

CASE 3394: Application of SHELL
OIL CO. for a non-standard gas
proration unit, Lea County.

ASE NO.

3394

Application,

Transcripts,

All Exhibits

ETC.

State of New Mexico
Oil Conservation Commission



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

May 11, 1966

Re: Case No. 3394
Order No. R-3065
Applicant:

Shell Oil Company

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

A. L. PORTER, Jr.
Secretary-Director

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. 3394
Order No. R-3065

APPLICATION OF SHELL OIL COMPANY
FOR A NON-STANDARD GAS PRORATION
UNIT, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on April 27, 1966,
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 11th day of May, 1966, 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, Shell Oil Company, seeks approval
of a 160-acre non-standard gas proration unit in the Blinebry Gas
Pool comprising the N/2 SW/4, SE/4 SW/4, and NW/4 SE/4 of Section
22, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico,
to be dedicated to its Turner Well No. 13 located in Unit N of
said Section 22.

(3) That although the proposed non-standard gas proration
unit does not lie wholly within a single governmental quarter
section and therefore is not eligible for administrative approval,
it consists of contiguous quarter-quarter sections or lots, and
the entire unit may reasonably be presumed to be productive of
gas from the Blinebry Gas Pool.

(4) That approval of the subject application will afford
the applicant the opportunity to produce its just and equitable
share of the gas in the pool, and will otherwise prevent waste
and protect correlative rights.

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CASE No. 3394
Order No. R-3065

IT IS THEREFORE ORDERED:

(1) That a 160-acre non-standard gas proration unit in the Blinebry Gas Pool comprising the N/2 SW/4, SE/4 SW/4, and NW/4 SE/4 of Section 22, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico, is hereby established and dedicated to the Shell Oil Company Turner Well No. 13 located in Unit N of said Section 22.

(2) That the net status of the herein authorized non-standard proration unit shall be the combined status of the proration units presently assigned to the Turner Well No. 13 located in Unit N of said Section 22 and the Turner Well No. 3 located in Unit J of said Section 22.

(3) That Administrative Order No. NSP-743, which authorized a 120-acre non-standard gas proration unit for the aforesaid Turner Well No. 13 comprising only a portion of the acreage described above, is hereby cancelled.

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

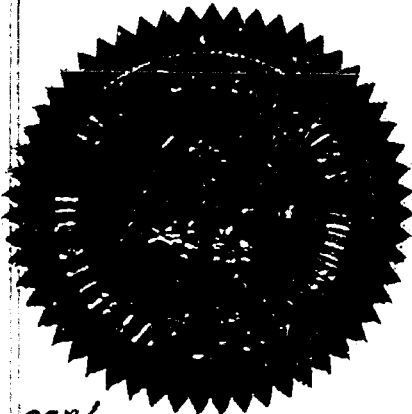
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


JACK M. CAMPBELL, Chairman


GUYTON B. HAYS, Member


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



esr/

DOCKET: EXAMINER HEARING - WEDNESDAY - APRIL 27, 1966

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:

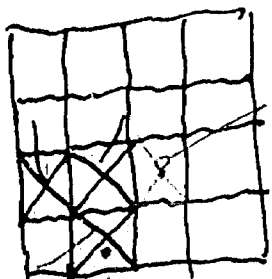
- CASE 3394: Application of Shell Oil Company for a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 160-acre non-standard gas proration unit comprising the N/2 SW/4, SE/4 SW/4, and NW/4 SE/4 of Section 22, Township 21 South, Range 37 East, Blinbry Gas Pool, Lea County, New Mexico, said unit to be dedicated to applicant's Turner Well No. 13 located in Unit N of said Section 22.
- CASE 3395: Application of R. W. Warner for down-hole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle in the well-bore marginal oil production from undesignated Gallup and Dakota Pools in his Warner-Federal Well No. 1 located in Unit A of Section 10, Township 22 North, Range 8 West, San Juan County, New Mexico.
- CASE 3396: Application of Texaco Inc. for a non-standard oil proration unit and a non-standard location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the approval of a 40-acre non-standard oil proration unit comprising the NE/4 SW/4 of Section 14, Township 12 South, Range 34 East, Ranger Lake-Pennsylvanian Pool, Lea County, New Mexico, said unit to be dedicated to its State of New Mexico "DA" Well No. 2 to be located 1980 feet from the South and West lines of said Section 14.
- CASE 3397: Application of Texaco Inc. for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of its Skaggs-Grayburg Unit Area comprising 880 acres, more or less, of Fee land in Sections 12 and 13, Township 20 South, Range 37 East, and Sections 7 and 18, Township 20 South, Range 38 East, Lea County, New Mexico.
- CASE 3398: Application of Texaco Inc. for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Grayburg formation, Skaggs-Grayburg Pool, through eleven wells in its Skaggs-Grayburg Unit, Lea County, New Mexico.
- CASE 3399: Application of Tenneco Oil Company for two non-standard gas proration units, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval of two non-standard gas proration units which would comprise all lands in the W/2 of Section 30, Township 30 North, Range 9 West, adjacent to a Blanco-Pictured Cliffs Pool, San Juan County, New Mexico.
- CASE 3400: Application of Pan American Petroleum Corporation for creation of a new pool and special pool rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new oil pool for its Big Eddy Unit Well No. 7 located in Unit O of Section 19, Township 20 South, Range 31 East, Eddy County, New Mexico, and for the promulgation of special rules therefor, including a provision for 160-acre oil proration units.

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APRIL 27, 1966, EXAMINER HEARING

CASE 3002 (Reopened):

In the matter of Case No. 3002 being reopened pursuant to the provisions of Order No. R-2684-A, which order continued the original order for an additional year, establishing 320-acre spacing for the Fowler-Lower Paddock Gas Pool, Lea County, New Mexico. All interested parties may appear and show cause why said pool should not be developed on 160-acre spacing units.



BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION

APPLICATION OF SHELL OIL COMPANY
FOR THE ESTABLISHMENT OF A NON-
STANDARD GAS PRORATION UNIT IN
THE BLINEBRY GAS POOL, LEA
COUNTY, NEW MEXICO

Case No. 3377

A P P L I C A T I O N

Comes now Shell Oil Company by its attorneys and applies to the New Mexico Oil Conservation Commission for the establishment of a non-standard gas proration unit in the Blinebry Gas Pool, Lea County, New Mexico, and in support of its application states:

1. Shell Oil Company is presently producing gas from the Blinebry Gas Pool through its well Turner No. 13 which is located in the $SE\frac{1}{4}SW\frac{1}{4}$ of Section 22, T. 21 S., R. 37 E., Lea County, New Mexico.

2. For proration purposes there is presently dedicated to the Turner No. 13 well 120 acres which comprise the $NW\frac{1}{4}SW\frac{1}{4}$, the $NE\frac{1}{4}SW\frac{1}{4}$ and the $SE\frac{1}{4}SW\frac{1}{4}$ all of Section 22, T. 21 S., R. 37 E. The standard gas proration unit for the Blinebry Gas Pool consists of 160 acres.

3. The Shell Oil Company Turner No. 3 well located in the $NW\frac{1}{4}SE\frac{1}{4}$ of Section 22, T. 21 S., R. 37 E., Lea County, New Mexico, is presently shut in. The Turner No. 3 well was at one time an oil well and because of an increasing gas/oil ratio has been designated a Blinebry gas well. There is dedicated to the Turner No. 3 well 40 acres.

4. The Shell Oil Company requests the establishment of a non-standard proration unit dedicated to the Turner No. 13 well, such non-standard unit to consist of 160 acres and comprise the

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Date 7-15-66


NW $\frac{1}{4}$ SW $\frac{1}{4}$, the NE $\frac{1}{4}$ SW $\frac{1}{4}$, the SE $\frac{1}{4}$ SW $\frac{1}{4}$ and the NW $\frac{1}{4}$ SE $\frac{1}{4}$ all being within Section 22, T. 21 S., R. 37 E., Lea County, New Mexico.

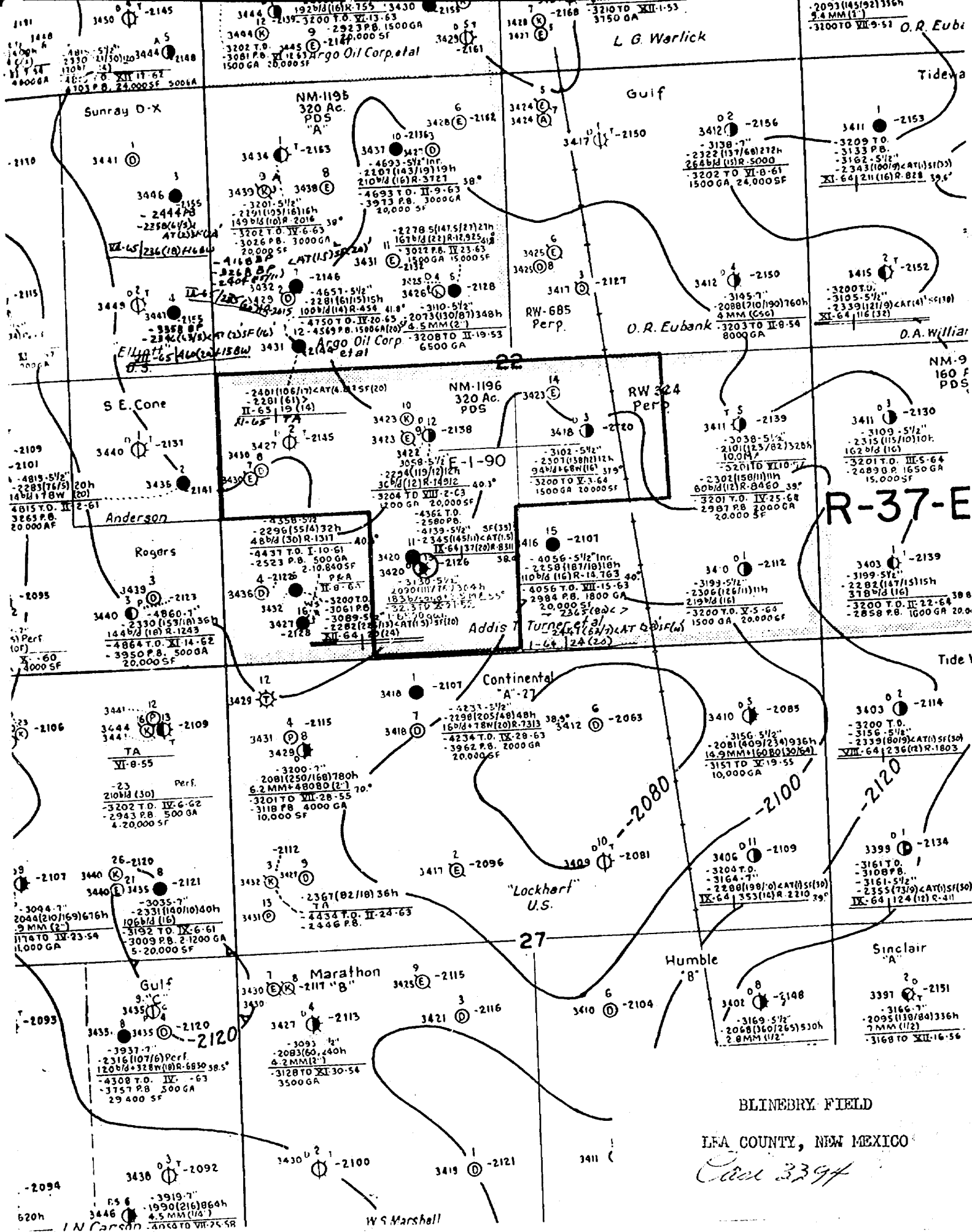
5. Approval of this application will prevent waste and protect correlative rights.

WHEREFORE, Shell Oil Company requests that this application be set for hearing before the Commission, or one of its Examiners, and that the Commission enter its order establishing the non-standard proration unit as set forth in this application.

SETH, MONTGOMERY, FEDERICI & ANDREWS

By


P. O. Box 2307
Santa Fe, New Mexico
Attorneys for Shell Oil Company



BLINBERRY FIELD
LEA COUNTY, NEW MEXICO
April 33 94

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

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

April 27, 1966

EXAMINER

HEARING

IN THE MATTER OF:

Application of Shell Oil Company for a
non-standard gas proration unit, Lea County,
New Mexico.

Case No. 3394

BEFORE:

Elvis A. Utz, Gas Engineer

TRANSCRIPT OF HEARING

MR. UTZ: The hearing will come to order, please.
Call Case 3394. Application of Shell Oil Company for a
non-standard gas proration unit, Lea County, New Mexico.

MR. BUELL: I'm Sumner Buell of Seth, Montgomery,
Federici and Andrews appearing on behalf of Shell Oil Company.
I have one witness and ask that he be sworn.

(Witness sworn.)

(Whereupon, Applicant's Exhibits
1 through 6 marked for
identification.)

* * *

R I C H A R D S E B A, a witness, having been first duly
sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. BUELL:

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

A Richard Seba, S-e-b-a, Senior Reservoir Engineer
with Shell Oil Company; employed in the Western Division in
Midland, Texas.

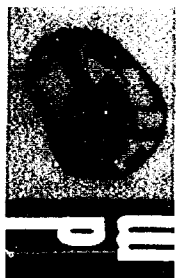
Q Have you previously testified before the Commission --

A Yes, sir, I have.

Q -- as an expert witness?

A Yes.

Q Are you familiar with the Shell application in this



Case 3394?

A Yes, I am.

Q What does Shell seek?

A Shell seeks the establishment of a 160 acre non-standard proration unit in the Blinebry Gas Pool, Lea County, New Mexico.

Q Mr. Seba, referring you to what has been marked Exhibit 1, would you explain what that is and what it depicts?

A Exhibit Number 1 is a plat of the area of the Blinebry Pool that the subject acreage is located. On this plat we have all of the wells that have been drilled in the area. The solid spots being the Blinebry completions, the open spots being completions in other zones. Further, to our nomenclature, the long slash line through the wells indicates that the well or the Blinebry Zone is temporarily abandoned; the lines on the dots indicating a gas well.

We also show on here, contours on top of the Blinebry Formation. I would also point out that the dark black line in the form of a "T" in Section 22 outlines the proposed non-standard 160 acre unit being sought by this hearing.

I would also point out that at the present time, Well Number 13 on the Turner Lease in the Southeast Quarter

of the Southwest Quarter of Section 22 is producing with 120 acres allocated to it, being the Northwest Quarter, the Northeast Quarter and the Southeast Quarter of the Southwest Quarter of Section 22.

At the present time, Wells Number 11 and 12, which have been completed in the Blinebry, are temporarily abandoned, and 13 is the only one productive from the Blinebry in that unit.

I also point out Well Number 3 in the Northwest Quarter of the Southeast Quarter, Section 22. This well, until December, had been classified as a Blinebry oil well. As of December 12th, it was classified as a Blinebry gas well and shut in. So at the present time Number 3 is shut in and is producing only from the Drinkard Formation.

MR. UTZ: It's a dual?

THE WITNESS: Yes.

A Well Number 13 is also a dual at the present time, producing from the Drinkard and Blinebry gas. I would also point out some other things; Shell does have a 320 acre lease, being the South half of that Section, and at the present time Wells Number 1, 6, 5 and 15 are classified as Blinebry oil wells. So that the whole 320 acre tract is either allocated or being produced from the Blinebry Formation, either gas or oil.



Q (By Mr. Buell) Mr. Seba, just for clarification, Shell Oil Company proposes by this application, to take the 40 acres dedicated to Number 3 and include that with the 120 acres that is now dedicated for the Number 13 Well, is that correct?

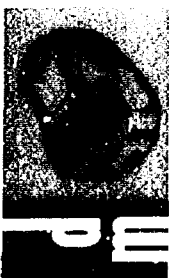
A That is the substance of this application, yes.

Q Mr. Seba, referring you, now, to what has been marked as Exhibit 2, would you explain what that shows?

A Exhibit 2 is merely a tabulation of pertinent reservoir data, fluid data, and production information pertaining to both the total Shell Turner Lease, and certain items being specifically attributable to this Well Number 13.

The reservoir data is thought to be average, figured for the lease, the fluid data being from the Turner 13 Well and the production information from the Turner 13 Well. There are a couple of items that merit attention; the rest just for information.

I would like to point out that the Compensate Gravity is 52.2° API; the producing Gas-Liquid Ratio is 1549 per cubic foot; and the current Deliverability of Turner 13 @ 600 psi; line pressure is 6200 cubic feet per day. The significance of the Condensate Gravity and the Gas-Liquid Gravity is such as pointed out in the field rules for Blinbry gas, which states "That the well must have a



Condensate in excess of 51⁰ API, and a Gas-Oil ratio of 31,000 cubic feet per barrel. Therefore, both of these items indicate that this well is classified as a well in the Blinebry Gas Pool.

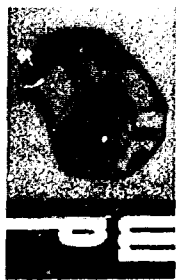
Q Do you feel that this 13 Well location in the Southeast Quarter of the Southwest Quarter of 22 will effectively drain the acreage under the Number 3 Well?

A Yes. With the high deliverability of 2.7 million cubic feet per day and the permeability of 7 millidarcies, the well will drain the acreage allocated to Number 3 at this time.

Q Referring to Exhibit 3, would you explain to the Examiner what is on this exhibit?

A Well, Exhibit 3 is just a brief history of the two wells concerned with this application. Well Number 13 being the gas well, which currently has 120 acres allocated to it, and Well 3, which has 40 acres allocated to it, which we request be added to the acreage for Well 13. Well 13 is presently a dual Drinkard oil Blinebry gas production. The flow potential taken of the well throughout its life has remained relatively constant, being in 1952, 3.5 million per day; in 1963, 3.4 million per day; and at the present time, 3.378 million cubic feet per day.

I would point out that there has been several



changes in classification of this well. In 1964 the well was shut in and the acreage transferred to the Turner 12, whereas in January 1965 the Turner 12 was abandoned, temporarily abandoned and the acreage was transferred back to 13, and the 13 changed from a shut in to a producing Blinebry gas well.

Well 3 is producing from the Drinkard Formation. Prior to May of 1964 the well was a Tubb-Drinkard dual, and in May of 1964 the Tubb was abandoned and the well was recompleted in the Blinebry oil in December of 1965. Due to high gas-oil ratio, the Blinebry was reclassified as a gas well and five days later the Well Number 3 was shut in.

Q Mr. Seba, would you refer to Exhibit Number 4 and explain what that shows?

A Exhibit 4 is the short productive history of the Turner 3 in the Blinebry Oil Pool. It will be noted throughout the year and a half it was completed in the Blinebry Oil, the oil production did decline and the gas production remained constant, resulting in an increasing gas-oil ratio. The purpose of presenting the exhibit is to show that the 40 acres which we request be added to the 120 acre unit applicable, is productive of gas and was shut in because of a high gas-oil ratio rather than due to an oil or gas productivity.



Q Would you explain what is shown on Exhibit Number 5?

A Exhibit 5 is a copy of the Gas Well Back Pressure Curve, which was submitted to the Commission in January of this year, which substantiates the fact that this well does have a calculated open flow potential of 3.378 million cubic feet per day. It is also significant to show that this curve was used in determining the deliverability at the 600 pound line pressure, merely going into this curve with a 600 pound back pressure, coming over to the line drawn through the highest rate of flow, coming down to the rate of flow per day, thus yielding a deliverability of 2.7 million cubic feet of gas per day against a 600 pound line pressure.

Q Would you briefly explain what is shown on Exhibit 6?

A Exhibit 6 is merely the supporting sheet that goes with the subsequent curve and includes all the data and calculations used; the determination, the calculated open flow potential of this well; the gas liquid hydrocarbon ratio, and the specific gravity of the gas as previously noted on Exhibit 2.

Q Mr. Seba, is there presently a high pressure gas line connection to the Turner Number 3 Well?

A No, there is not. The well was connected to a low pressure system at the time that it was a Blinebry oil well, but at the present time there is no high pressure gas connection.

Q Has it been a practice in this Blinebry area to allow the creation of non-standard units or proration units?

A In making a brief study of the Blinebry Pool I was able to determine at least four cases where non-standard units cutting across section lines had been prorated.

Q Has it presently produced its allowable?

A No. The Turner Number 3 Well, you said 3?

Q Yes.

A It has been shut in since the 6th day of December and therefore accumulated underproduction for that period. Therefore, we request that the underproduction of Well 3 be allocated to the 160 acre unit, allowing the production to be produced through Number 13.

I would also like to point out at that time that with a deliverability of 2.7 million cubic feet per day and an anticipated 160 acre allowable in the neighborhood of half a million cubic feet per day, it's obvious that the well has a capability of making up any past underproduction that can be attributed to this well, and can sustain

production at the allowable rate, at the present time.

Q Do you feel that the granting of the application would prevent waste and protect Correlative Rights?

A Yes, I do.

Q Were Exhibits 1 through 6 prepared by you or under your supervision?

A Yes, they were.

MR. BUELL: Move the introduction of Exhibits 1 through 6.

(Whereupon, Applicant's Exhibits 1 through 6 offered into evidence.)

MR. UTZ: Without objection the exhibits will be admitted.

(Whereupon, Applicant's Exhibits 1 through 6 admitted into evidence.)

MR. BUELL: I have nothing further.

CROSS-EXAMINATION

BY MR. UTZ:

Q Mr. Seba, I would gather from your Exhibit 4 that the Number 3 Well is a pretty good gas producer in its own right, is it not?

A Yes.

Q About 20,000,000 a month?

A Yes, sir. I have the exact figures here. It has

produced as much as 51,000,000 cubic feet in a month.

Q That well was shut in, what, 12/1/65?

A 12/6/65. It was classified as a gas well, Well 1, and was shut in 5 days later.

Q What is the reason that you would rather shut this well in in the Blinebry, rather than make a gas connection to a 40 or 80 acre tract?

A We feel that it will lead to waste, economic waste, and that our operating costs will be higher by having to operate an additional well, and it will also require Northern Natural Gas, the possible transporter of this gas, to install a meter and necessary surface facilities to take this with no increase in production from the acreage.

Q Is it your intention to leave the well shut in on the Blinebry or to make another completion?

A Our plans at the present time are to leave the Blinebry shut in and to produce the well from the Drinkard. I'm aware that there are numerous pays in this area and at the present time we don't have plans for dualing this well with another pay.

Q How about the other three oil wells in the Southeast Quarter of Section 22; is the GOR increasing on those?

A Yes, but we anticipate they should be able to maintain oil status, or at least have a gas-oil ratio less

than 32,000 for approximately the next two years.

Q Do you intend to make a four point test on the Number 3 Well?

A We hadn't planned to but this could be accomplished if it is desired.

Q I was just wondering how we would comply with Rule 402, which says "Every gas well must have a four point test"?

A We would be happy to do this. It would require venting the gas during the test period since we don't have a connection.

Q That's something you ought to take up with Mr. Ramey.

A All right. I'll make a note of that and certainly see what needs to be done.

MR. UTZ: Any other questions of the witness?
The witness may be excused.

Q (By Mr. Utz) As I see it there may be some -- first let me ask, you requested an allowable for this 40 acre gas allowable, for this 40 acre unit as of the 6th of December, did you not, in your testimony; or did I misunderstand you?

A I said the well was shut in as of the 6th and was carrying an underage as a gas well.

Q You created a 40 acre unit for the well, did you?

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PAGE 13

A It was my understanding that the well was automatically classified as a gas well, and it was my understanding that with this reclassification 40 acres are automatically attributed to that well. And the well was shut in on the 6th of December and therefore since that time has been accumulating underage.

Q Do you know whether or not the Hobbs office ever issued a supplement assigning 40 acres to this well as a gas well?

A No, sir, I don't know for sure.

Q Well, if they didn't we may have a problem.

A Let me check on that, too.

CROSS-EXAMINATION

BY MR. PORTER:

Q They assigned an allowable at the time it became eligible for reclassification, it would not have accrued underage, is that right?

A That's right.

MR. UTZ: The witness may be excused.

MR. BUELL: I have nothing further.

MR. UTZ: Are there any statements in this case? The case will be taken under advisement.

I N D E X

WITNESS

RICHARD SEBA

Direct Examination by Mr. Buell

Cross-Examination by Mr. Utz

Cross-Examination by Mr. Porter

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PAGE

E X H I B I T S

MARKED FOR IDENTIFICATION

OFFERED

ADMITTED

NUMBER

Applt's. 1

Applt's. 2

Applt's. 3

Applt's. 4

Applt's. 5

Applt's. 6

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STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) ss

I, BOBBY J. DAVIS, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me; and that the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

Witness my Hand and Seal this 13th day of May, 1966.

Bobby J. Davis
NOTARY PUBLIC

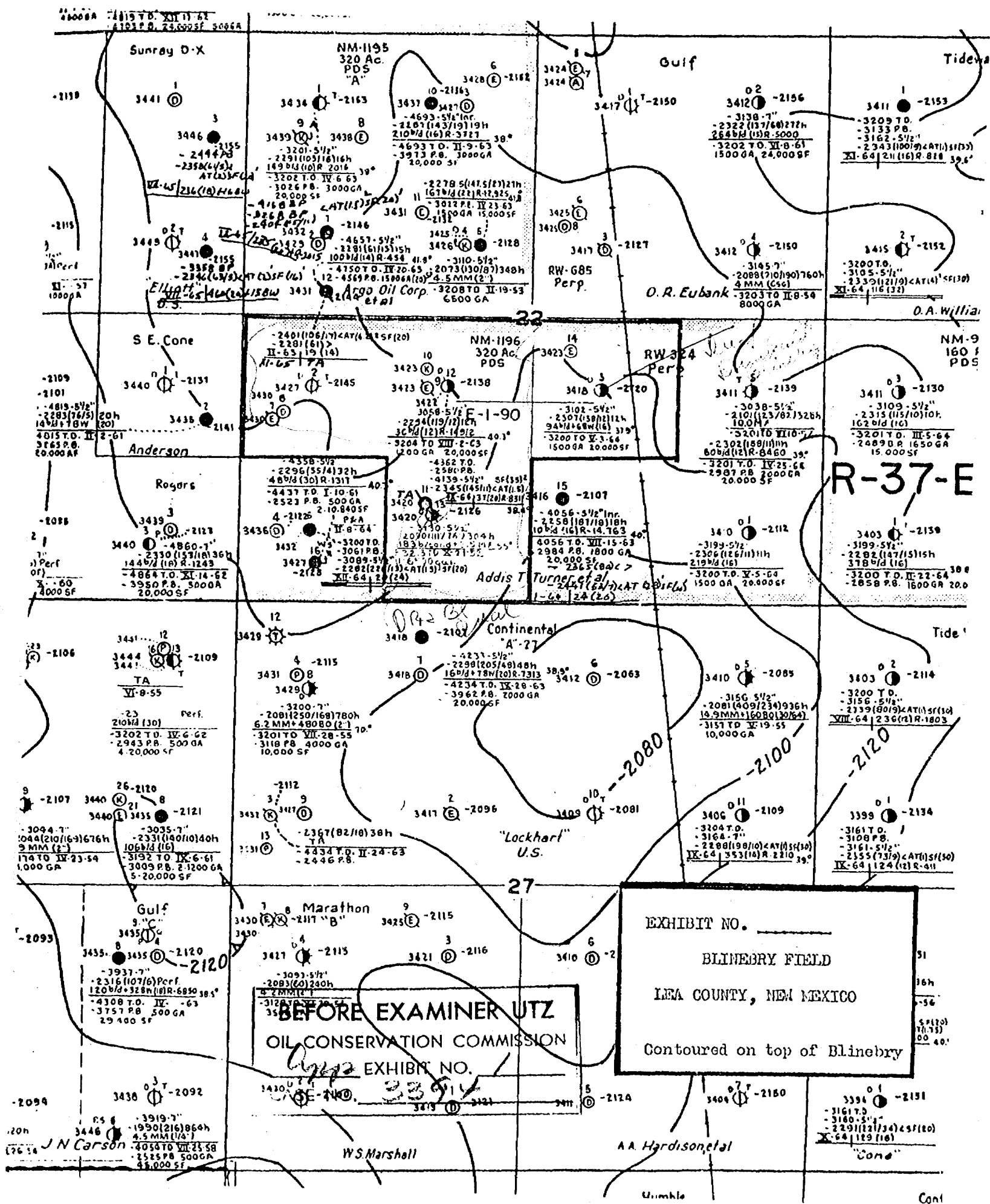
My Commission Expires:
March 13, 1969.

I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No. 3394
dated by me on May 23, 1966.
Thurston
Examiner
New Mexico Oil Conservation Commission

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RESERVOIR AND FLUID DATA
SHELL TURNER LEASE
BLINEBRY (GAS) POOL
LEA COUNTY, NEW MEXICO

Reservoir Data

Depth	-	5510-5621 feet
Bottom Hole Pressure	-	1682 psi @ -2400 feet (10-15-65)
Bottom Hole Temperature	-	110°F
Permeability	-	4.5 md
Porosity	-	8.5%
Connate Water Saturation	-	24%

Fluid Data

Gas Gravity	-	0.713 (Sweet)
Condensate Gravity	-	52.2°API

Production Information

Gas-Liquid Ratio - 1549 MCF/Bbl.
Calculated Absolute Open Flow Potential - 3.378 MMCFD (1-21-66)
Gas Sales - El Paso (High Pressure Gas - 600 psi)
 - Skelly Oil Company (Low Pressure Gas)
Gas Lift - Shell Oil Company
Oil Transportation - Shell Oil Company
Deliverability of Turner No. 13 @ 600 psi - 2.7 MMCFD

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
Prova EXHIBIT NO. 2
CASE NO. 3394

SHELL-TURNER LEASE
BLINEBRY (GAS) POOL
LEA COUNTY, NEW MEXICO

Well No. 13

Current Status: Drinkard/Blinebry (Gas) Dual Completion

<u>Date</u>	<u>Event</u>
8-26-50	Well completed in Drinkard
10-21-52	Well dually completed in Blinebry (gas) CAOF = 3.5 MMCFD
10-25-63	CAOF = 3.4 MMCFD
9-13-64	Blinebry (gas) temporarily abandoned Acreage transferred to Turner No. 12
1-14-66	Blinebry (gas) changed from shut in to producing status
1-21-66	CAOF = 3.378 MMCFD

Well No. 3

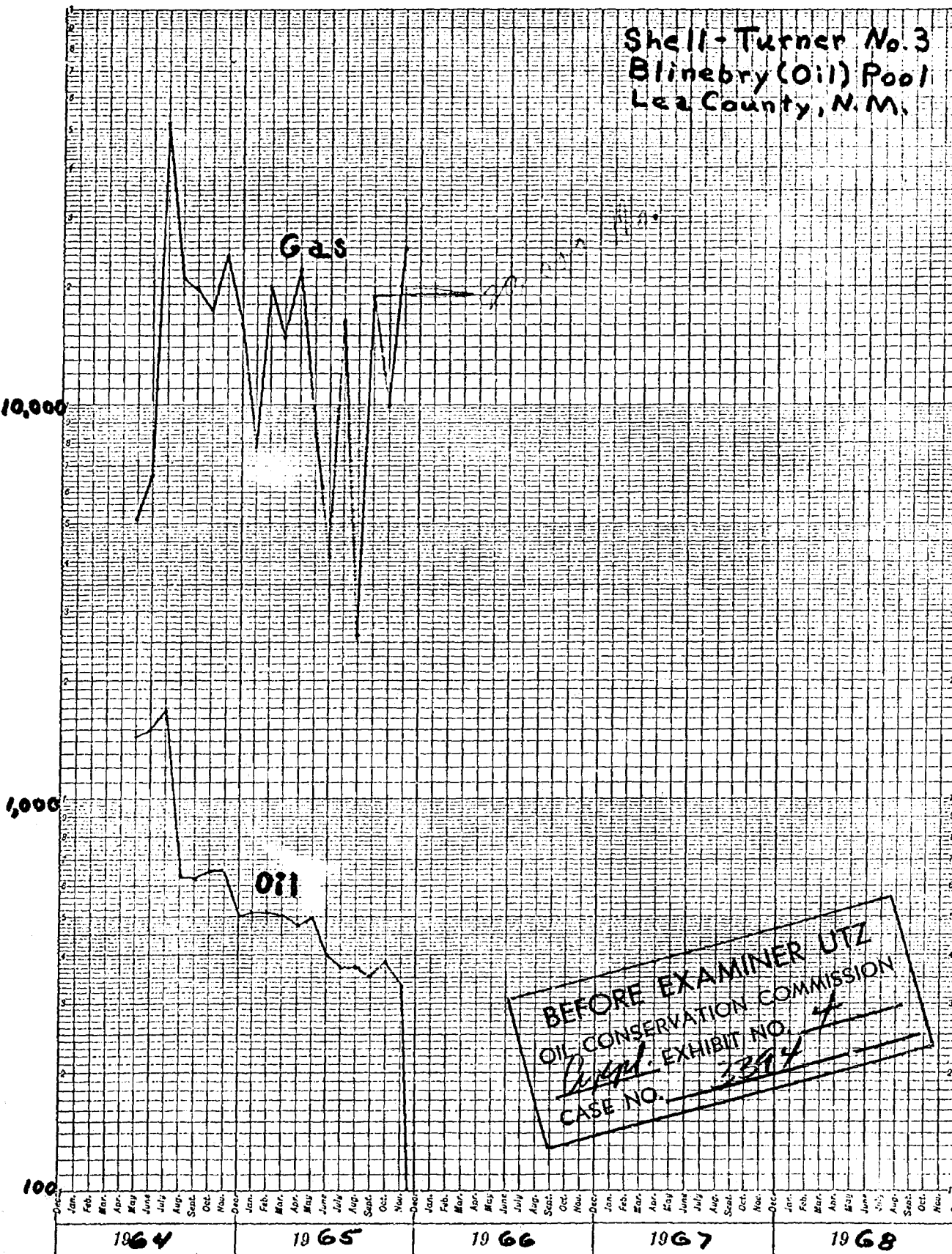
Current Status: Drinkard Production Only

<u>Date</u>	<u>Event</u>
6-24-49	Well completed in Drinkard
12- 7-52	Well dually completed in Tubb (gas)
5- 4-64	Tubb (gas) abandoned
5- 4-64	Well recompleted in Blinebry (oil)
12- 1-65	Blinebry reclassified as gas well
12- 6-65	Blinebry (gas) shut in

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
App EXHIBIT NO. 3
CASE NO. 3394

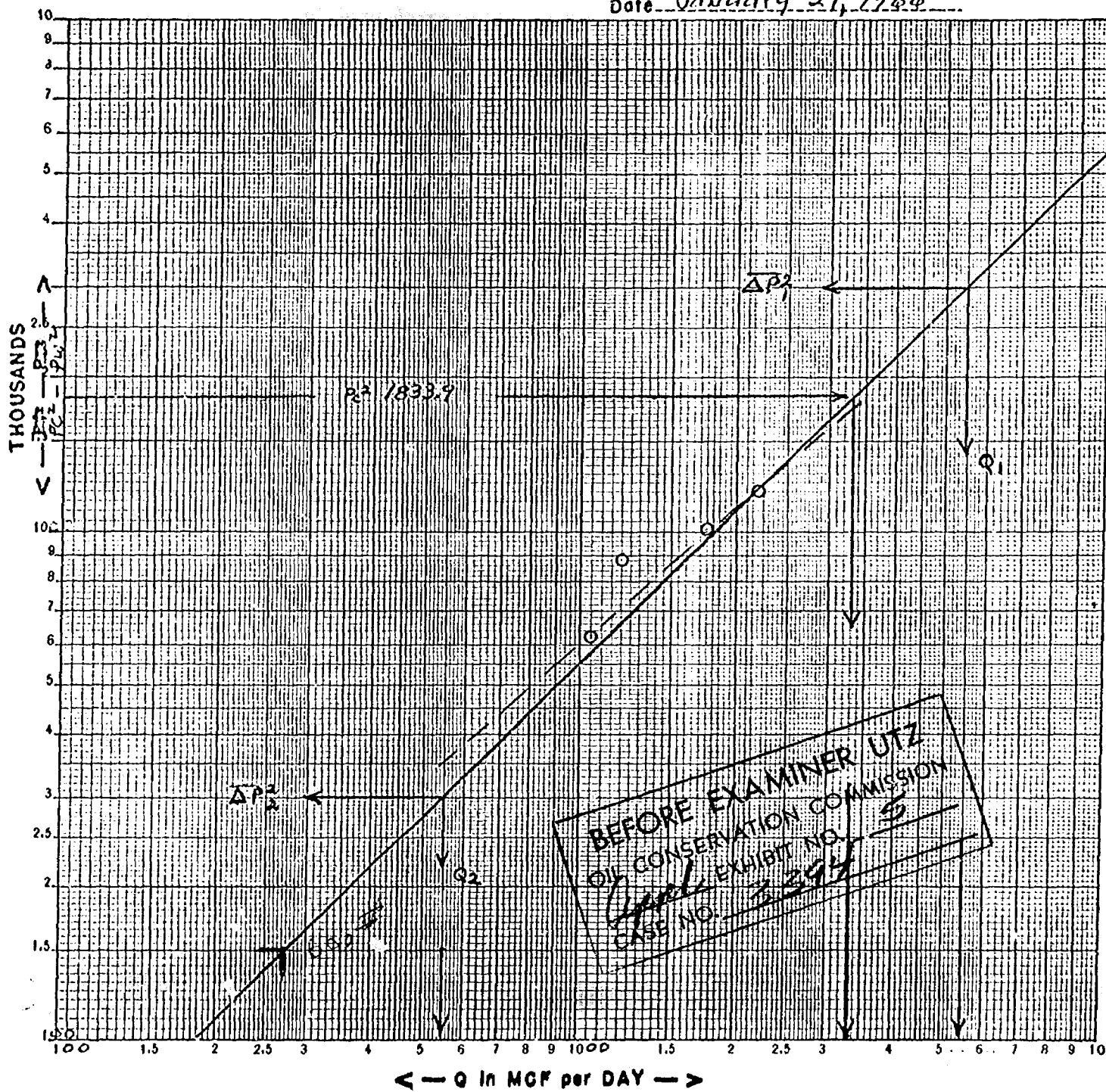
Monthly Oil (Bbl) and Gas (Mcf) Production

Shell-Turner No. 3
Blinebry (Oil) Pool
Lea County, N.M.



**GAS WELL
BACK PRESSURE CURVE**

County LER Field BLINERBY GAS
Operator SHELL OIL COMPANY
Lease TURNER Well No. 13
Volume 3,378 MCF/24 hr.
Date JANUARY 21, 1944



$$\begin{aligned}\Delta P_1^2 & P_2^2 - P_{w1}^2 = 3000 \\ \Delta P_2^2 & P_2^2 - P_{w2}^2 = 300 \\ Q_1 & = 5500 \text{ MCFD} \\ Q_2 & = 550 \text{ MCFD}\end{aligned}$$

$$\begin{aligned}\text{LOG } Q_1 & = 3.740363 \\ \text{LOG } Q_2 & = 2.740363 \\ n & = 1.000\end{aligned}$$

N. MEXICO CONSERVATION COMM. IN WESTERN DISTRICT
 'MULTIPOINT AND ONE POINT BACK PRESSURE TEST' FOR GAS WELL

Form C-122
 Revised 9-1-65

Type Test <input type="checkbox"/> Initial <input type="checkbox"/> Annual <input checked="" type="checkbox"/> Special			Test Date 1-21-66		
Company Shell Oil Company			Connection El Paso Natural Gas Company		
Pool Blinbry Gas			Formation Blinbry		
Completion Date 10-3-52		Total Depth 6633'	Plug Back TD -	Elevation 3420' DF	Farm or Lease Name Turner
Cas. Size 5 1/2	Wt. 15.0	d 4.976	Set At 6550'	Perforations: From 5510' To 5621'	Well No. 13
Tbg. Size 2	Wt. 4.7	d 1.995	Set At 6624'	Perforations: From To	Unit Sec. Twp. Rge. N 22 21S. 37E
Type Well - Single - Bradenhead - G.G. or G.O. Multiple G. O. Dual				Packer Set At 6400'	County Lea
Producing Thru csg.		Reservoir Temp. °F 110 @ 5600	Mean Annual Temp. °F 60	Baro. Press. - P _a 13.2	State New Mexico
5566	H 5566	G _g .713	% CO ₂ 0	% N ₂ 20	% H ₂ S 0
Prover		Meter Run 4"	Taps Flga.		

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI							Packer				72 hrs.
1.	4	X	1.500	591		64			1341	64	24
2.	4	X	1.500	594		66			959	66	24
3.	4	X	1.500	596		64			892	64	24
4.	4	X	1.500	571		64			734	64	24
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	10.84	76.20	604.2	.9962	1.184	1.083	1,055
2.	10.84	86.24	607.2	.9943	1.184	1.084	1,193
3.	10.84	125.9	609.2	.9962	1.184	1.084	1,745
4.	10.84	159.5	584.2	.9962	1.184	1.080	2,202
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	.90	524	1.33	.852	52.2	
2.	.91	526	1.33	.851		
3.	.91	524	1.33	.851		
4.	.87	524	1.33	.857		
5.						

P _c 1354.2 P _c ² 1833.9		(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.534$	
NO.	P _w ²	P _w	P _w ² - P _w ²
1	1208.2		1208.8
2	945.2		946.0
3	819.4		821.1
4	635.5		638.4
5			

Absolute Open Flow		3,378 Mcfd @ 15.025		Slope, n		1.000	
Slope greater than 1.000, a slope of 1.000 is used through highest rate of flow.							
Remarks:							

Approved By Commission	Conducted By: A. L. Ellerd	Calculated By: A. L. Ellerd	Checked By:
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