

CASE NO. 5345 Appli. TEXACO INC.
downhole commingling, Lea County

CASE No.

5345

Application,

Transcripts,

Small Exhibits

ETC.

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
October 16, 1974

EXAMINER HEARING

IN THE MATTER OF:

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

CASE 5345

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 Carr, Esq.
Legal Counsel for the Commission
State Land Office Building
Santa Fe, New Mexico

For Texaco, Inc.: Booker Kelly, Esq.
WHITE, KOCH, KELLY & MCCARTHY
220 Otero
Santa Fe, New Mexico

I N D E X

EUGENE CRAIG HINRICHS

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HINRICHS-DIRECT

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MR. STAMETS: We will call the next Case, 5345.

MR. CARR: Case 5345, Application of Texaco, Inc.
for downhole commingling, Lea County, New Mexico.

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

MR. STAMETS: Any other appearances in this Case?
The witness will stand and be sworn, please.

(Whereupon, the witness was duly sworn.)

EUGENE CRAIG HINRICHS

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, position and employer,
please?

A My name is Eugene Craig Hinrichs, I'm district
production engineer with Texaco in Hobbs.

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

A Yes, sir, I have.

Q Referring to your plat, Exhibit No. 1, would you
state briefly what Texaco seeks by the application?

THE NYE REPORTING SERVICE
STATE-WIDE DEPOSITION NOTARIES
225 JOHNSON STREET
SANTA FE, NEW MEXICO 87501
TEL. (505) 982-0386

A Texaco requests approval to downhole commingle the Justis North Montoya, Ellenburger and Fusselman Pools in the G. L. Erwin "B" (NCT-2) Well No. 5. This well is located 330 feet from the south line and 330 feet from the east line of Section 35, Township 24 South, Range 37 East of Lea County. The subject lease is outlined in yellow and the subject well is designated by the red arrow.

Q And what is the present status of that well?

A It is presently producing from the -- as a triple completion from the Fusselman, Montoya and Ellenburger, with the Waddell zone shut in.

Q Could you give the Examiner a brief history of the well and its well bore, or its data sheet as you have shown on Exhibit No. 2?

A The data sheet contains information pertinent to the zones to be downhole commingled. As you can see, all of the zones are being produced by pump. The Fusselman and Ellenburger being produced by hydraulic pump and the Montoya by rod pump. The bottom-hole pressures, as you can see, are similar, and the productive right of the well will be such that we will be able to keep it pumped off, if we are able to commingle, so that there will be no cross flow between the zones, from one zone into another. The

types of crude in all three are sweet, and the gravities are similar, just about the same. They are presently being commingled on the surface, so there will be no compatibility problem with them, with the crude, and there will be no reduction in the price as a result of downhole commingling. As you can see down below, the income without commingling would be \$111.09 a day; if we commingle it will \$269.79 a day. This is based on a production increase of 20 barrels a day. Presently the Montoya and the Ellenburger are in need of equipment repair for the downhole equipment which is the reason for these low tests. I will discuss, when we get to our decline curves, what the capabilities of these zones are right now if this equipment is repaired.

Q Now, turning to Exhibit No. 3, your Gas-Oil Ratio Tests, do you feel there is any significant difference between the Gas-Oil Ratio in the three zones?

A Well, the Gas-Oil Ratio for the Montoya is 4900 to 1, which is rather high, but this is due to the low oil production of 2 barrels a day, it's only 9.8 mcf of gas, and this will cause no problem upon commingling since the gas volume is low.

Q I believe you stated that low production was due to mechanical problems?

A Yes, it was.

Q Now, originally this well was a quadruple completion, is that right?

A That's right.

Q And what zone is it that is now abandoned?

A The Waddell zone is abandoned.

Q Referring to your Exhibit 4, your present completion, would you explain that to the Examiner.

A The present multiple completion was authorized by Order MC-1237(A), issued January 7th, 1965. It approved quadruple completion of the Montoya, Fusselman, Waddell, and Ellenburger. Subsequently the Waddell has been abandoned making less than a barrel a day, and it is now producing as a triple completion from the Montoya, Fusselman and Ellenburger. This well has 16 inch surface casing set at 250 feet, cemented with 300 sacks and the cement circulated. There is an intermediate string of 13 and 3/8 inch casing set at -- this is evidently wrong, it shows 102 feet. I imagine it should be 4102.

MR. STAMETS: That's on Exhibit No. 4?

A (Continuing) We have the top at 91 feet, it's 13 and 3/8, and below that down to 3500 feet, it's 11 and 3/4, and the temperature survey shows that the cement top is

at 1925.

MR. KELLY: Mr. Examiner, we would ask that Exhibit No. 4 be amended to reflect.

MR. STAMETS: I believe it properly reflects the situation.

A (Continuing) Yes, it does if I had just read on. There are four stings of 2 and 7/8 inch casing set at 7248, 7250, 8150 and 8150. They were cemented in the hole with a cement topping at 1600 feet as determined by a temperature survey.

Q Okay, now go on to Exhibit No. 5 and your proposed completion.

A What we propose to do is communicate the Fusselman, Montoya, and Ellenburger zones with perforations from 7120 to 7130. The Ellenburger and Waddell will then be communicated from 7990 to 7995. Gas will be vented out of the Fusselman, Montoya, and Ellenburger zones, and the crude will be pumped out of the Waddell zone. The bridge plug will be set at 8,050 feet to separate the Waddell from the three zones being produced out of the Waddell string.

Q Now, on Exhibits 6, 7, and 8 your individual production decline curves, could you go into that and explain what problems you have had with your Montoya and Ellenburger

zones?

A As you can see the Montoya was on a pretty good 15 percent decline as I've indicated, on your copies by the dashed line. We have had some mechanical problems with the pumping equipment; as you can see it was making 2 barrels a day. We need to pull the equipment out and replace it or repair it. Also, a similar situation exists in the Ellenburger string. The one barrel a day test which we show is not representative of the capacity of this well from the Ellenburger. We anticipate that, based on the decline curve and extrapolating the decline out, that we will be able to get 8 barrels a day from the Montoya, 15 barrels a day from the Ellenburger, and 18 barrels a day as we show tested from the Fusselman. We know the Fusselman is making this 18 barrels a day because it was pumping off at the time or the test I previously talked about; but we are uncertain right now as to the actual capacity of the Ellenburger and the Montoya since the equipment is in bad shape. What we would recommend doing would be to, as far as for allocation, would be to test the well for 2 to 3 weeks after we get it back on, until the production stabilizes, and everything in excess of 18 barrels a day would be attributed to the Montoya and Ellenburger. You can see that the ratio between the

Ellenburger to the Montoya was about 2 to 1, so we would split out the, you know, any increase above 18 barrels a day, two-thirds to the Ellenburger and one-third of that to the Montoya, and calculate an allocation based on that.

Q Now, the crude from the three zones is now being commingled at the surface?

A Yes, it is.

Q So there is no problem with that?

A No problem.

Q Commingling would not decrease the value of the crude?

A No. I would like to point out that by commingling this we will reduce our economic limit. Right now this at this depth it is approximately 6 barrels a day per zone. Buy using a rod pump and by commingling the zones, we get an additional 24,000 barrels of oil by being able to produce it from one common well bore, one rod pump.

Q All right. Now, in your opinion, then the granting of this application would prevent waste and allow you to recover hydrocarbons that would otherwise be left down structure?

A That's right.

Q Were Exhibits 1 through 8 prepared by you or under

HINRICHS-DIRECT
-CROSS

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your direct supervision?

A Yes, sir.

MR. KELLY: We would move the introduction of Exhibits 1 through 8 at this time.

MR. STAMETS: Exhibits 1 through 8 will be admitted.

(Whereupon, Exhibits 1 through 8 were admitted into evidence.)

MR. KELLY: We have no further direct testimony.

CROSS EXAMINATION

BY MR. STAMETS:

Q Mr. Hinrichs, would it be acceptable for an Order to be written allocating the production from the three zones based on the figures you have presented here, allowing for an amendment to that if subsequent tests should prove that those are not correct?

A That would be fine.

MR. STAMETS: Any other questions of this witness?

MR. KELLY: Nothing further.

MR. STAMETS: You may be excused. Anything further in this Case? We will take the Case under advisement.

STATE OF NEW MEXICO)

1 SS.

COUNTY OF SANTA FE)

I, SIDNEY F. MORRISH, 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.

Adney L. Burroughs

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of

heard by me on 10-16, 1977

Richard L. Lamm, Examiner
New Mexico Oil Conservation Commission

THE NYE REPORTING SERVICE

STATE-WIDE DEPOSITION NOTARIES

225 JOHNSON STREET

SANTA FE, NEW MEXICO 87501

TEL. (505) 942-0386

TRANS EXHIBIT NO. 1
CASE NO. 5345

Hearing Date OCT, 16, 1974



2021-1923

JYG JALMAT PATES SAS
JB JUSTIS BLINEBRY
JGG JUSTIS GLORESTA GAS
JTO JUSTIS TUBB-DRINKARD
LM LANGLIE MATTIX 7 RIVERS
NJB NORTH JUSTIS BLINEBRY
NJD " DEVONIAN

NJE	NORTH	JUSTIS	ELLENBURSER
NJS	"	"	FUSSELLMAN
NJN	"	"	MCREE
NJNO	"	"	MONTOLA
NJT	"	"	TUBB-CRANLEY
NJW	"	"	WADDELL

LESEB

(130) ABANDONED
(150) ABANDONED-SALVAGE DEFERRED
(51) SHUT IN
(50D) SALT WATER DISPOSAL
(1A) TEMPORARILY ABANDONED
(120) TO BE RECONDITIONED FOR OIL

TEXACO Inc.

JUSTIS & LANGLEIE MATTIX POOLS
LEA COUNTY, NEW MEXICO

0' 1000' 2000'

DATA SHEET FOR WELLBORE COMMINGLING BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION

Operator: **Texaco Inc.**

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

Lease and Well No.: G.L. Erwin "B" Federal (NCT-2) No. 5

Location: 330' FSL & 330' FEL of Sec. 35, Township 24 South, Range 37 East, Lea County, New Mexico

TEXACO EXHIBIT NO. 2

CASE NO. 5345

Submitted by _____

Hearing Date Oct 16, 1974

WELL DATA

	<i>Hydraulic</i> Upper Pool	<i>Rod Pump</i> Middle Pool	<i>Hydraulic</i> Lower Pool
Name of Pool	Justis Fusselman North	Justis Montoya North	Justis Ellenburger North
Producing Method	Pump	Pump	Pump
BHP	1000 (Est.)	1000 (Est.)	1300 (Est.)
Type Crude	Sweet	Sweet	Sweet
Gravity	39.6	39.9	39.6
GOR Limit	2000	2000	2000
Completion Interval	6950'-7060'	7118'-7130'	8332'-8359'
Current Test Date	8-30-74	8-28-74	8-29-74
Oil	18	2	1
Water	7	1	0
GOR	TSTM	4875	TSTM
Selling Price of Crude - \$/BBL.	5.29	5.29	5.29
Daily Income - \$/Day	95.22	10.58	5.29

COMMINGLED DATA:

Gravity of Commingled Crude 39.6

Selling Price of Commingled Crude - \$/BBL. 5.29

Daily Income - \$/Day 269.79

Net (Gain) (~~Loss~~) from Wellbore Commingling - \$/Day 105.80 (Production increase of 20 BOPD)
based on current producing rates.

*need equipment
repair
in c prod*

**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	TBG. 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.		
G. L. Erwin "B" Federal (NCT-2)	5	P	35	24S	37E												
<u>Justis Fusselman North</u>						8-30-74	P			40	24	7	39.6	18	-	TSTM	
<u>Justis Montoya North</u>						8-28-74	P			5	24	1	39.9	2	9.8	4900	
<u>Justis Ellenburger North</u>						8-29-74	P			10	24	0	39.6	1	-	TSTM	

BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION
TEXACO EXHIBIT NO. 3
CASE NO. 5345
Submitted by _____
Hearing Date OCT 16, 1974

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

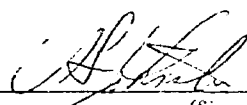
During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Commission.

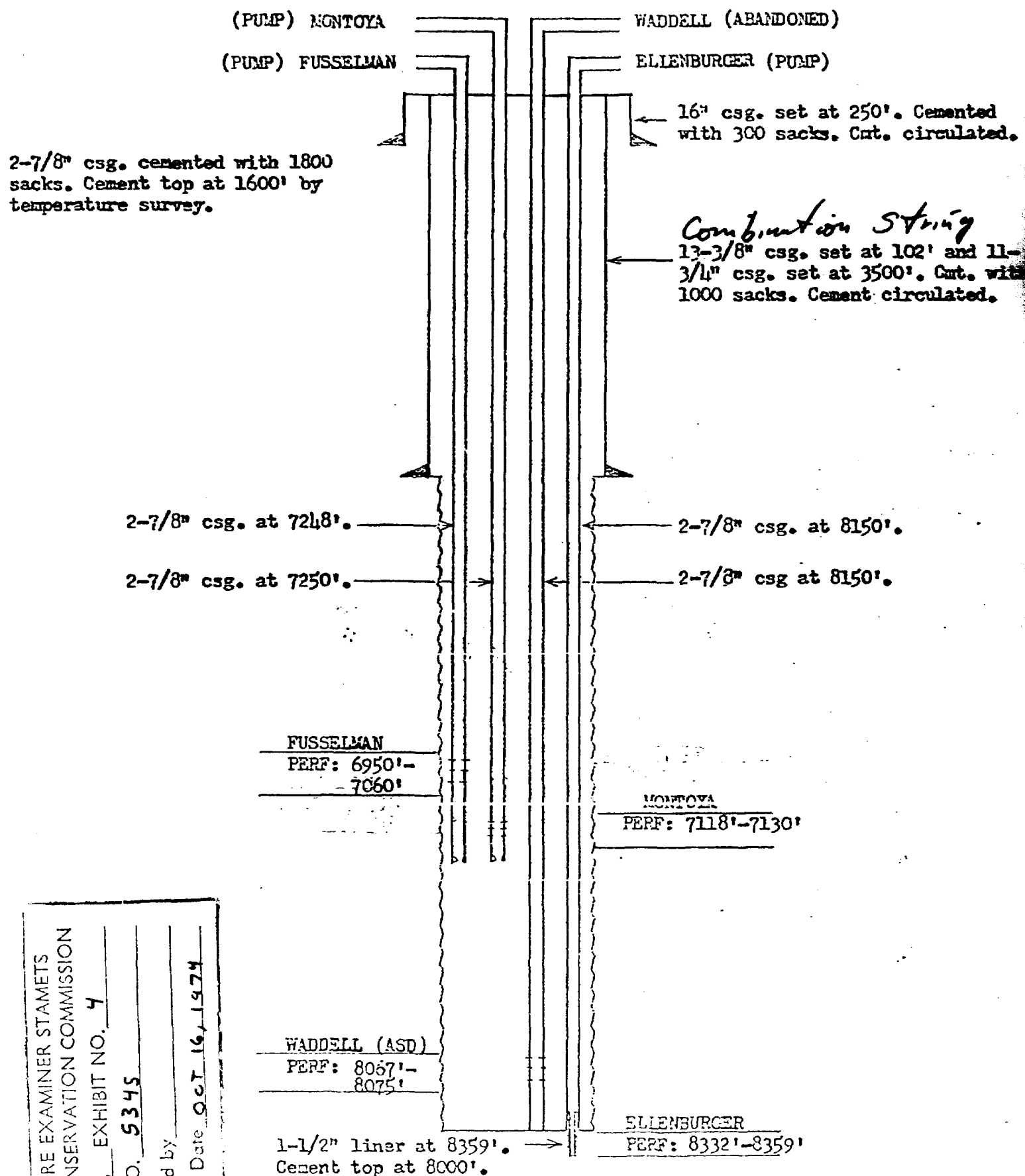
Gas volumes must be reported in MCF measured at a pressure base of 15,025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

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 391 and appropriate pool rules.

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


 (Signature)
Assistant District Superintendent
 (Title)
September 10, 1974
 (Date)



BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION
Texas EXHIBIT NO. 4
CASE NO. 5345
Submitted by
Hearing Date OCT 16, 1974

Present Completion
G.L. ERWIN "B" FEDERAL (NCT-2) NO. 5
JUSTIS NORTH (FUSSELMAN, MONTTOYA,
WADDELL AND ELLENBURGER) POOLS
LEA COUNTY, NEW MEXICO

TEXACO INC. **MIDLAND DIVISION**

Performance Curve

G.L. ERWIN "B" (NCT-2) NO. 5
JUSTIS NORTH (MONTOKA) POOL
LEA COUNTY, NEW MEXICO

DRAWN BY: JBS DATE: 9-13-74

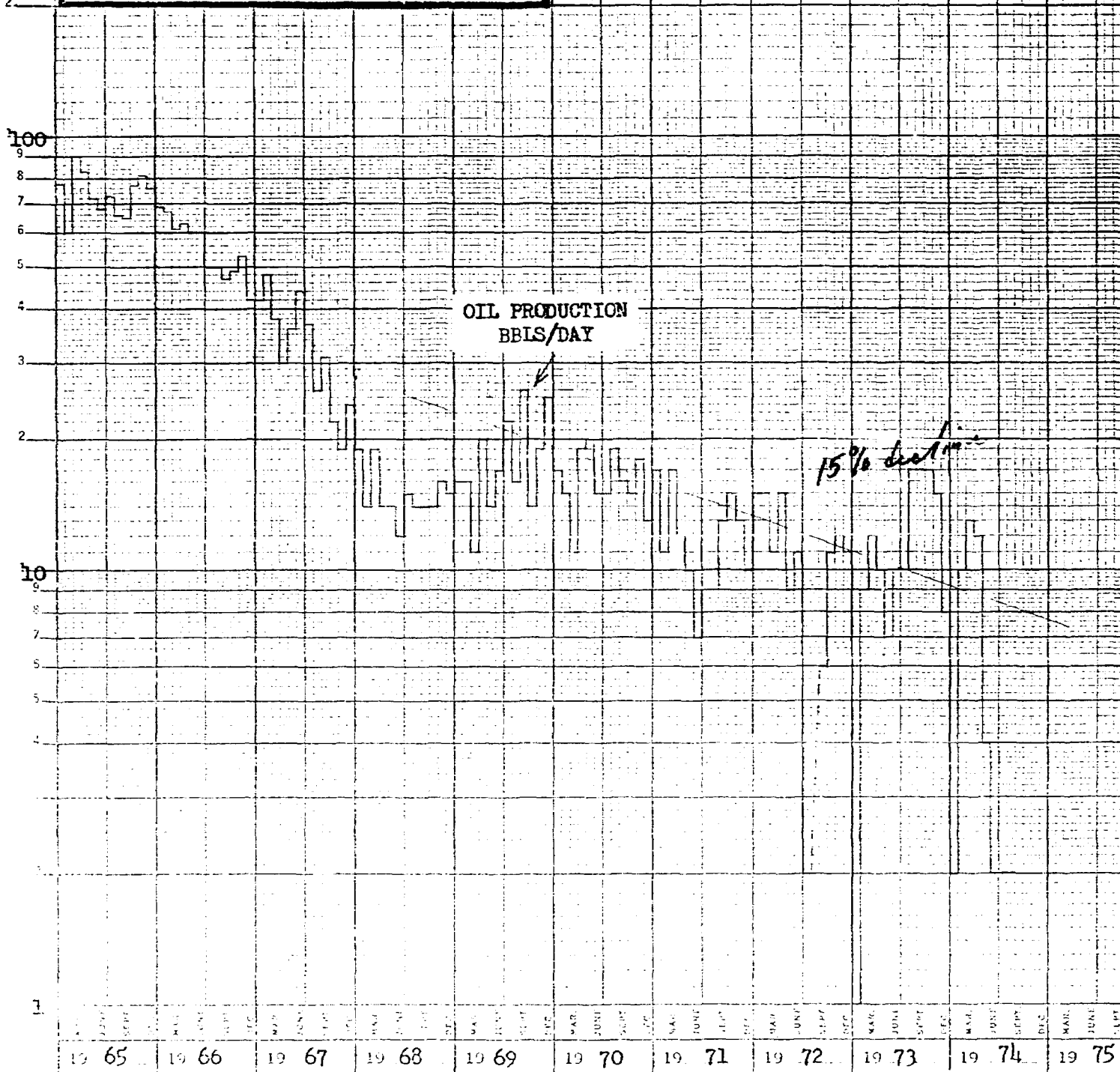
BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION

EXHIBIT NO. 6

CASE NO. 5345

Submitted by

Hearing Date OCT 16, 1974



TEXACO INC. **MIDLAND DIVISION**

Performance Curve

G.L. ERWIN "B" (NCT-2) NO. 5
JUSTIS NORTH (FUSSELMAN) POOL
LEA COUNTY, NEW MEXICO

DRAWN BY: JBS DATE: 9-13-74

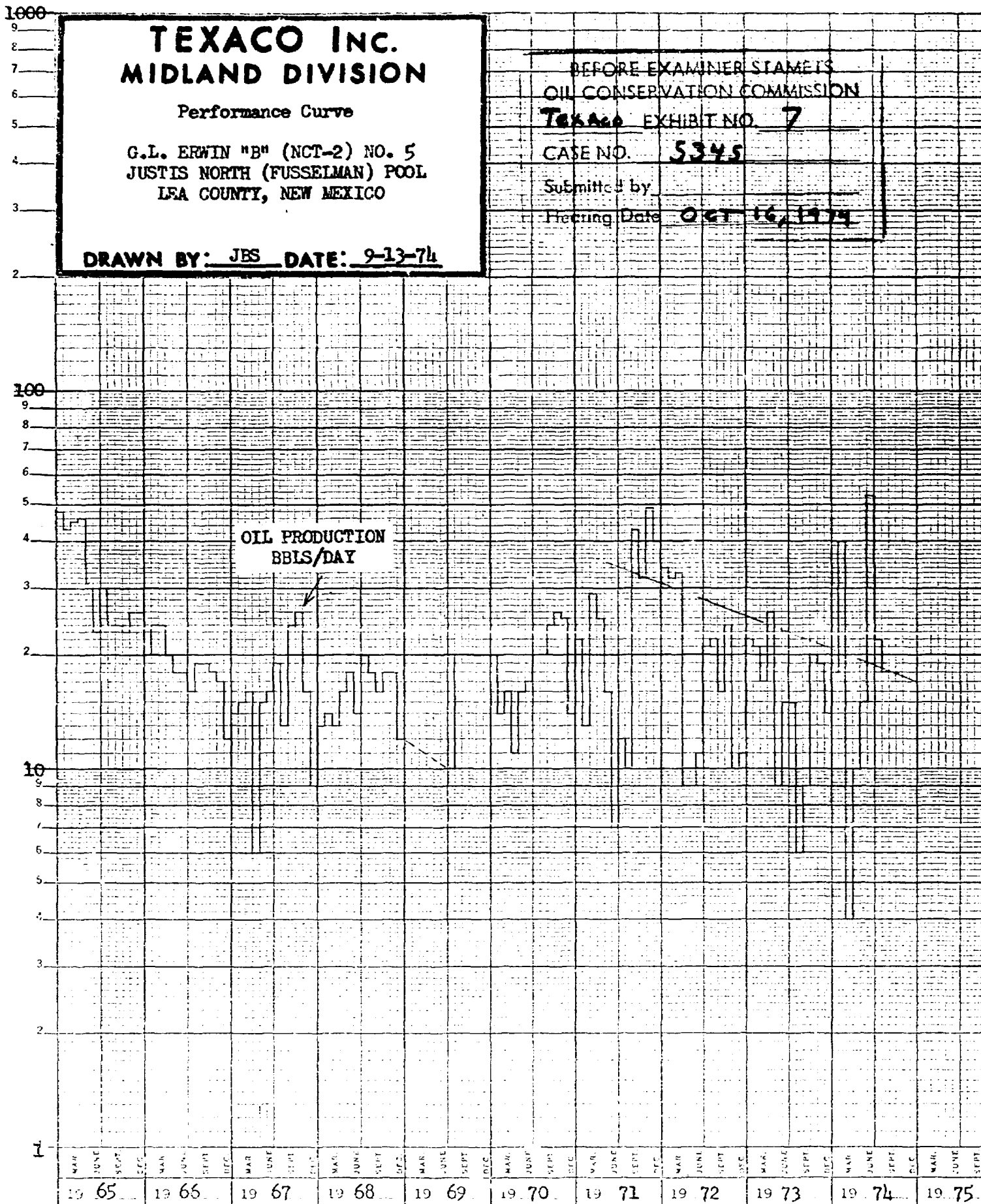
BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION

TEXACO EXHIBIT NO. 7

CASE NO. 5345

Submitted by

Hearing Date OCT 16, 1974



TEXACO INC.
MIDLAND DIVISION

Performance curve

G.L. ERWIN "B" (NCT-2) NO. 5
JUSTIS NORTH (ELLENBURGER) POOL
LEA COUNTY, NEW MEXICO

DRAWN BY: JBS DATE: 9-13-74

BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION

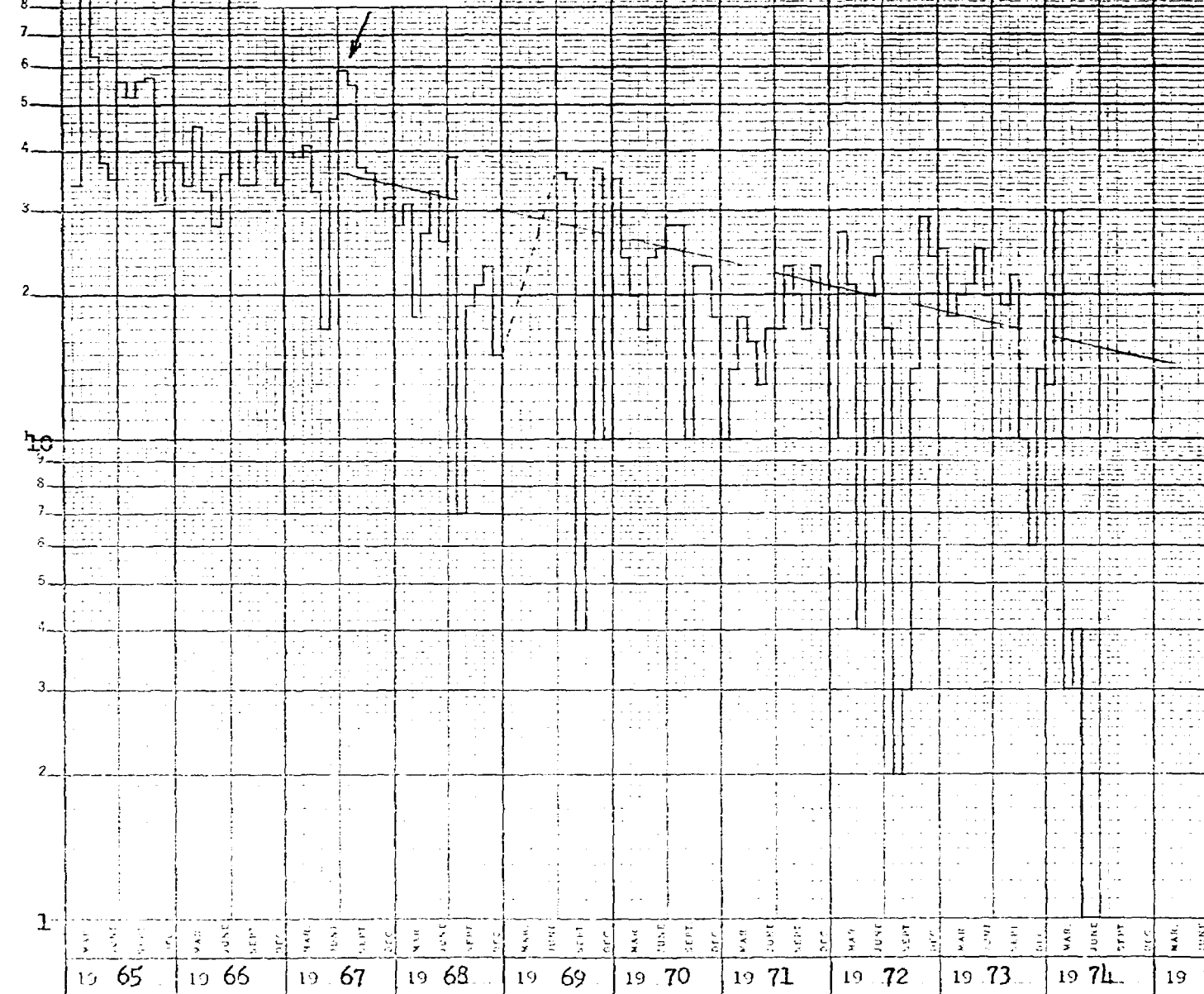
EXHIBIT NO. 8

CASE NO. 5345

Submitted by

Hearing Date Oct 10, 1974

OIL PRODUCTION
BBLS/DAY



OFFSET OPERATORS

Gulf Oil Corporation - U.S.
900 N. Turner
Hobbs, New Mexico 88240

National Cooperative Refinery Associates
915 Wilco Building
Midland, Texas 79701

Amerada Hess Corporation
P. O. Box 591
Midland, Texas 79701

Shell Oil Company
P. O. Box 1509
Midland, Texas 79701



OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO
P. O. BOX 2088 - SANTA FE
87501

I. R. TRUJILLO
CHAIRMAN
LAND COMMISSIONER
ALEX J. ARMILLO
MEMBER
STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY - DIRECTOR

October 30, 1974

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

Re: CASE NO. 5345
ORDER NO. R-4895
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.
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. 5345
Order No. R-4895

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 October 16, 1974, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 29th day of October, 1974, 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 G. L. Erwin "B" Fed. (NCT-2) Well No. 5, located in Unit P of Section 35, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico.

(3) That the applicant has completed said well as a quadruple tubingless completion in the North Justis-Fusselman, North Justis-Montoya, Waddell, and North Justis-Ellenburger Pools under authority granted by the Commission by its Administrative Order MC-1237-A.

(4) That the applicant seeks authority to commingle Fusselman, Montoya, and Ellenburger production within the wellbore of the above-described well in such a manner as to permit commingled oil to be produced through the former Waddell casing string and all or part of the commingled gas to be produced through any of the various casing strings.

(5) That the Waddell zone is to be abandoned.

(6) That from the Fusselman zone, the subject well is capable of marginal production only.

(7) That from the Montoya zone, the subject well is capable of low marginal production only.

(8) That from the Ellenburger zone, the subject well is capable of low marginal production only.

(9) 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.

(10) 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.

(11) 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.

(12) That in order to allocate the commingled production to each of the commingled zones in the subject well, 43 percent of the commingled oil production should be allocated to the Fusselman zone, 20 percent of the commingled oil production to the Montoya zone, 37 percent should be allocated to the Ellenburger zone, and 100 percent of the commingled gas production should be allocated to the Montoya zone.

(13) That the Secretary-Director of the Commission should administratively adjust the percentages set out in Finding No. (10) above if subsequent testing indicates such adjustment would permit more accurate allocation of the commingled production.

IT IS THEREFORE ORDERED:

(1) That the applicant, Texaco Inc., is hereby authorized to commingle Fusselman, Montoya and Ellenburger production within the wellbore of the G. L. Erwin "B" Fed. (NCT-2) Well No. 5, located in Unit P of Section 35, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico, in such a manner as to permit commingled oil to be produced through the former Waddell casing string and all or any part of the commingled gas to be produced through any of the various casing strings.

(2) That 43 percent of the commingled oil production shall be allocated to the Fusselman zone, 20 percent of the commingled oil production shall be allocated to the Montoya zone, and 37 percent of the commingled oil production shall be allocated to the Ellenburger zone, and 100 percent of the commingled gas production should be allocated to the Montoya zone;

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Case No. 5345
Order No. R-4895

PROVIDED HOWEVER, that the Secretary-Director of the Commission may administratively adjust said percentages if subsequent testing should indicate such adjustment would permit more accurate allocation of the commingled production.

(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

I. R. TRUJILLO, Chairman

ALEX. J. ARMIJO, Member

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

S E A L

dr/

CASE 5343: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Paul Haskins, Trustee and Continental Casualty Company, and all other interested parties to appear and show cause why the Arthur Cain Well No. 1, located in Unit N of Section 4, Township 15 North, Range 33 East, Harding County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.

CASE 5344: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit American Fuels Corporation and Aetna Casualty and Surety Company, and all other interested parties, to appear and show cause why the following American Fuels Wells on the W-S Ranch in Colfax County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program:

NM-B Well No. 1, located in Unit G of Section 6, Township 30 North, Range 19 East;

NM-B Well No. 2, located in Unit P of Section 16, Township 30 North, Range 18 East;

NM-B Well No. 4, located in Unit H of Section 13, Township 30 North, Range 18 East;

NM-B Well No. 5, located in Unit P of Section 30, Township 30 North, Range 19 East; and

NM-B Well No. 10, located in Unit N of Section 24, Township 31 North, Range 19 East.

CASE 5345: Application of Texaco, Inc. for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of production from the Fusselman, Montoya, and Ellenburger formations, North Justis Field, in the wellbore of its G.L. Erwin "B" Fed. (NCT-2) Well No. 5, located in Unit P of Section 35, Township 24 South, Range 37 East, Lea County, New Mexico.

CASE 5346: Application of Continental Oil Company for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of production from the Blinebry formation and the East Warren-Drinkard Pool in the wellbore of its Warren Unit Well No. 11, located in Unit A of Section 35, Township 20 South, Range 38 East, Lea County, New Mexico.

CASE 5347: Application of Continental Oil Company for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of production from the West Warren-Blinebry and East Skaggs-Drinkard Pools in the wellbore of its SEMU Berger Well No. 21, located in Unit O of Section 19, Township 20 South, Range 38 East, Lea County, New Mexico.

Examiner Hearing - Wednesday - October 16, 1974

Docket No. 29-74

-4-

CASE 548: Application of Continental Oil Company for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of production from the Blinebry and Drinkard Pools in the wellbores of its Elliott B Well No. 6, located in Unit J of Section 6, Township 22 South, Range 37 East, and its Lockhart B-1 Well No. 9, located in Unit I of Section 1, Township 22 South, Range 36 East, both in Lea County, New Mexico.

Docket No. 30-74

Dockets Nos. 30-74 and 31-74 are tentatively set for hearing on October 30 and November 13, 1974. Application for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - OCTOBER 16, 1974

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 from seventeen prorated pools in Lea, Eddy, Roosevelt, and Chaves Counties, New Mexico, for November, 1974;
- (2) Consideration of the allowable production of gas from five prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico, for November, 1974.

CASE 5304: (Continued from the September 4, 1974, Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Mercury Production Company, American Employers' Insurance Company and all other interested parties to appear and show cause why the Mercury State Well No. 1 located in Unit E of Section 27, Township 10 South, Range 26 East, Chaves County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.

CASE 5292: (Continued from the September 18, 1974, Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit El Paso Natural Gas Company, United States Fidelity and Guaranty Co., and all other interested parties to appear and show cause why each of the following wells should not be plugged and abandoned in accordance with a Commission-approved plugging program:

EPNG Ludwick Well No. 11, located in Unit B, Section 19, Township 30 North, Range 10 West, San Juan County, New Mexico;

EPNG Rincon Unit Well No. 127, located in Unit A, Section 28, Township 27 North, Range 6 West, Rio Arriba County, New Mexico; and

EPNG Warren A Well No. 2, located in Unit A, Section 23, Township 28 North, Range 9 West, San Juan County, New Mexico.

CASE 4976: (Reopened) (Continued from the October 2, 1974, Examiner Hearing)

In the matter of Case No. 4976 being reopened pursuant to the provisions of Order No. B-4633 to permit all operators in the West Parkway-Strawn

(Case 4976 continued from Page 1)

and West Parkway-Atoka Gas Pools in Section 28, Township 19 South, Range 29 East, Eddy County, New Mexico, to appear and present evidence to clearly establish the nature of the reservoirs, proper rates of production for wells therein, and special rules therefor.

CASE 5313: (Continued and Readvertised)

Application of El Paso Natural Gas Company for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Aztec-Pictured Cliffs and Blanco-Mesaverde production in the wellbore of its Ludwick Well No. 11 located in Unit B of Section 19, Township 30 North, Range 10 West, San Juan County, New Mexico.

CASE 5338: Application of Amerada Hess Corporation for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced water into the Devonian formation through the open-hole interval from 10,980 feet to 11,180 feet in its State BTC Well No. 1, located in Unit N of Section 35, Township 11 South, Range 33 East, Bagley Siluro-Devonian Pool, Lea County, New Mexico.

CASE 5339: Application of John L. Cox for salt water disposal, Lea County, New Mexico. Applicant in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres formation through the open-hole interval from approximately 4989 feet to 5017 feet in his U.S.M. Well No. 2, located in Unit H of Section 27, Township 9 South, Range 37 East, West Sawyer-San Andres Pool, Lea County, New Mexico.

CASE 5340: Application of Atlantic Richfield Company for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its State BR Well No. 1, located in Unit K of Section 16, Township 21 South, Range 26 East, Eddy County, New Mexico, in such a manner as to produce gas from an undesignated Atoka gas pool through the tubing and gas from an undesignated Morrow gas pool through the casing-tubing annulus by means of a cross-over assembly.

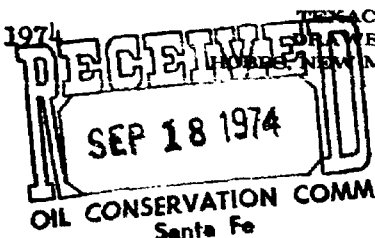
CASE 5341: Application of Texas Oil & Gas Corporation for an unorthodox location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Williamson Fed. Well No. 3, located 660 feet from the North line and 1980 feet from the East line of Section 9, Township 20 South, Range 29 East, NMPM, Burton Flats-Morrow Gas Pool, Eddy County, New Mexico, the E/2 of said Section 9 to be dedicated to the well.

CASE 5342: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Leon Davis, Fidelity and Deposit Company of Maryland, and all other interested parties to appear and show cause why the New Mexico State "Heart" Well No. 1, located in Unit J of Section 16, Township 14 North, Range 32 East, NMPM, Harding County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.



PETROLEUM PRODUCTS

September 17, 1974



TEXACO INC.
PRAYER 728
HOBBS, NEW MEXICO 88240

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

RE: REQUEST FOR EXAMINER HEARING
Application for Downhole Commingle
G. L. Erwin "B" Federal (NCT-2) Well No. 5
Justis, North (Montoya, Ellenburger, and
Fusselman) Pools
Lea County, New Mexico

ATTENTION: MR. A. L. PORTER, JR.

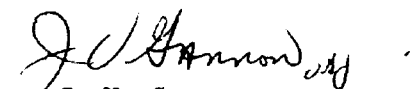
Gentlemen:

It is requested that an examiner hearing be scheduled to consider TEXACO's application to downhole commingle the Justis, North (Montoya, Ellenburger, and Fusselman) Pools in the G. L. Erwin "B" Federal (NCT-2) Well No. 5 located in Unit P of Section 35, Township 24 South, Range 37 East, Lea County, New Mexico.

The USGS and all offset operators have been notified of this application.

Your cooperation in this matter will be appreciated.

Yours very truly,


J. V. Gannon
District Superintendent

JBS:kw
MAS, Jr.
NMOCC - Hobbs
USGS - Hobbs
Offset Operators
JSR - Midland

DOCKET MAILED

Date 10 4 74

DATA SHEET FOR WELLBORE COMMINGLING

Page 5345

Operator: **Texaco Inc.**

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

Lease and Well No.: **C.L. Erwin "B" Federal (NCT-2) No. 5**

Location: **330' FSL & 330' FEL of Sec. 35, Township 24 South, Range 37 East, Lea County, New Mexico**

WELL DATA

	Upper Pool	Middle Pool	Lower Pool
Name of Pool	<u>Justis Fusselman North</u>	<u>Justis Montoya North</u>	<u>Justis Ellenburger North</u>
Producing Method	<u>Pump</u>	<u>Pump</u>	<u>Pump</u>
BHP	<u>1000 (Est.)</u>	<u>1000 (Est.)</u>	<u>1300 (Est.)</u>
Type Crude	<u>Sweet</u>	<u>Sweet</u>	<u>Sweet</u>
Gravity	<u>39.6</u>	<u>39.9</u>	<u>39.6</u>
GOR Limit	<u>2000</u>	<u>2000</u>	<u>2000</u>
Completion Interval	<u>6950'-7060'</u>	<u>7118'-7130'</u>	<u>8332'-8359'</u>
Current Test Date	<u>8-30-74</u>	<u>8-28-74</u>	<u>8-29-74</u>
Oil	<u>18</u>	<u>2</u>	<u>1</u>
Water	<u>7</u>	<u>1</u>	<u>0</u>
GOR	<u>TSTM</u>	<u>4875</u>	<u>TSTM</u>
Selling Price of Crude - \$/BBL.	<u>5.29</u>	<u>5.29</u>	<u>5.29</u>
Daily Income - \$/Day	<u>95.22</u>	<u>10.58</u>	<u>5.29</u>

COMMINGLED DATA:

Gravity of Commingled Crude 39.6

Selling Price of Commingled Crude - \$/BBL. 5.29

Daily Income - \$/Day 269.79

Net (Gain) (~~LOSS~~) from Wellbore Commingling - \$/Day 105.80 (Production increase of 20 BOPD)
based on current producing rates.

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

G-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	TBG. PRESS.	DAILY ALLOW-ABLE	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.	
G. L. Erwin "B" Federal (NCT-2)	5	P	35	24S	37E											
<u>Justis Fusselman North</u>						8-30-74	P			40	24	7	39.6	18	-	TSTM
<u>Justis Montoya North</u>						8-28-74	P			5	24	1	39.9	2	9.8	4900
<u>Justis Ellenburger North</u>						8-29-74	P			10	24	0	39.6	1	-	TSTM

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

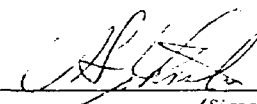
During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized 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)

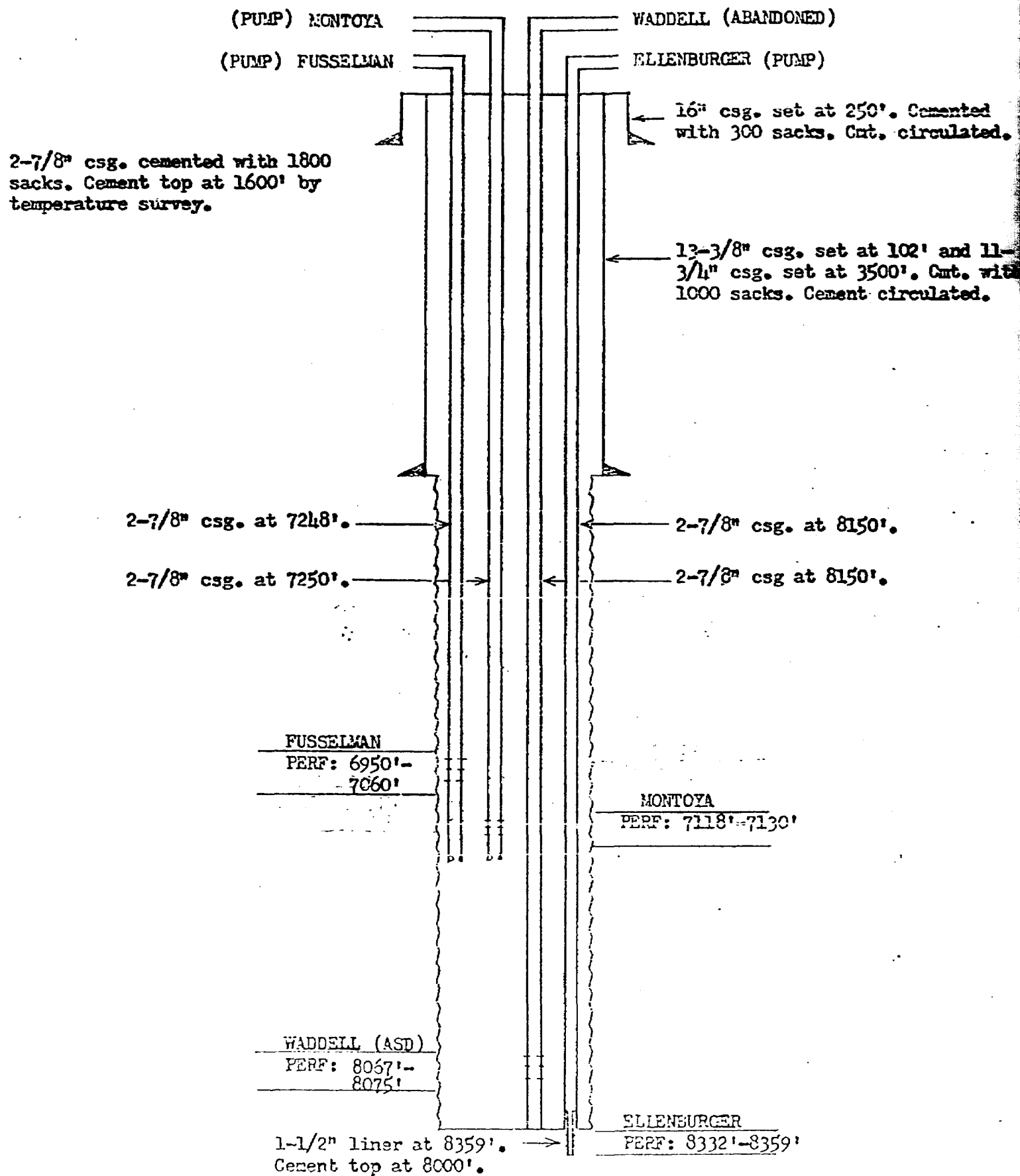
Assistant District Superintendent

(Title)

September 10, 1974

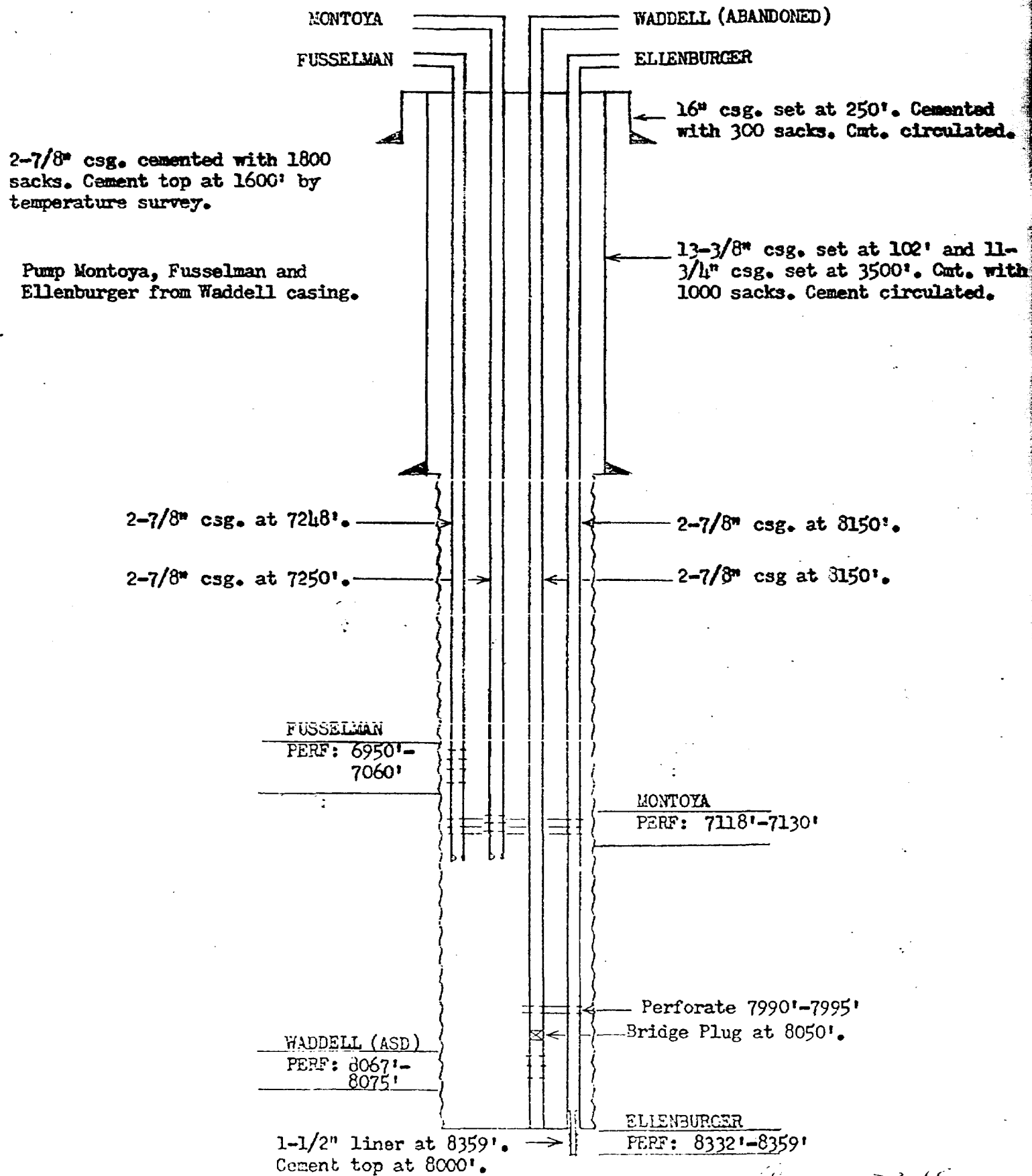
(Date)

5345



Present Completion
G.L. ERWIN "B" FEDERAL (NCT-2) NO. 5
JUSTIS NORTH (FUSSELMAN, MONTOYA,
WADDELL AND ELLENBURGER) POOLS
LEA COUNTY, NEW MEXICO

5-345



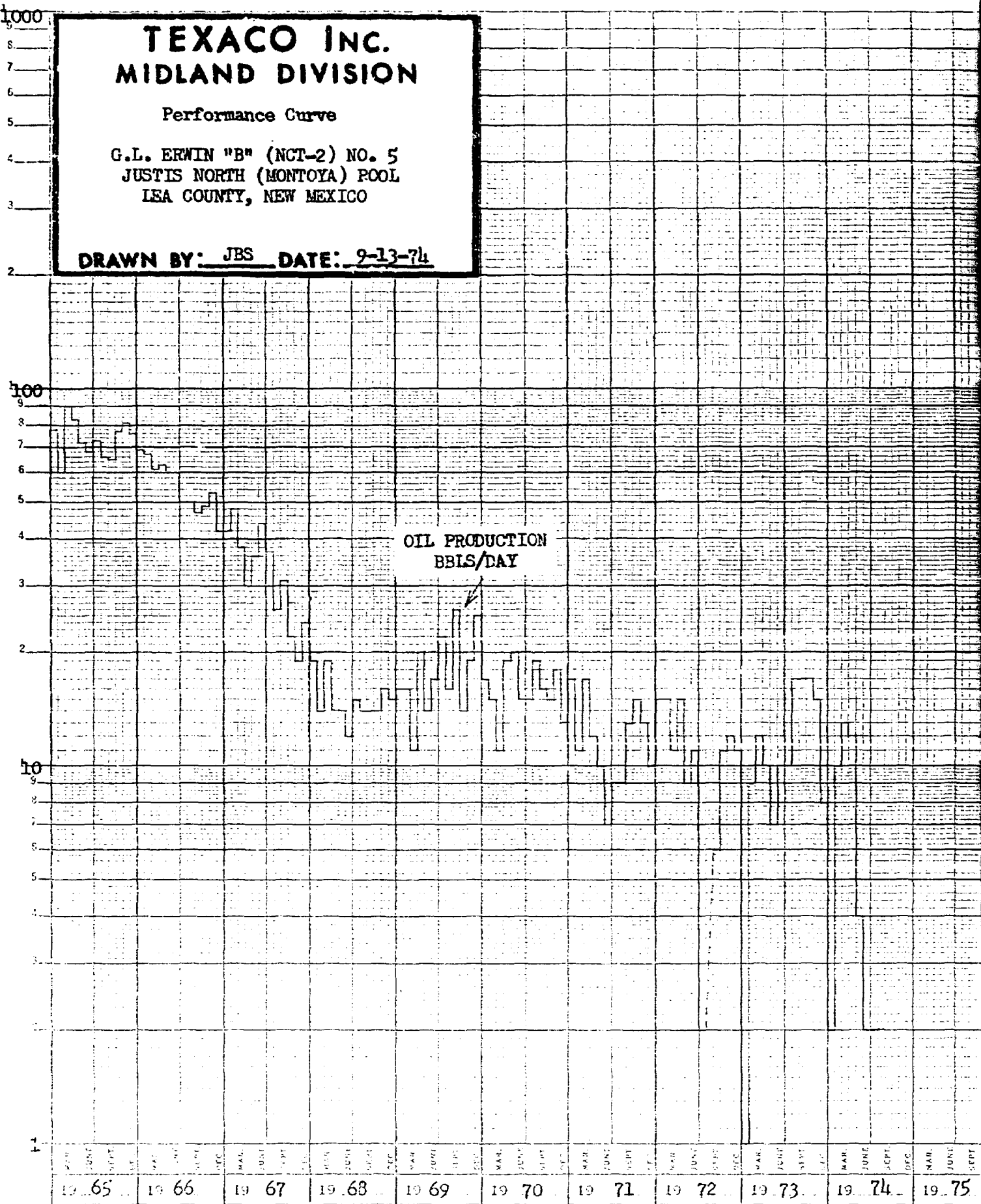
5-345

TEXACO INC. **MIDLAND DIVISION**

Performance Curve

G.L. ERWIN "B" (NCT-2) NO. 5
JUSTIS NORTH (MONTOKA) POOL
LEA COUNTY, NEW MEXICO

DRAWN BY: JBS DATE: 9-13-74



Doc 5-345

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TEXACO INC. MIDLAND DIVISION

Performance Curve

G.I. ERWIN "B" (NCT-2) NO. 5
JUSTIS NORTH (FUSSELMAN) POOL
LEA COUNTY, NEW MEXICO

DRAWN BY: JBS DATE: 9-13-74

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OIL PRODUCTION
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600-5345

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TEXACO INC. **MIDLAND DIVISION**

Performance curve

G.L. ERWIN "B" (NCT-2) NO. 5
JUSTIS NORTH (ELLENBURGER) POOL
LEA COUNTY, NEW MEXICO

DRAWN BY: JBS DATE: 9-13-74

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OIL PRODUCTION
BBLs/DAY

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19 74

19 75

5345

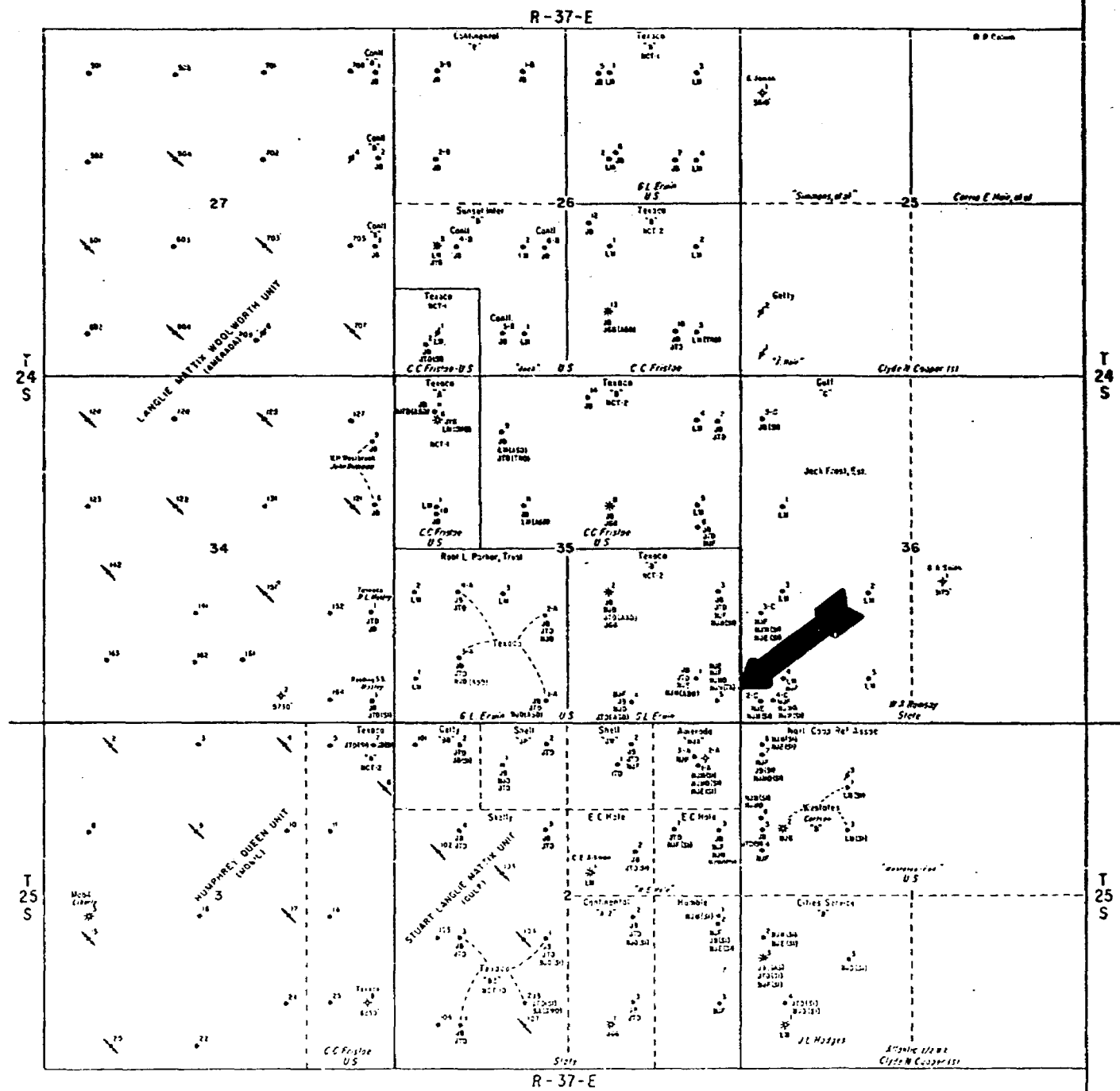
OFFSET OPERATORS

Gulf Oil Corporation - U.S.
900 N. Turner
Hobbs, New Mexico 88240

National Cooperative Refinery Associates
915 Wilco Building
Midland, Texas 79701

Amerada Hess Corporation
P. O. Box 591
Midland, Texas 79701

Shell Oil Company
P. O. Box 1509
Midland, Texas 79701



POOL INDEX

JFD	JALWAY FATES GAS	NUE	NORTH JUSTIS ELLENBURGER
JB	JUSTIS BLUESBRY	NUF	FUSSELLMAN
JOG	JUSTIS OCEANITA GAS	NIM	MEXEE
JTD	JUSTIS TUBB-DRINKARD	NIM	MONTANA
LM	LANGLIE MATTIX 7 RIVERS	NJD	TUBB-DRINKARD
NJB	NORTH JUSTIS BLUESBRY	NJW	WADDELL
NJD	NORTH JUSTIS DEVONIAN		

LEGEND

(ASD)	ABANDONED
(ASD)	ABANDONED-SALVAGE DEFERRED
(S)	SHUT IN
(SWD)	SALT WATER DISPOSAL
(TA)	TEMPORARILY ABANDONED
(TRD)	TO BE RECONDITIONED FOR OIL

TEXACO Inc.
JUSTIS & LANGLIE MATTIX POOLS
LEA COUNTY, NEW MEXICO

SCALE: 0 1000 2000'

Corr. 5-345

(d)

dr/

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. 5345

Order No. R-4895

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 October 16, 1974, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this _____ day of _____, 1974, 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 G. L. Erwin "B" Fed. (NCT-2) Well No. 5, located in Unit P of Section 35, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico.

1 -2-

2 CASE NO. 5345

3 Order No. R-

4 (3) That the applicant has completed said well as a quadruple
5 tubingless completion in the North Justis-Fusselman, North Justis-
6 Montoya, Waddell, and North Justis-Ellenburger Pools under authority
7 granted by the Commission by its Administrative Order MC-1237-A.

8 (4) That the applicant seeks authority to commingle Fusselman,
9 Montoya, and Ellenburger production within the wellbore of the above-
10 described well in such a manner as to permit commingled oil to be
11 produced ^{from the} former Waddell casing string ^{and or} with all part of the
12 commingled gas to be produced ^{through} any of the various casing strings.

13 (5) That the Waddell zone is to be abandoned.

14 (6) That from the Fusselman zone, the subject well is capable
15 of marginal production only.

16 (7) That from the Montoya zone, the subject well is capable
17 of low marginal production only.

18 (8) That from the Ellenburger zone, the subject well is
19 capable of low marginal production only.

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

23 (10) That the reservoir character ^(is) of each of the subject
24 zones are such that underground waste would not be caused by the
25 proposed commingling provided that the well is not shut-in for an
26 extended period.

27 (11) That to afford the Commission the opportunity to assess
28 the potential for waste and to expeditiously order appropriate
29 remedial action, the operator should notify the Hobbs district
30 office of the Commission any time the subject well is shut-in for
31 7 consecutive days.

32 (12) That in order to allocate the commingled production to
each of the commingled zones in the subject well, 43 percent of the

1 -3-
2 CASE NO. 5345
3 Order No. R-

4 commingled oil production should be allocated to the Fusselman
5 zone, 20 percent of the commingled oil production to the Montoya
6 zone, 37 percent should be allocated to the Ellenburger zone, and
7 100 percent of the commingled gas production should be allocated
8 to the Montoya zone.

9 (13) That the Secretary-Director of the Commission should
10 administratively adjust the percentages ^{Set out} in Finding No. (10) above
11 if subsequent testing indicates such adjustment would permit
12 more accurate allocation of the commingled production.

13 IT IS THEREFORE ORDERED:

14 (1) That the applicant, Texaco Inc., is hereby authorized to
15 commingle Fusselman, Montoya and Ellenburger production within the
16 wellbore of the G.L. Erwin "B" Fed. (NCT-2) Well No. 5, located in
17 Unit P of Section 35, Township 24 South, Range 37 East, NMPM, Lea
18 County, New Mexico, in such a manner as to permit commingled ~~oil~~
19 oil to be produced ~~from~~ ^{through} the former Waddell casing string and
20 all or any part of the commingled gas to be produced ~~from~~ ^{through} any of
21 the various casing strings.

22 (2) That 43 percent of the commingled oil production shall
23 be allocated to the Fusselman zone, 20 percent of the commingled
24 oil production shall be allocated to the Montoya zone, ^{and} 37 percent
25 of the commingled oil production shall be allocated to the
26 Ellenburger zone, and 100 percent of the commingled gas production
27 should be allocated to the Montoya zone;

28 PROVIDED HOWEVER, that the Secretary-Director of the Commission
29 may administratively adjust said percentages if subsequent testing
30 should indicate such adjustment would permit more accurate allocation
31 of the commingled production.

32 (3) That the operator of the subject well shall immediately
notify the Commission's Hobbs district office any time the well

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-4-
CASE NO. 5345
Order No. R-

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.