

CASE 3495: Appli. of BURLESON &
HUFF for a non-standard proration
unit & a non-standard location.

CASE NO.

3495

Application,
TRANSCRIPTS,
SMALL Exhibits
ETC.

GOVERNOR
JACK M. CAMPBELL
CHAIRMAN

State of New Mexico
Oil Conservation Commission



LAND COMMISSIONER
GUYTON B. HAYS
MEMBER

P. O. BOX 2088
SANTA FE

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

December 6, 1966

Mr. Jason Kellahin
Kellahin & Fox
Attorneys at Law
Post Office Box 1769
Santa Fe, New Mexico

Re: Case No. 3495
Order No. R-3162
Applicant:
BURLESON & HUFF

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

ir/

Carbon copy of order also sent to:

Hobbs OCC x

Artesia OCC

Aztec OCC

OTHER Mr. Bill Kastler, Gulf Oil Corporation, Roswell, N.M.

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. 3495
Order No. R-3162

APPLICATION OF BURLESON & HUFF
FOR A NON-STANDARD PRORATION UNIT
AND A NON-STANDARD LOCATION, LEA
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on November 30, 1966,
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 6th day of December, 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, Burleson & Huff, seeks authority to
drill its Sunray State Well No. 1 at an unorthodox location 990
feet from the North line and 330 feet from the East line of Lot 3,
Section 2, Township 16 South, Range 32 East, NMPM, North Anderson
Ranch-Wolfcamp Pool, Lea County, New Mexico.

(3) That said Lot 3 can reasonably be presumed to be produc-
tive of oil in the subject pool.

(4) That the proposed non-standard location is necessary
to prevent waste and protect correlative rights and should be
approved in order to afford the applicant the opportunity to
produce its just and equitable share of the oil and gas in the
North Anderson Ranch-Wolfcamp Pool.

-2-

CASE No. 3495
Order No. R-3162

(5) That the applicant also seeks approval of a 50.30-acre non-standard proration unit in the North Anderson Ranch-Wolfcamp Pool comprising all of said Lot 3.

(6) That approval of a 50.30-acre non-standard proration unit in the North Anderson Ranch-Wolfcamp Pool comprising all of Lot 3, Section 2, Township 16 South, Range 32 East, NMPM, North Anderson Ranch-Wolfcamp Pool, Lea County, New Mexico, to be dedicated to the applicant's Sunray State Well No. 1 will afford to the owner of each property in the pool the opportunity to produce his just and equitable share of the oil and gas in the pool.

IT IS THEREFORE ORDERED:

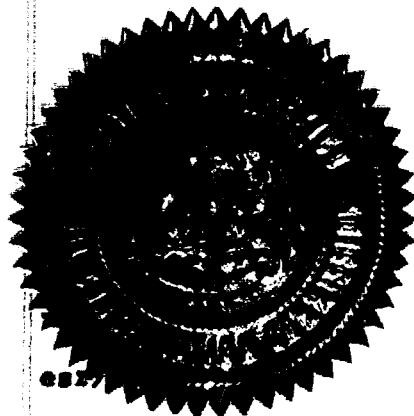
(1) That the applicant, Burleson & Huff, is hereby authorized to drill its Sunray State Well No. 1 at an unorthodox location in the North Anderson Ranch-Wolfcamp Pool 990 feet from the North line and 330 feet from the East line of Lot 3, Section 2, Township 16 South, Range 32 East, NMPM, Lea County, New Mexico.

(2) That a 50.30-acre non-standard proration unit in the North Anderson Ranch-Wolfcamp Pool comprising all of Lot 3 of Section 2, Township 16 South, Range 32 East, NMPM, Lea County, New Mexico, is hereby created and dedicated to the Burleson & Huff Sunray State Well No. 1 to be located 990 feet from the North line and 330 feet from the East line of said Lot 3.

(3) That the above-described non-standard oil proration unit shall receive an allowable computed in accordance with Rule 3 of the Special Rules and Regulations for the North Anderson Ranch-Wolfcamp Pool promulgated by Order No. R-2212, dated May 1, 1962.

(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
JACK M. CAMPBELL, Chairman

Guyton B. Hays
GUYTON B. HAYS, Member

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

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Date 12/2/66

CASE 3495

Hearing Date 9am 11/30/66

My recommendations for an order in the above numbered cases are as follows:

Enter an order authorizing Burleson
~~and the~~ & Huff to ~~Survey~~ drill
their Sunray State Well No 1 at an
unorthodox location 990' FNL and
330' FEL of Lot 3, Section 2, T16S,
R32E; North Anderson Ranch Walcamp
Pool, Lea County, New Mexico. Also
authorize applicants a 50.30 acre
non std oil proration unit comprising
all of ~~the~~ said Lot 3 to be dedi-
cated to the well.

Find necessity of non std lot is based
on prevention of waste and protection
of correlative rights. Allowance to be
computed in accordance with Rule 3 of
Anderson Ranch WX Pool Rules as set out in Order
no. 2212

[Signature]

LEWIS B. BURLESON

JACK HUFF

BURLESON & HUFF
OIL PROPERTIES
BOX 935 - PHONE MU 3-4747
MIDLAND, TEXAS

December 2, 1966

Dec 5 1966

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

Attention: Mr. D. S. Nutter

Re: Case No. 3495

Gentlemen:

Attached are photo copies of the charts to which Mr. John Yuronka referred in his testimony recently in the hearing for the above case and for which copies were not available at the hearing.

By carbon copy of this letter we are also sending copies of these charts to Mr. William Kastler with Gulf Oil Corporation in Roswell.

Yours very truly,

BURLESON & HUFF



Jack Huff

JH/ap

Encls.

DOCKET: EXAMINER HEARING - WEDNESDAY - NOVEMBER 30, 1966

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

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

CASE 3492: Application of Midwest Oil Corporation for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the Cinta Roja-Morrow Gas Pool, Lea County, New Mexico, including a provision for 640-acre proration units.

CASE 3493: Application of H. M. Sweeney for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of its Hale Unit Area comprising 1920 acres, more or less, of Federal, State and Fee lands in Township 20 South, Range 30 East, Eddy County, New Mexico.

CASE 3494: Application of Texaco Inc. for a non-standard gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of its Cotton Draw Unit Well No. 64 at an unorthodox gas well location 660 feet from the North line and 1652 feet from the West line of Section 18, Township 25 South, Range 32 East, in an undesignated Devonian gas pool, Lea County, New Mexico.

CASE 3495: Application of Burlason & Huff for a non-standard proration unit and a non-standard location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the approval of a 50.30-acre non-standard oil proration unit comprising all of Lot 3, Section 2, Township 16 South, Range 32 East, North Anderson Ranch-Wolfcamp Pool, Lea County, New Mexico, to be dedicated to a well to be drilled at a non-standard location for said pool 990 feet from the North line and 330 feet from the East line of said Lot 3.

CASE 3496: Application of Newmont Oil Company for a waterflood expansion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to expand its West Square Lake Waterflood Project, Square Lake Pool, by the conversion to water injection of its Continental State Well No. 1, located 1980 feet from the North line and 1990 feet from the West line of Section 36, Township 16 South, Range 31 East, Eddy County, New Mexico.

CASE 3497: Application of Me-Tex Supply Company for a non-standard gas proration unit and a non-standard gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the approval of a non-standard gas proration unit comprising Lots 5, 6, 11, 12, 13, and 14 of Section 3, Township 21 South, Range

(Case 3497 continued)

36 East, Eumont Gas Pool, Lea County, New Mexico, to be dedicated to its Wallace State Well No. 3 located at an unorthodox location 3,300 feet from the South line and 1980 feet from the West line of said Section 3. Applicant further seeks the assignment to said proration unit of the accumulated underproduction presently carried by its Wallace State Well No. 2 located in Unit L of said Section 3, said well currently being dedicated to a 160-acre non-standard gas proration unit comprising Lots 5, 6, 11, and 12 of said Section 3, and also the assignment to said unit of the accumulated underproduction presently carried by the aforesaid Wallace State Well No. 3, said well currently being dedicated to an 80-acre non-standard proration unit comprising Lots 13 and 14 of said Section 3.

CASE 3498: Application of Pan American Petroleum Corporation for a pressure maintenance project, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a pressure maintenance project in the Piñon Gallup Oil Pool by the injection of water into the Gallup formation through five wells located in Section 19, Township 28 North, Range 11 West and Sections 14, 15, and 24, Township 28 North, Range 12 West, San Juan County, New Mexico. Applicant further seeks the promulgation of special rules for the operation of said project.

CASE 3499: Application of Pan American Petroleum Corporation for pressure interference tests, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to conduct a pressure interference test in the Cato-San Andres Pool, Chaves County, New Mexico, by shutting in a number of its wells in said pool and producing its Baskett "D" Well No. 1 located in Unit G, Section 11, Township 8 South, Range 30 East, Chaves County, New Mexico. Applicant also seeks authority to transfer the allowable from other wells on said Baskett "D" lease to Well No. 1, to temporarily overproduce said lease, and to make-up the overproduction at the conclusion of the test period by curtailment of wells on said lease. Applicant further seeks authority to accumulate underproduction on any lease where wells will be shut-in, for production upon conclusion of the interference tests.

LEWIS B. BURLESON

JACK HUFF

BURLESON & HUFF
OIL PROPERTIES
BOX 935 - PHONE MU 3-4747
MIDLAND, TEXAS

October 26, 1966

Handwritten: GMA 3495
NSP-770

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

Handwritten: 10 Oct 27 AM 10 07

Attention: Mr. A. L. Porter, Jr.
Secretary-Director

Re: Application for Administrative Approval
for Non-Standard Proration Unit and
Exception to Designated Well Location.
North Anderson Ranch-Wolfcamp Pool,
Lea County, New Mexico.

Gentlemen:

We propose to drill a well to test the Wolfcamp formation at a depth of about 9,900 feet located 990 feet from the north line and 330 feet from the east line of Lot 3, Section 2, Township 16 South, Range 32 East, N.M.P.M., Lea County, New Mexico. We have obtained a farmout agreement from Sunray DX Oil Company, the owner of the State of New Mexico oil and gas lease number E-5301 which covers said Lot 3 together with other land. Attached is a plat with Lot 3 colored in red and our proposed location shown thereon. Our proposed location is a direct offset to a producing well in the North Anderson Ranch-Wolfcamp Pool.

We request that we be authorized to drill on the above location by administrative approval without hearing and notice as an exception to the field rules for the North Anderson Ranch-Wolfcamp Pool, which rules provide that wells drilled south of the common line between Township 15 South and Township 16 South shall be located in either the NW/4 or SE/4 of a governmental quarter section. Our proposed location is in the NE/4 of a governmental quarter section. We further request that our proration unit be approved as consisting solely of said Lot 3, which contains 50.30 acres, and that our allowable be determined as provided by Rule 3 of the aforementioned field rules.

Page 2
New Mexico Oil Conservation Commission
October 26, 1966

Our requests are made due to the fact that the only acreage we have on which to drill in said Section 2 is Lot 3, and we wish to drill on such lot and maintain the production from it as a unit by itself.

We have on this date mailed copies of this application by certified mail with return receipt requested to all of the offsetting operators to Lot 3, notifying them of our application. The offsetting operators are as follows: Gulf Oil Corporation is the operator to the west, southwest, south and southeast; Mobil Oil Company is the operator to the east; and Shell Oil Company is the operator to the north. We are the owner of the State of New Mexico oil and gas lease covering the locations to the northwest and northeast of Lot 3. Photo copies of receipts showing notices have been mailed are attached hereto, and photo copies of the signed receipts from the offset operators will be forwarded to you after they have been returned to us.

This application is submitted to you in triplicate.

Yours very truly,

BURLESON & HUFF



Jack Huff

JH/mj

Attachments

No. 591846

RECEIPT FOR CERTIFIED MAIL—30¢

SENT TO <i>McPhail Co</i>		POSTMARK OR DATE MIDLAND, TX OCT 26 1966 USPO
STREET AND NO. <i>Box 633</i>		
P. O., STATE, AND ZIP CODE <i>City</i>		
EXTRA SERVICES FOR ADDITIONAL FEES		
Return Receipt Shows to whom and date delivered <input checked="" type="checkbox"/> 10¢ fee	Shows to whom, date, and where delivered <input type="checkbox"/> 35¢ fee	Deliver to Addressee Only <input type="checkbox"/> 50¢ fee
POD Form 3800 Mar. 1966 NO INSURANCE COVERAGE PROVIDED— NOT FOR INTERNATIONAL MAIL (See other side)		

No. 591844

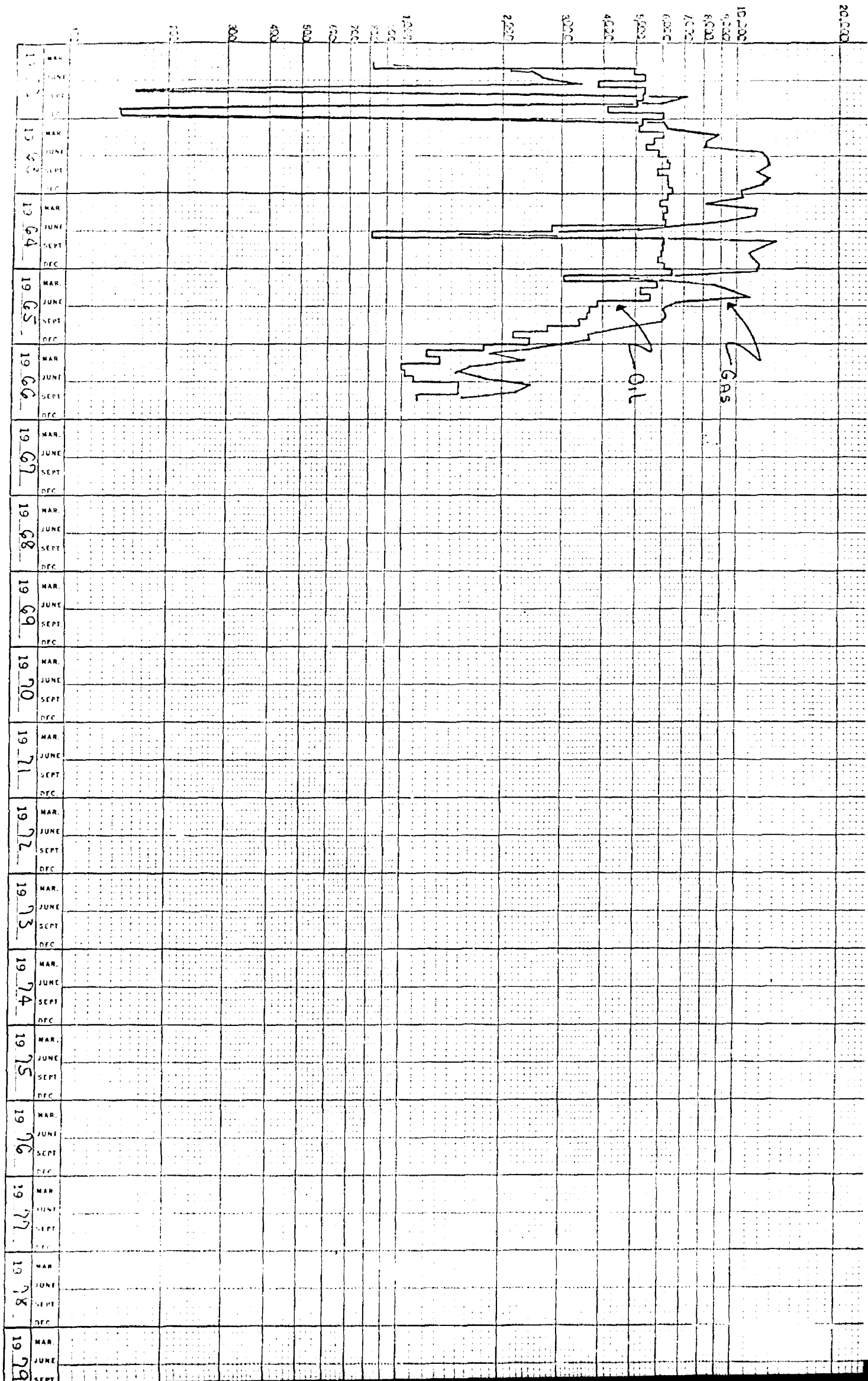
RECEIPT FOR CERTIFIED MAIL—30¢

SENT TO <i>Shellport Co</i>		POSTMARK OR DATE MIDLAND, TX OCT 26 1966 USPO
STREET AND NO. <i>Box 1509</i>		
P. O., STATE, AND ZIP CODE <i>City</i>		
EXTRA SERVICES FOR ADDITIONAL FEES		
Return Receipt Shows to whom and date delivered <input type="checkbox"/> 10¢ fee	Shows to whom, date, and where delivered <input type="checkbox"/> 35¢ fee	Deliver to Addressee Only <input type="checkbox"/> 50¢ fee
POD Form 3800 Mar. 1966 NO INSURANCE COVERAGE PROVIDED— NOT FOR INTERNATIONAL MAIL (See other side)		

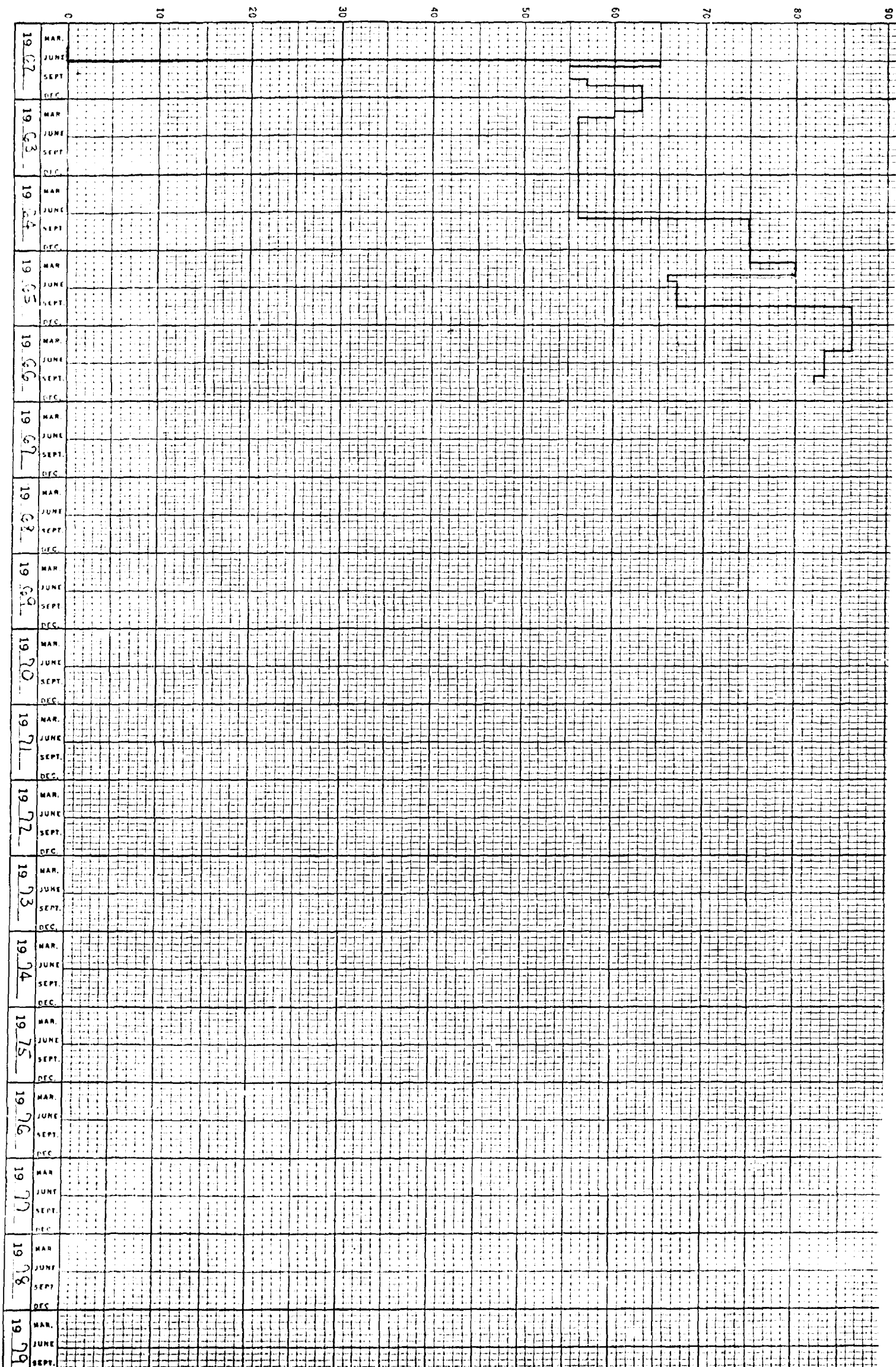
No. 591845

RECEIPT FOR CERTIFIED MAIL—30¢

SENT TO <i>Shellport Corp</i>		POSTMARK OR DATE MIDLAND, TX OCT 26 1966 USPO
STREET AND NO. <i>Box 1938</i>		
P. O., STATE, AND ZIP CODE <i>Wesley N M</i>		
EXTRA SERVICES FOR ADDITIONAL FEES		
Return Receipt Shows to whom and date delivered <input checked="" type="checkbox"/> 10¢ fee	Shows to whom, date, and where delivered <input type="checkbox"/> 35¢ fee	Deliver to Addressee Only <input type="checkbox"/> 50¢ fee
POD Form 3800 Mar. 1966 NO INSURANCE COVERAGE PROVIDED— NOT FOR INTERNATIONAL MAIL (See other side)		

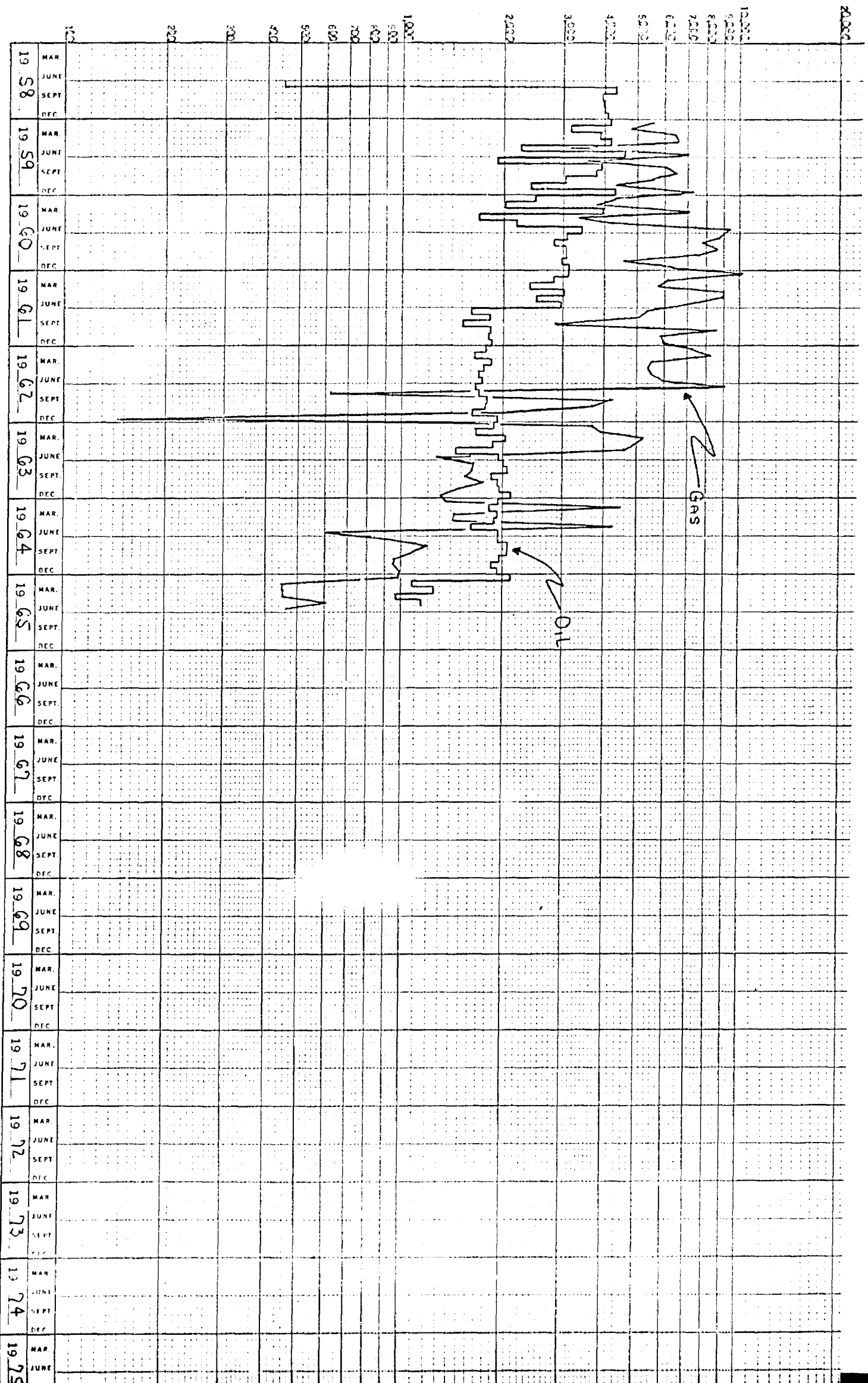


% White Production

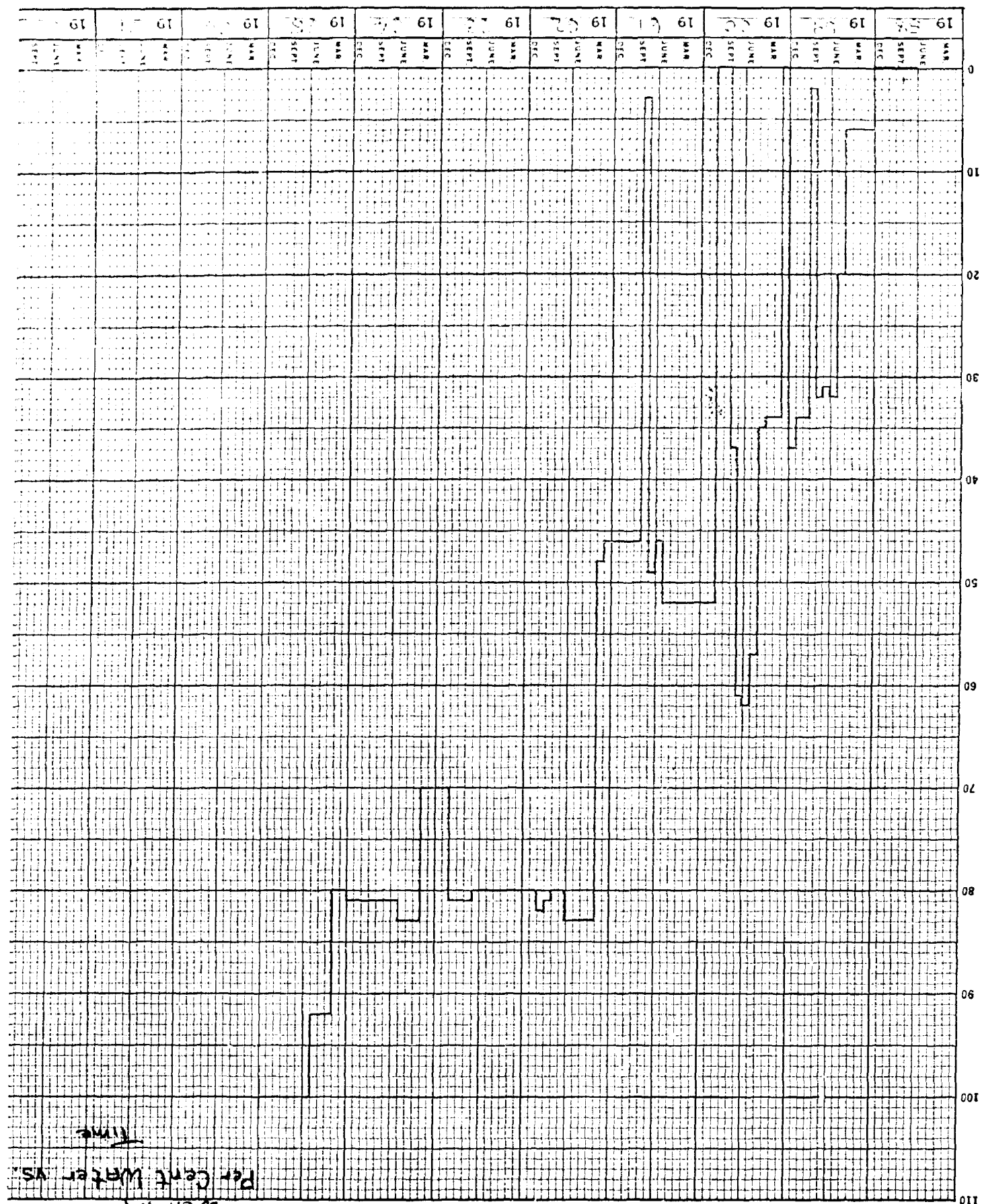


Monthly Oil and Gas Production, Bbls and MCF

Gulf Oil Corporation Lea State "CLA" Well #1



% Water Production



Gulf Oil Corp.
Lea State "CLRA"
Well #1
Per Cent Water vs. Time

Gulf Oil Corporation

ROSWELL PRODUCTION DISTRICT

P. O. Drawer 1938
Roswell, New Mexico 88201

W. B. Hopkins
DISTRICT MANAGER
M. I. Taylor
DISTRICT PRODUCTION
MANAGER
F. O. Mortlock
DISTRICT EXPLORATION
MANAGER
H. A. Rankin
DISTRICT SERVICES MANAGER

November 4, 1966

3495

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

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

Re: Burleson & Huff's October 26, 1966 Application
for Administrative Approval for Non-Standard
Proration Unit and Exception to Designated Well
Location.
North Anderson Ranch - Wolfcamp Pool,
Lea County, New Mexico.

Gentlemen:

Gulf Oil Corporation as the owner of all the working interest in
Lot 4 of Section 2, Township 15 South, Range 32 East, N.M.P.M., Lea
County, New Mexico protests the above styled application.

The application, if granted, could require the drilling of unneces-
sary wells to effectively drain the area.

Yours very truly,

M. I. Taylor
M. I. Taylor

WVK:ejl

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

Burleson & Huff
P. O. Box 935
Midland, Texas 79701



DOCKET NUMBER

Date

11-18-66

LEWIS B. BURLESON

JACK HUFF

BURLESON & HUFF

OIL PROPERTIES

BOX 935 - PHONE MU 3-4747

MIDLAND, TEXAS

November 3, 1966

YH/A

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

Attention: Mr. A. L. Porter, Jr.
Secretary-Director

Re: Application for Administrative Approval
for Non-Standard Proration Unit and
Exception to Designated Well Location.
North Anderson Ranch-Wolfcamp Pool,
Lea County, New Mexico.

Gentlemen:

Attached are three copies of postal receipts showing that Mobil Oil Company, Gulf Oil Corporation and Shell Oil Company received notice of our application. The Shell receipt does not show a date, but the reverse side indicates that it was received on October 27th, the same date on which the other two companies were delivered their notices.

Yours very truly,

BURLESON & HUFF



Jack Huff

JH/mj

Encls.

DOCKET MAILED

Date 11-18-66

3494

INSTRUCTIONS TO DELIVERING EMPLOYEE		
<input type="checkbox"/> Show to whom and when delivered	<input type="checkbox"/> Show to whom, when, and address where delivered	<input type="checkbox"/> Deliver ONLY to addressee
(Additional charges required for these services)		

Received the numbered article described below.

REGISTERED NO.	SIGNATURE OR NAME OF ADDRESSEE (Must always be filled in)
CERTIFIED NO.	SIGNATURE OF ADDRESSEE'S AGENT, IF ANY
INSURED NO.	
DATE DELIVERED	SHOW WHERE DELIVERED (only if requested)

10-2-1900

CGO-16-71545-8 GPO

INSTRUCTIONS TO DELIVERING EMPLOYEE		
<input type="checkbox"/> Show to whom and when delivered	<input type="checkbox"/> Show to whom, when, and address where delivered	<input type="checkbox"/> Deliver ONLY to addressee
(Additional charges required for these services)		

Received the numbered article described below.

REGISTERED NO.	SIGNATURE OR NAME OF ADDRESSEE (Must always be filled in)
CERTIFIED NO.	SIGNATURE OF ADDRESSEE'S AGENT, IF ANY
INSURED NO.	
DATE DELIVERED	SHOW WHERE DELIVERED (only if requested)

10-2-1900

CGO-16-71545-8 GPO

INSTRUCTIONS TO DELIVERING EMPLOYEE		
<input type="checkbox"/> Show to whom and when delivered	<input type="checkbox"/> Show to whom, when, and address where delivered	<input type="checkbox"/> Deliver ONLY to addressee
(Additional charges required for these services)		

Received the numbered article described below.

REGISTERED NO.	SIGNATURE OR NAME OF ADDRESSEE (Must always be filled in)
CERTIFIED NO.	SIGNATURE OF ADDRESSEE'S AGENT, IF ANY
INSURED NO.	
DATE DELIVERED	SHOW WHERE DELIVERED (only if requested)

10-2-1900

CGO-16-71545-8 GPO

LEWIS B. BURLESON

JACK HUFF

BURLESON & HUFF

OIL PROPERTIES

BOX 935 • PHONE MU 3-4747

MIDLAND, TEXAS

October 26, 1966

See NSP 770

3445

Mr. A. L. Porter, Jr
New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico

Dear Mr. Porter:

Attached are three copies of our application for administrative approval of a non-standard proration unit and an exception to the designated well locations as provided in the field rules for the North Anderson Ranch-Wolfcamp Pool in Lea County, New Mexico.

By carbon copy of this letter I will remind Mr. D. S. Nutter to please place our case on the docket for the November 30th hearing of the Oil Conservation Commission as we previously discussed.

Yours very truly,

BURLESON & HUFF



Jack Huff

JH/mj

Attachments

cc - Mr. D. S. Nutter

1966 OCT 27 AM 10 27

dearnley-meier reporting service, inc.

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

1120 SIMMS BLDG. • P. O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO



BEFORE THE NEW MEXICO
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
November 30, 1966

EXAMINER HEARING

In the matter of:

Application of Burleson and Huff for
a non-standard proration unit and
a non-standard location, Lea County,
New Mexico.

CASE NUMBER
3495

BEFORE:

DANIEL S. NUTTER, Examiner

TRANSCRIPT OF HEARING

MR. NUTTER: The hearing will come to order, please.
We will call next Case 3495.

MR. HATCH: Case 3495. Application of Burleson and
Huff for a nonstandard prorator unit and a nonstandard location,
Lea County, New Mexico.

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

MR. KELLAHIN: If the Examiner please, Jason Kellahin,
Kellahin and Fox, Santa Fe, appearing for the applicant and we
will have four witnesses I would like to have sworn.

MR. NUTTER: Are there any other appearances in this
case?

MR. KASTLER: I am Bill Kastler with Gulf Oil
Corporation from Roswell.

MR. NUTTER: Mr. Kastler, do you anticipate that you
will have a witness in this case?

MR. KASTLER: No. I believe I will just cross
examine and make a statement at the close.

MR. NUTTER: Would you have your four witnesses
stand and be sworn, Mr. Kellahin?

(Witnesses sworn.)

MR. KELLAHIN: I would like to call as our first
witness, Mr. Jack Huff.

JACK HUFF: called as a witness on behalf of the applicant,
having been first duly sworn was examined and testified as
follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you state your name, please?

A Jack Huff.

Q Mr. Huff, are you one of the applicants in Case Number 3495?

A Yes, sir, I am.

Q Are you familiar with the application that was filed in this case?

A Yes, I am.

Q Briefly stated, what does Burleson and Huff propose in this application?

A We propose -- well, we have requested authority from the Conservation Commission to drill on Lot 3, Section 2, Township 16 South, Range 32 East, a Wolfcamp test to around 9,900 feet and ask that our drilling unit be composed solely of Lot 3 and that our allowable be based on Rule 3 as specified in the Field Rules for the North Anderson Ranch-Wolfcamp Field.

Q Now, this Lot 3, is that a Governmental subdivision in Section 2?

A Yes, sir.

Q That is not a standard section, is that correct?

A No, sir. It contains 50.5 acres.

Q Referring to what has been marked as Exhibit No. 1,

would you identify that exhibit, please?

A Yes, sir. If you will put that on the wall, Mr. Burleson, please. We have a large copy there which I will refer to if you want to look at it, and we can also pass out these smaller copies to anybody who might care to have one.

The acreage in the south portion of the North Anderson Ranch-Wolfcamp Field is colored in various colors denoting the units, the acreage surrounding each well which form the units that have been dedicated to those wells in the area in which we propose to drill. The balance of the field lying to the north of the various colored areas, shows the remainder of the wells in the field and those units surrounding those wells are simply outlined in red.

Q But the colored areas are all acreage dedicated to the well at the present time, is that correct?

A That's correct.

Q With the exception of the Burleson and Huff acreage which is proposed to be dedicated?

A And that is the acreage which is colored in yellow.

Q Now, the acreage immediately to the south, what is the situation as to it, Mr. Huff?

A According to my information, it is presently undedicated to, as any acreage in the North Anderson Ranch-Wolfcamp Field. There used to be a Wolfcamp well there. It

was a dual producer, but that well has presently been abandoned in the Wolfcamp formation and is presently producing from the Devonian only.

Q Now, that is the acreage immediately south of the red area, Mobil, isn't that correct?

A Yes, sir. In other words, that is the Southwest quarter of the Northeast quarter of Section 2.

Q Now, referring to the acreage to the west of that, the acreage colored in blue, what is the situation as to that?

A That is acreage which is dedicated to the Gulf No. 180 State NCTA well, on 80-acre tract. That well is located 1990 feet from the north line and 2310 feet from the west line of Section 2.

Q Now, did Gulf offer to pool that acreage with you at any time?

A No, sir. They did not.

Q Are you familiar with the history of this area, Mr. Huff?

A Well, I am familiar with the history of events which pertain to and are important to us in this matter and if I might, I would like to give a short chronological history of events, insofar as we think they pertain to us leading up to the present time.

Q Would you do that, please?

A All right. First, I would like to point out that the Gulf Lea State No. 1-CLA well, which is the well we previously referred to, located in the Southwest quarter of the Northeast quarter of Section 2, was completed as a Wolfcamp producer in 1958. The Mobil Number 1 NM State S well located in the Northwest quarter of the Northeast quarter of Section 2 was likewise completed in 1958 as a Wolfcamp producer.

Since those two wells have been completed, there has been no further drilling activity in the immediate area of our proposed location for a period of approximately eight years. As I believe has already been stated, Sunray D.X. Oil Company is the owner of the lease covering Lot 3 in Section 2 on which we propose to drill. We first asked Sunray for a farmout of Lot 3 in September of 1963 to drill our proposed Wolfcamp tests. We finally got our farmout from Sunray in August of 1966, approximately three years later. On October 18th, 1966, we purchased an oil and gas lease covering the Southwest quarter and Southeast quarter of Southeast quarter of Section 32 in Township 15 South, Range 32 East, at the State Land Sale in Santa Fe.

MR. NUTTER: Now, what was that acreage, Mr. Huff?

THE WITNESS: The Southwest quarter and Southeast of Southeast of Section 32, 15, 32.

MR. NUTTER: And those are marked "Huff" on the plat?

THE WITNESS: Yes, sir, marked "Huff" on the plat. We acquired this acreage for a minimum bid of ten dollars per acre or a total of two thousand dollars.

A By letters dated October 18th and 19th, we asked the surrounding, rather the offsetting operators to the Sunray acreage on which we propose to drill, for waivers of objection to our location. Those operators were Gulf and Shell and Mobil.

On October 21st, 1966, I called Mr. Madison Taylor, with Gulf in Roswell and also called representatives of Mobil and Shell in Midland. All of these companies advised us that they would not sign waivers of objection to the location with the exception of Shell who simply said, "We will sign if the others will sign."

By application dated October 26th, 1966, five days later, we asked for an administrative approval of our location with the dedication of Lot 3 solely to the well as our drilling in it; and on the same date we sent copies of our application again to the offsetting operators, Gulf, Mobil and Shell. These copies were received by those companies on October 27th, 1966 or the date following on which we made our application.

Simultaneously with making the application, we asked that the matter be put on the November 30th Hearing Docket in the event we should get an objection to the administrative approval, and, of course, Gulf has subsequently objected to the

administrative approval.

On October 31st, four days after Gulf received its copy of our application to get administrative approval for the drilling of our well, John West surveyed the location for the Gulf No. 1 Eddy State NCTA well, to which we previously referred, and on that same date the plat was filed with the Commission in Hobbs, dedicating the south half of the Northwest quarter of Section 2 to that well as its drilling unit.

On November 10th, I went from Midland, which is my home, to Roswell and with Mr. Pete Marianos of Sunray, talked to Mr. Fluger who is Mr. Taylor's assistant with Gulf, and asked Gulf to withdraw their objection to our location and suggested that they might wait until we drill our well before they started drilling their well which they had filed for. Mr. Taylor was out of the City at that time.

On November 14th, I called Mr. Taylor and he said that they would be drilling their well by November 28th, two days before the hearing and indicated they would not delay the drilling of their well and that they would not withdraw their objections to our location.

Q (By Mr. Kellahin) Now, Mr. Huff, how many acres are there in Lot 3?

A 50.3 acres. I might point out that this is the only acreage which Sunray has and consequently which we have

under the terms of our farmout agreement with them. It's where we want to drill, when we want to drill only on that acreage and with that acreage being the sole acreage dedicated to the well as the drilling unit.

Q Now, what is the situation on the farmout? Does it have a time limit on it?

A Yes, it does. Like all farmout agreements, of course, we are subject to a time limitation in which to start drilling.

Q And what is your limitation?

A As presently extended, it is December 20th of this year.

Q Have you had any extensions prior to this?

A Yes, sir. We had one extension prior to this, to November 20th.

Q Now, under the terms of the farmout agreement, would it be possible for you to pool or unitize your acreage with any other operator?

A No, sir. We simply have a farmout agreement under the terms of which we agree to drill at a location in Lot 3 if we are permitted to do so by the State of New Mexico.

Q Was Exhibit No. 1 prepared by you or under your supervision?

A Yes, sir, it was.

MR. KALLAHIN: I would like to offer in evidence Exhibit No. 1.

MR. NUTTER: Applicant's Exhibit No. 1 will be admitted in evidence.

(Whereupon, Applicant's Exhibit 1 was admitted into evidence.)

THE WITNESS: May I point out one more thing, that Gulf has, as you can see by the plat, a hundred and sixty acres in the northern part of Section 2, being this tract here. The Southwest quarter of the Northeast quarter, this tract which is presently dedicated to the well which they intend to drill the number 1 NCTA State, as well as Lot 4 which is a 50-acre tract in the Northwest corner of Section 2, so if they care to rearrange their acreage as presently dedicated, they could have two full 80-acre units, in the event they care to drill more than one well. If they didn't wish to do this and did wish to drill a standard location on Lot 4, they, in addition to having Lot 4, could form a unit by adding to that Lot 1 of Section 3 to the west, and have about a 100-acre unit.

MR. KALLAHIN: That's all I have on direct examination.

MR. NUTTER: Mr. Huff, now the 40 acres which is the Southwest of the Northeast that is not colored and has the abandoned well on it, that is also part of the Gulf lease, is that correct?

THE WITNESS: Yes.

MR. NUTTER: Are there any questions of Mr. Huff?
Mr. Kastler?

CROSS EXAMINATION

BY MR. KASTLER:

Q Mr. Huff, were you at any time offered the opportunity to unitize or pool your Lot No. 3 with Gulf's Lot No. 4 for the drilling of an orthodox regular standard location well?

A When I first called Gulf to ask if they would sign waivers of objection to our location, Mr. Taylor, at that time, said that they would like to join us in the drilling of our well with the location left unspecified and I told him then that it was very doubtful that we would want to do so, but we would consider it and I would let him know later. And then when I called him the subsequent time and when, previous to my second call to him, I had seen Mr. Fluger. I told him that, "No, we did not wish to join in the drilling of the well either on the Sunray acreage or the Gulf acreage to the west at a standard location, but simply wanted to drill on the Sunray with the only unit dedicated, being Lot 3, to the well."

Q I see. If he should be granted this exception and allowed to drill at a non-standard location on Lot 3, would you now be willing to allow that Lot 4 will be forced pooled with it?

dearnley-meier

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

1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87101
1205 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO 87108

A No, sir. We would not be willing to do so.

Q I presume you have further testimony?

A Yes, sir.

MR. KASTLER: I don't have any other questions.

MR. NUTTER: Are there any questions of Mr. Huff?

REDIRECT EXAMINATION

BY MR. KELLAHIN:

Q What reason would you not be willing to go along with pooling Lot 4, Mr. Huff?

A Well, the principal reason would be we like the location on the Sunray acreage. We think it is productive. We think it will make a good well. We don't like the location on the Gulf acreage. We think the Gulf acreage has an excellent chance of being non-productive. In other words, we feel that we have the good acreage and that Gulf has the poor acreage, in the event we did drill on the non-standard location, but had a pool forming the units of Lot 3 and 4 in Section 2.

Q Now, is that conclusion based on geological and engineering testimony that will be offered later in this hearing?

A Yes, sir, it is.

MR. KELLAHIN: That's all.

RECROSS EXAMINATION

BY MR. KASTLER:

Q Do you mean to imply in any way that Gulf is in bad

faith in spotting the well it has spotted, on Lot No. 6, I believe it is?

A No, sir. Gulf has a perfect right to do so. I don't think they are in bad faith at all.

Q Then you understand that that constitutes a portion of a contiguous 80 acres in one single lease?

A Right, correct.

MR. KASTLER: Thank you.

MR. NUTTER: Are there any further questions? The witness may be excused.

(Witness excused.)

MR. KELLAHIN: I would like to call as our next witness, Mr. Pete Marianos.

PETE MARIANOS, called as a witness on behalf of the applicant, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you state your name, please?

A Pete Marianos.

Q How is that spelled, please?

A M-a-r-i-a-n-o-s.

Q By whom are you employed, Mr. Marianos?

A Sunray DX Oil Company.

dearnley-meier reporting service, inc.

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

1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87101
1205 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO 87108



Q What is your position?

A District Land Manager.

Q And where are you located?

A Roswell, New Mexico.

Q In connection with your position as District Land Manager in Roswell, New Mexico, is the area involved in the application in the case now before the Commission under your jurisdiction?

A Yes.

Q Do you have anything to do with any efforts made to obtain pooling of this acreage?

A On March 31st -- may I just tell you what --

Q Yes. Put it in your own words.

A On March 31st of this year, I called Mr. Frank Curtis of Gulf and asked him if Gulf would be willing to pool our 50-acre tract together with a Gulf 40-acre tract to the south.

Q Who is Mr. Frank Curtis?

A He is District Land Manager for Gulf Oil Corporation.

Q And where is he located?

A Roswell.

Q Roswell? Please proceed.

A He was unable to give me any sort of an answer and suggested I write a letter, which I did. I wrote a letter

requesting substantially the same thing as in the telephone conversation.

Several days later I received a phone call from Mr. Jack Cavanaugh who works under Mr. Curtis' supervision of Gulf, I believe, and he advised me that Gulf was unwilling to pool the acreage. I then asked him if Gulf would consider farming out the 40 acres to Sunray and he advised me, no, that Gulf would not.

Q Did you ask him if Gulf would take a farmout from Sunray?

A Yes, sir.

Q And what was the answer?

A No.

Q Did you ask that this be put in writing?

A Yes, sir.

Q What was your answer?

A The answer was that he was busy at the time and couldn't give me an answer to the letter.

MR. KELLAHIN: That's all I have of this witness.

MR. NUTTER: Are there any questions of Mr. Marianos?

Mr. Kastler?

MR. KASTLER: No.

MR. NUTTER: You may be excused.

(Witness excused.)

MR. KELLAHIN: May Mr. Marianos be excused from the hearing, at the present, at least?

MR. NUTTER: Mr. Kastler, do you suspect that you will want to recall Mr. Marianos?

MR. KASTLER: No.

MR. NUTTER: You may be excused from the hearing.

MR. KELLAHIN: I would like to call as our next witness, Mr. Louis Burleson.

LOUIS BURLESON, called as a witness on behalf of the applicant, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you state your name, please?

A Louis Burleson.

Q Mr. Burleson, are you one of the applicants in the Case before the Commission at this time?

A I am, sir.

Q And what is your business or profession?

A I am a geologist and a partner in Burleson and Huff, dealing in oil properties, mainly in New Mexico, but in West Texas, and I live in Midland, Texas.

Q Have you ever testified before the Oil Conservation Commission of New Mexico?

A I have not.

Q For the benefit of the Examiner, would you please outline your education and experience as a geologist?

A I graduated from the University of Texas in 1948 with a B.S. degree in Geology and went to work for the Atlantic Refining Company in Midland as a junior geologist in the New Mexico District Office. In 1948 I was transferred to Roswell, New Mexico as an assistant geologist. I worked there until 1954 and when they transferred me to Lake Charles, Louisiana, where I lasted for one year, I came back to Midland and went to work as Chief Geologist for Joseph I. O'Neal Oil Properties and had that job for five and a half years and quit Mr. O'Neal and formed a partnership with Jack Huff who was employed by Mr. O'Neal as his landman and have been independent since 1959.

I might say that our main area of interest in where we have worked most has been in Southeast New Mexico because this was the area that I was familiar with and worked for Atlantic.

Q Did you do geological work in Southeastern New Mexico for Atlantic?

A Yes, sir, I did.

Q And for Mr. O'Neal?

A Yes, sir, I did.

Q And have you since formed a partnership with Mr.

dearnley-meier reporting services, inc.

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

1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87101
1205 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO 87108

Huff doing geological work in Southeastern New Mexico?

A Yes, sir, I have.

MR. KELLAHIN: We submit the witness' qualifications.

MR. NUTTER: He is qualified.

Q (By Mr. Kellahin) Mr. Burleson, have you made a study of the area involved in the application in Case 3495?

A Yes, sir, I have.

Q First, just briefly, what was the nature of your study? How did you approach this?

A This area is a complicated geological problem province and I consider that the production in the North Anderson Ranch produces in a reef margin, that is the lime body that is on the margin of a reef development. This margin has reef characteristics to it and I think you should attack this problem as you would any reef, in that it crosses time lines and would thicken and thin in one -- to the east, say, or to the north, and that you should, you should isopac this margin to see where the thickest part is and then you should see where the best porosity development is and try to stick to the closest area of permeability and porosity.

I have prepared three cross sections. One isopac and one structure map on the north part covering the North Anderson Ranch Field. I concurred with the hearing before that set up this as a separate field from the Anderson Ranch in that

it is entirely different from the wells to the south that the sections encounter.

Q Now, referring to what has been marked as Exhibit No. 2, is that one of the cross sections you referred to?

A Yes, it is.

Q Is that shown on the map Exhibit No. 1?

A Yes, sir. Cross Section AA -- this will be Cross Section BB prime and it goes from the -- I have some additional copies of this cross section if you would like to see them. It may be better if I just stand up there and talk from the cross section.

MR. KELLAHIN: I believe it would.

A This is Cross Section BB Prime. It goes from the TP and Gulf re-entered this well, Lane Mills Unit No. 1, south to the Humble BA State No. 1, to the Mobil S No. 1, and to the Gulf State CLA No. 1.

I think we better define my units and what I am going to contour on and isopachs so that everybody will understand and have a clear understanding of how I am attacking this problem.

First, the Gulf CLA No. 1 is, I consider a reef well, that has reef development in it. This is a remnant or part of a reef build-up that was put on testimony when they separated the North Anderson Ranch from the Anderson Ranch.

Going to the north, and I think you can readily see that there is a great deal of difference in this pay section of this unit, which I call a reef margin which is colored in red going into this main reef build-up in the Gulf well.

I have also identified Zone A which is, first, which is a porous thin line that has had oil and shows in it, that to my knowledge, no well has been completed in this zone as yet in its field.

The top of the main reef margin, which is my map horizon, will be defined as the first massive porous line encountered in the section and this will -- and this Unit will always have the pay that is associated in this area and to the wells to the east in the North Anderson Ranch Field. The Lane Mills Unit was a dry hole, Humble was a dry hole, Mobil was perforated in this zone as shown by the perforations. The base of this reef margin is the top of the first massive shale zone, and you can see how I have carried this across on the shale kicks on the Gamma-Ray and sidal logs. And this lime body or lime banks or whatever you want to call it, comes in graded into this reef development that is found in the Gulf State CLA No. 1.

I think it is important when you are studying reefs, to find out how thick this unit is, and from this log, which is an ES log, we have 105 feet of what I recognize as

my main reef margin development. In the Humble well, we had 122 feet; in the Mobil well, we have 114 feet and then again I don't recognize this unit as you can pick it as it is graded in this reef.

MR. NUTTER: Now, Mr. Burleson, is it your contention at this point, that the CLA No. 1 would be in the old Anderson Ranch Pool?

THE WITNESS: I feel that it certainly is a great deal different from this, but -- and this well also, if you will look at the map, it's pulled way down into the southeast corner of that forty, but you should certainly have some reef margin in the north part of that, because this should be real fast.

MR. NUTTER: Now, according to your Exhibit No. 1, the dotted line goes across there separating the North Anderson Ranch and the Anderson Ranch and apparently then, that line is a little bit too far south as far as the cross section is concerned?

THE WITNESS: But it might be interesting that -- now, this was, this well I think has produced 200,000, approximate, barrels of oil, so this is still a good well, or was, until they temporarily abandoned it.

MR. NUTTER: What pool did it produce it from?

THE WITNESS: This well produced was put in the

North Anderson Ranch Field.

MR. NUTTER: Well, geographically it produced from the North Anderson Ranch. Physically, do you think it produced from the North Anderson Ranch or the Anderson Ranch?

THE WITNESS: If we define that the North Anderson Ranch produces in my reef margin, then this well should have been put in with the wells to the south.

Q (By Mr. Kellahin) The Mobil well is still producing, is it not?

A Yes, sir. It's flowing with a thousand pounds on the tubing and it's a top allowable well.

Q Now, the Gulf well, it has been temporarily abandoned, is that correct?

A Yes, sir. It has.

Q Do you know, is there any essential difference in the producing characteristics of the two wells as to GOR water production, any other factors?

A I think our engineer will give some testimony along that line.

Q Does that complete your testimony on Exhibit No. 2?

A Yes, sir, it does.

Q Referring to what has been marked as Exhibit No. 3, would you identify that exhibit?

A Exhibit No. 3 is a cross section AA Prime as shown on Exhibit 1. It goes from the Tenneco Gulf State No. 1 dry hole to the Mobil S. No. 1, to the Gulf State R No. 1, to the Gulf State R No. 2.

This one again is just to show what I consider the reef margin and show that it does have reef characteristics to it and these three wells, on the right-hand side, the Mobil, the Gulf and the State R No. 1 are productive in this reef margin in this area. I pick approximately 145 feet of reef margin in this well. In this well I pick 128 feet of reef margin. In the Gulf State R No. 1 I would have 128 feet. In the Mobil New Mexico S No. 1 I recognize 114 feet of reef margin and in the Tenneco Gulf State B No. 1 dry hole to the west, I pick 76 feet of reef margin present. I think this cross section was mainly done to show that the maximum reef margin development occurs on the eastern part of this cross section in the vicinity of the Gulf State R No. 2, and you have a thinning to the west from 154 feet to 76 feet.

Q Now, referring to what has been marked as Exhibit No. 4 would you identify that exhibit, please?

A I think I have previously said that this reef margin has reef characteristics to it, and then that it will thin and thicken and will grade one direction to another and

go up and down in a section, and I think it's important to find out if we have a thick area to this or if it's a thin area, or is it uniform; and when you are fighting these reefs one of the main tools is to have an isopac and this isopac again shows this 154 feet of thickness in the Gulf State R No. 2, and as we go to the east we thin out to the Tenneco well which had the thinnest reef margin development of the reef margin. These picks in here are real hard to come by because this reef margin is plunging as it goes to the east and the entire section wasn't drilled.

It might be interesting to know that Mr. Stoltz's well in Section 3 $\frac{1}{4}$ tested oil and gas in this margin. I haven't seen the log yet, but it is a producer, this far down.

Q Do you know the approximate depth at which the Stoltz's well was completed?

A They drillstem tested at approximately 10,200 to 285.

Q That completes your testimony?

A I might say one thing; as we move west from the Mobil well our proposed location in Lot 3 should have approximately 100 to 105 feet that a proposed -- location -- a well drilled in the Northwest of the Northwest should have approximately 80 feet of reef margin in it.

Q Would that in your opinion be detrimental to the

changes of completing a producing well based on the geology?

A I would think that you would certainly want to be in an area where you have the maximum unit, pay unit, although this isn't a permeability indication but it does show our unit thins as we go to the west.

Q Now, referring to what has been marked as Exhibit No. 5, would you identify that exhibit, please?

A Exhibit 5 again is the same cross section as the one above, AA Prime, and encompasses the same wells, but on this cross section I am using micrologs as the basis for this cross section.

First, the three wells on the right-hand side, the Mobil, the Gulf State R No. 1 and R. No. 2 are regular micrologs or microsurveys and the pay that I have -- the separation that I have colored will be in yellow on all these logs. The Tenneco dry hole to the west is a proximity microlog, and its separation will be on the left-hand column, as I have colored a little bit of separation that occurred at 10,000 feet if you will notice. So we do have a little bit different kind of log on the Gulf, on the Gulf State B No. 1 dry hole. I will equate then microlog separation to pay as this is a -- as all four of these logs are standard, same type logs. In other words, on this dry hole we find no separation in this reef margin. Going to the Mobil New Mexico State S

No. 1 we find 38 feet of separation on the microlog as colored in yellow.

In Gulf State R No. 1 we find the maximum development of separation if we equate this back to pay of 64 feet. And moving over to the Gulf State R No. 2 we find 34 feet of microlog separation in this well. This cross section is showing that the maximum pay development in this cross section occurs in the Gulf State R No. 1 with 64 feet and thins as we go to the west, to the Mobil with 38 feet, to the Tenneco well with no separation at all.

This would mean that our proposed location would have less pay than the Mobil State S No. 1, and the location in the Northwest of the Northeast could encounter some pay, but it would be thin since the well drilled in this location would offset, a diagonal offset a dry hole to the Northwest which did not have any separation on the microlog.

I have tried to correlate these pay zones as they come through and have numbered them A, B, C and D. When the reef margin reefed up in the Gulf State R No. 2 its pay is developed in the top, and it looks like it has, Zone A would go to the west and then would pinch out as this margin thins as we go on to the Gulf well. The Pay B would be in the upper part of the reef margin and occurs in the Gulf State R No. 1 and occurs in the Gulf State R No. 2. It appears that

the C zone, which I think will be the main pay zone to the north, and in this area occurs in the State R No. 1 and in the R No. 2. Then Unit D is a broken thin pay section that is present in all three of the wells.

Q Now, does that indicate to you, Mr. Burleson, that a well drilled at the location proposed by Burleson and Huff would possibly be productive from at least two pay zones?

A Yes, sir, two units. I wouldn't call them pay zones, but two streaks of permeability that would develop in our reef margin.

Q And what is your conclusion as to a well drilled on the Gulf acreage of Lot No. 4?

A A well drilled over here would be a diagonal offset to a dry hole which did not have any separation on the microlog and would be further away from the largest build-up which occurs in the State R No. 1. Also, I think it's interesting that the high structural well -- Now, this reef margin isn't a structural unit. The high structural well, say on a G Shell is the Mobil well, and it has less pay than a structural lower well which is the State R No. 1.

Q Would this appear to you to indicate that all of the Gulf acreage in Lot No. 4 is productive?

A I would think that, as I have shown on this cross section, they have a chance to encounter some kind of

development in the unit C as shown on this cross section.

Q Now referring to what has been marked as Exhibit No. 6, would you identify that exhibit, please?

A Exhibit 6 is my structure map on the top of the main reef margin which is again the top of the first massive porous lime body which occurs in the section which is the producing horizon in the North Anderson Ranch Field.

This map shows that there are really two areas of production in the North Anderson Ranch Field proper. One would be the production that occurs in the Gulf State R No. 1, the Gulf State R No. 2 and the Mobil S No. 1, and this would be wells that were on the plunging nose that occurs in the top reef build-up here in the Gulf State CLA No. 1, as we go, we have north dip as we go down dip to this point. The other production in the North Anderson Ranch occurs up on the east flank of the anomalous area centered around the T.P. Lane Mills Unit, located in Section 32.

I have shown a barrier on the dotted line coming across here which is based on engineering data which will be presented later to show the reservoir characteristics in this part of the field are entirely different than the reservoir characteristics to the wells to the north.

This map shows that our proposed location should be lower than the Gulf, Eddy Lea State No. 1 that is presently

dearnley-meier

reporting service, inc.

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

1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87101
1205 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO 87108

staked our drilling which would be the Southeast of the Northwest of Section 2; should be flat or approximately or a few feet higher to the Mobil S No. 1 and would be approximately -- and would be higher than the Gulf State R No. 1 on this reef margin. Our proposed location out there in Section 4 should run thirty to forty, thirty to thirty-five feet long on this interpretation to our proposed well in Lot 3.

MR. KELLAHIN: Were Exhibits 2 through 6 prepared by you or under your supervision, Mr. Burleson?

A Yes, they were.

MR. KELLAHIN: We will offer in evidence Exhibits 2 through 6.

MR. NUTTER: Applicant's Exhibits 2 through 6 will be admitted in evidence.

(Whereupon, Applicant's Exhibits 2 through 6, admitted in evidence.)

Q (By Mr. Kellahin) Now, on the basis of your testimony, Mr. Burleson, do you find quite a variation in the pay as you move across this field?

A I think the cross section AA Prime shows that there is a variance of pay between the wells in this particular segment of the North Anderson Ranch Field. By the way, these are the three wells that are productive from this segment or south of the barrier as shown on my structure map.

Q Now, in your opinion based solely on your study of the geology, would a well located on the Gulf acreage to the west be able to drain the Burleson and Huff acreage?

A Well, it should be structurally lower to the acreage in Section 3 and, because it is a diagonal offset to a dry hole which had no microlog separation and no permeability as a basis for permeability, I would say that a well here would probably not drain the oil under Lot 3.

Q Now, would the Lot 3 be subject to drainage, in your opinion, again based on your study of geology, by the Gulf Well No. 1 presently drilling to the south of the Burleson and Huff acreage?

A Yes, sir, I think that the current, the well in the Southeast of the Northwest of Section 2 should have a like pay section or a similar pay section that we would encounter in Lot 3, and it will be a little, some structurally higher than our location so this well is in a prime position to drain the, drain Lot 3.

Q Do you have anything further to add to your testimony, Mr. Burleton?

A No, sir, I don't.

MR. KELLAHIN: That completes the direct examination of this witness.

MR. NUTTER: Are there any questions of Mr. Burleson?

dearnley-meier reporting services, inc.

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

1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87101
1205 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO 87108



CROSS EXAMINATION

BY MR. KASTLER:

Q Mr. Burleson, are you familiar with the drillstem tests that were made in conjunction with the Tenneco Gulf State B Well?

A The drillstem test as shown on Cross Section AA Prime is marked on the cross section shows G.S.T. 9890 to 9921, open 90 minutes recovered 105 feet of slimy oil and gas mud and 50 feet of muddy oil. Initial shut-in pressure 3220 flowing pressure 63 to 65 pounds, and the final shut-in was 3507.

Q In other words, it disclosed the presence of some hydrocarbons?

A Yes, it did.

Q And that seems to dispute your conclusion that there is no porosity in that well or in the area of that well, isn't that correct?

A Well, I don't think I use the term porosity. I use the term that I am going to equate, for this cross section here, microlog permeability as a basis for pay, and if you notice I extend this unit over and tied it into this well because there is some slight indication from these pressures that this well may be tied into this unit.

Q Okay, but you are actually taking a hypothetical

fact and saying that that has predominance over actual presence of some hydrocarbons?

A Well, but I don't quite understand what you mean. Because there is no microlog separation.

Q Yes.

A Well, I have to use a criteria and I think it's the basis for the oil field and this is a good tool, in reef body, that you certainly need some kind of a good permeability to have a producer. I consider this as a dry hole.

Q You believe that acreage that that well is drilled on is thoroughly condemned?

A Yes, sir. I do.

Q And yet you bought that as a portion of a 200 acre lease just recently?

A Yes. We paid a minimum price for this and this acreage was put into the unit. We really only wanted the acreage that lies -- if we could have bought just what acreage we wanted we would have bought this 40-acre tract here, but as the land sale came up they put this unit and this as a partial in that tract.

Q Now, that Southeast Southeast of Section 32 is also covered by dry hole, is it not?

A Yes, sir, it is.

Q Did you testify that there was any pay section in

the area of that well?

A I have this log. Humble ran pipe and tested this and the pulse and the production tests are noted on this cross section in the logs. They were not able to complete a well although they did have some good shows in it and produced, swabbed three barrels of oil and 72 barrels of water in this upper A segment and then down in the main reef margin they swabbed six barrels of oil and 40 barrels of load water. This section did show on the sonic log some six, several streaks that had from up to six per cent porosity in it, but this well was not completed as a producer.

Q Now, Mr. Burleson, you testified that the acreage you were more interested in rather than the acreage condemned by the Tenneco A B or Gulf B well was the acreage which would be described as Southeast of the Southwest of Section 32, is that correct?

A Just a moment ago, that this would, this does have for a little bit the common boundary with our well. Also, we only, as previous testimony has shown, we only had this 50-acre tract and we really would have liked to have had some other acreage to go with our deal and this was open so we picked this land up and this is the way the State Land Office put it up that we were required to bid on this 160 on this tract. I personally like this 40 better than the rest of this.

I think my structure map shows that I think this 40 here is a little bit higher than this.

Q Based on the predominance of the data you have used in your calculations, that is almost identical in position and its possibilities of having any reef margin is almost identical with Gulf's Lot 4, is it not? Immediately north of Gulf's Lot 4?

A Well, there are some strange things as I think I first said that this reef margin, in trying to answer all the problems involved, are hard to do, and hard to say that here is a well that's a dry hole and yet it's as high as some of these producers to the east. In other words, this well is probably in the area of our, of our barrier that comes through there which would show just exactly the exact location of that barrier, we are not sure, which would, I think, would account for why this is a dry hole.

Q You believe, had the well been located somewhere else on that same 40 acres, that it wouldn't have been a dry hole?

A I personally think if Humble had drilled this down in this corner or this corner, they might have had a chance for a well.

Q You also believe that had Gulf's C, CLA well, had it been located somewhere else on its 40 acres, it might have

dearnley-meier

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

1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87101
1205 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO 87108

encountered far better production than it did?

A No, I'm not going to say far better production because this has been a good well, although it has not performed like the Mobil or the Gulf State R No. 1, but this well I feel definitely is a reef well and although I have, Gulf has never released anything to the log service other than the Gamma Ray Neutron. I have never seen an electric log on this well so my entire interpretation is going to have to be based on this Gamma Ray.

MR. KASTLER: I believe that's all.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Burleson, now on your cross section, Exhibit No. 5 there, you show these pays A, B, C and D, and you show the amount of separation, microlog separation, that each one of those wells has. How would you account for the fact of the three wells on the right, the one that has the least separation had the biggest initial potential and the one that had the most separation had the smallest potential? Isn't the separation an indication of permeability and porosity?

A Yes, sir. It is. But wouldn't it, to go back and equate that and say how have these wells done, and how has the production history on these wells performed, and the production history today, the Gulf State R No. 1 which

had the maximum amount of microlog separation in pay has produced more oil than either the Mobil or the State R No. 1.

Q Is it the only one of the three that's a top allowable well?

A No, sir. The Mobile State S No. 1 is a top allowable well. The Gulf State R No. 2 is producing about 8 per cent, John? It has a real high cut of water. John will have those figures, but I believe in the range of, say 60 to 70 per cent water.

Q What is the cumulative production history of those three wells? Do you happen to know that?

A The Mobil S has approximately 450,000 barrels of oil, and the Gulf State R No. 1, which was drilled at approximately the same time has 500,000, and the Gulf State R No. 2 which was drilled I think three or four years later has approximately 225,000 barrels of oil.

MR. PORTER: You say that G.L.A. 1 has about 200,000?

THE WITNESS: Yes, right, this well has approximately 200,000 barrels of oil.

MR. PORTER: I see.

A This well came in making the water.

MR. KELLAHIN: Which well are you referring to?

THE WITNESS: Excuse me, the Gulf State R No. 2 came in making a high cut of water and I think it counts that

water may be coming or is suggested from this cross section that the water may be coming from this upper A Unit that is not present in these wells.

Q (By Mr. Nutter) It is perforated a little bit in the B Unit, however, is it not?

A Yes, it is.

MR. NUTTER: Are there any other questions of Mr. Burleson? He may be excused.

(Witness excused.)

MR. KALLAHIN: Our next witness is Mr. John Yuronka.

JOHN YURONKA, called as a witness on behalf of the applicant, having first been duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KALLAHIN:

Q Would you state your name, please?

A John Yuronka.

Q What business are you engaged in, Mr. Yuronka?

A I am in the consulting petroleum engineering business.

Q Where are you located?

A Midland, Texas.

Q Have you testified before the Oil Conservation

Commission of New Mexico and made your qualifications a matter of record here?

A Yes, sir.

MR. KELLAHIN: Are the witnesses' qualifications acceptable?

MR. NUTTER: Yes, sir, they are.

Q (By Mr. Kellahin) Mr. Yuronka, in connection with your work as an independent consultant, have you done any work for Burleson and Huff in the areas involved in the application now before the Commission?

A Yes, sir, I have.

Q What did you do in that connection?

A I ran some production decline curves on the wells in the immediate vicinity of the Burleson and Huff Tract and production decline curves were sent water versus time and bottom hole pressure versus cumulative production.

(Whereupon, Applicant's Exhibits 7 through 14 were marked for identification.)

Q Now, referring to what has been marked as Exhibit No. 7, would you identify that exhibit and discuss the information shown on it.

A Exhibit No. 7 is a production decline curve on the Mobil New Mexico State S Well No. 1. This well is one located East of the Burleson and Huff well. The well has

produced at the allowable allocated to it ever since its completion. The well is presently flowing at a thousand pounds flowing pressure, tubing pressure. As you can see from the gas plotted as marked on the production decline curve, the gas production on this well, the casing head gas production has been relatively constant and has averaged approximately 1600 throughout the producing life of the well.

The cumulative production for this well, as of November 1, is approximately 450,000 barrels of oil.

Q Now, referring to what has been marked as Exhibit No. 8, would you identify that exhibit?

A Exhibit No. 8 is per cent water versus time on the Mobil Well, New Mexico State S Well No. 1. As you can see on this well, the first oil production shown was in March of this year, and as of the last month recorded and shown on this curve, October, the water production is only eight per cent.

Q That is quite recent development, too, is it not? The production of water?

A Yes, it has just occurred since March of this year.

Q Now, referring to what has been marked as Exhibit No. 9, would you identify that exhibit?

A Exhibit No. 9 is a production decline curve on Gulf Oil Corporation's Lea R. State Well No. 1. This well is two locations east of the Burleson and Huff Tract. The well,

as you can see, has been top allowable since its completion until June of this year when I believe the well was put on artificial lift. If I may, just for simplicity's sake here, I would like to submit Exhibit No. 10 which is per cent water versus time on this well and we can discuss both of them at the same time.

As you can see, the water production on this Gulf Oil Corporation's Lea R State Well No. 1 has been somewhat erratic since its completion in June of '58. Water production first occurred in June of '64, which was eight per cent. This eight per cent held for approximately a year with a gradual increase as of about the end of last year. The well was up to per cent water production of thirty-three per cent and has just recently gone up to thirty-nine per cent.

If you will refer back to your production curve, you will note that approximately the time this thirty-nine per cent water production occurred is when the well began to exhibit a decline in its production and the latest production is approximately 1950. I can give you the exact amount here, 1970 barrels of oil for the month of September.

I would like to point out several things in regard to Exhibit No. 9, the production decline curve. The average GOR for this well has been approximately 1400. It

started off at about 1300 and is now up to 2100. The cumulative production is now up to 2100. The cumulative production as of 11/1/66 is 515,000 barrels of oil.

These are the two best wells in the field and this can be, by referring to Exhibit 5, is that the one that shows the separation of zones?

MR. NUTTER: Right.

A That cross section was showed that these wells that we have just discussed here, the Mobil and Gulf Lea R State No. 2 have the greater amount of separation on the microlog.

Q What does this indicate as to the producing mechanisms in this particular area?

A This would indicate a possible water drive reservoir which I will go into detail on just a little later.

Q Now, have you examined the producing characteristics of any of the other wells in the area?

A Yes, sir. I have not drawn curves -- well, I've drawn curves but I do not have them for submittal at this time; if the Commission would care for them, why I would be only too happy to do so. I have drawn a production decline curve in water, per cent water versus time on the Gulf State CLA No. 1 which is in the Southwest of the Northeast. I have drawn the same two curves for the Gulf Lea State Well

No. 2, and I have also drawn the same curve for Union State A Well No. 1. The Union State A Well No. 1 is the diagonal Northeast offset to the Mobil Tract.

Just briefly the Gulf State CLA No. 1 was completed in June of '58. The well was apparently a limited capacity well within a very few months after its completion. The GOR has never been excessive on the well and cumulative production on abandonment in '65 was 196,000 barrels of oil.

In regard to water curve per cent water versus time the first six months of the well's life, there was not water reported then for the next three or four months, we had about five or six per cent, then it shot up to thirty per cent and produced at approximately 40 per cent for two years, then the water production went over eighty per cent and finally, of course, eventually the one hundred per cent upon abandonment.

The Gulf Lea R. State Well No. 2, the production has been fairly stable on this well since its completion in April of 1962. The GOR has not been excessive, the cumulative production, as of November the 1st, 1966 was 236,000 barrels of oil. This well within three months after its completion jumped up to 55 per cent water and held at this rate for approximately two years. The well is now producing at a rate of about, per cent water of about 85 per

cent. Now, I might add that while this well was producing this 55 per cent water reported, it was at this stabilized production rate which would be the top allowable.

Now, in regard to the Union State A Well No. 1, this is a well, if you will note on the Exhibit 6, I believe it was prepared by Mr. Burleson. It is the well, just on the other side of the barrier as shown by him on his structure map. This well, as I mentioned, is the diagonal Northeast offset to the Mobil Well. It was completed in November of '60. It apparently -- it just exhibits different characteristics than the wells to the south. It started off with a GOR of approximately 1400; it is now over 3,000. The cumulative production as of November is 262,000.

The water production on this well, the great influx of water occurred in the beginning in 1965 and the well is now producing over 75 per cent water. Those are the curves that I have prepared that I will now, if the Commission would desire a copy of these curves we would be only too happy to present it to them.

MR. NUTTER: Probably wouldn't hurt to have them since you have referred to all of those statistics.

THE WITNESS: Okay.

Q (By Mr. Kellahin) Now, in connection with the Union State A Well No. 1, you stated that has different

producing characteristics. Do you draw any conclusion as to any basic difference in the reservoir on the basis of this?

A Before I go into detail on this, I would like to submit some other curves and you can have three or four of them and we can look at all of them at the same time, and I think it will be easier for all of us to understand it in the discussion.

I have drawn a production decline curve for the Union's North Anderson Ranch Unit Well No. 1. This well is two locations north of the Union State A Well No. 1. This particular well was completed in --

MR. PORTER: Are you going to refer to it as an exhibit? That is Exhibit No. 11, is that correct?

MR. KASTLER: Yes.

THE WITNESS: Yes.

A Let me-- I will also present as exhibit, a bottom hole pressure versus cumulative curve on Mobil New Mexico State S Well No. 1.

Q That is Exhibit No. 12, is that correct?

A Yes, sir. I will also present an exhibit, Union Oil Company North Anderson Ranch Unit Well No. 1 bottom hole pressure versus cumulative.

Q That is Exhibit No. 13?

A And also as Exhibit 14, I will present bottom hole

pressure versus cumulative on Union Oil Company State A Well No. 1.

In regard to the production decline curve on the Union North Anderson Ranch Unit Well No. 1, this well is the best well in the North Anderson Ranch Wolfcamp Pool, other than the Mobil New Mexico State S and the Gulf State R Well No. 1. As of the first of November, it has produced 340,000 barrels of oil. This well makes no water at the present time. As you can see, the GOR started at approximately 1500 and is now over 4,000. The curve, the well is also beginning to exhibit a decline, it has the characteristics of a typical solution gas drive reservoir well.

Now, in regard to our bottom hole pressure versus cumulative curves, if you will note Exhibit 12, Mobil New Mexico State S Well No. 1, these are bottom hole pressures taken on the Mobil State S Well No. 1. I have drawn a minimum and a maximum. The minimum as you can see to the extreme right end of the paper, goes down to 400 pounds which gives the well a million and a half barrels of oil. If you take the maximum, why you are only down to about 2600 pounds and you have recovered a million and a half barrels of oil. Now, we know in a water drive reservoir that usually, or invariably a well will water out before it will recover these types of reserves. But in looking at this curve as compared to the two

union wells it is quite apparent that you are dealing with a little different type of reservoir because of the pressures involved.

If you -- both union wells, if you decline your bottom hole pressure versus cumulative, you come up with approximately 450,000 barrels of oil. This certainly is quite contrary to the bottom hole pressure as shown in the Mobil New Mexico State S Well No. 1.

Now, in regard to several things, it would be apparent from the information we have here that from this barrier south to the dividing line it would be apparently, that from this barrier on down to the dividing line shown for the North Anderson Ranch Wolfcamp and Anderson Ranch Wolfcamp Pool we have a little different type of reservoir as compared to the northern portion of the North Anderson Ranch Wolfcamp Pool.

And the water encroachment from the information we have at the present time, would appear to be coming from the south and the east, from the production history that is apparent in the wells we have. Just taking into account this Mobil Well which is the New Mexico State S, the abandoned Gulf State CLA No. 1 and the two wells on Gulf's Lea R State No. 1, we come up with a cumulative production to November the 1st of this year of 1.4 million barrels of oil.

Consequently, we go to the point in regard to

reserves. I am taking the arithmetic averages of these four wells and allocating 350,000 barrels of oil to this tract. This is as I say, the cumulative production as to date.

Q Do you have any bottom hole pressure history on any of the Gulf wells?

A No, sir. In regard to the area between the barrier and the boundary line between the two pools, we do not have any other bottom hole pressure history other than the Mobil well.

Q Now, in your conversion as to this barrier, Mr. Yuronka, is that to the north of the barrier you have a solution drive reservoir and to the south of the barrier you have a water drive reservoir. Is this correct?

A From the information that we have, that I have presented here as testimony, this would be a very strong indication as far as we are concerned, yes, sir.

Q Now, you stated the reserved calculation that you have made on the Burleson and Huff tract in your opinion, is it economical to drill on this tract for the purpose of producing oil on a 50-acre unit?

A Yes, sir. In regard to economics, as I mentioned previously, I think the Burleson and Huff well in the location shown would produce approximately 350,000 barrels of oil. The estimated cost of a completed well into the tanks

with artificial lift is \$150,000. This is a 75 per cent lease so if you take the 350,000, multiply it by 75 per cent lease and \$2.00 a barrel, you can come up with \$525,000, divide this by the one fifty that it would cost for the well and you come out with the ratio of income to investment of 3.5 to 1.

Q Now, you heard Mr. Huff's testimony in connection with Exhibit No. 1, did you not, in regard to the units that have been formed surrounding the Burleson and Huff acreage?

A Yes, sir.

Q And it would appear then that the only acreage that could be pooled with the Burleson and Huff acreage is the Gulf Lot No. 4 to the west?

A Yes, sir.

Q Do you have an opinion as to the feasibility of such a pooling from the engineering point of view?

A Perhaps what I should do, is, in order to recap all of the technical testimony presented -- the evidence we have here would indicate that from the barrier on south, as mentioned previously, we have a different type reservoir from the barrier on south to the dividing line between the North Anderson Ranch Wolfcamp Pool and the Anderson Ranch Wolfcamp Pool itself. It would appear from the production history we

have, plus the bottom hole pressure of the one well that is available in here that it would appear to be a water drive reservoir and not a solution gas drive reservoir.

Now, under the presently existing pool rules south of the common boundary line from between Township 15 South and 16 South the locations as called for in the pool rules say a well should be either in the Southeast quarter or the Northwest quarter of a Governmental quarter section. Now, we feel that if a well were drilled in this Northwest quarter of the Northwest quarter the correlative rights of Burleson and Huff would be violated to this extent. We have shown here a thinning of a pay of the reef margin as detected by Mr. Burleson coming to the east.

MR. NUTTER: Coming to the west?

THE WITNESS: Pardon me, to the west.

A We know that from what we have seen here that as you come to the west it gradually becomes thinner; the pay will, of course, change as you get into a thinner section. We feel that if a well were drilled in the Northwest quarter it would certainly not come anywhere close to producing the amount of oil that the Burleson and Huff tract -- Burleson and Huff location well would produce.

Also in order to affirm this further, may I make this one additional statement? As we go west, we also

approach this possible barrier. We do not have enough control, there is not enough control geologically to indicate what direction this barrier possibly might go but we do know that from the production history of these wells that there is a variance. Now, we come down to the variance of pay that exists which is in Exhibit 5 on microlog separation. It would be apparent that the amount of a pay that would be acquired by Mr. Burleson -- that would be encountered by Mr. Burleson's interpretation would be a very slim, very thin pay as compared to a location to the well in their location.

I would like to point out one thing in regard to this particular cross section. You can note the variance zone here. This variance is not from eighty acres to eighty acres. It's from forty acres to forty acres from here to here to here. Now, if a variance, such a variance can occur in forty acres we feel it would be at least the same, perhaps even greater on an eighty acre spacing.

Now, in regard to interpretation here if any well could drain the Burleson and Huff tract, even with the variances of pay that occurs from forty-acre location to forty-acre location, probably the well most apt to do it would be the Gulf well. Now, we do know and no one I'm sure will argue the fact there has been some drainage from the Burleson and Huff's tract over to the Mobil location. Now, in regard to,

in regard to the Gulf well, I might add that --

MR. PORTER: You are talking about the Gulf proposed well?

THE WITNESS: Yes, the proposed Gulf location which is the --

MR. KASTLER: Eddy State No. 1.

THE WITNESS: NCTA No. 1.

MR. KASTLER: And it is now drilling?

THE WITNESS: It is drilling.

MR. KASTLER: Yes.

THE WITNESS: Well, fine. This well is located as close as possible to the boundaries to the -- as they can get to the corner of that lease line and this could be some indication that they might not exactly be sold on some of the acreage out here as far as drilling location is concerned.

Now, as far as drilling an unnecessary well, Burleson and Huff do not feel that this is an economic waste or this is the drilling of an unnecessary well as presented in my reserve. We are talking about approximately 3.5 to 1 on your money. On the allowable you are talking about approximately a twelve-month pay out at top allowable and, of course, the reserves that we have presented will substantiate the drilling of a well on that tract. As stated by Mr. Huff, the only thing they request is the right to drill a well on their

tract and be allocated the allowable as prescribed or as requested in their application.

Q (By Mr. Kellahin) Were Exhibits 7 through 14 prepared by you or under your supervision?

A Yes, sir, they were.

MR. KELLAHIN: At this time I offer in evidence Exhibits 7 through 14 conclusively.

MR. NUTTER: Applicant's Exhibits 7 through 14 will be admitted in evidence.

(Whereupon, Applicant's Exhibits 7 through 14 admitted in evidence.)

Q (By Mr. Kellahin) Mr. Huronka, in your opinion, is it necessary for Burleson and Huff to drill as they propose in this application in order to protect their correlative rights?

A Yes, sir.

Q In your opinion, would their correlative rights be violated were they not permitted?

A Yes, sir.

Q Will they violate the correlative rights of offset operators by drilling and producing a well at this proposed location in your opinion?

A No, sir.

Q Dedicated 50 acres to the well?

A No, sir.

MR. KELLAHIN: That's all I have on direct examination.

MR. NUTTER: We will recess the hearing until 1:30 at which time the witness will be subject to cross examination.

AFTERNOON SESSION

Case 3495 (continued)

MR. NUTTER: Case 3495 in the hearing will come to order, please. Mr. Yuronka is on the stand. He has just finished his direct testimony. Does anyone have any questions of him? Mr. Kastler.

CROSS EXAMINATION

BY MR. KASTLER:

Q Mr. Yuronka, you have concluded that it was economical to drill on a 50-acre tract, being Lot 3. Do you have the same conclusion with respect to Lot Number 4 of Section 2, 16, 32?

A I wouldn't invest my money in the well.

Q Good. Now, have you testified -- I don't believe you were directly asked the question of whether, in your opinion, this application was in the interest of prevention of waste.

A Well, I don't know if the application has that or not.

Q However, you have testified that it was economical to drill on the 50 acres being in Lot 3?

A Yes, sir.

Q And for that testimony, your statement was that,

therefore, this application would not result in drilling of an unnecessary well?

A Yes, sir.

Q But had you considered the fact that this might either result in the creation of a waste if Lot Number 4 remains undrilled because it is economically unfeasible to drill in Lot Number 4?

A I don't quite understand your question and if I don't answer it quite right, why, you can --

Q All right.

A You're saying here that the well on Lot Number 3 is an unnecessary well as far as Gulf is concerned?

Q No, no. What I am saying is, if you say that you are confining your interest alone to drilling the one-half of the proration unit, that it's most logical to create for the drilling?

A Yes, sir.

Q If you are going to confine it alone to drilling on Lot 3, then your conclusion that this application doesn't result in the drilling of unnecessary wells is not quite accurate because you must also take into consideration that it would render the drilling of an unnecessary well to condemn Lot Number 4.

A Well, if you drilled a well on Lot Number 4, though, you could go ahead and if Gulf felt that location was productive, they could go ahead and drill that location and they have some acreage to the west that they could dedicate.

to it, so they would not be hurting as far as allowable is concerned.

Q Do you know of any instances in which the Oil Conservation Commission in recent years has granted a proration unit across a section line?

A I may be wrong, but I think I testified in one that was approved. Now, I'm not sure. I would have to -- it was back in a gas, in a Jalmat Gas proration unit, possibly, I don't know.

Q In the Jalmat Gas case, you might recollect there was a Gulf well that has, I think, 160 acres dedicated to it, or 640, and it crosses four section lines, but that was done long ago. It wasn't confirmed or it wasn't created at that Jalmat Gas hearing that I believe you had reference to.

A But there has been a unit created that has crossed section lines, whether it's a gas or oil well, the unit has been created.

Q And that was done only long, long ago.

A Well, regardless of the time, as far as I'm concerned, it was done.

Q Do you believe that the findings and conclusions that you have reached by making your curve analyses, your cumulative production and water production, gas-oil ratio analyses actually have a single thing to do with condemning the

1-4
3495

dearnley-meier reporting services, inc.

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

1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO
1203 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO

possibility of production in Lot Number 4?

A My testimony in regard to my curves, as far as the curves I presented, all that -- to me, all they presented was the possibility that you might have a water-drive reservoir in that area.

Q Yes.

A Mr. Burleson, I believe, is the one that put on a cross section and testified in regard to the productivity of Lot Number 4. Now, the statement I made was the fact that since the section is thinning --

Q Assuming that Mr. Burleson testified --

A Well, I am assuming -- well, I am assuming that Mr. Burleson's testimony is correct.

Q Yes.

A I feel that he is probably as well versed as anyone else and I'm sure there might be a little difference of opinion, but nevertheless, his interpretation is such that it is thinning. This is a general geological concept, I believe. Mr. Burleson, I think, can testify to this that this is a general geological concept as far as that pay thinning as you go to the west.

Q But that's not the best testimony. That is on hearsay. You have heard him testify to that?

A No, sir. No, sir, I haven't heard him -- I don't

1 -5
3495

dearnley-meier

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

1120 SIMAS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO
1203 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO

think he testified to that.

Q Oh, I see. How does he reach a conclusion?

A As far as -- this is a general geological concept that I think this is -- I believe that the Lazy J Pool possibly conforms to this situation.

Q The concept is in words of an ordinary lawyer that you try and stay away from a dry hole, isn't that correct?

A Right.

Q But it's nothing more than that, is it?

A No, sir.

Q And Mr. Burleson did testify that he has encountered thickening and thinning --

A That's right.

Q -- in this reservoir very much so?

A Yes, sir.

Q And there is no direct evidence and there can't be until you have actually proven this with a drilling bit of whether or not Lot 4 is capable of production.

A I agree with you 100 per cent on that, sir.

Q And in case Number 2507, which was heard sometime in 1962, and resulted in the creation of a special pool, the North Anderson Ranch Wolfcamp Pool and special pool rules found as the finding of fact that one well would drill in excess of 80 acres, did it not?

1 -6
3495

dearnley-meier

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO
1203 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO

PAGE

57

A That was the -- that was the conclusion reached at that time, yes, sir.

Q I beg your pardon. I meant drain.

A Yes, sir.

MR. KASTLER: I believe that's all.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Yuronka, is there anything, as far as the reservoir fluid characters to indicate that there is any difference in the south half, below this barrier in the north half --

A No, sir.

Q Are the fluid characteristics --

A No bottom hole samples or anything of that sort was run. The only thing we have to base it on is the bottom hole pressures.

Q And if you take a north-south cross section, there is no evidence, geologically, of any change or difference between the north half and the south half?

A No, sir.

Q It's only on these gas-oil ratios and the bottom hole pressure decline and on the water test --

A Yes, sir.

Q -- that you find these differences?

T -7
3495

dearnley-meier

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

1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO
1203 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO

MR. PORTER: No gravity difference?

THE WITNESS: No, sir, not any material difference.

Q (By Mr. Nutter) Have you calculated under the special formula which is presented in the rules for the North Anderson Ranch Wolfcamp what the maximum allowable for a 50.3 acre unit is under some normal unit allowable?

A Under Rule 3, the allowable for that, for the Burleson and Huff 50.3 acre tract would be 202 barrels of oil per day.

Q And what normal unit allowable were you using there?

A I was basing it on 50 barrels of oil per day, as the basic unit allowable.

Q What would the allowable for an 80 acre unit be?

A Let's see. 189 -- it would be 239.

Q So this well would have 202 barrels as compared with 239. Now, the other three wells that are in this same tier of lots are approximately -- well, I guess that one well, that Gulf well to the east has a full two units dedicated to it, doesn't it?

A Yes, sir.

Q Of approximately 100 acres dedicated to it?

A No. I would believe this would be -- I believe -- is this the unit you're talking about?

Q No. The green one there.

T1-8
3495

dearnley-meier

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO
1203 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO

A The green one? Yes, sir, I would think that that would be approximately 100 acres.

Q And then the blue one there is approximately 90 acres?

A That would be about 90 acres, yes, sir.

Q And the Mobil well has about the same acreage that your proposed well has?

A Yes, sir.

Q About 50?

A Yes, sir.

MR. NUTTER: Are there any other questions of Mr. Yuronka? He may be excused.

(Witness excused.)

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

MR. KELLAHIN: No, I believe that is all, Mr. Nutter. Thank you.

MR. NUTTER: Does anyone have anything they wish to offer in Case 3495?

MR. KASTLER: I have a statement.

MR. NUTTER: Please proceed.

MR. KASTLER: Gulf Oil Corporation objects to the application of Burleson and Huff for a non-standard proration unit and a non-standard location on the grounds that a good cause for such exception simply does not exist, and further,

-9
3495

dearnley-meier

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

1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO
1203 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO

for the reason such action would be highly detrimental to Gulf.

At all times material to this proposal involved in this application, Gulf has expressed its concern over the fact that Lot 4 of Section 2 would be isolated unless the drilling of an unnecessary well were undertaken at Gulf's sole cost, list and expenses.

The present rules for the North Anderson Ranch Wolfcamp Pool, however, provide ample protection by establishing orderly development with a minimum number of wells. In good faith, Gulf has proposed drilling a well at a standard location in Lot 4 to form a 100 acre proration unit with these applications and our proposition has been refused. The Commission has already determined that one well will drain in excess of 80 acres. If by any chance, the Commission should authorize applicant's drilling on Lot Number 3, we think it is only fair that the Commission also provide that it be conditional upon Gulf having the opportunity to pool Lot 4 upon payment of its proportionate share of the well costs.

Finally, if the Commission should overrule Gulf on all of these requests, we still consider it necessary to point out that the non-standard unit allowable is provided for under Rule 5 of the pool rules rather than under Rule 3. In other words, applicants, if successful, should only be allowed to

1-10
3495

dearnley-meier

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

1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO
1203 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO

PAGE

61

produce five-eighths of the full 80 acre allowable or otherwise inequity would result. That's all.

MR. NUTTER: Mr. Kastler, did I understand you correctly to say that Gulf stands ready, willing and able to share with Burleson and Huff in the drilling of a well in Lot 4?

MR. KASTLER: In Lot 4, yes.

MR. NUTTER: And you would also be willing to share in the drilling of a well in Lot 3?

MR. KASTLER: Yes, sir. If the Commission is going to approve an unorthodox location, the drilling in Lot 3 with the pooling of Lot 4 into a 100 acre unit would be acceptable to Gulf.

MR. NUTTER: Mr. Kellahin?

MR. KELLAHIN: If the Examiner please, in regard to the willingness of Gulf to participate in drilling a well on Lot 4, I think our witness testified that there was just a general communication to the effect of "Why don't you join us?" No proposition was ever made to Burleson and Huff, firmed up any proposal of that nature, and the testimony of the witness from Sunray Midcontinent certainly showed, Sunray D-X certainly showed that efforts had previously been made as late as last March to drill such a well on, and to unitize or to farm out or to give a farm-out or to take a farm-out involving this

particular acreage and it has been refused so there was certainly no reason for Burleson and Huff, knowing this background, to approach Gulf with any proposition other than we asked for a waiver for the well which they proposed and that is exactly what they did.

Now, in regard to isolation of the acreage, as Mr. Huff testified, and is readily apparent from the map, our Exhibit Number 1, there were several possibilities open to Gulf at the time they spudded in their well immediately south of the Burleson and Huff acreage.

At that time, the well to the east was shut in and abandoned. Apparently watered out. Now, that doesn't necessarily condemn all of the acreage in that unit and that 40 acres was available for dedication to the Gulf well which is presently being drilled, leaving then open another 40 acres which could have -- in the same section, which could have been dedicated to their Lot 4 being the southwest quarter of that area; or they have, as it has been testified, they had the acreage in the adjacent section which could be still dedicated to that or could move their present dedication on their drilling well if they so see fit. And they are not isolated; they have acreage available to dedicate to a well in Lot 4 if they feel like drilling a well in Lot 4.

There is nothing magic about section lines and they

have been crossed before and this is particularly true on an edge location such as we believe Gulf acreage to be and our testimony shows it's probably nonproductive or a very limited production available in Lot 4 and that's why we don't want Burleson and Huff's well and our testimony supports this.

Now, the testimony clearly shows the formation ascending to the west. It clearly shows the basis of drilling experience, the Tenneco well up there, that probably the Gulf acreage is nonproductive, or as I say, as limited production.

Now, in connection with the dedication of acreage under the provisions of the pool rules, being Order Number S-2212, the Commission, I think, very wisely recognized that the situation such has occurred here could possibly exist when they made provision while you have 80 acre proration units and while they did specify well location. The order goes on to state that "This shall not preclude the drilling of a well in either 40 acre tract or lot, as the case may be."

Because of the nature of the formation, it was apparent that some operators might want to, with an 80-acre tract, for example, might want to drill two wells and in effect, we are in the same situation here and in effect, that's what's already been done in the area immediately adjacent to Burleson and Huff's acreage where Mobil has drilled on a lot and has one well dedicated, that area

1-15
3495

dearnley-meier

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

1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO
1203 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO

PAGE 64

dedicated to one well. Gulf did the same thing to the south and dedicated their 40 acres to one well, if they had 80 in there, I don't know whether they did or not, but at the present time they are sitting there with 40 acres open with no wells producing from it and they can dedicate it if they want to.

Now, in connection with the statement of counsel as to the provisions of Rule 5, the setting of the allowable for this unit, frankly I would say that the order is somewhat ambiguous, but I think we should bear in mind and the Commission's records will reflect this, that the Mobil well is operating and the allowable is being assigned presently under the provisions of Rule 3. Now, the authority of the Oil Conservation Commission is limited under the statutes and under the Court's decisions to the prevention of waste which the Commission took into consideration when they set up the pool rules and ordered the prorationing of production in this pool. In doing so, the Oil Conservation Commission is enjoined to protect correlative rights and by no stretch of the imagination could you say that correlative rights are being protected if the interpretation of the rule is placed that Mr. Kastler asks here.

The result of this would be that one unit of approximately the same identical size would receive an

7 -14
3495

dearnley-meier

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO
1203 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO



allowable based on one formula. The immediately adjacent unit with the same acreage and presumably the same reserves, insofar as any information that is available is concerned, would get a different allowable and that could result only in drainage and violation of correlative rights.

MR. KASTLER: You contend Rule 5 is illegal?

MR. KELLAHIN: You can answer when you get ready. I don't know what you said.

MR. KASTLER: I said you contend that Rule 5 is illegal, adopted by the Commission?

MR. KELLAHIN: I contend that the Commission, having applied by reasons of Rule 3, can only apply the provisions of Rule 3 throughout the pool and in addition to that, Rule 3 reads, "The allowable for all wells in the North Anderson Ranch Wolfcamp Pool shall be determined by applying the following formula." Now, certainly if they are going to apply that formula to the Mobil well, in order to protect correlative rights, you would have to apply the same identical formula to the offsetting unit -- that's our position.

MR. NUTTER: Mr. Kellahin, what would your thought be if the Commission should approve the unorthodox location and the nonstandard unit here and then Gulf should bring a force pooling action, I would pool that acreage in with the Burleson and Huff acreage, what position --

T -15
3495

dearnley-meier

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

1120 SIMAS BLDG. • P.O. BOX 1097 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO
1203 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO

PAGE

66

MR. KELLAHIN: My position on that, Mr. Nutter, would be that that would be a separate case which, while we would have some objection to the bringing of such an action, certainly if they want to file the application, why, they have the right to file it and we would undoubtedly protest it.

MR. NUTTER: It would be for the formation of a standard unit.

MR. KELLAHIN: Yes, sir, consisting of two lots which would result, actually, in something like 100 acre unit.

MR. NUTTER: What do the pool rules, you've got them there, what do they say a unit of the North Anderson Ranch Pool shall consist of? It would be Rule 2, I imagine.

MR. KELLAHIN: Quoting, "Each well completed or recompleted in the North Anderson Ranch Wolfcamp Pool shall be located in a unit containing 80 acres more or less which unit shall contain two Governmental quarter-quarter sections or lots joined by a common bordering site. Provided, however, that nothing contained herein shall be construed as prohibiting the drilling of a well on each of the quarter-quarter sections of the unit."

MR. NUTTER: Thank you.

MR. KELLAHIN: There is further provision, of course, under the provision of Rule 5 that with good cause shown, an exception can be granted for the drilling of a well on a single

11-16
3495

dearnley-meier

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

1120 SIMAS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO
1203 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO

quarter-quarter section or lot, and in the event it is protested, why, then it goes for hearing and that is what occurred here. We did ask for a unit under the provision of Rule 5.

MR. PORTER: Mr. Kellahin, you referred to a possible ambiguity in the rules and you mentioned a formula there under Rule 5. What does Rule 5 say about allowables?

MR. KELLAHIN: That is Rule 5 that contains the formula, Mr. Porter. Rule 5 --

MR. PORTER: Rule 5 is the one I would like to know about.

MR. KELLAHIN: Rule 5 provides that "The allowable assigned to any such nonstandard unit shall bear the same ratio to a standard allowable in the North Anderson Ranch Wolfcamp Pool as the acreage in such nonstandard unit varies to 80 acres." But this is not the way the Commission has done it in the pool and we are just asking for the same treatment that has been accorded the other operators.

MR. NUTTER: Do you have any rebuttal, Mr. Kastler?

MR. KASTLER: I don't believe so.

MR. NUTTER: Does anyone have anything they wish to offer now in Case 3495? If not, we will take the case under advisement and call Case 3496.

1-17
3495

dearnley-meier reporting service, inc.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO
1203 FIRST NATIONAL BANK EAST • PHONE 236-1294 • ALBUQUERQUE, NEW MEXICO

PAGE 68

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) ss

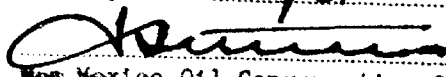
I, JERRY POTTS, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached transcript of hearing was reported by me in stenotype and that the same was reduced to typewritten transcript under my personal supervision and contains a true and correct record of said proceedings, to the best of my knowledge, skill and ability.


NOTARY PUBLIC

My Commission Expires:

July 10, 1970

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 3495, heard by me on 11/30, 1966.


Examiner
New Mexico Oil Conservation Commission