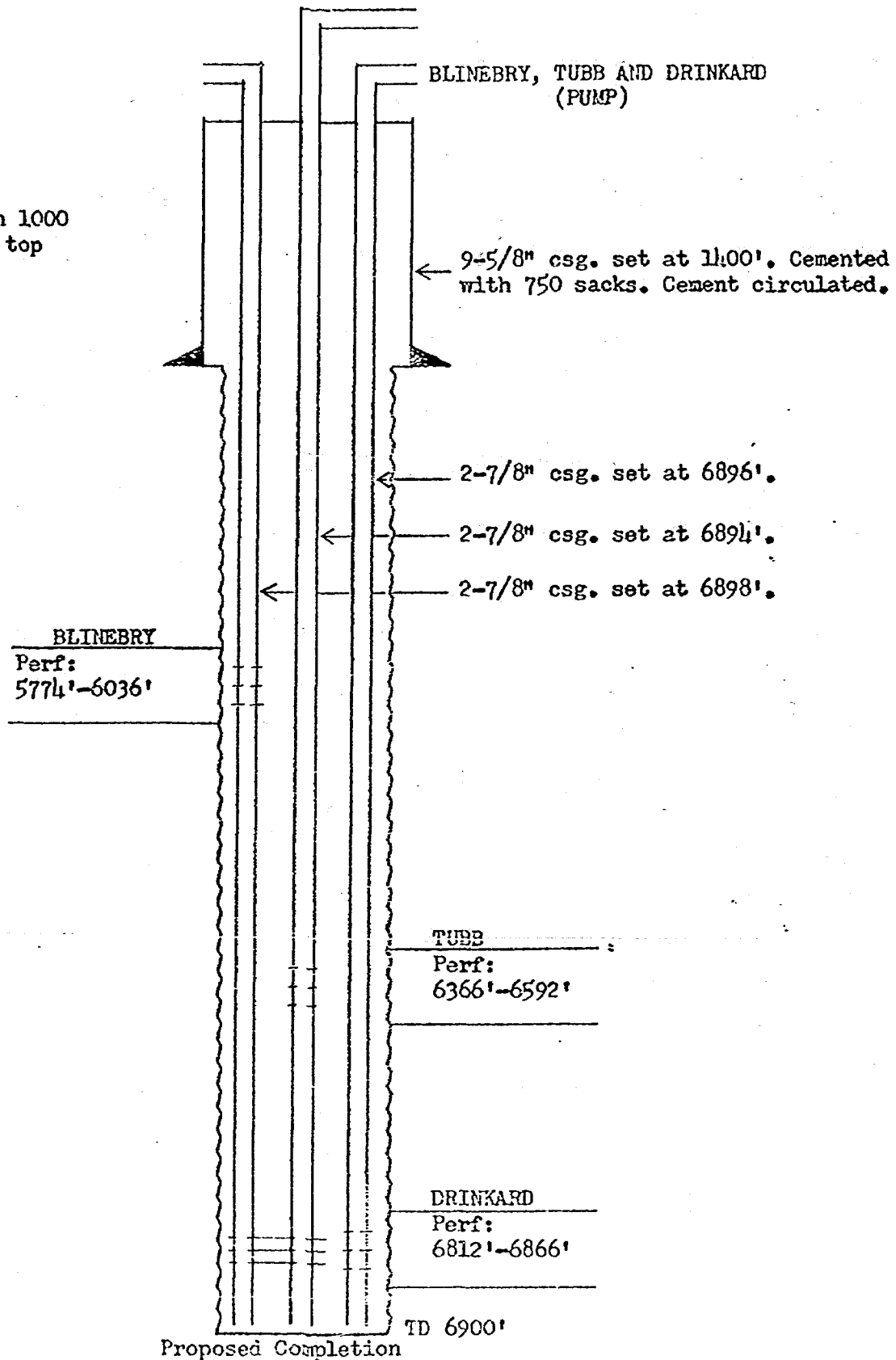


Present Completion
M.B. WEIR "B" FED. NO. 10
MONUMENT TUBB, SKAGGS DRINKARD AND WEIR BLINEBRY EAST POOLS
LEA COUNTY, NEW MEXICO

JBS 3-21-75

Case 5457

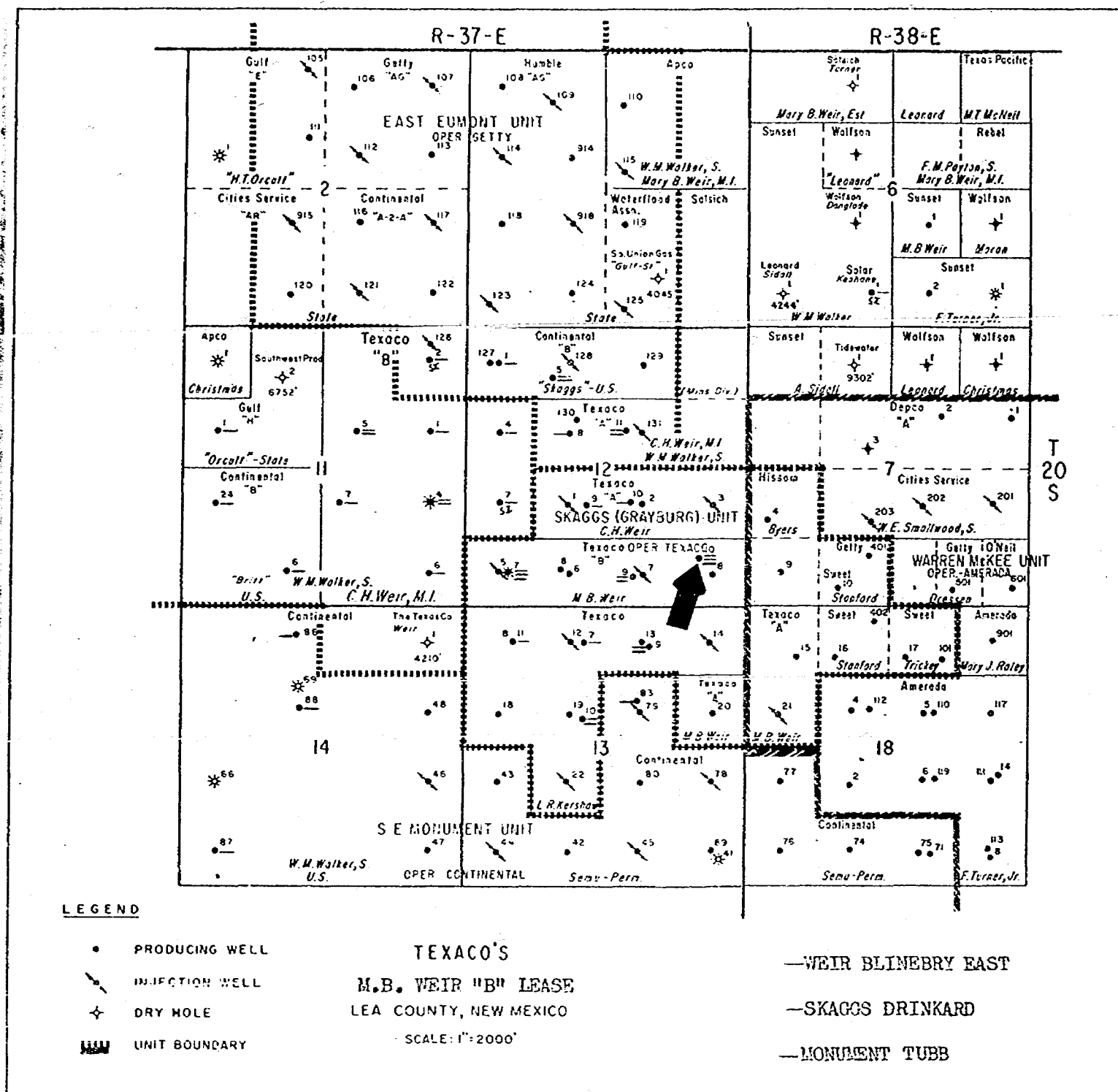
2-7/8" csg. cemented with 1000
sacks. Calculated cement top
at 3400'.



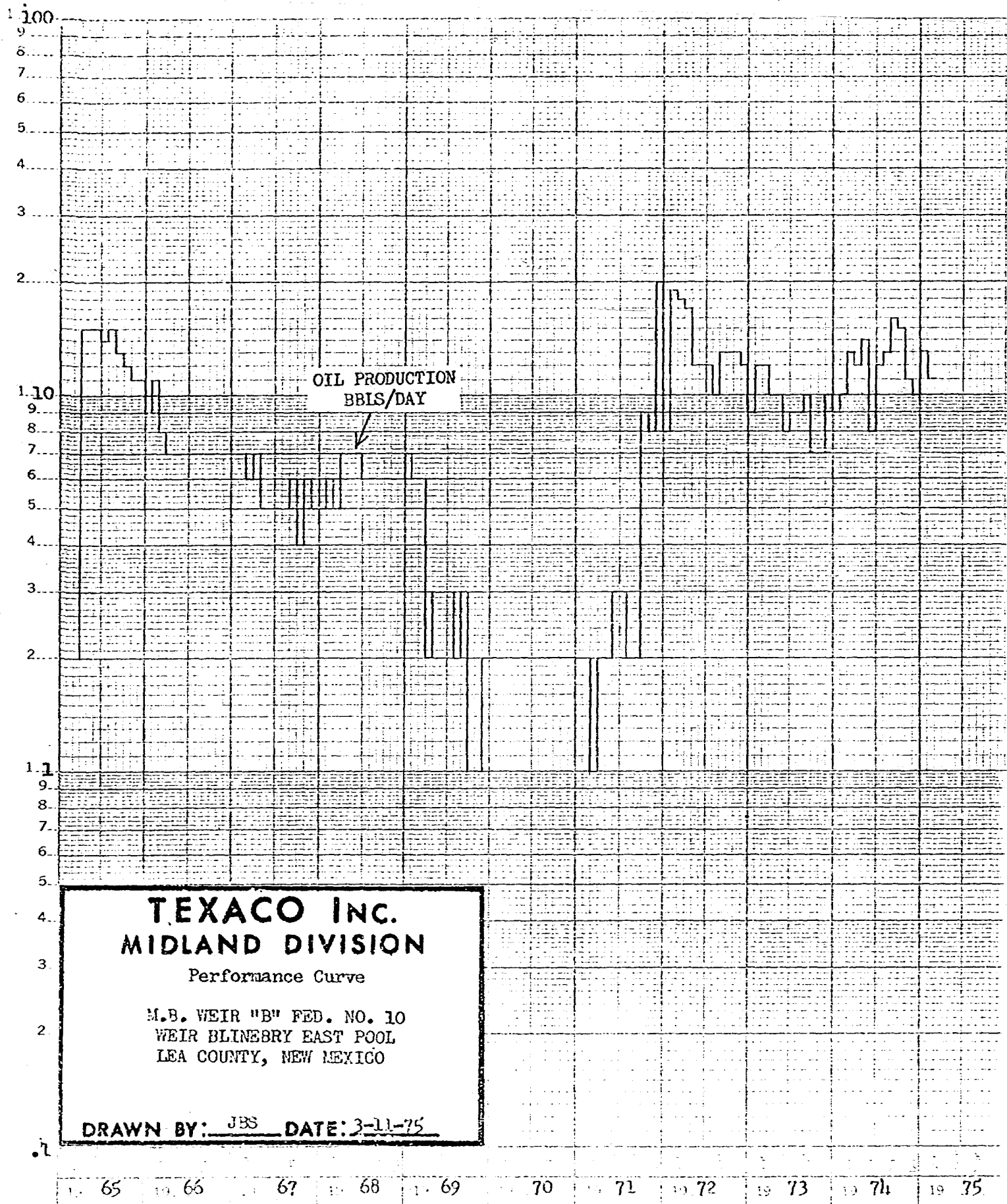
M.B. WEIR "B" FED. NO. 10
MONUMENT TUBB, SKAGGS DRINKARD AND WEIR BLINEBRY EAST POOLS
LEA COUNTY, NEW MEXICO

JRS 3-21-75

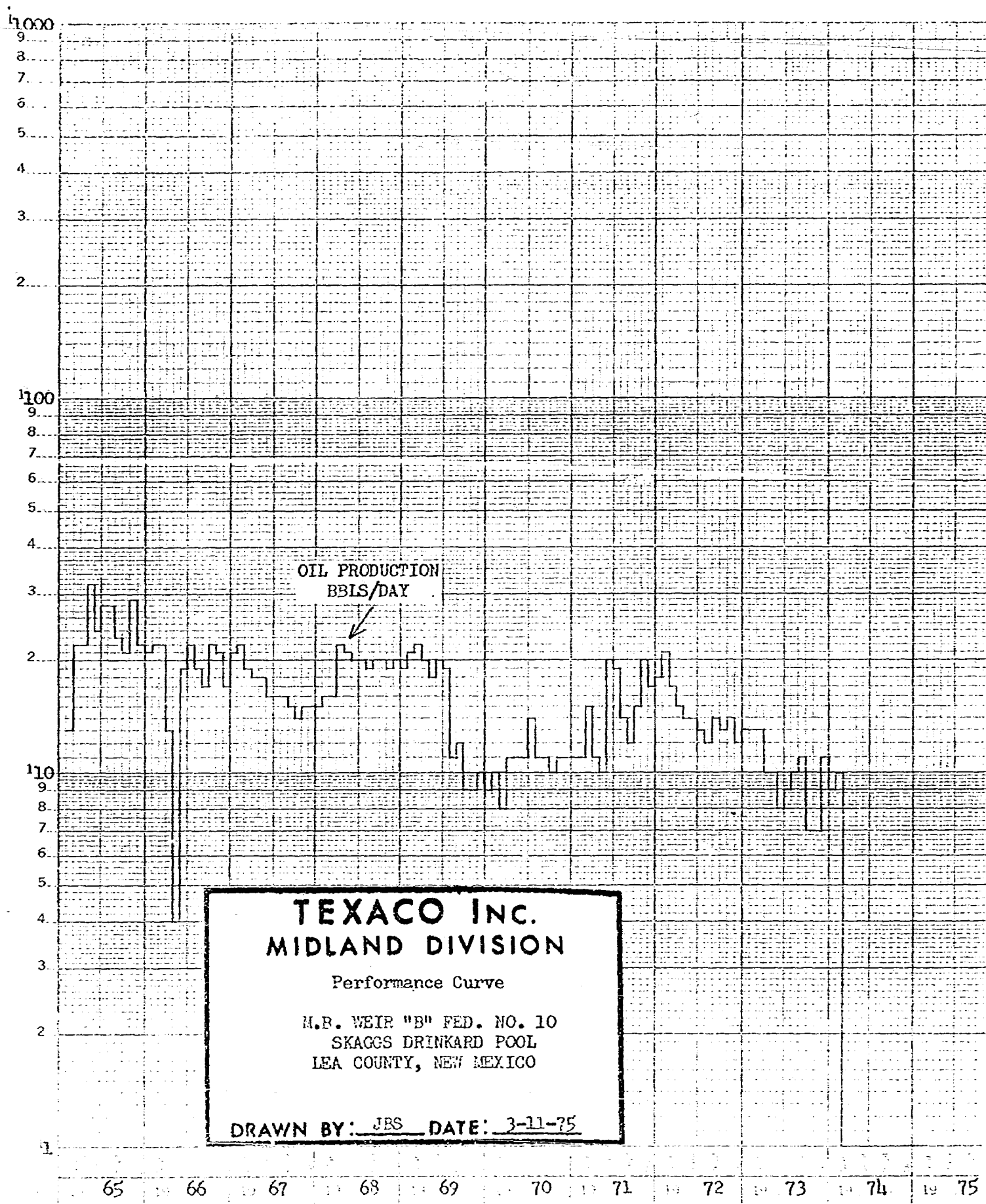
Case 5457



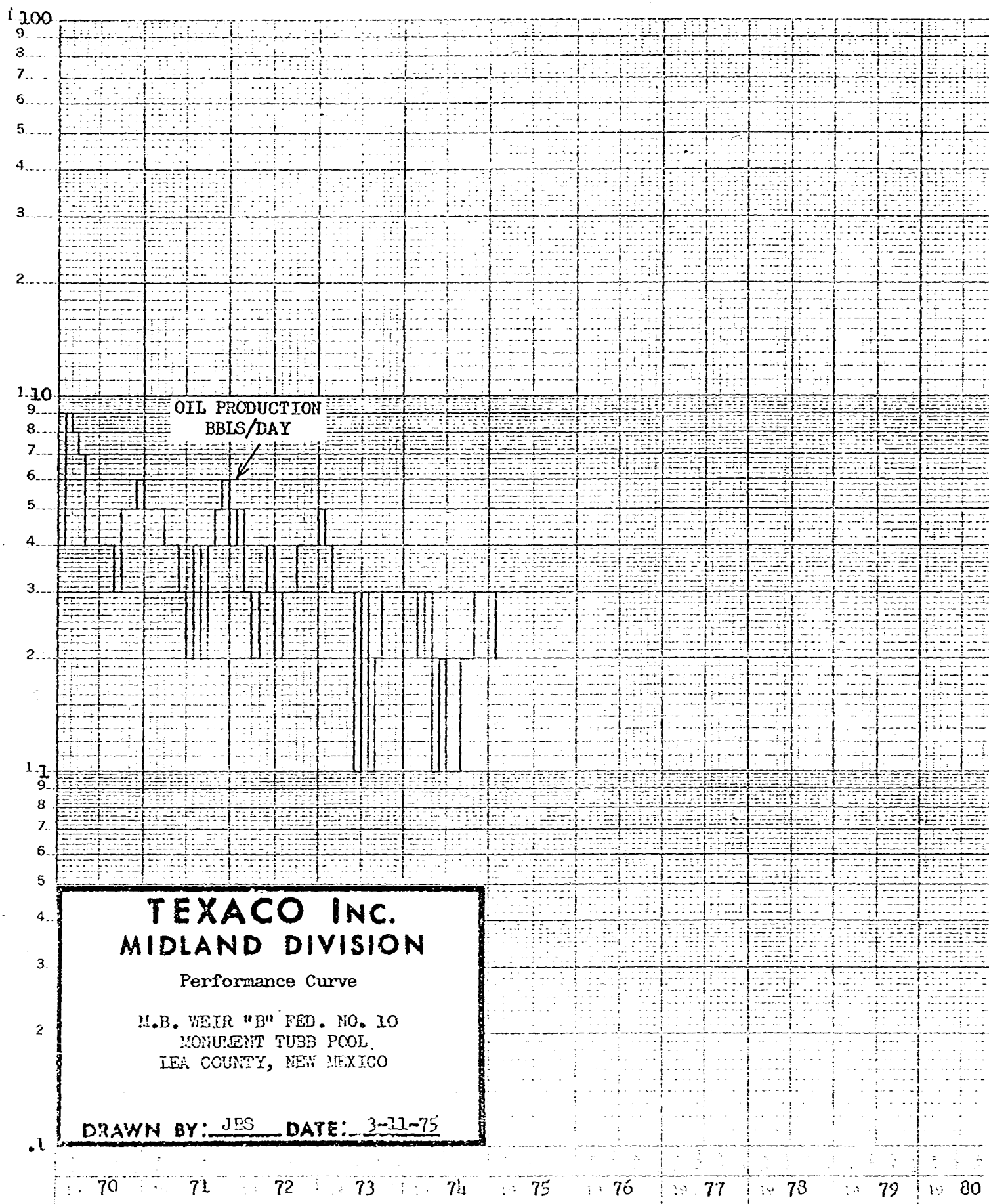
Case 5457



Case 5457



Case 5457



DRAFT

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:

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

CASE NO. 5457
Order No. R- 5006

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on April 16, 1975,
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 16th day of April, 1975, 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 M. B. Weir "B" Well No. 10, located in Unit P
of Section 12, Township 20 South, Range 37 East, NMPM, Lea
County, New Mexico.

-2-

Case No. 5457

Order No. R-

(3) That the applicant seeks authority to commingle East Weir-Blinebry, Monument-Tubb, and Skaggs-Drinkard production within the wellbore of the above-described well.

(4) That from the East Weir-Blinebry zone, the subject well is capable of ~~low~~ marginal production only.

(5) That from the Monument-Tubb zone, the subject well is capable of low marginal production only.

(6) That from the Skaggs-Drinkard zone, the subject well is capable of low marginal production only.

(7) 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.

(8) 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.

(9) 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.

(10) That in order to allocate the commingled production to each of the commingled zones in the subject well, 55 percent of the oil ^{and 31 percent of the gas production} should be allocated to the East Weir-Blinebry zone, 24 percent of the ~~commingled liquid~~ ^{and 62 percent of the gas production} oil production to the Monument-Tubb zone, and 21 percent of the oil ^{and one percent of the gas production} production to the Skaggs-Drinkard zone.

IT IS THEREFORE ORDERED:

(1) That the applicant, Texaco Inc., is hereby authorized to commingle East Weir-Blinebry, Monument-Tubb, and Skaggs-Drinkard production within the wellbore of the M. B. Weir "B" Well No. 10, located in Unit P of Section 12, Township 20 South, Range 37 East, NMPM, Lea County, New Mexico.

-3-

Case No. 5457

Order No. R-

(2) That 55 percent of the ~~commingled~~ oil production *and 31 percent of the gas production* shall be allocated to the East Weir-Blinebry zone, 24 percent *and 68 percent of the gas production* of the ~~commingled~~ oil production shall be allocated to the Monument-Tubb zone, and 21 percent of the ~~commingled~~ oil *and one percent of the gas production* production shall be allocated to the Skagg-Drinkard 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 herein-
above designated.