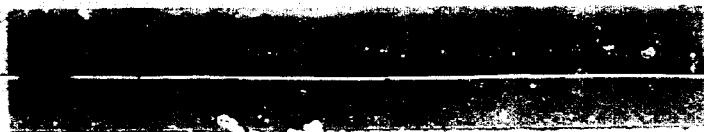


Case No.

1401

Application, Transcript,
Small Exhibits, Etc.



OIL CONSERVATION COMMISSION
P. O. BOX 871
SANTA FE, NEW MEXICO

April 9, 1958

C
O
P
Y

Mr. William Kastler
Gulf Oil Corporation
P.O. Box 669
Roswell, New Mexico

Dear Mr. Kastler:

We enclose two copies of Orders R-1150 and R-1152 issued April 3, 1958, by the Oil Conservation Commission in Cases 1400 and 1401, respectively, which were heard on March 19th at Santa Fe.

Very truly yours,

A. L. Porter, Jr.
Secretary - Director

bp
Encls.

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF THE STATE OF NEW
MEXICO FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 1491
Order No. R-1152

APPLICATION OF GULF OIL CORPORATION
FOR AN ORDER AUTHORIZING AN OIL-GAS
DUAL COMPLETION IN AN UNDESIGNATED
PADDOCK OIL POOL (DESIGNATED AS THE
SOUTH PADDOCK POOL, EFFECTIVE APRIL
1, 1958) AND IN THE TUBB GAS POOL IN
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on March 19, 1958, at Santa Fe, New Mexico, before Daniel S. Nutter, Examiner duly appointed by the New Mexico Oil Conservation Commission, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 3rd day of April, 1958, the Commission, a quorum being present, having considered the application, the evidence adduced and the recommendations of the Examiner, Daniel S. Nutter, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Gulf Oil Corporation, is the owner and operator of the T. R. Andrews Well No. 3, located 1980 feet from the South line and 1990 feet from the East line of Section 32, Township 22 South, Range 38 East, NMPM, Lea County, New Mexico.

(3) That the applicant proposes to dually complete the above-described T. R. Andrews Well No. 3, in such a manner as to permit the production of gas from the Tubb Gas Pool through tubing up to a change-over flow tube at the Paddock formation and thence through the casing-tubing annulus to the surface, and to permit the production of oil from an undesignated Paddock oil pool (designated the South Paddock Pool, effective April 1, 1958) through the tubing.

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

(5) That approval of the subject application will not cause waste nor impair correlative rights.

(6) That the subject application should be approved.

IT IS THEREFORE ORDERED:

That the applicant, Gulf Oil Corporation, be and the same is hereby authorized to dually complete the above-described T. R. Andrews Well No. 3, in such a manner as to permit the production of gas from the Tubb Gas Pool through tubing up to a change-over flow tube at the Paddock formation and thence through the casing-tubing annulus to the surface, and to permit the production of oil from an undesignated Paddock oil pool (designated the South Paddock Pool, effective April 1, 1958) through the tubing..

PROVIDED HOWEVER, That subject well shall be completed and thereafter produced in such a manner that there will be no commingling within the well-bore, either within or outside the casing, of gas, oil and gas, or oil produced from either or both of the separate strata,

PROVIDED HOWEVER, That prior to the actual dual completion the operator shall make pressure tests of the casing to prove that no casing leaks exist. In the event a casing leak is apparent the operator shall take appropriate steps to adequately repair the leak. The results of these tests shall be reported to the Commission on Form C-103.

PROVIDED FURTHER, That upon the actual dual completion of such subject well applicant shall submit to the appropriate District Office of the Commission copies of Oil Conservation Commission Form C-103, Form C-104, Form C-110, and Form C-123, outlining the information required on those forms by existing Rules and Regulations, and two copies of the electric log of the well.

PROVIDED FURTHER, That said subject well for dual completion and production shall be equipped in such a way that reservoir pressures may be determined separately for each of the two specified strata, and further, be equipped with all necessary connections required to permit recording meters to be installed and used at any time as may be required by the Commission or its representatives, in order that natural gas, oil, or oil and gas from each separate stratum may be accurately measured and the gas-oil or gas-liquid ratio thereof determined, and

PROVIDED FURTHER, That the operator shall make any and all tests, including segregation and packer-leakage tests upon completion and annually thereafter during the Annual Deliverability Test Period for the Tubb Gas Pool, commencing in the year 1959, and whenever the packer is disturbed, but not excluding any other tests and/or determinations as deemed necessary by the Commission; the original and all subsequent tests shall be witnessed by representatives of offset operators if any there be at their election, and the results of each test, properly attested to by the applicant herein and all witnesses, shall be filed with the Commission within fifteen (15) days after the completion of such tests, and further, that applicant shall file with the Commission in duplicate a packer-setting affidavit, which affidavit shall be due within fifteen (15) days of the dual completion or whenever the packer is disturbed, and

-3-
Case No. 1401
Order No. R-1152

PROVIDED FURTHER, That upon the actual dual completion of such subject well, applicant shall submit to the Commission a diagrammatic sketch of the mechanical installation which was actually used to complete and produce the seal between the strata, and a special report of production, gas-oil ratio or gas-liquid ratio, and necessary pressure determination for each producing zone or stratum immediately following completion.

IT IS FURTHER ORDERED: That jurisdiction of this cause is hereby retained by the Commission for such further order or orders as may seem necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of applicant to comply with any requirement of this order after proper notice and hearing the Commission may terminate the authority hereby granted and require applicant or its successors and assigns to limit its activities to regular single-zone production in the interests of conservation.

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

**STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION**

E. L. Nechem

EDWIN L. NECHEM, Chairman

Murray E. Morgan

MURRAY E. MORGAN, Member

A. L. Porter, Jr.

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



OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

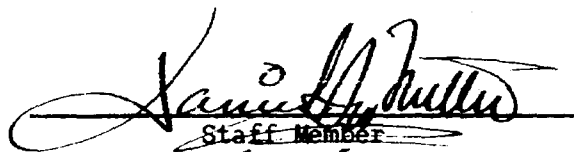
Date March 20, 1958

CASE 1401

Hearing Date 3/19/58 Santa Fe: DSN

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

Enter an order authorizing the applicant, Gulf Oil Corporation, to duly complete its T. R. Andrews Well No. 3, located 1980 feet from the South line and 1980 feet from the East line of Section 32, Township 22 South, Range 38 East. Applicant proposes to produce the Tubb gas through tubing up to a Baker Model "E" changing ~~the~~ over flow tube thence through the casing annulus to the surface. The Paddock oil zone will be produced through 2 3/8 inch tubing. This system will separate the zone adequately and the oil from the Paddock can be pumped to the surface if necessary.


Staff Member
Examiner

CASE 1399:

Application of Sinclair Oil & Gas Company for a non-standard gas proration unit. Applicant, in the above-styled cause, seeks an order establishing a 160-acre non-standard gas proration unit in the Blinebry Gas Pool comprising the W/2 SW/4, SE/4 SW/4, and SW/4 SE/4 of Section 26, Township 21 South, Range 37 East, Lea County, New Mexico, said unit to be dedicated to the applicant's J. R. Cone "A" Well No. 2 located 1980 feet from the South line and 660 feet from the West line of said Section 26.

CASE 1400:

Application of Gulf Oil Corporation for a dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its Naomi Keenum Well No. 2 located 660 feet from the South line and 1980 feet from the East line of Section 14, Township 21 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Terry-Blinebry Oil Pool and to permit the production of gas from the Tubb Gas Pool through parallel strings of tubing.

CASE 1401:

Application of Gulf Oil Corporation for a dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its T. R. Andrews Well No. 3 located 1980 feet from the South and East lines of Section 32, Township 22 South, Range 38 East, Lea County, New Mexico, in such a manner as to permit the production of oil from an undesignated Paddock oil pool through tubing and to permit the production of gas from the Tubb Gas Pool through tubing up to the Paddock oil zone and thence through a crossover assembly into the casing-tubing annulus to the surface.

CASE 1402:

Application of Neville G. Penrose, Inc. for an exception to the No-Flare Order No. R-553 for an oil well in the Tubb Gas Pool. Applicant, in the above-styled cause, seeks an order granting an exception to No-Flare Order No. R-553 for its McCallister Well No. 1, located 660 feet from the North line and 660 feet from the West line of Section 7, Township 22 South, Range 38 East, Tubb Gas Pool, Lea County, New Mexico.

DOCKET: EXAMINER HEARING MARCH 19, 1958

Oil Conservation Commission 9 a.m. Mabry Hall, State Capitol, Santa Fe, N. M.

The following cases will be heard before Daniel S. Nutter, Examiner:

CASE 1368:

Application of Ambassador Oil Corporation for an order amending Order No. R-1110. Applicant, in the above-styled cause, seeks an order amending Order No. R-1110 to substitute the Vickers-Etz Well No. 2, NE/4 NE/4 Section 30, and the Vickers-Etz Well No. 3, SW/4 NE/4 Section 30, as water injection wells in lieu of the Carper Wheatley Well No. 1, SW/4 SE/4 Section 29, and Texas Trading State Well No. 3, NE/4 NW/4 Section 32, all in Township 16 South, Range 31 East, Eddy County, New Mexico.

CASE 1395:

Application of Graridge Corporation for approval of a unit agreement. Applicant, in the above-styled cause, seeks an order approving its North Caprock-Queen Unit for purposes of secondary recovery in the Caprock-Queen Pool in Lea and Chaves Counties, New Mexico. Said unit comprises 2,887 acres, more or less, of State of New Mexico and patented lands located in Township 12 South, Range 31 East, Chaves County, New Mexico, and Township 12 South, Range 32 East, and Township 13 South, Range 32 East, Lea County, New Mexico.

CASE 1396:

Application of Continental Oil Company for a dual completion. Applicant, in the above-styled cause seeks an order authorizing the dual completion of its Hawk B-3 Well No. 4 located 1980 feet from the North line and 660 feet from the East line of Section 3, Township 21 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Terry-Blinebry Oil Pool and gas from the Tubb Gas Pool through parallel strings of tubing.

CASE 1397:

Application of Warren-Bradshaw Exploration Company for an exception to Rule 309 of the Commission Rules and Regulations. Applicant, in the above-styled cause, seeks an order authorizing the production of more than eight wells into a common tank battery and authorizing the commingling of production from two basic State of New Mexico leases, comprising the W/2 NW/4, W/2 SW/4, and SE/4 SW/4 of Section 21, and the NE/4 of Section 29, respectively, Township 17 South, Range 33 East, Lea County, New Mexico.

CASE 1398:

Application of Sinclair Oil & Gas Company for a non-standard gas proration unit. Applicant, in the above-styled cause, seeks an order establishing a 160-acre non-standard gas proration unit in the Tubb Gas Pool comprising the W/2 SW/4, SE/4 SW/4, and SW/4 SE/4 of Section 26, Township 21 South, Range 37 East, Lea County, New Mexico, said unit to be dedicated to the applicant's J. R. Cone "A" Well No. 1 located 660 feet from the South and West lines of said Section 26.

Case 1401

NEW MEXICO
OIL CONSERVATION COMMISSION
P. O. Box 871
Santa Fe, New Mexico

Date February 12, 1958

Gulf Oil Corporation
P.O. Drawer 1290
Ft. Worth 1, Texas

ATTENTION: E. Hesford

Gentlemen:

Your application for the dual completion of the Gulf T. R. Andrews Well
No. 3

dated February 6, 1958 has been received, and has been tentatively
scheduled for hearing before an examiner on
March 19, 1958

A copy of the docket will be forwarded to you as soon as the matter is
advertised.

Very truly yours,

A. L. Porter, Jr.
A. L. PORTER, Jr.,
Secretary-Director

ga

*Docket Mailed
3-6-58 BP*



PETROLEUM AND ITS PRODUCTS

GULF OIL CORPORATION

P.O. DRAWER 1290 FORT WORTH 1, TEXAS

E. HOSFORD
DIVISION PRODUCTION COORDINATOR

February 6, 1958

FORT WORTH
PRODUCTION DIVISION

Oil Conservation Commission
State of New Mexico
P. O. Box 871
Santa Fe, New Mexico

Re: Application to Dually Complete Gulf's T. R. Andrews Well
No. 3 so as to Produce from the Paddock Oil Pool and the
Tubb Gas Pool

Gentlemen:

Gulf Oil Corporation respectfully submits application for permission to dually complete subject well, and requests that the Commission set this matter for examiner hearing at an early date.

The following facts are offered in support of this application:

- (1) Gulf Oil Corporation's T. R. Andrews Well No. 3 is located 1980 feet from the south and east lines of Section 32, T-22-S, R-38-E, Lea County, New Mexico. This well was originally drilled with the intent of dually completing as a Drinkard oil and Tubb gas well. However, the Drinkard pay was found to be non-commercial, and, after testing, plans were changed to provide for a Paddock oil and Tubb gas, oil over gas, dual completion. After perforating the 5½" casing, the Paddock pay flowed 81 barrels of oil and 4 barrels of water through 22/64" choke on a 10-hour natural test. On a production test, the Tubb gas zone flowed at a rate of 2,700 MCF with 225-pound back pressure through 2-3/8" tubing. Attached is a plat of the area, as well as a diagrammatic sketch of the proposed dual equipment.
- (2) Gulf's T. R. Andrews Well No. 3 was drilled to a total depth of 7100 feet and 5½" casing set at 7099 feet and cemented with 850 sacks. The plugged back total depth is 6500 feet. The 5½" casing opposite the Tubb zone was perforated with F. I. gun at 6281, 6256, 6236, 6195, 6172, 6110, and 6052 feet. The Paddock oil zone was perforated from 5164 to 5216 feet with four ½" jet holes per foot.
- (3) In dually completing the well, applicant proposes to use a Baker Crossover Flow Assembly. In utilizing

February 6, 1958

this equipment, the Tubb gas production will enter the tubing and pass through the crossover assembly and up the tubing-casing annulus. The Paddock oil production will enter the 5 1/4" casing and pass through the crossover equipment into the 2-3/8" tubing to the surface. To assure separation between the two pays, a Baker Model "D" Packer has been set at 6000 feet and a Baker Model "A" Packer at 5130 feet with 2-3/8" tubing at 6284 feet, as shown on the attached sketch.

The manner and method of the proposed dual completion is mechanically feasible and practical and the granting of this application is in the interest of conservation and the protection of correlative rights. Applicant will comply with all rules and regulations of the New Mexico Oil Conservation Commission to maintain separation of production from the two pays.

By copy of this letter of application, all offset operators are notified of the proposed dual completion.

Respectfully submitted,

GULF OIL CORPORATION

By E. H. Hargrave
Division Production Coordinator

cc: Oil Conservation Commission
P. O. Box 2045
Hobbs, New Mexico

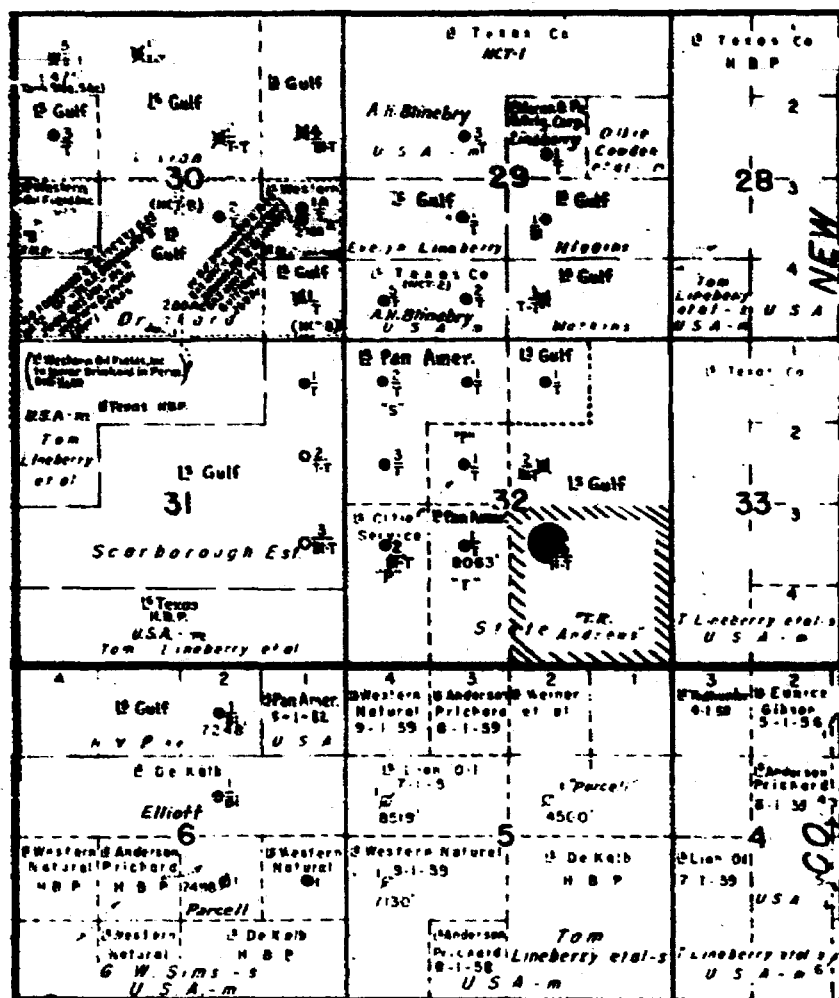
Anderson Prichard Oil Corporation
P. O. Box 196
Midland, Texas

Cities Service Oil Company
P. O. Box 97
Hobbs, New Mexico

Pan American Oil Corporation
P. O. Box 899
Roswell, New Mexico

The Texas Company
P. O. Box 1270
Midland, Texas

Ted Weiner et al
6100 Camp Bowie Blvd.
Fort Worth, Texas



GULF'S T.R. ANDREWS LEASE LEA COUNTY, NEW MEXICO

Legend
 Paddock Oil Unit 40 Ac.
 Tubb Gas Unit 160 Ac.
 ● Proposed Oil Over Gas Dual

GULF OIL CORPORATION

SCALE 1" = 3000'

13-3/8" OD Csg. at 266'

Cement Circulated

8-5/8" OD Csg. at 3100'

Cemented w/1400 sax

Circulating Valve at 5128'

Baker Prod. Pkr. at 5130'

Baker Model "E" Change-Over
Flow Tube

Paddock Oil Zone perforated
w/4 holes /ft. over
interval 5164'-5216'

Baker Prod. Pkr. at 6000'

Tubb Gas Zone selectively
perforated by "FI" technique
over interval 6052'-6281'

Tubing suspended at 6264'

PBTD 6500

5-1/2" OD Csg. at 7099'

Cement w/850 sax

Cement

TD 7100'

NOTE

Drawing not to scale

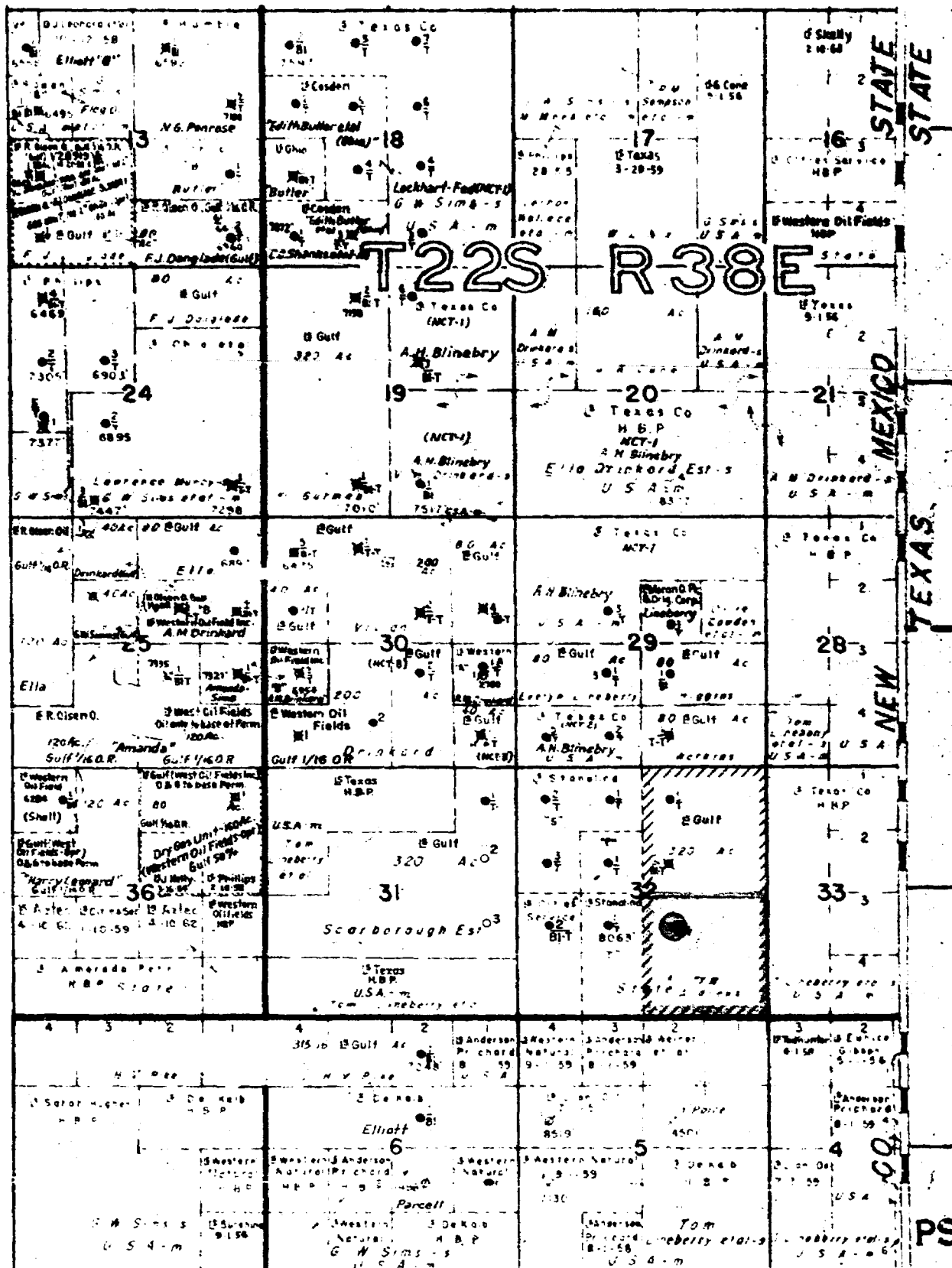
Case No. _____

Exhibit No. _____

**PROPOSED MECHANICAL INSTALLATION
PADDOCK OIL-TUBB GAS DUAL COMPLETION
T.R. ANDREWS WELL NO. 3**

Gulf Oil Corporation

Ft. Worth Prod. Div.



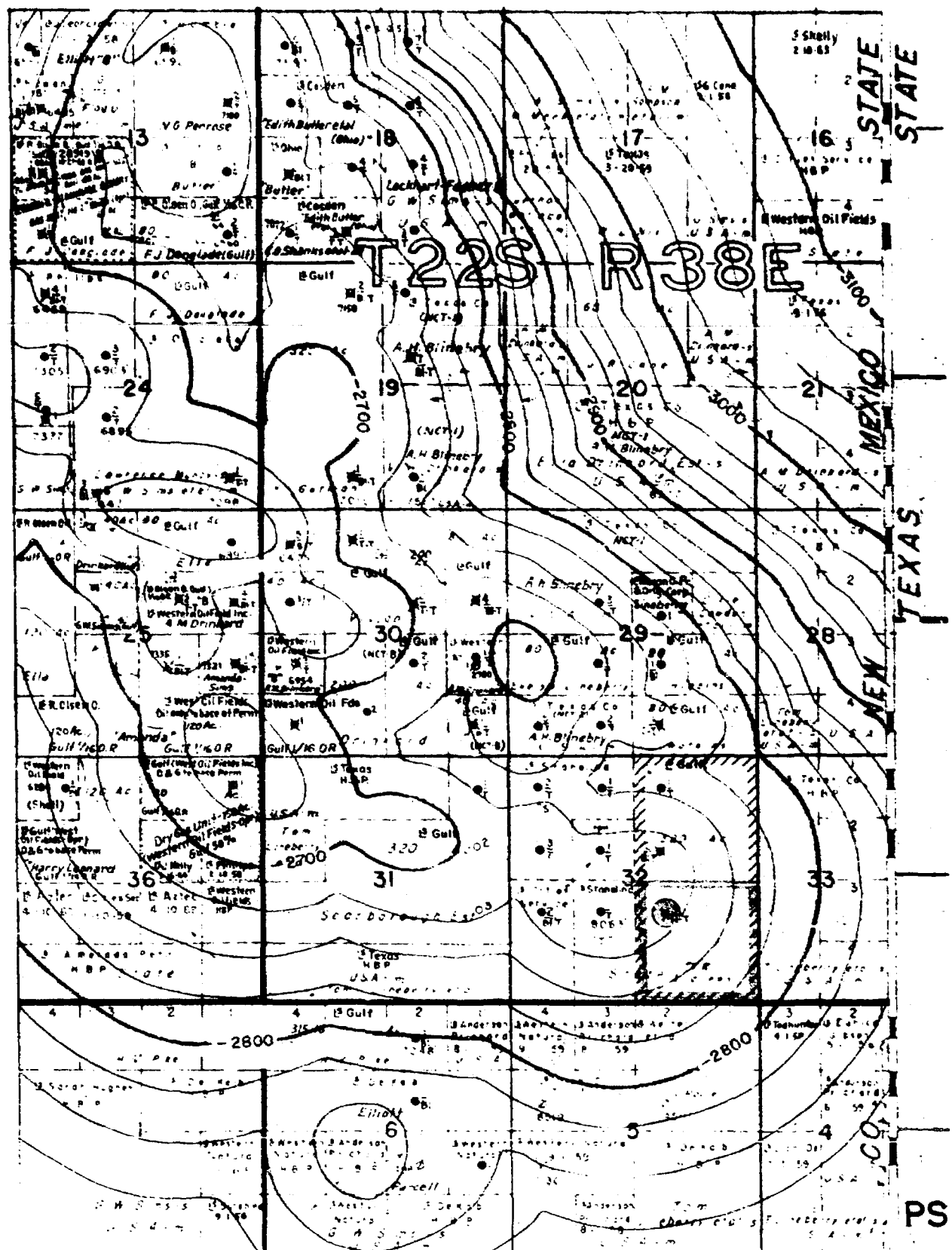
LEASE PLAT
T. R. ANDREWS
SOUTH PADDOCK OIL & TUBB GAS POOLS
LEA COUNTY, NEW MEXICO

- LEGEND -

 Pertinent Gulf Lease
 Pertinent Gulf Well
 Gulf Oil Corporation March 19, 1958

Case No 1401
 Exhibit No 1

ILLEGIBLE



Contour Map on Top of Tubb Formation

Case No. 1401 Exhibit No. _____

Gulf Oil Corporation

March 19, 1958

ILLEGIBLE

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

March 19, 1958

TRANSCRIPT OF HEARING

Case 1401

DEARNLEY - MEIER & ASSOCIATES
INCORPORATED
GENERAL LAW REPORTERS
ALBUQUERQUE - SANTA FE
3-6691 2-2211

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

March 19, 1958

IN THE MATTER OF:

Application of Gulf Oil Corporation for a dual com- :
pletion. Applicant, in the above-styled cause, :
seeks an order authorizing the dual completion of :
its T. R. Andrews Well No. 3 located 1980 feet :
from the South and East lines of Section 32, Town- :
ship 22 South, Range 38 East, Lea County, New :
Mexico, in such a manner as to permit the produc- : Case
tion of oil from an undesignated Paddock oil pool : 1401
through tubing and to permit the production of gas :
from the Tubb Gas Pool through tubing up to the :
Paddock oil zone and thence through a crossover :
assembly into the casing-tubing annulus to the :
surface. :

BEFORE: Mr. Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

MR. PAYNE: Application of Gulf Oil Corporation for a dual
completion.

MR. KASTLER: Bill Kastler of Roswell, appearing for Gulf
Oil Corporation. Will the record show that Mr. Savage has been
sworn in this case?

MR. NUTTER: Yes.

GERALD J. SAVAGE

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

DIRECT EXAMINATION

DEARNLEY, MEIER & ASSOCIATES
INCORPORATED
GENERAL LAW REPORTERS
ALBUQUERQUE, NEW MEXICO
3-6691 5-9546

BY MR. KASTLER:

Q Please state your name, position and where employed.

A Gerald J. Savage. I'm employed as a production geologist in Roswell, New Mexico by the Gulf Oil Corporation.

Q Have you previously qualified as an expert witness?

A Yes, I have.

Q Are you familiar with the area surrounding the Gulf T. R. Andrews Well No. 3?

A Yes, I am.

Q Have you prepared or caused to be prepared a location plat showing this general area?

A Yes, I have, and this exhibit I have labeled No. 1.

Q Referring to Exhibit No. 1, will you please state what is shown thereon?

A Specifically is shown on this plat the pertinent Gulf lease which is the East Half of Section 32, Township 22 South, Range 38 East, also is shown outlined in yellow the 160 acre gas proration unit which has been requested for this well, and the No. 3 T. R. Andrews encircled and marked in red.

Q Is that State, Federal or fee lease?

A To my understanding it is a State lease.

Q Does your location plat also show the surrounding operators?

A Yes, it does.

Q Will you describe the previous wells or all wells on the lease?

A Located 660 feet from the North line and 1980 feet from the East line of that Section 32 is the Gulf No. 1 T. R. Andrews which is a Drinkard oil producer, and located 1980 feet from the North and East lines of that same Section 32 is Gulf's No. 2, T. R. Andrews which is a Elinebry and Tubb gas-gas dual.

Q Will you now give the history of Well No. 3?

A Well No. 3 was originally scheduled as a Tubb gas, Drinkard oil prospect. However, after drilling to a total depth of 7,100 feet, the Drinkard was found to be non-commercial due to a high gas-oil ratio and the well was then plugged back to test the Tubb zone. It was then scheduled as a Paddock oil, Tubb gas dual completion. The hole was plugged back to a depth of 6,500 feet and perforated in the Tubb zone.

On coil commission test on December 1st, 1957, it flowed 2,700,000 cubic feet of gas per day with a 225 pound back pressure. The Tubb zone was then packed off and the Paddock zone perforated through the interval 5,164 feet to 5,216 feet, and potentialled for 172 barrels of oil and two barrels of water without treatment.

Q Have you prepared or caused to be prepared a structure plat?

A Yes, sir, I have a structure plat of that immediate area which I have labeled Exhibit No. 2 in this case.

Q What formation is shown on the structure?

A This structure is contoured on top of the Tubb formation

with a contour interval of 25 feet.

Q Will you please explain what may be illustrated by this structure plat?

A This structure plat primarily shows the Tubb structure in the structure position of the No. 3 T. R. Andrews.

Q Do you have a log showing the formations penetrated and the intervals perforated?

A I have copies of the log on the T. R. Andrews No. 3 and it shows the formations penetrated and the zones perforated.

Q Was this prepared, or were the markings on there prepared, at your direction or by you or under your supervision?

A The pertinent information as applied to these logs was applied at my direction.

Q Specifically what information is shown on this log that is pertinent to this case?

A I have shown the top of the Glorietta formation at a depth of 5,220 feet and the perforated interval from 5,164 feet to 5,216 feet. This zone has been identified as part of the Paddock pay. This zone, on January 12, 1958, on a six hour Oil Conservation Commission test through two and three-eighths inch tubing and 1564 inch choke flowed 33 barrels of oil and .43 of a barrel of water, this extended to twenty-four hour is 172 barrels of oil and two barrels of water for the gas volume of 74,000 cubic feet of gas per day and GOR of 430.

Also shown is the depth of the Blinbry at 5,580 feet and the top of the Tubb formation at 6,073 feet which formation has been perforated with the fracture initiation technique at 7.015 minute Oil Conservation Commission test on December 1st, 1957, through two and three-eighths inch tubing and four inch orifice, this zone flowed 2,700,000 cubic feet of gas with 225 pound back pressure, with an estimated open flow of 2,900,000 cubic feet of gas per day.

MR. KASTLER: This completes the ~~questions~~ I have of our geological witness in this case, and I would like at this time to move to admit Exhibits 1, 2 and 3 in this case.

MR. NUTTER: Is there objection to the introduction of Gulf's Exhibits 1 through 3? If not they will be admitted.

CROSS EXAMINATION

By MR. NUTTER:

Q Now, Mr. Savage, what is the verbal limits of the Paddock Pool?

A I am not absolutely familiar with what the vertical limits are of the Paddock Pool. The Gulf Oil Corporation has defined that pay zone in their practice as the McKnight TI in the Basil San Andres formation, but we got a verbal ruling from Mr. Randall Montgomery in Hobbs that that would be called the Paddock pay.

Q Is this well in the area which was included for the designation of a new pool designated as the South Paddock Pool?

A Yes.

Q At the hearing March 13th?

A I am not familiar with the hearing on March 13, but to my knowledge it is within that area designated as the South Paddock Oil Pool.

Q I believe that there was a proposed pool creation at that hearing calling for the creation of the South Paddock Pool to comprise the Southeast Quarter of Section 32, Township 22 South, Range 38 East. Would this well fall within that area?

A This well does fall within that area.

Q And the vertical limits of that pool were the Paddock formation. Is this well completed within the Paddock formation?

A The Paddock to my understanding is a pay designation within the Glorieta formation. But according to this verbal ruling that I mentioned previously from Mr. Montgomery that this zone, although it is Basil San Andres, would be considered to be part of the Paddock pay.

Q I see. The interval of perforations in the Tubb zone are within the vertical limits of the Tubb Gas Pool, is that correct?

A Yes, sir, they are.

MR. NUTTER: Are there any further questions of Mr. Savage? If not he may be excused.

(Witness excused.)

MR. KASTLER: Mr. Pace.

A Yes.

Q At the hearing March 13th?

A I am not familiar with the hearing on March 13, but to my knowledge it is within that area designated as the South Paddock Oil Pool.

Q I believe that there was a proposed pool creation at that hearing calling for the creation of the South Paddock Pool to comprise the Southeast Quarter of Section 32, Township 22 South, Range 38 East. Would this well fall within that area?

A This well does fall within that area.

Q And the vertical limits of that pool were the Paddock formation. Is this well completed within the Paddock formation?

A The Paddock to my understanding is a pay designation within the Glorietta formation. But according to this verbal ruling that I mentioned previously from Mr. Montgomery that this zone, although it is Basil San Andres, would be considered to be part of the Paddock pay.

Q I see. The interval of perforations in the Tubb zone are within the vertical limits of the Tubb Gas Pool, is that correct?

A Yes, sir, they are.

MR. NOTER: Are there any further questions of Mr. Savage? If not he may be excused.

(Witness excused.)

MR. KASTLER: Mr. Pace.

Will the record please show that Mr. Mace has been sworn?

CHARLES E. MACE

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

DIRECT EXAMINATION

By MR. KASTLER:

Q Please state your name and position and where employed.

A Charles E. Mace, petroleum engineer with Gulf Oil Corporation, Roswell, New Mexico.

Q Are you familiar with this application to dually complete Gulf's T. R. Andrews Well No. 3? A Yes, I am.

Q Have you previously qualified as an expert witness before this Commission? A Yes, I have.

Q Have you prepared or caused to be prepared a schematic diagram to explain the features of this installation?

A Yes, sir, I have.

Q Is this identified by being marked Exhibit No. 4?

A Yes, sir, it is.

Q Referring to Exhibit No. 4, will you please state what is shown there?

A Briefly Exhibit 4 shows that there is a 13-3/8" OD surface string at 266' with cement circulated intermediate casing string of 8-5/8" OD, cemented with 1400 sack; cement top at about 1200 feet below the surface behind the casing. 5-1/2" OD oil string set

7,097 feet, cemented with 850 sax, and the top of the cement may be found behind the casing at 3100 feet, the total depth of the well was 7100 feet, the plug back total depth is 6500 feet. The well is currently equipped as shown and that is there is a Baker packer at 5130 and a Baker packer at 6,000 feet. Then there is a 2-3/8" OD J-55 run into the well and seated through the two packers, and on the bottom of the tubing or near the bottom and seated in the upper Baker is the Baker Model "G" changeover flow tube.

The well is perforated as shown. The Paddock is perforated at 5164 to 5216, that would be combined between the two packers; the Tubb gas has been perforated at 6,052 to 6,281 as shown on the diagram, and it would be below the lower packer. The Tubb gas therefore enters the well bore below the lower packer as shown in green, comes up the tubing until it enters the changeover flow tube and switched to the casing annulus and flow to the surface through the annular. The Paddock oil will flow in between the two packers as shown in red into the changeover flow tube, and up the tubing to the surface.

Q To your knowledge has any installation of this type been previously approved by the New Mexico Oil Conservation Commission?

A One case to my knowledge, I'm sure of, there may be others, but there's one I'm sure of and that is the Gulf Oil Corporation Alice Paddock No. 2. It was Case D No. 1733, and by Order R-1121 on January 29, 1938 the installation was approved.

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Q That was an identical to this?

A Yes, sir.

Q Can adequate tests be performed to insure the complete separation of the oil and gas zones and determine any leakage?

A Yes.

Q Will Gulf comply with the open test procedures and --

A (Interrupting) Yes.

Q Has Gulf previously filed application for an administrative approval of a 160 acre standard proration unit which is T. R. Andrews No. 3?

A The request has been so filed.

Q Has this approval been granted?

A To my knowledge the approval has not been granted, but it may have in the last few days.

Q Will you state what pipeline connections are proposed?

A The gas is under contract to the Permian Basin Pipeline Company. That is the Tubb gas and the South Paddock oil will be taken by the Texas Company and it is being trucked.

Q Do you know the reason why it's being trucked?

A Yes, sir. The Texas-New Mexico line said that the oil from the South Paddock was too sour and they requested not to take the oil.

Q Is this application in the interest of conservation of oil and gas and prevention of waste, in your opinion?

A Yes, sir.

Q In your opinion will it protect correlative rights?

A Yes, sir.

MR. KASTLER: Those are all the questions I have of this witness now. I would like to move to admit Exhibit No. 4.

MR. NUTTER: Without objection, Gulf's Exhibit 4 will be admitted.

CROSS EXAMINATION

By MR. NUTTER:

Q Mr. Mace, can the oil produced from the Paddock zone be pumped in the event the well fails to flow?

A Yes, sir, it can.

Q How low could a pump be set with this type of an installation?

A The pump could be set just right down to the dirt, or to the circulating valve, just above the changeover flow tube.

Q Do you anticipate that the levels will be such to the depletion of the well that a pump could be set to produce this well?

A Yes, sir, a pump could be set to produce this well.

MR. NUTTER: Any further questions of the witness? If not he may be excused.

(Witness excused.)

Does anyone have anything further they wish to offer in Case 1461? If not we will take the case under advisement and the

hearing is adjourned.

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C E R T I F I C A T E

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) : SS

I, ADA DEARNLEY, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission at Santa Fe, New Mexico, is a true and correct record to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF I have affixed my hand and notarial seal this 31st day of March, 1958.

Ada Dearnley
Notary Public-Court Reporter

My commission expires:
June 19, 1959.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 1401 heard by me on 3-19, 1958.
[Signature], Examiner
New Mexico Oil Conservation Commission