

Case Number
4530

Application

Transcripts

Small Exhibits

E T C.

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SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
April 28, 1971

EXAMINER HEARING

IN THE MATTER OF:

Application of Amoco
Production Company for
down-hole commingling,
Lea County, New Mexico.

Case No. 4530

BEFORE: Elvin A. Utz, Examiner

TRANSCRIPT OF PROCEEDINGS

1 MR. UTZ: Cause 4530.

2 MR. HATCH: Cause 4530, application of Amoco
3 Production Company for down-hole commingling, Lea County,
4 New Mexico.

5 MR. COOTER: Mr. Examiner, Paul Cooter with the
6 law firm of Atwood and Malone, Roswell, appearing for the
7 applicant, Amoco Production Company.

8 The applicant will present or call one witness,
9 Mr. Lee VanRamshorst, let me spell his name for you. His
10 last name is V-A-N-R-A-M-S-H-O-R-S-T.

11 MR. UTZ: Thank you.

12 MR. HATCH: We needed it.

13 (Witness sworn.)

14 MR. UTZ: Are there other appearances?

15 (Whereupon, Applicant's Exhibits
16 1, 2A, 2B, 3, 4, 5A and 5B were
marked for identification.)

17 LEE BRIAN VANRAMSHORST

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

20 DIRECT EXAMINATION

21 BY MR. COOTER:

22 Q Would you please state your name, place of
23 residence, employer and in what capacity you are employed,
24 for the record, please, sir?

25 A My name is Lee Brian VanRamshorst, I work for

1 Amoco Production Company in Fort Worth, Texas, as a
2 petroleum engineer.

3 Q Have you previously testified before the New
4 Mexico Oil Conservation Commission?

5 A No sir, I have not.

6 Q Would you please give the Examiner a brief resume
7 of your educational and your professional experience?

8 A I received my bachelor of science degree in
9 mechanical engineering from the University of Missouri
10 at what was formerly the Missouri School of Mines, went
11 to work upon graduation with Pan American Petroleum
12 Corporation, which is now Amoco Production Company, in
13 Liberal, Kansas. Worked two and a half years in the
14 Liberal, Kansas, office in various assignments, was
15 transferred to the Fort Worth division office where I worked
16 the past four years in various capacities as a petroleum
17 engineer.

18 I also have a master's of management and science
19 from Texas-Christian University as of December of last
20 year.

21 Q Would you please state briefly what the
22 applicant Amoco Production Company seeks by its application
23 in this case?

24 A In this case, Amoco Production Company wishes
25 to receive approval to down-hole commingle its Blinbry and

1 Drinkard oil zones in its Southland Royalty "A" Number Two,
2 a triple completion, the third zone being the Tubb gas
3 zone.

4 Q Let me first direct your attention to what
5 has been marked already as Exhibit Number One in this
6 case. What does this exhibit show?

7 A This exhibit shows the immediate area around
8 our Southland Royalty "A" Lease, with that lease outlined
9 with red hatched coloring. The subject well, the
10 Southland Royalty "A" Number Two, is indicated by a red
11 arrow.

12 The various colors on the map are to distinguish
13 the pools that are productive and the various well bores,
14 to the best of our knowledge, in the immediate area. The
15 symbol "DHC" that you find on some of the wells stands
16 for down hole commingling already approved. This information
17 is shown for our assistance in Royalty "A" only.

18 Q To the north of the subject well which has been
19 marked by the red arrow is the Number 8 -- Southland
20 Royalty "A" Number 8 well. It is indicated to be a triple
21 completion that is down hole commingled. Would you please
22 explain that?

23 A Yes, the Number 8 well is down hole commingled
24 by a hearing of August of last year. It's a triple
25 completion in the Blinbry, Drinkard and Tubb zones. In this

1 case, though, all three zones were oil productive.

2 Q It was completed in the same triple completion
3 manner as the Number 2 Well with the exception that the
4 Tubb is an oil well in the Number 8 well and it's a is well
5 in the Number 2 Well?

6 A That is true.

7 Q And -- all right. Let me next direct your
8 attention to what has been marked as Exhibits 2-A and 2-B.
9 Would you please explain those and relate what they
10 show?

11 A Exhibit 2-A and 2-B are well bore sketches
12 of the well bore in the Southland Royalty "A" Number 2,
13 the subject well. The Exhibit 2-A is the condition,
14 the mechanical condition as now exists.

15 The Exhibit 2-B is the mechanical condition
16 as we propose if the Commission allows us down hole
17 commingling of the Blinebry oil and Drinkard oil zones.

18 The color coding shown on the exhibit is the
19 same as that indicated on Exhibit Number One. The three
20 zones productive as indicated are the upper zone, the
21 Blinebry oil zone, the middle zone being a Tubb gas
22 zone, and the lower zone being a drinkard oil zone.

23 Q Would you please relate the mechanics as shown
24 on it of your proposal, proposed commingling on Exhibit 2-B?

25 A My Exhibit 2-B is a -- as you can see by relating

1 it to Exhibit 2-A, we plan to remove the tubing string
2 that currently is producing the Blinebry oil and to
3 perforate the tubing string that is currently producing the
4 Drinkard oil, setting a plug between the perforations
5 in the tubing string that will remain in the well to produce
6 both zones and set a pump above that plug.

7 The oil from the Drinkard would flow up there and
8 out of the lower perforations into the casing opposite
9 the Blinebry oil zone, and the Blinebry oil and the
10 Drinkard oil in its commingled status would flow back
11 up the tubing and be pumped up to the surface.

12 Q Let me put this aside for just a minute. I am
13 going to come back to Exhibit 2-B, but let's pass on for
14 the moment to Exhibit Three. What does that show?

15 A Exhibit Three is a data sheet for the subject
16 well, the Southland Royalty "A" Number Two. It indicates
17 that surface commingling was authorized for the
18 Southland Royalty "A" Lease in April of 1962, that the
19 multiple completion in the present well bore was authorized
20 on October 22, 1962.

21 It also indicates that latest tests for the
22 two pools in question, the Blinebry at the latest test
23 is making approximately eight barrels of oil a day, three
24 barrels of water and has a GOR of 499. That zone is being
25 pumped.

1 The Drinkard pool, the latest test is approximately
2 eight barrels of oil a day, one barrel of water a day, a
3 GOR of 1,093. It also is being pumped.

4 Also indicated on the exhibit are bottomhole
5 pressure data. The Blinebry bottomhole pressure is 701 PSI
6 and the Drinkard 778. These two pressures were taken from
7 the Southland Royalty "A" Number One, the immediate south
8 offset to the subject well in the latter -- in November
9 of 1969 prior to it being down hole commingled.

10 The two pressures that are indicated, this
11 would demonstrate they are -- the Drinkard pressure is a
12 sonic pressure while the other one was a measured bottomhole
13 pressure, so the Blinebry is the better pressure of the
14 two.

15 Q Wait a minute, let me interrupt you, haven't
16 you got that reversed? The Blinebry is the sonic measurement,
17 isn't it?

18 A Yes, excuse me, I'm sorry. The Blinebry pressure
19 is the sonic measurement and the Drinkard is the bottom
20 measured pressure, making the Drinkard the better pressure
21 of the two.

22 Q And in your opinion, are these compatible
23 pressures for down hole commingling?

24 A Yes sir, they are.

25 Q What would the down hole commingling production be,

1 or what would you expect it to be?

2 A I'd expect to have fifteen to sixteen barrels of
3 oil per day.

4 Q All right; then let's go back. Based on the
5 information that you have given as shown by Exhibit Three,
6 and the mechanics as shown on Exhibit 2-B, do you believe
7 that the proposed arrangement as shown on Exhibit 2-B, and
8 based on the information shown on Exhibit Three, that the
9 proposed commingling would jeopardize the efficiency of
10 production from either the Blinebry or the Drinkard
11 zones?

12 A No sir, I do not believe it would be jeopardized
13 from either zone.

14 Q And in your opinion, would the Tubb gas pool
15 be adequately protected as a separate pool in the well
16 bore?

17 A Yes sir, it would.

18 Q What is the allowed maximum production for a
19 commingled well of this nature?

20 A Based on the Drinkard perforations from 6595
21 to 6730, it would be forty barrels of oil a day.

22 Q Would it exceed that maximum if commingling
23 were allowed?

24 A No sir, with our estimation of fifteen to sixteen
25 barrels of oil a day, it would not exceed that forty.

1 Q Has there been any problem associated with
2 surface commingling or already authorized down hole
3 commingling on this lease?

4 A There has not been.

5 Q Let me next direct your attention to what
6 has been marked as Exhibit Number Four, and ask you to
7 relate what is shown on that?

8 A Exhibit Number Four is a fluid characteristics
9 and economic data sheet for the subject well, the
10 Southland Royalty "A" Number Two Well. As indicated,
11 the -- both fluids, the Blinebry oil and the Drinkard
12 oil had an API, the Blinebry was approximately forty-two,
13 the Drinkard is approximately thirty-eight.

14 The economics indicated at the bottom of the
15 exhibit show that in a commingled condition, actually
16 there would be a slight increase in value of the crude that's
17 produced.

18 Q All right, let me next direct your attention
19 to what's been marked as Exhibits Five-A and Five-B. What
20 do these show?

21 A Exhibits Five-A and Five-B are recent past
22 performance curves for the Southland Royalty 2-A in
23 the two -- the Blinebry and Drinkard pools, the Five-A
24 being the Blinebry and Five-B being the Drinkard pool.
25 Indicated in color is the oil production in green in barrels of

1 oil per day and the water production in barrels of water
2 per day. As shown there, the production has been quite
3 similar for the two zones over the immediate past.

4 Q How would you compare the performances of the
5 two pools?

6 A As just stated, it's very similar. They are
7 almost identical at the present time.

8 Q What would you consider to be a fair allocation
9 between the two pools with down hole commingling?

10 A I would assume a fifty-fifty allocation would be
11 warranted.

12 Q Have waivers been obtained from the offset
13 operators?

14 A We sent notification to the four offset operators,
15 and have received waivers from two.

16 Q Do you believe that under the proposals set
17 forth in your application, that correlative rights would
18 be protected?

19 A Yes sir, I do.

20 Q Would there be any adverse conditions imposed
21 by down hole commingling, in your opinion?

22 A No, sir.

23 Q Will there be additional reserves recovered
24 should the Commission authorize down hole commingling for
25 this well?

1 A There will be some additional recovery because
2 of the lower economic limits that you can reach by reduced
3 operating costs for the respective pools.

4 Q You believe, therefore, that that would prevent
5 waste?

6 A Yes, sir.

7 Q I believe that the Form C-116 was filed with
8 your application, was it not?

9 A Yes, sir.

10 Q Were the exhibits to which reference has been
11 made either prepared by you or under your direction and
12 supervision?

13 A They were.

14 MR. COOTER: We would offer the exhibits.

15 MR. UTZ: Without objection, the exhibits -- well,
16 let's see --

17 MR. COOTER: One, Two-A, Two-B, Three, Four
18 and then Five-A and Five-B.

19 MR. UTZ: Okay.

20 MR. COOTER: That concludes our direct case.

21 MR. UTZ: These exhibits, as stated, will be
22 entered into the record of this case.

23 (Whereupon, Applicant's Exhibits
24 1, 2-A, 2-B, 3, 4, 5-A and 5-B
25 were received in evidence.)

CROSS EXAMINATION

BY MR. UTZ:

Q Have these zones been pumped prior to this, or are they both pumped now?

A Yes sir, they are both pumped now.

Q Okay; so you would remove one string of tubing and one string of pumping equipment?

A Yes, sir.

Q How far is it from the perforations in your Drinkard to the packer in the Blinbry?

A It's approximately six hundred feet.

Q So that the Drinkard will have to flow that six hundred feet before it can be pumped, is that right?

A That's correct.

Q Is it adequate to do that?

A I believe it is, sir.

Q Is there any way to perform leakage tests, or has this been accomplished --

A Oh, I couldn't say right offhand. Very possibly there would not be --

Q You think it might be pretty expensive?

A Yes.

Q Now, in view of that, how would you be able to determine whether the Tubb zone might be -- well, the separation packers on each side of the Tubb zone might be

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1 leaking?

2 A The only way to be able to tell is by seeing
3 additional gas or pressure on the casing at the surface,
4 as far as the upper packer is concerned, and the lower
5 packer to be an increase in GOR or the produced fluid that
6 wouldn't be expected.

7 Q What kind of pressure do you have in the Tubb?

8 A This I do not know, sir.

9 Q Do you have any opinion?

10 A I have no opinion on it.

11 Q Is it substantially higher than either of the
12 oil zones?

13 A I don't believe so, sir, because that Tubb
14 zone is presently part of an administrative request we
15 have made to be reclassified from a marginal to a non-
16 marginal status, and it was -- the reclassification is
17 only because the original gas purchasers lowered the line
18 pressure by a hundred pounds. It had a hard time producing
19 against the higher line pressures of three hundred fifty that
20 did exist.

21 Q The pressures in these two oil zones, that is,
22 the Blinebry and the Drinkard, what was the date of that
23 test?

24 A It's November of 1969.

25 Q That's quite a while ago, wasn't it?

1 A Yes sir, it was prior to the down hole commingling
2 for the Southland Royalty "A" Number One from which the
3 pressures were taken.

4 Q And that pressure at that time was 701 for the
5 Blinebry and 778 for the Drinkard. Do you have any opinion
6 what it is now?

7 A It would be probably below that. As I said,
8 one of those was sonic and one of those was bottomhole
9 measured, so they are subject to some error there, but I
10 assume that it would be somewhat decreased. Now, I wouldn't
11 say it would be appreciably increased, though.

12 MR. UTZ: Any other questions of the witness?
13 You may be excused.

14 (Witness excused.)

15 MR. UTZ: Statements?

16 Taken under advisement.

17 MR. COOTER: Thank you, sir.
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I N D E X

WITNESS

PAGE

LEE BRIAN VANRAMSHORST

Direct Examination by Mr. Cooter

2

Cross Examination by Mr. Utz

12

EXHIBIT

MARKED

OFFERED AND
RECEIVED

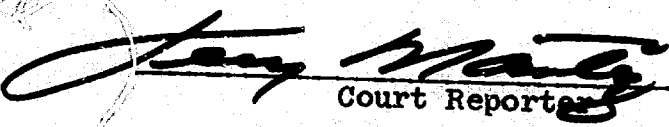

Applicant's 1, 2-A,
2-B, 3, 4, 5-A & 5-B

2

11

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1 STATE OF NEW MEXICO)
2 : ss
3 COUNTY OF MCKINLEY)
4 I, Jerry Martinez, Court Reporter in and for the
5 County of McKinley, State of New Mexico, do hereby certify
6 that the foregoing and attached Transcript of Hearing before
7 the New Mexico Oil Conservation Commission was reported by
8 me and that the same is a true and correct record of the said
9 proceedings, to the best of my knowledge, skill and ability.
10
11 
12 Court Reporter
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22
23 I do hereby certify that the foregoing is
24 a complete record of the proceedings in
25 the hearing of Case No. 45-3-9
heard by me on April 25, 1971.

Examiner
New Mexico Oil Conservation Commission



OIL CONSERVATION COMMISSION

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

May 6, 1971

**GOVERNOR
BRUCE KING
CHAIRMAN**

**LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER**

**STATE GEOLOGIST
A. L. PORTER, JR.**

SECRETARY - DIRECTOR

Mr. Paul Cooter
Atwood & Malone
Attorneys at Law
Post Office Box 700
Roswell, New Mexico 88201

Re: Case No. 4530
Order No. R-4140
Applicant:
Amoco Production Company

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 *AP*

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. 4530
Order No. R-4140

APPLICATION OF AMOCO PRODUCTION
COMPANY FOR DOWN-HOLE COMMINGLING,
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on April 28, 1971,
at Santa Fe, New Mexico, before Examiner Elvis A. Uts.

NOW, on this 6th day of May, 1971, 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, Amoco Production Company, is the
owner and operator of the Southland Royalty "A" Well No. 2,
located in Unit B of Section 9, Township 21 South, Range 37 East,
NMPM, Lea County, New Mexico.

(3) That pursuant to authority granted by Order No. R-2343
the subject well was completed as a triple completion (conven-
tional) to produce oil from the Blinebry and Drinkard Pools and
gas from the Tubb Gas Pool.

(4) That the Blinebry and Drinkard zones in the subject well
are now capable of only low marginal production.

(5) That the applicant now proposes to complete the subject
well in such a manner as to produce gas from the Tubb Gas Pool
through one string of 2-inch tubing and to produce the low

-2-

CASE NO. 4530

Order No. R-4140

marginal oil production from the Blinebry and Drinkard Pools through a single parallel string of 2 3/8-inch tubing, commingling in the well-bore the production from the Blinebry and Drinkard oil zones, with separation of the Tubb zone and the commingled Blinebry and Drinkard zones by means of packers set at approximately 6037 feet and 6550 feet.

(6) That the proposed commingling of the Blinebry and Drinkard zones may substantially extend the productive lives of said zones.

(7) That the reservoir characteristics of the Blinebry and Drinkard zones in the subject well are such that underground waste would not be caused by the proposed commingling in the well-bore.

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

(9) That the mechanics of the proposed completion are feasible and in accord with good conservation practices.

(10) That in order to allocate the commingled production to each of the commingled zones in the subject wells, 50% of the commingled oil production should be allocated to the Blinebry zone, 50% of the commingled oil production to the Drinkard zone, 32% of the commingled gas production to the Blinebry zone, and 68% of the commingled gas production to the Drinkard zone in the subject well.

(11) That approval of the subject application will prevent waste and protect correlative rights.

(12) That Order No. R-2343 should be superseded.

IT IS THEREFORE ORDERED:

(1) That the applicant, Amoco Production Company, is hereby authorized to complete its Southland Royalty "A" Well No. 2 located in Unit B of Section 9, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico, in such a manner as to produce gas from the Tubb Gas Pool through one string of 2-inch tubing and to produce oil from the Blinebry and Drinkard Pools through a single parallel string of 2-3/8-inch tubing, commingling in the

-3-

CASE NO. 4530

Order No. R-4140

well-bore the production from the Blinebry and Drinkard Pools, with separation of the Tubb zone and the commingled Blinebry and Drinkard zones by means of packers set at approximately 6037 feet and 6550 feet.

PROVIDED HOWEVER, that the applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A of the Commission Rules and Regulations insofar as said rule is not inconsistent with this order;

PROVIDED FURTHER, that the applicant shall notify the Commission of any substantial increase of the gas-oil ratio of the commingled zones.

(2) That 50% of the commingled oil production shall be allocated to the Blinebry zone, 50% of the commingled oil production to the Drinkard zone, 32% of the commingled gas production to the Blinebry zone, and 68% of the commingled gas production to the Drinkard zone.

(3) That the commingling in the well-bore authorized by this order shall continue only so long as the commingled production of the two zones does not exceed 40 barrels of oil per day nor 80 barrels of water per day.

(4) That the maximum amount of gas which may be produced daily from the commingled zones in the subject well shall be determined by multiplying 2,000 by the top unit allowable for the Blinebry Pool.

(5) That Order No. R-2343 is hereby superseded.

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

-4-

CASE NO. 4530

Order No. R-4140

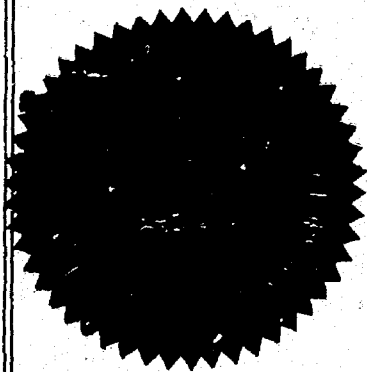
DONE at Santa Fe, New Mexico, on the day and year herein-
above designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

Bruce King
BRUCE KING, Chairman

Alex J. Armijo
ALEX J. ARMILLO, Member

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



dr/

Case 4530

Hear d 4-28-71

Rec. 4-30-71

Grant Amoco permission to
coomingle the Blinbury and
Dinkard oil zone thru ~~the~~
string of 2 3/8 tubing set thru 2
packers. One at 6037 and one at 6550.
The Dinkard will be produced thru
the tubing running thru the Subbi
gas zone from 6037-6550 & coomingle
ed with the Blinbury in the tubing
at 5843 and 5980. A pump will
produce the coomingle stream.
The Blinbury gas zone will be
produced thru 2" tubing.
Both zone are producing
approx 16 BOPD.

Thos D. H.
allocate Production on Basis of
Test of 2-22-71.

	Gas	Oil.
Blinbury Zone.	32%	50%
Dinkard Zone.	68%	50%

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

March 25, 1971

Cover 4530

Amoco Production Company
Oil and Gas Building
P. O. Box 1410
Fort Worth, Texas 76101

Attention: Mr. D. L. Ray

DOCKET MAILED

Date 4-16-71

Re: Application for Down-hole
Commingling
Southland Royalty "A" 2
Blinebry and Drinkard Pools
Lea County, New Mexico

Gentlemen:

This application is not eligible for administrative approval and is being set for hearing before an examiner on April 28, 1971.

A copy of the docket will be mailed to you within the next few days.

Very truly yours,

GEORGE M. HATCH
Attorney

GML/dr

cc: Oil Conservation Commission
P. O. Box 1980
Hobbs, New Mexico 88240

C
O
P
Y

DOCKET: EXAMINER HEARING - WEDNESDAY - APRIL 28, 1971

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

The following cases will be heard before Elvis A. Utz, Examiner, or Daniel S. Nutter, Alternate Examiner:

CASE 4352: (Reopened) Continued from the April 14, 1971 hearing. This case will again be continued - to the May 19, 1971 hearing.

In the matter of Case 4352 being reopened by the Oil Conservation Commission upon its own motion to give all interested persons an opportunity to appear and present evidence as to whether the Double L-Queen and Suble-Queen Pools, Chaves County, New Mexico, are in fact separate reservoirs or one common reservoir. Further, in the event it is found that the two pools comprise one common reservoir, the Commission will consider the adoption of special rules and regulations to provide for the classification of oil and gas wells, spacing and well location requirements for oil and gas wells, and an allocation formula for withdrawals from the gas wells and oil wells.

CASE 4523: Application of Texas Pacific Oil Company, Inc., for the re-dedication of acreage, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the rededication of a 160-acre non-standard gas proration unit in the Jalmat Gas Pool comprising the SE/4 of Section 31, Township 25 South, Range 37 East, Lea County, New Mexico, to its Legal Wells Nos. 1 and 2, located, respectively, in Units P and I of said Section 31. Applicant further seeks authority to produce the allowable assigned to said unit from either of said wells in any proportion.

CASE 4524: Application of Texaco Inc. for reinstatement of cancelled underproduction, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to the general rules and regulations for the prorated gas pools of Southeastern New Mexico to permit the reinstatement of accumulated underproduction cancelled for its Blinbry "A" Federal (NCT-1) Well No. 2 located in Unit I, Section 31, Township 23 South, Range 37 East, Jalmat Gas Pool Lea County, New Mexico.

CASE 4525: Application of Wolfson Oil Company for a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for a 280-acre non-standard gas proration unit comprising the SW/4, S/2 NW/4, and NE/4 NW/4 of Section 20, Township 22 South, Range 36 East, Jalmat Gas Pool, Lea County, New Mexico, to be dedicated to its

Cities-Federal Well No. 1 located 2310 feet from the South line and 330 feet from the West line of said Section 20.

CASE 4526: Application of Pennzoil United, Inc., for the creation of a new pool and promulgation of special pool rules, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new pool for the production of gas from the San Andres formation for its Superior State Well No. 1 located in Unit L of Section 8, Township 7 South, Range 35 East, Roosevelt County, New Mexico, and for the promulgation of special rules therefor, including a provision for 320-acre spacing units.

CASE 4527: Application of Big "6" Drilling Company for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Bone Springs formation in the interval from 10,062 feet to 10,119 feet in its Ora Jackson "A" Well No. 1 located in Unit M of Section 5, Township 19 South, Range 35 East, Scharb-Bone Springs Pool, Lea County, New Mexico.

CASE 4528: Application of Frankon, Aston & Fair, Inc., for an exception to Order No. R-3221, as amended, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-3221, as amended, to dispose of water produced by its Coppedge Well No. 1-C located in Unit H of Section 5, Township 18 South, Range 30 East, Loco Hills-Grayburg-San Andres Pool, Eddy County, New Mexico, in an unlined pit in the vicinity of said well.

CASE 4529: Application of El Paso Natural Gas Company for 320-acre spacing, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks 320-acre spacing for the Grayburg-Atoka Gas Pool, Eddy County, New Mexico. Said pool was created prior to June 1, 1964, and therefore is not automatically eligible for 320-acre spacing. In the absence of evidence to the contrary, 320-acre spacing will be established for the pool.

CASE 4530: Application of Amoco Production Company for down-hole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle oil production from the Blinbry and Drinkard Pools in the well-bore of its Southland Royalty "A" Well No. 2, a triple completion, located in Unit B of Section 9, Township 21 South, Range 37 East, Lea County, New Mexico.

CASE 4518: (Readvertised)

Application of American Quasar Petroleum Company of New Mexico for a unit agreement and unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Vaca Draw Unit Area comprising 7,680 acres, more or less, of State, Federal and fee lands in Township 25 South, Range 33 East, Lea County, New Mexico. Applicant further seeks authority to drill an exploratory gas well at an unorthodox location 660 feet from the North line and 760 feet from the East line of Section 28, said Township and Range, to test the Devonian, Pennsylvanian, and Wolfcamp formations within one mile of the Red Hills Field. In the absence of objection an order will issue based upon testimony received in this case on March 31, 1971.

CASE 4531A

Application of Hanson Oil Company for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water by injection into the Delaware formation in the open-hole interval from 4192 to 4197 feet in its Hanson Federal Well No. 11 located 990 feet from the North line and 1650 feet from the West line of Section 25, Township 26 South, Range 31 East, North Mason-Delaware Pool, Eddy County, New Mexico.

CASE 4532A

Application of Atlantic Richfield Company for the assignment of gas allowable, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the assignment of gas allowable to its Phillips "A" Well No. 9, located 800 feet from the South line and 660 feet from the West line of Section 31, Township 19 South, Range 37 East, Monument-McKee Gas Pool, Lea County, New Mexico, for the proration period from July 1, 1970, through December 31, 1970, and for January and February, 1971. Said well was completed in March, 1971, as a twin replacement well for applicant's Phillips "A" Well No. 8 which ceased producing in 1969 and after extensive and unsuccessful workover operations was abandoned in January, 1971.

CASE 4533:

Application of Amoco Production Company for reinstatement of cancelled under production and reclassification of three wells, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to the general rules for prorated gas pools in Southeast New Mexico to permit the reinstatement of underproduction cancelled January 1, 1971, for the following wells: Gillully "B" Fed. No. 3, in Unit N of Section 33, Township 20 South, Range 37 East, Eumont

Pool, Gillully Fed. Gas Com. No. 4, in Unit B of Section 24, Township 20 South, Range 36 East, Eumont Pool, and State "C" Tr. 12 No. 4, in Unit F of Section 16, Township 21 South, Range 37 East, Blinebry Pool. Applicant further seeks the reclassification from marginal to non-marginal of the aforesaid Gillully "B" Fed. No. 3, and the Owen "B" Fed. No. 2 in Unit B of Section 34 and the Southland Royalty "A" No. 2 in Unit B of Section 9, both in Township 21 South, Range 37 East, Tubb Gas Pool.

CASE 4534: Application of Continental Oil Company for a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 160-acre non-standard gas proration unit in the Blinebry Gas Pool consisting of the N/2 SW/4, SE/4 SW/4, and SW/4 SE/4 of Section 21, Township 21 South, Range 37 East, Lea County, New Mexico, to be assigned jointly to its Wantz Wells Nos. 8 and 11 located in Units O and L respectively of said section; or, in the alternative, for the reallocation of acreage between the two wells so as to assign 40-acres to Well No. 11 and 120-acres to Well No. 8.

CASE 4535: Application of Continental Oil Company for down-hole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle Monument-Tubb and Weir Drinkard oil production in the well-bore of its SEMU Well No. 70, located in Unit I of Section 15, Township 20 South, Range 37 East, Lea County, New Mexico.

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. 2661
Order No. R-2343

APPLICATION OF PAN AMERICAN PETROLEUM
CORPORATION FOR A TRIPLE COMPLETION,
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on October 10, 1962, at Santa Fe, New Mexico, before Daniel S. Nutter, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 22nd day of October, 1962, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Daniel S. Nutter, 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, Pan American Petroleum Corporation, is the owner and operator of the Southland Royalty "A" Well No. 2, located in Unit B of Section 9, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico.

(3) That the applicant seeks permission to complete said Southland Royalty "A" Well No. 2 as a triple completion (conventional) in such a manner as to produce oil from the Drinkard Oil Pool and from the Blinebry Oil Pool through 2 3/8-inch OD tubing and 2.0-inch OD tubing, respectively, and to produce gas from the Tubb Gas Pool through 2.0-inch OD tubing.

(4) That the mechanics of the proposed triple completion are feasible and in accord with good conservation practices.

(5) That approval of the subject application will neither cause waste nor impair correlative rights.

-2-

CASE No. 2661
Order No. R-2343

IT IS THEREFORE ORDERED:

(1) That the applicant, Pan American Petroleum Corporation, is hereby authorized to complete its Southland Royalty "A" Well No. 2, located in Unit B of Section 9, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico, as a triple completion (conventional) in such a manner as to produce oil from the Drinkard Oil Pool and from the Blinebry Oil Pool through 2 3/8-inch OD tubing and 2.0-inch tubing, respectively, and to produce gas from the Tubb Gas Pool through 2.0-inch OD tubing.

PROVIDED HOWEVER, That the applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A of the Commission Rules and Regulations.

PROVIDED FURTHER, That the operator shall take packer-leakage tests upon completion and annually thereafter during the Gas-Oil Ratio Test Period for the Drinkard Oil Pool, and at such other times as the Secretary-Director of the Commission may prescribe.

(2) 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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

EDWIN L. MECHEM, Chairman

E. S. WALKER, Member

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

S E A L

esr/

CONTINENTAL OIL COMPANY

P. O. Box 460
HOBBS, NEW MEXICO 88240

PRODUCTION DEPARTMENT
HOBBS DIVISION
L. P. THOMPSON
Division Manager
G. C. JAMIESON
Assistant Division Manager

March 23, 1971

1001 NORTH TURNER
TELEPHONE 393-4141

Amoco Production Company
Oil and Gas Building
P. O. Box 1410
Fort Worth, Texas 76101

Attention Mr. D. L. Ray

Gentlemen:

Subject: Waivers of Objection for Downhole Commingling
Southland Royalty "A" No. 2, Lea County, New Mexico

Attached is a signed copy of your letter dated March 16, 1971, as Continental's waiver of objection to downhole commingle the Blinebry and Drinkard Oil Pools in the subject well.

An approved copy of your request has been forwarded to the New Mexico Oil Conservation Commission in Santa Fe.

Yours very truly,

SIGNED: G. C. JAMIESON

G. G. Jamieson

GCJ-DW
CC: NMOCC-Santa Fe

(SFS)

Case 4530



D. L. Ray
Division Engineer

March 16, 1971

Amoco Production Company

Oil and Gas Building
P.O. Box 1410
Fort Worth, Texas 76101
Producing Department

File:

DRC-144-986.510.1

Subject:

Waivers of Objection for
Downhole Commingling,
Southland Royalty "A" No. 2,
Blinbry & Drinkard Pools
Lea County, New Mexico

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

Phillips Petroleum Company
P. O. Box 2130
Hobbs, New Mexico 88240

Shell Oil Company
P. O. Box 276
Roswell, New Mexico 88201

Western Oil Fields, Inc.
112 North First
Artesia, New Mexico 88210

Gentlemen:

We propose to downhole commingle the Blinbry and Drinkard from our Southland Royalty "A" Well No. 2, a Tubb (gas) Blinbry (oil) and Drinkard (oil) triple well, located 660' FNL and 1980' FEL, Section 9, T21S R37E, Lea County, New Mexico. The Tubb gas will still be produced through a separate string of tubing.

New Mexico Oil Conservation Commission Order No. R-3845 requires a 20-day waiting period for approval of downhole commingling if offsetting operators do not waive objection to the commingling. In order to expedite early approval of the subject matter, we solicit your waivers of objection to downhole commingling.

If you have no objection to the proposed commingling, please sign one copy of this letter as your waiver and return to Mr. D. L. Ray, P. O. Box 1410, Fort Worth, Texas. Please also forward one signed copy to the New Mexico Oil Conservation Commission in Santa Fe.

Yours very truly,

LBVR:jn

APPROVED FOR: Continental Oil Company

BY: SIGNED: G. C. JAMIESON

DATE: March 23, 1971

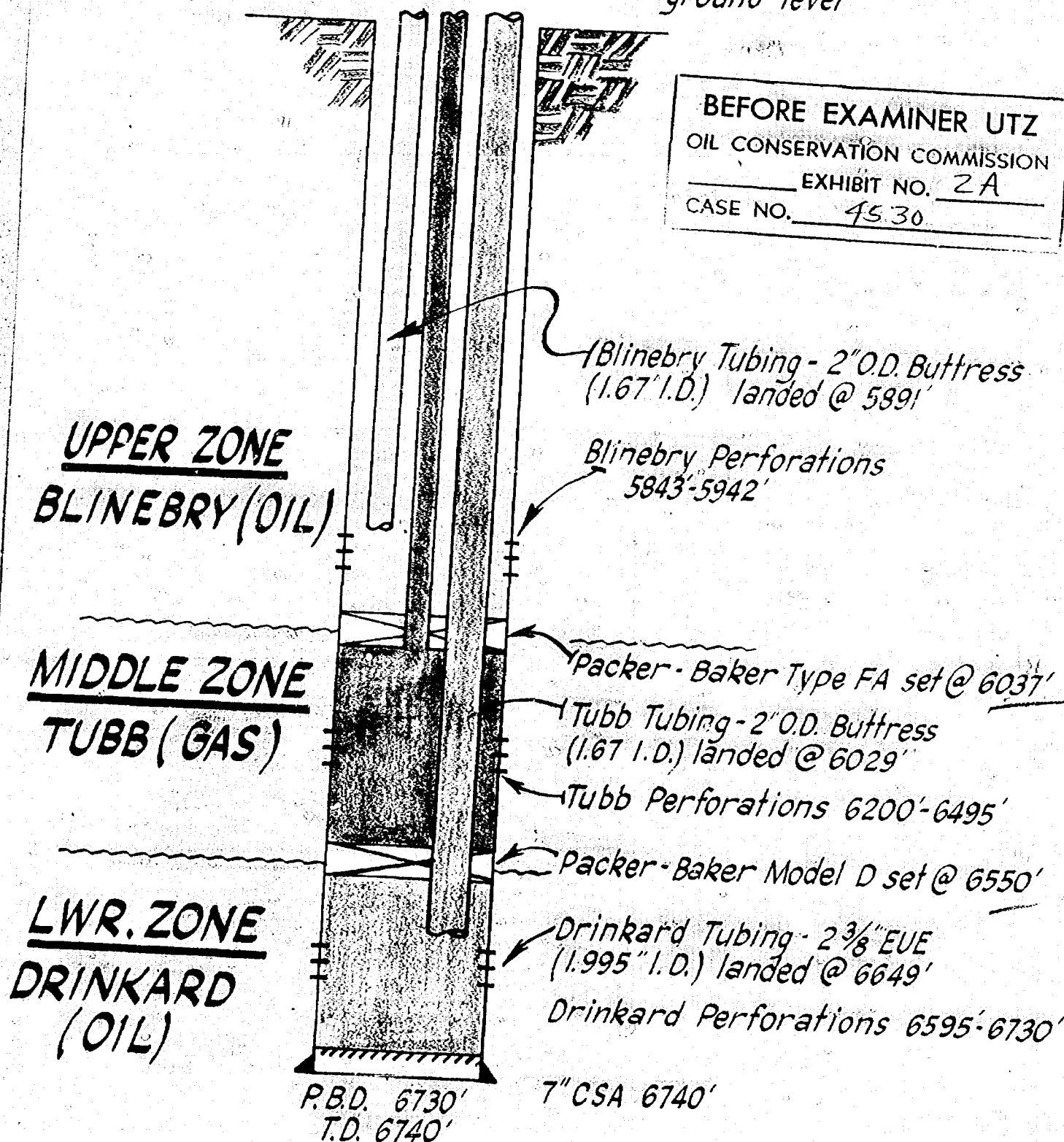
D. L. Ray

Case 4530

DOWNHOLE EQUIPMENT SOUTHLAND ROYALTY A No. 2

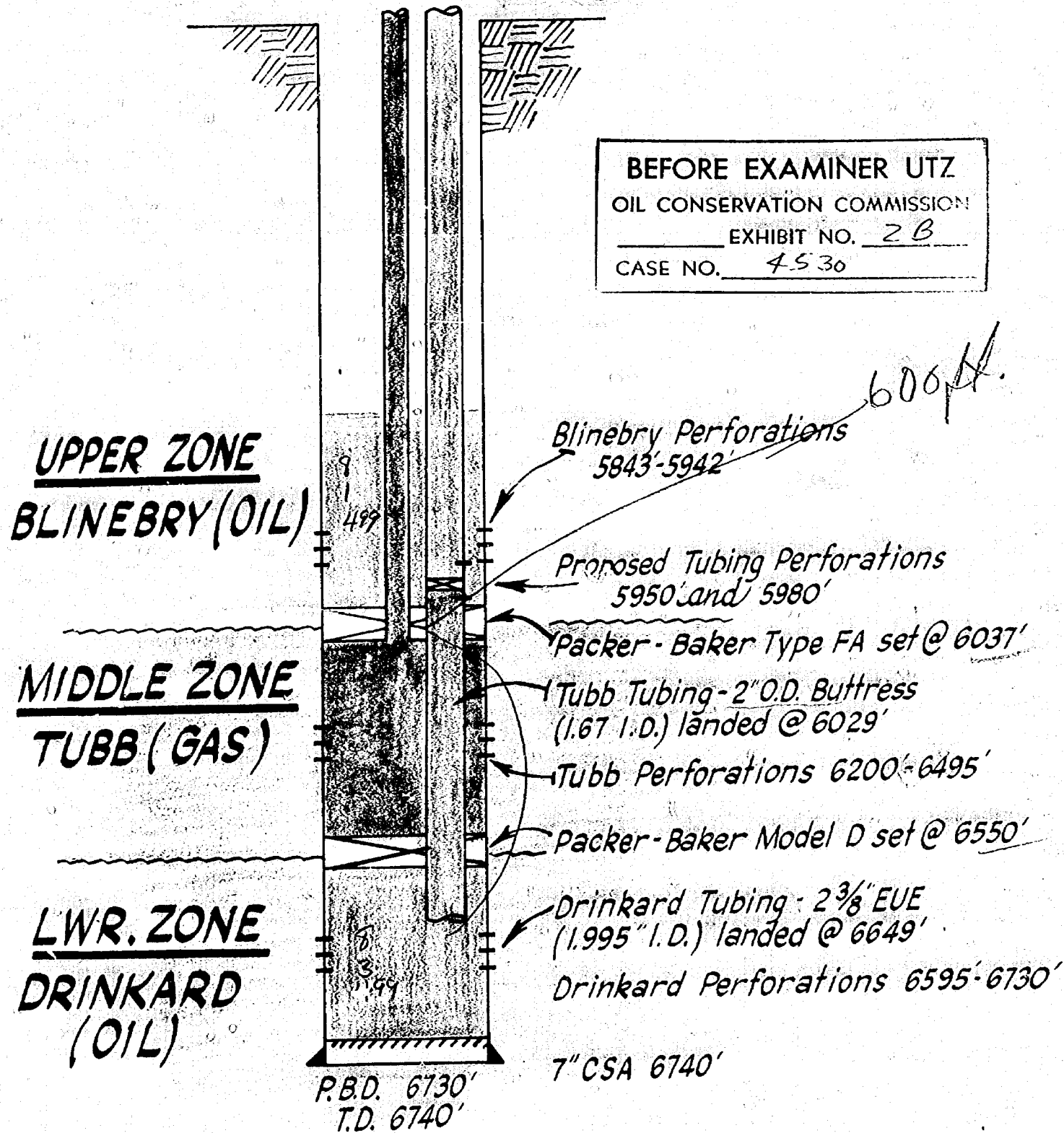
multiple tubing head
ground level

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. 2A
CASE NO. 45.30



DOWNHOLE EQUIPMENT SOUTHLAND ROYALTY A No. 2

multiple tubing head
ground level



Well	Pools	Latest Test (BOPD x BWPD x GOR)	Bottom Hole Pressure*		Remarks
			(psi)	(Datum)	
Southland Royalty. "A" No. 2	Blinebry	8 x 3 x 499	701	Sonic -2400	Oil - Pump
	Drinkard	8 x 1 x 1,093	778	Bomb -3050	Oil - Pump

Surface Commingling - Authorized for Southland Royalty "A" lease by Order #PC-89, dated April 19, 1962.

Multiple Completion - Authorized by Order No. ~~MC-2344~~ ^{R-2343} dated October 22, 1962.

Report 15 to 16 BOD Commingling

*From Southland Royalty "A" No. 1

BEFORE EXAMINER UTZ	
OIL CONSERVATION COMMISSION	
EXHIBIT NO.	3
CASE NO.	4530

SOUTHLAND ROYALTY "A" NO. 2

Fluid Characteristics

<u>Pool</u>	<u>Type Fluid</u>	<u>Gravity (°API)</u>
Blinebry	Sweet Crude	42.0
Drinkard	Sweet Crude	38.0

Surface commingling authorized by Commission Order #PC-89, dated April 19, 1962..

Value of Commingled Production

All production sold under Mobil's intermediate crude posting; Top = \$3.56/bbl., Gravity = 40 - 44.9° API.

Blinebry gravity = 42.0° API @ \$3.56/bbl. x 7.6 BOPD = \$27.06/da.

Drinkard gravity = 38.0° API @ \$3.52/bbl. x 7.5 BOPD = \$26.40/da.

Total daily revenue \$53.46/da.

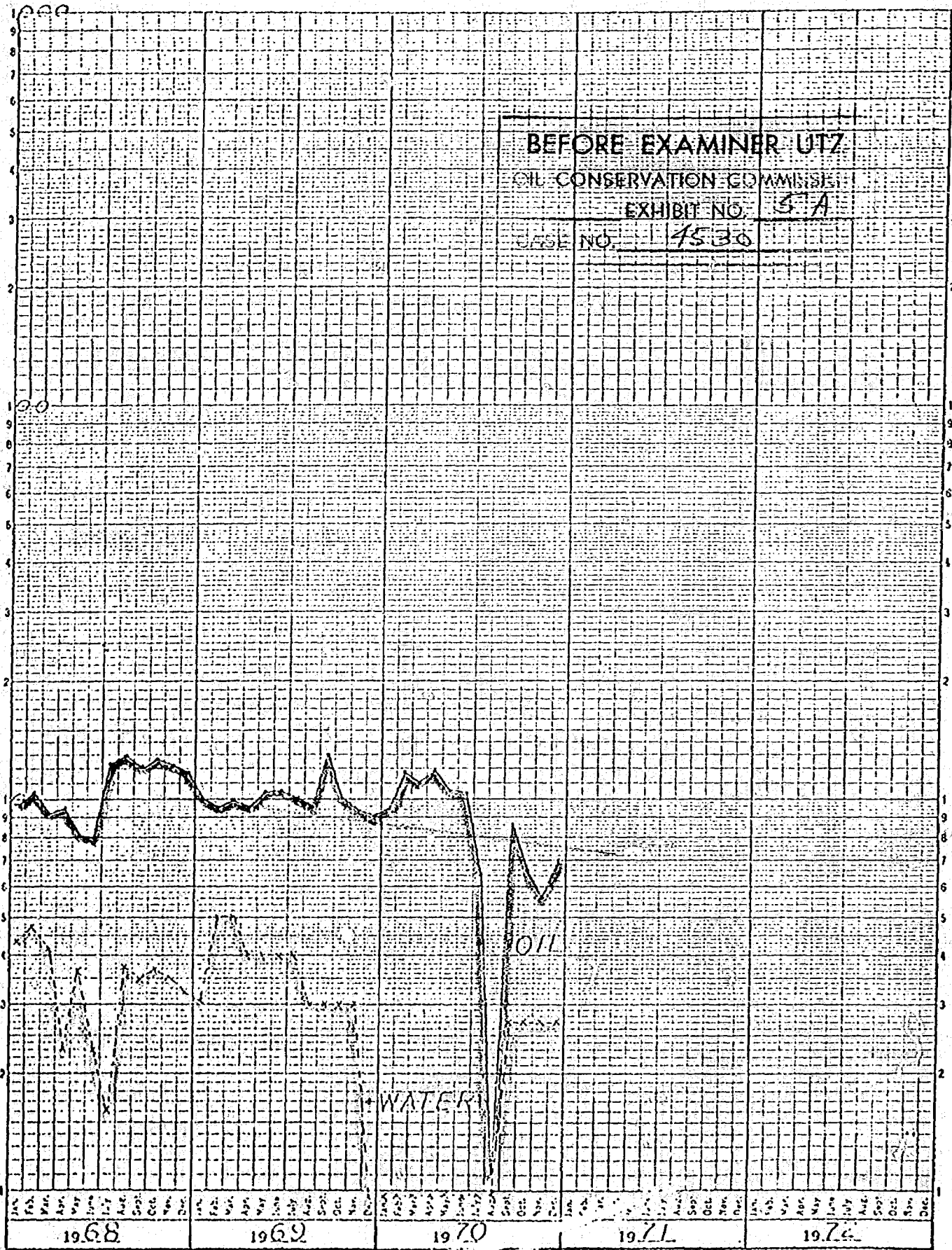
Combined Blinebry-Drinkard gravity 40.5° API @ \$3.56/bbl. x 15.1 BOPD = \$53.76/da.

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. 4
CASE NO. 4530

SOUTHLAND ROYALTY "A" NO. 2
BLINEBRY FIELD

K&E 5 YEARS BY MONTHS 46 6030
X-3 LOG CYCLES
MADE IN U.S.A.
KEUFFEL & ESSER CO.

BFPD

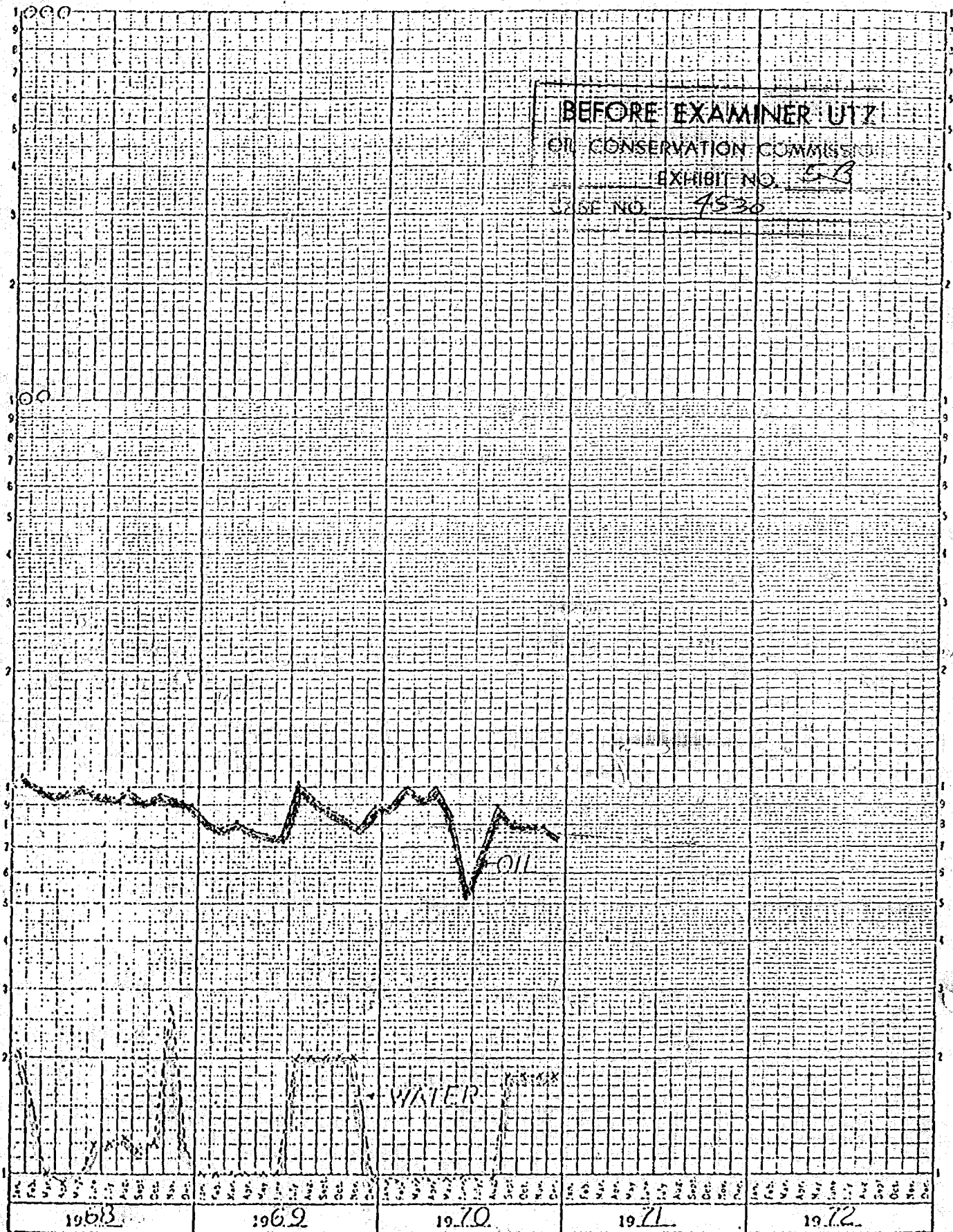


SOUTHLAND ROYALTY 'A' NO. 2
DRINKARD FIELD

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. 5B
CASE NO. 7530

46 6690
X 2 LOG CYCLES
KEUFFEL & ESSER CO.

BFPD





D. L. Ray
Division Engineer

Case 450

Amoco Production Company

Oil and Gas Building
P.O. Box 1410
Fort Worth, Texas 76101

Producing Department

March 11, 1971

File: DRC-143-986.510.1

Subject: Southland Royalty "A" 2
Downhole Commingling
Blinebry and Drinkard Pools
Lea County, New Mexico

New Mexico Oil Conservation Commission (2)
Post Office Box 871
Santa Fe, New Mexico 87501

Gentlemen:

In accordance with the provisions of Order R-3845 (Case No. 4104), Amoco Production Company respectfully requests administrative approval for downhole commingling of the below stated Pools in the following well:

<u>Well</u>	<u>Location</u>	<u>Pools to be Commingled</u>
Southland Royalty "A" 2	B-9-21-37	Blinebry and Drinkard

Attachment 1 is a plat indicating the Southland Royalty "A" No. 2 by a red arrow.

The most recent test from each zone of this well proposed for commingling and the respective bottom hole pressures for the Blinebry and Drinkard are shown on Attachment No. 2. Also indicated on Attachment No. 2 are the order numbers and dates authorizing the surface commingling and the multiple completion for this well. It should be noted that the lowermost perforations in this well are within 6,000' to 6,999', which would provide top allowable for the commingled zones of 40 BOPD. As shown on Attachment No. 2, the combined producing capacity of both zones is only 15 BOPD.

Attachment No. 3 is an official Commission Form C-116, reflecting the most recent capacity test from each zone in this well.

*Set for
hearing*

*Multiple
Completion*

On Attachment No. 2, the estimated bottom hole pressures shown are actually measured data from the Southland Royalty "A" No. 1, the south offset to the subject well. Form C-124 for these pressure measurements is included as Attachment 4. These are the most recent bottom hole pressure measurements taken in the immediate area.

Both the Blinebry and Drinkard are produced by pump in the Southland Royalty "A" Well No. 2, thereby meeting the criteria set forth in Rule 303-C-1-(c).

As shown on Attachments Nos. 2 and 3, each zone in the Southland Royalty "A" Well No. 2 produces at low marginal rates. Maximum combined production from these zones would be 15 BOPD. Should we be permitted to combine these zones and produce them as one, a substantial savings in operating costs will result. The well will, therefore, be produced to a lower economic limit and an incremental increase in recovery from each zone will result.

The zones for which we are requesting downhole commingling authority in this well are currently being commingled at the surface. Our continual surveillance of production equipment associated with these wells has revealed no indication of corrosion, scaling, or any other detrimental effect due to incompatibility between the produced fluids. Attachment No. 2 provides pertinent data regarding the Commission orders approving both multiple completion and surface commingling of the Blinebry and Drinkard zones for this well. Also, since this well is now commingled at the surface and the commingled stream is fed directly into the sales line, no decrease in the value of the produced fluids will result from downhole commingling of the Blinebry and Drinkard zones.

Attachment No. 5 presents a calculation for this well showing that no loss in value would occur due to lesser value crude being commingled with a high value crude. Additionally, production from each zone is of a sweet nature. All ownership in both zones in this well is common.

We can see no detrimental effects on future anticipated secondary recovery operations which could be caused by downhole commingling of these zones. As mentioned above, there will be essentially no opportunity for cross flow between zones and due to the compatibility of fluids, no detrimental effects on the reservoir can result.

New Mexico Oil Conservation
Commission

-3-

File: DRC-143-986.510.1

Attachments 6 and 7 are decline curves for the Blinebry and Drinkard zones, respectively, from which an extrapolation can be made and used for allocation of production between zones.

We have also attached a copy of our letters to all offset operators notifying them of our request and requesting their waiver.

Yours very truly,

D. L. Ray

LBVR:jn
Attachments

cc: New Mexico Oil Conservation Commission
Hobbs, New Mexico

ATTACHMENT NO. 2

<u>Well</u>	<u>Pools</u>	<u>Latest Test</u> (BOPD x BWPD x GOR)	<u>Bottom Hole Pressure *</u> (psi)	<u>(Datum)</u>	<u>Remarks</u>
Southland Royalty "A" No. 2	Blinebry	8 x 3 x 499	701	-2400	Oil - Pump
	Drinkard	8 x 1 x 1,093	778	-3050	Oil - Pump

Surface Commingling - Authorized for Southland Royalty "A" lease by Order #PC-89, dated April 19, 1962.

Multiple Completion - Authorized by Order No. MC-2344 dated October 22, 1962.

*From Southland Royalty "A" No. 1 -- See Form C-124 as Attachment No. 4 to this letter.

Out 4530

ATTACHMENT 3
NEW MEXICO OIL CONSERVATION COMMISSION
GAS-OIL RATIO TESTS

C-116
 Revised 1-1-65

Operator Amoco Production Company		Pool Drinkard & Blinebry				County Lea										
Address P. O. Box 68, Hobbs, New Mexico						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.	
Southland Royalty "A" Blinebry Drinkard	2	B	9	21	37	2-20-71	P			8	24	3.0	7.6	3.8	499	
						2-22-71	P			10	24	1.0	7.5	8.2	1093	

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)

Area Engineer

(Title)

February 24, 1971

(Date)

Case 4520

TYPE OF REPORT - (X)	
Initial Completion	
Special	
General Survey	

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-124
Revised 1-1-65

Attachment No. 4 RESERVOIR PRESSURE REPORT

Operator Pan American Petroleum Corp		Pool Blinebry X Drinkard		County		Date	
Address P. O. Box 68, Hobbs, New Mexico		Producing Formation	Oil Gradient psl/ft.	Water Gradient psl/ft.	Gas Gravity	Datum Plane Drinkard -3050 Blinebry -2400	

LEASE	WELL NO.	LOCATION				ELEV.	OIL (O) OR GAS (G)	DATE TESTED	SHUT-IN HOURS	SHUT-IN TBG. PRESS.	BOMB TEST DATA			SONIC INSTRUMENT TEST DATA							PRESS. AT DATUM
		U	S	T	R						TEST DEPTH	S.H. TEMP. °F	OB. SERVED PRESS.	PROD. TEST (BBLs./DAY)		LIQUID LEVEL	LIQUID GRADIENT PSI/FT.	WT. OF LIQUID COL. PSI	WT. OF GAS COL. PSI	CSG. PRESS.	
Southland Royalty A	1	G	9	21	37	3488 DF															
Drinkard							0	11/15/69	24	610	5938	110	725				.03				778
Blinebry							0	11/17/69	24		Sonic	100				4774	0.39	434	39	228	701

All depths plus or minus sea level; all pressures psi; Bomb shall be calibrated frequently enough against a dead weight tester to ensure an accuracy of one per cent; gas gravity shall be determined by analysis; liquid level shall be feet above datum plane. SEE RULE 302.

* Well shall be produced at least 24 hours prior to shutting in for sonic test.

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

James E. Lynch
(Signature)

Area Engineer
(Title)

12-18-70
(Date)

Case 4530

ATTACHMENT NO. 5
SOUTHLAND ROYALTY "A" NO. 2

Fluid Characteristics

<u>Pool</u>	<u>Type Fluid</u>	<u>Gravity (°API)</u>
Blinebry	Sweet Crude	42.0
Drinkard	Sweet Crude	38.0

Surface commingling authorized by Commission Order #PC-89, dated April 19, 1962.

Value of Commingled Production

All production sold under Mobil's intermediate crude posting; Top = \$3.56/bbl., Gravity = 40 - 44.9° API.

Blinebry gravity = 42.0° API @ \$3.56/bbl. x 7.6 BOPD = \$27.06/da.

Drinkard gravity = 38.0° API @ \$3.52/bbl. x 7.5 BOPD = \$26.40/da.

Total daily revenue \$53.46/da.

Combined Blinebry-Drinkard gravity 40.5° API @ \$3.56/bbl. x 15.1 BOPD = \$53.76/da.

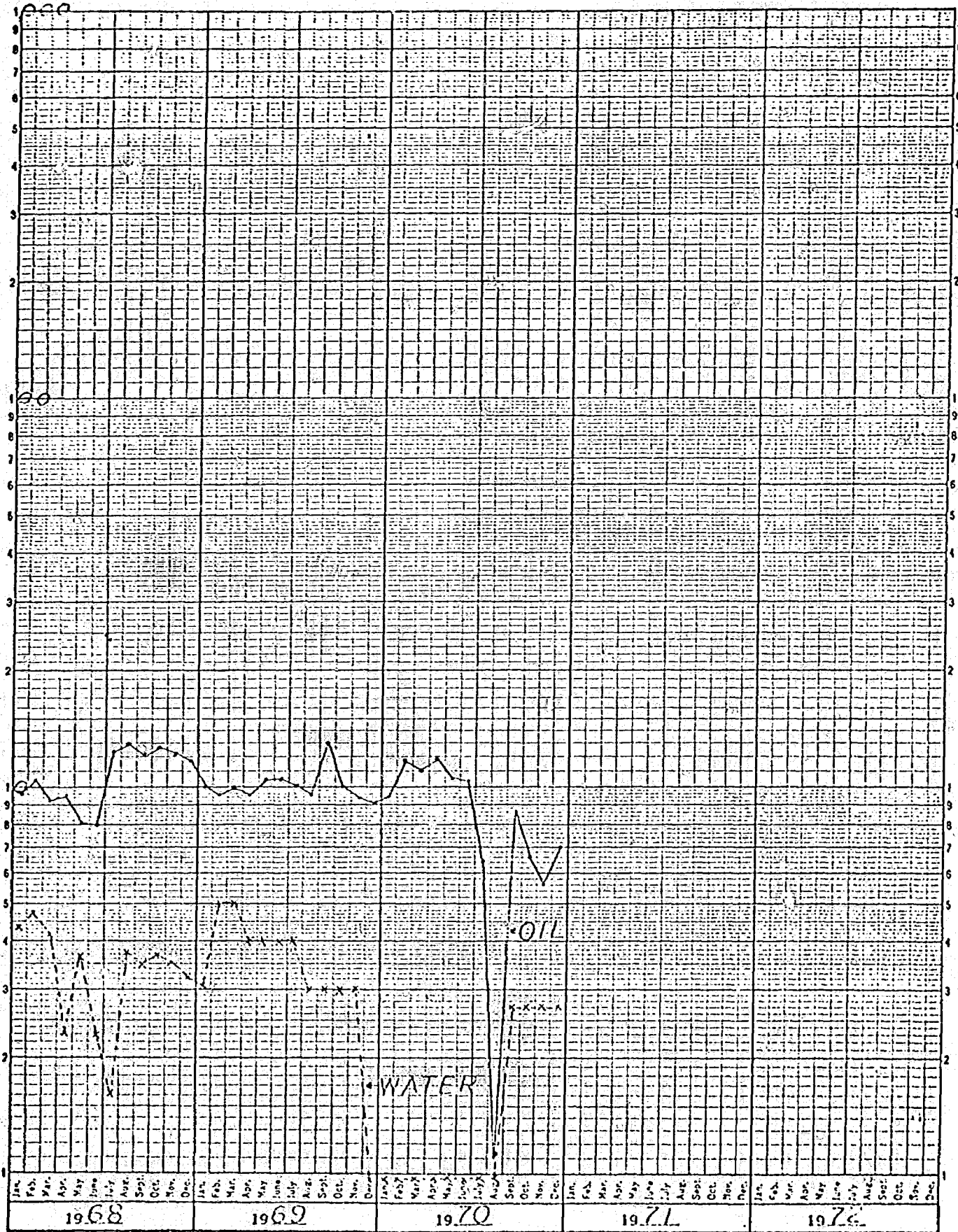
Case 4530

ATTACHMENT 6

SOUTHLAND ROYALTY "A" NO. 2 BLINEBRY FIELD

Model 5 YEARS BY MONTHS 46 6690
MADE IN U.S.A.
KEUPPEL & ESSER CO.

BFPD



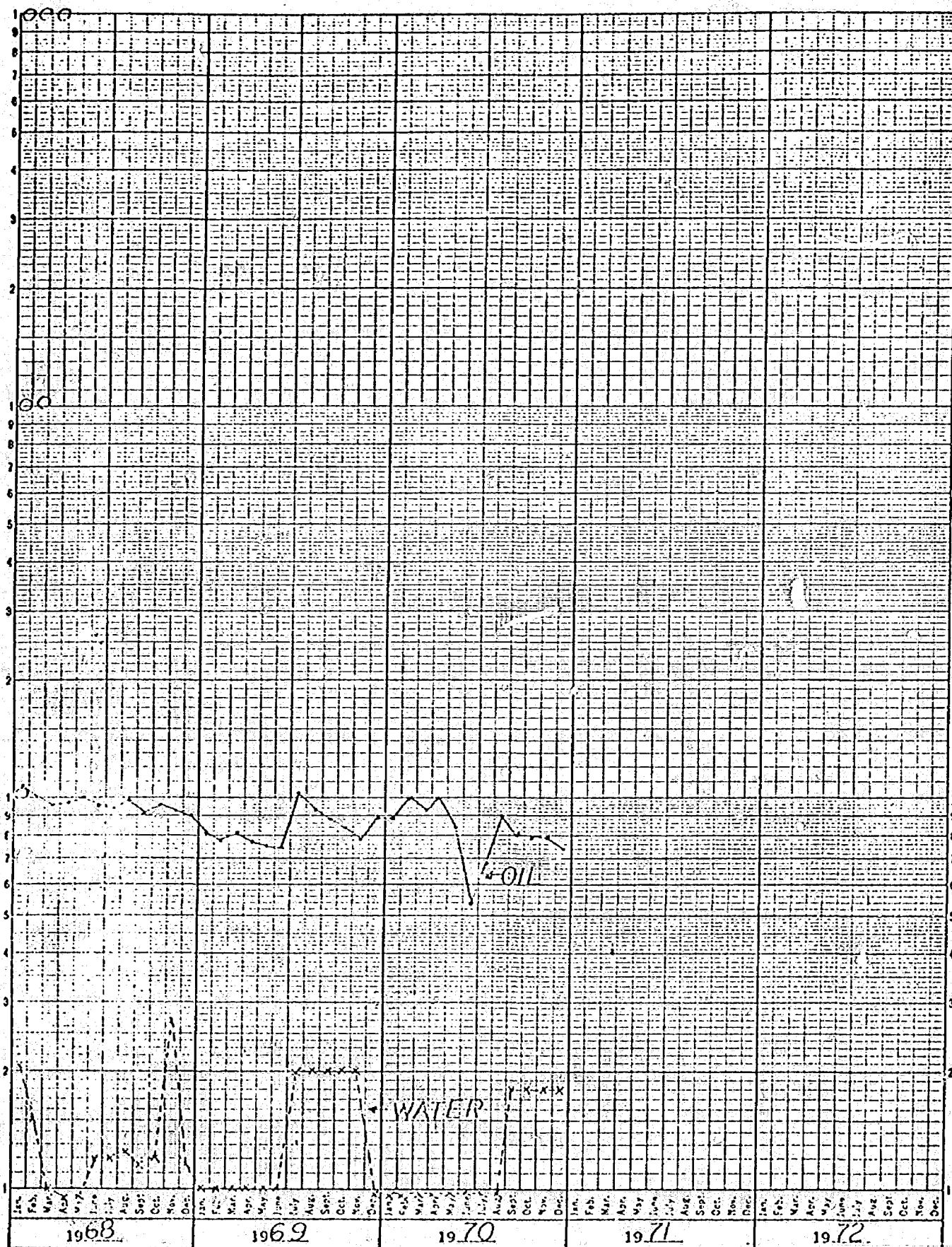
Case 4530

ATTACHMENT 7

SOUTHLAND ROYALTY 'A' NO.2 DRINKARD FIELD

5 YEARS BY MONTHS 46 6590
X = LOG CYCLES
KEUFFEL & ESSER CO.

BFPD



Case 4530



D. L. Ray
Division Engineer

March 16, 1971

Amoco Production Company

Oil and Gas Building
P.O. Box 1410
Fort Worth, Texas 76101
Producing Department

File: DRC-144-986.510.1

Subject: Waivers of Objection for
Downhole Commingling,
Southland Royalty "A" No. 2,
Blinebry & Drinkard Pools
Lea County, New Mexico

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

Phillips Petroleum Company
P. O. Box 2130
Hobbs, New Mexico 88240

Shell Oil Company
P. O. Box 276
Roswell, New Mexico 88201

Western Oil Fields, Inc.
112 North First
Artesia, New Mexico 88210

Gentlemen:

We propose to downhole commingle the Blinebry and Drinkard from our Southland Royalty "A" Well No. 2, a Tubb (gas) Blinebry (oil) and Drinkard (oil) triple well, located 660' FNL and 1980' FEL, Section 9, T21S R37E, Lea County, New Mexico. The Tubb gas will still be produced through a separate string of tubing.

New Mexico Oil Conservation Commission Order No. R-3845 requires a 20-day waiting period for approval of downhole commingling if offsetting operators do not waive objection to the commingling. In order to expedite early approval of the subject matter, we solicit your waivers of objection to downhole commingling.

If you have no objection to the proposed commingling, please sign one copy of this letter as your waiver and return to Mr. D. L. Ray, P. O. Box 1410, Fort Worth, Texas. Please also forward one signed copy to the New Mexico Oil Conservation Commission in Santa Fe.

Yours very truly,

LBVR:jn

APPROVED FOR: _____

BY: _____

DATE: _____

D. L. Ray

Case 4530

DRAFT

GMH/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. 4530

Order No. R-4140

APPLICATION OF AMOCO PRODUCTION
COMPANY FOR DOWN-HOLE COMMINGLING,
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on April 28, 1971,
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this _____ day of May, 1971, 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, Amoco Production Company, is the
owner and operator of the Southland Royalty "A" Well No. 2, ~~a~~
~~triple completion~~, located in Unit B of Section 9, Township 21
South, Range 37 East, NMPM, Lea County, New Mexico.

(3) That pursuant to authority granted by Order No. R-2343
the subject well was completed as a triple completion (conventional)
to produce oil from the Blinebry and Drinkard Pools and gas from
the Tubb Gas Pool.

(4) That the Blinebry and Drinkard zones in the subject well
are now capable of only low marginal production.

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(5) That the applicant now proposes to complete the subject well in such a manner as to produce gas from the Tubb Gas Pool through one string of 2-inch tubing and to produce the low marginal oil production from the Blinebry and Drinkard Pools through a single parallel string of ~~2~~^{2 3/8}-inch tubing, commingling in the well-bore the production from the Blinebry and Drinkard oil zones, with separation of the Tubb zone and the commingled Blinebry and Drinkard zones by means of packers set at approximately 6037 feet and 6550 feet.

(6) That the proposed commingling of the Blinebry and Drinkard zones may substantially extend the productive lives of said zones.

(7) That the reservoir characteristics of the Blinebry and Drinkard zones in the subject well are such that underground waste would not be caused by the proposed commingling in the well-bore.

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

(9) That the mechanics of the proposed completion are feasible and in accord with good conservation practices.

(10) That in order to allocate the commingled production to each of the commingled zones in the subject wells, 50% of the commingled oil production should be allocated to the Blinebry zone, 50% of the commingled oil production to the Drinkard zone, 32% of the commingled gas production to the Blinebry zone, and

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68% of the commingled gas production to the Drinkard zone in the subject well.

(11) That approval of the subject application will prevent waste and protect correlative rights.

(12) That Order No. R-2343 should be superseded.

IT IS THEREFORE ORDERED:

(1) That the applicant, Amoco Production Company, is hereby authorized to complete its Southland Royalty "A" Well No. 2 located in Unit B of Section 9, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico, in such a manner as to produce gas from the Tubb Gas Pool through one string of 2-inch tubing and to produce oil from the Blinebry and Drinkard Pools through a single parallel string of ^{2 3/8} 2-inch tubing, commingling in the well-bore the production from the Blinebry and Drinkard Pools, with separation of the Tubb zone and the commingled Blinebry and Drinkard zones by means of packers set at approximately 6037 feet and 6550 feet.

PROVIDED HOWEVER, that the applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A of the Commission Rules and Regulations insofar as said rule is not inconsistent with this order;

PROVIDED FURTHER, that the applicant shall notify the Commission of any substantial increase of the gas-oil ratio of the commingled zones.

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(2) That 50% of the commingled oil production shall be allocated to the Blinebry zone, 50% of the commingled oil production to the Drinkard zone, 32% of the commingled gas production to the Blinebry zone, and 68% of the commingled gas production to the Drinkard zone.

(3) That the commingling in the well-bore authorized by this order shall continue only so long as the commingled production of the two zones does not exceed ⁴⁰~~48~~ barrels of oil per day nor 80 barrels of water per day.

(4) That the maximum amount of gas which may be produced daily from the commingled zones in the subject well shall be determined by multiplying 2,000 by the top unit allowable for the Blinebry Pool.

(5) That Order No. R-2343 is hereby superseded.

(6) 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.