#### BEFORE THE

# OIL CONSERVATION COMMISSION Santa Fe, New Mexico

"The State of New Mexico, by its Oil Conservation Commission, hereby gives notice, pursuant to law, of the following public hearings to be held February 17, 1948, beginning at 10:00 o'clock a.m. on that day in the City of Santa Fe, New Mexico.

### STATE OF NEW MEXICO TO:

"All named parties in the following cases, and notice to the public:

#### CASE NO. 119

"In the matter of the application of G. B. Suppes, D. D. Thomas, Carper Drilling Co., Inc. and the Texas Trading Co., Inc. for approval of an unorthodox well spacing plan and provation plan covering and including sections 28, 33 and 34, township 16 S, range 30 east, N.M.P.M. within the Square Lakes Field, Eddy County, New Mexico.

#### CASE NO. 120

"In the matter of the application of Malco Refineries, Inc., Dale Resler d/b/a Resler Oil Company, and Martin Yates Jr. for approval of the deepening of an unorthodox location, the same being 220 feet from the north line and 2420 feet from the east line of section 28, township 18 S, range 28 E, N.M.P.M., Eddy County, New Mexico.

# CASE NO. 121

"In the matter of the application of Malco Refineries, Inc., Dale Resler d/b/a Resler Oil Company, and Martin Yates Jr. for approval of the deepening of an unorthodox location, the same being located 1070 feet from the south line and 1070 feet from the east line of section 21, township 18 S, range 28 E, N.M.P.M., Eddy County, New Mexico.

### CASE NO. 122

"In the matter of the application of Malco Refineries, Inc., Dale Resler d/b/a Resler Oil Company, and Martin Yates Jr. for approval of the deepening of an unorthodex location, the same being located 1857 feet from the north line and 2390 feet from the west line of section 28, township 18 S, range 28 E, N.M.P.M., Eddy County, New Mexico.

#### CASE NO. 123

"In the matter of the application of Malco Refineries, Inc., Dale Resler d/b/a Resler Oil Company, and Martin Yates Jr. for approval of the deepening of an unorthodox location, the same being located 220 feet from the east line and 880 feet from the north line of section 32, township 18 S, range 28 E, N.M.P.M., Eddy County, New Mexico.

### CASE NO. 124

"In the matter of the application of Dale Resler d/b/a Resler Oil Company for approval of the deepening of an unorthodox location to be located 1070 feet from the south line and 1070 feet from the east line of section 27, township 18 S, range 28 E, N.M.P.M., Eddy County, New Mexico.

"In the matter of the application of Malco Refierries, Inc., Dale Resler d/b/a Resler Oil Company and Martin Yates Jr. for approval of the deepening of an unorthodox location, the same located 1070 feet from the north line and 1070 feet from the east line of section 28, township 18 S, range 28 E, N.M.P.M., Eddy County, New Mexico.

"Given under the seal of the Oil Conservation Commission of New Mexico, at Santa Fe, New Mexico on January 26, 1947.

STATE OF NEW MEXICO

OIL CONSERVATION COMMISSION

By /s/ R. R. Spurrier
R. R. SPURRIER, Secretary \*\*

### CASE NO. 127

In the matter of the application of Ralph Lowe to dually complete, for oil and gas production from two separate zones, Shell State No. 2-C, located 990 feet from the south line and 1,650 feet from the west line of section 36, township 23 shouth, range 36 east, N.M.P.M., Lea County, New Mexico.

"Given under the seal of the Oil Conservation Commission of New Mexico, at Santa Fe, New Mexico, on February 2, 1948.

STATE OF NEW MEXICO

OIL CONSERVATION COMMISSION

By /s/ R. R. Spurrier
R. R. SPURRIER, Secretary\*

### CASE NO. 117

The Texas Company and Vora V. Hartley,

Petitioners.

-vs-

Harold Hurd; Monument Townsite Company; Ed Holland; B. M. Keohane; Marianne Keohane; Barnard Patrick Keohane; Margie T. Roland; Heirs of Elizabeth A. Anderson, deceased, and All Unknown Claimants of Interests in the Premises Adverse to Petitioners,

Respondents."

# BASE NO. 118

In the matter of the application of the Ohio Oil Company for the issuance of a special order permitting production through a single well bore of oil and gas from the Drinkard zone between 6,370 feet and 6,410 feet, and gas and/or gas and distillate from the Blineberry zone between 5,410 feet and 5,520 feet in Ohio Oil Company, J. L. Muncy No. 2, located 1980 feet from the south and west lines of section 24, township 22S range 37 E, N.M.P.M., Lea County, New Mexico.

"Given under the seal of the Oil Conservation Commission of New Mexico, at Santa Fe, New Mexico, on January 26, 1947.

### OIL CONSERVATION COMMISSION

### /s/ R. R. Spurrier R. R. SPURRIER. Secretary"

#### MEMBERS OF COMMISSION:

Hon. Thomas J. Mabry, Governor, Chairman Hon. John E. Miles, State Land Commissioner, Member

Hon. R. R. Spurrier, Secretary, Oil Conservation Commission, Member Hon. Lake J. Frazier, Attorney, Hon. George Graham, Legal Adviser.

## REGISTER -

#### NAME

# L. J. Forehr Robert L. Inler M. B. Penn E. J. Pierce J. H. Crocker Caswell Silver B. M. Keohane P. B. English Roy O. Yarbrough L. O. Hickerson Fred Feasel J. D. Atwood Earl A. Nichols Willis Lea Foster Morrell R. E. McMillen John L. Camp E. Parre Ward James B. Diggs Owen Roberts Donald S. Bush Glenn Staley Silas P. Sheldon Frank C. Barnes Betty Wistrand Guy Shepard

N. W. Krouskup R. F. Miller J. O. Seth John D. Culp N. R. Lamb Paul C. Evans A. E. Willig E. R. Wright

Dudley Cornell Mary Lee Cornell R. S. Knapper

C. A. Necados D. D. Bodie

Leo R. Manning Van Thompson

Al Greer

John M. Kelly Robert B. Kennedy J. W. House

Ralph Lowe J. W. Puddleford

Joseph C. Gordon Marion A. Gilbert

Earl E. Hartley

#### **ADDRESS**

# Tulsa, Oklahoma Tulsa, Oklahoma Tulsa, Oklahoma Midland, Texas Tulsa, Oklahoma Aztec, New Mexico Roswell, New Mexico Farmington, N. M. Hobbs, N. M. Albuquerque, N. M. Fostorio, Ohio

Roswell, N. M.
Dallas, Texas
Dallas, Texas
Roswell, N. M.
Midland, Texas Houston, Texas Houston, Texas Tulsa, Oklahoma Artesia, N. M. Artesia, N. M.

Hobbs, N. M.

Artesia, N. M. Albuquerque, N. M. Santa Fe, N. M. Santa Fe, N. M.

Artesia, N. M. Artesia, N. M.

Santa Fe, N, M. Hobbs, N. M.

N.M. Bureau of Mines Hobbs, N. M.

Ft. Worth, Texas Santa Fe, N. M.

Albuquerque, N. M. Albuquerque, N. M. Tulsa, Oklahoma

Albuquerque, N. M. Hobbs, N. M. Farmington, N. M.

Dallas, Texas Aztec, N. M.

Roswell, N. M. Midland, Texas

Midland, Texas Jal, N. M. Dallas, Texas Santa Fe, N. M.

### COMPANY

Repollo Oil Company Repollo Oil Company

Mid-Continent Petroleum Co.

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11 M. J. Florence

Self

Oil Conservation Commission

The Ohio Oil Company

Consultant

Southern Union Production Co.

U.S.G.S.

Ohio Oil Company The Ohio Oil Company n n n

Gulf Oil Corporation Murchison & ? CLOSUIT

Malco et al

Lea County Operators Resler Oil Company

Consultant Geologist

N. M. Oil Commission State Land Office

Grayburg Oil Company Grayburg Oil Company Stanolind Oil Co.

Stanolind Oil Co. Artesia, N. M.

The Texas Company

Gulf Oil Corporation The Texas Company

Self Self

Gulf Oil Corporation Independent Operator

C. S. Oil Company

Southern Union Production Co. Oil Conservation Commission Consulting Geologist G. B. Suppes Humble Oil Company

R. Olsen Oil Company Byrd-Frost, Inc.

Self Self

Clovis, N. M.

Said meeting was convened at the City Hall, Santa Fe, New Mexico, on February 17, 1948 at 10:00 o'clock A.M.

Meeting was called to order by Governor Mabry, and the dockets read by George Graham, Attorney.

### CASE NO. 119

BY MR. JOHN M. KELLY:

If the Commission please, this is a petition to request unorthodox well spacing and proration plan for a part of the Square Lakes Field in Eddy County, New Mexico.

I would like to call the Commission's attention to Case No. 111, Order No. 731 - I do not have the exact date in which they granted unorthodox well location and proration plan covering 80 acres in Section
33. Mr. Kennedy, Representative of Supes and Supes and petitioner in
previous cases is present as a witness, I would like for him to state
the results they obtained in drilling that well.

(After being duly sworn, Mr. Robert B. Kennedy testified as follows)

The Johnson #1 unit 5-A was completed in 1947 and produced 360 barrels of oil per day, and we believe results from that test justify additional drilling.

MR. KELLY: Are the other two wells in that particular unit completed as top allowable wells?

- A. Yes, they were top allowable wells.
- Q. They were drilled several years ago?
  - A. Approximately 1944.
- Q. Approximately three years later you drilled a well approximately one-half way between these two wells?
  - A. That is right.
- Q. Better than the top allowable well?
  - A. That is right.
- Q. You believe that will exist on other 80 acre tracts?
  - A. Yes, we believe that will exist.
- Q. The basis of your application is to more fully drain the area we believe this well will result, if we drill the unorthodox wells Therefore, we desire to drill wells as follows:

Location 330 feet from west line, 1370 feet from north line of every 80 acre tract.

330 feet from east line, 1230 feet from north line.

Also in order to reproduce acreage in the most efficient manner, proration plans be based on 80 acre units. That is if the acreage be given two 40 acre allowables. We are not asking for additional allowable, just asking that it be so set up the greater amount from better wells in order that the most efficient lease be maintained. The 80 acre tracts shall be shall be considered as one producing unit after one well is drilled, and they shall not be re-divided into 40 acre units as long as one other well is being produced. In that way there will be no excess drainage on another operator. We are not asking that a petition be granted in closer spacing to another operator. The petition is desired to obtain approval to drill

these wells on unorthodox locations in order to more efficiently drain the area. We will be glad to answer any questions.

COMMISSIONER MILES:

Any questions?

MR. KELLY:

It is all federal land and the Petitioner has a letter from the United States Geological Survey stating they have no objection to this plan - The letter states in part:

"No objection is offered by this office to the well spacing plan as proposed in the application. It is the opinion of this office that the drilling of these wells should be encouraged to afford opportunity for the greatest ultimate recovery of oil and gas from the presently producing reservoir of the Square Lake Pool."

COMMISSIONER MILES:

Anybody else any statement?

(No Response)

(The case will be taken under advisement)

CASES NOS. 120, 121, 122, 123, 124, and 125 combined:

Mr.DONALD S. BUSH, Attorney:

If the Commission please, these six petitions for unorthodox locations are are in township 18 S, range 28 E, and sections 28, 21, 32 and 27. All these wells were drilled in 1925 and 1926. In Case No. 120, the well known as the Flynn, Welch and Yates State No. 13, was completed at 2120 feet on or about June 10, 1925, and it is desired to deepen that location to 2900 feet.

In Case No. 123, the well known as Flynn Welch No. 28, was completed at a total depth of approximately 2039 feet on the 28th of September 1925, and it is desired to deepen that location to approximately 2900 feet.

In Case No. 124, the well known as Quillen-Dunnett Compton No. 1, was completed to a total depth of 2505 feet August 28, 1925. It is the desire of the Petitioner to deepen that location to approximately 3,000 feet.

In Case No. 125, the well was known as Flynn, Welch and State No. 52, was completed at a total depth of 2160 feet on or about October 15, 1926, and it is desired to deepen this location to approximately 2900 feet.

Of these wells, three of them are now producing and Flynn, Welch, Yates No. 28, and Flynn, Welch, Yates No. 24 and Flynn, Welcy No. 52. In the event these wells are deepened it is the desire of the Petitioner to case off those upper pays so there will be no question of dual completions of these wells. It is the belief of the Petitioner if those upper fields be depleted of gas pressure would act as a thief.

Sometime ago there was some confusion as to whether or not on these old locations which were completed prior to the present Oil Conservation Commission Laws; were legal locations at the time they were drilled - whether or not a hearing was necessary or permissible, as a result of that confusion one of these wells has been completed to the requested in No. 1, another well is now in the process of being deepened, No. 28, the fact that the drilling of these wells was commenced prior to this was because of the confusion which did exist as to whether or not the petition was necessary or even proper. It is believed by the Petitioner if these unorthodox locations are permitted to be deepened the Petitioner will be able to more economically

determine the limitation of a new production, that is being obtained in that particular area. There is approximately 2,000 feet of hole that can be utilized by the Petitioner if he be allowed to go ahead into these holes and deepen them.

(After being duly sworn, Mr. Vilas P. Sheldon testified as follows:)

MR. BUSH:

State your name to the Commission please.

MR. SHELDON: Vilas P. Sheldon.

- Q. What is your occupation?
  - A. Geologist.
- Q. What is your address:
  - A. Artesia, New Mexico.
- Q. I would like to have you tell the Commission what in your opinion will tend to conserve oil and gas resources in the State of New Mexico if these petitions be granted.
  - A. We are trying to exploit a new pay in the edge of the old Artesia field. We have evidence that some of the new pay underlies part of the old field, and that the older portion of the field has been drilled one well to 10 acres. A number of such wells are no longer producing and hardly any of them no longer profitable 1 or 1½ barrels per day. It would be much more economical to the operator to be allowed to deepen some of the old wells rather than dig new wells. We propose to deepen only one well to 40 acres. Asking for closer spacing, we do not propose to ask for additional allowable. The wells that will be deepened will have a string of casing and will be properly completed and segregated from the old pay.
- Q. Do you believe that being allowed to deepen these old wells you will obtain geological information that will enable you to determine the limitations of this old field to go about to maximum production of this old field?
  - A. Yes, I do.

COMMISSIONER MILES:

Anybody have any questions to ask or statements to make?

MR. SPURRIER:

Is this all federal land?

MR. BUSH:

No, all state leases.

COMMISSIONER MILES:

Iny objection to the request made in these petitions?

(No response)

Anybody else anything to say?

(No Response)

If not, the request will be granted.

Mr. J. D. Atwood, Representing the Ohio Oil Company:

If the Commission please, I would like to present Mr. J. L. Camp.

MR. J. L. CAMP:

If it please the Commission, this is an application of the Ohio Oil Company to dually complete and produce its J. L. Muncy No. 2 well in the Drinkard Field in Lea County, New Mexico, in such a manner that oil and gas produced through the tube from the Drinkard Zone between depths of 6375 feet and 6395 feet, and so that gas and distillate for producing other emulsion in the space between the tube and the casing. From the Blineberry between the depths of 5410 feet and 5520 feet, at this time the well has been completed and is now producing oil and gas from the Drinkard well or lower stratum.

(After being duly sworn, Mr. Paul Ward testified as follows:)

MR. CAMP: State your name and address.

MR. WARD: Paul Ward - Houston, Texas.

- Q. Is this the first time you have appeared before this Commission?
  - A. Yes, sir.
- Q. Will you please state your qualifications briefly?
  - A. I have worked for the Ohio Oil Company for approximately 15 years and at the present time am Division Petroleum Engineer of the Western Division; and graduated from Oklahoma University.
- Q. Is Lea County, New Mexico, within your jurisdiction insofar as your work for the Ohio Oil Company is concerned?
  - A. Yes.
- Q. Have you had any experience with dual completions?
  - A. Yes, I have had some.
- Q. Have you had prepared a map showing the area in which this well is located and the area immediately surrounding it?
  - A. Yes.
- Q. Is that may correct insofar as the information in possession of the Ohio Oil Company is concerned?
  - A. Yes.
- Q. We offer Exhibit No. 1 (The above mentioned map) in evidence.
- Q. Will you point out to the Commission the location of the J. H. Muncey Well #2 you are proposing to dually complete?
  - A. On Exhibit #1, the J. H. Muncey Well #2 is in Section 24, Twonship 22 S, Range 37 E, and includes the section colored yellow and indicated by an arrow. There are three offsetting wells Phillips-Simms Nos. 1, 2, and 3.
- Q. Is well No. 3 a drilling well or completed well?
  - A Tunderstand a drilling well at the present time.

- Q. Is Well No. 2 an offset of Phillips?
  - A. Yes.
- Q. That is indicated on the map also?
  - A. Yes.
- Q. What zone is that producing from?
  - A. Completed in the Drinkard Zone.
- Q. Is that the same zone as the Muncey #2 is now producing from?
  - A. Yes.
- Q. What stratum is the Phillips-Simms No. 1 producing from?
  - A. Blineberry Zone.
- Q. Is that a direct offset to Muncy No. 2?
  - A. Yes.
- Q. Is the Blineberry zone the zone in which it is proposed to also complete J. L. Muncey No. 2?
  - A. Yes.
- Q. So that if dual completions is completed the Muncey No. 2 will be offset of two Phillips wells, Nos. 1 and 2?
  - A. Yes.

#### MR. GAMP:

If the Commission Please, at this time I have here a suggested form of Order that I would like for the Commission to read at this time. While it is a little out of order, our reason for so doing is that we have incorporated in this Order various procedures that we think should be followed in this dual completion well, various safeguards and provide for various tests and ordered it would be definitely known that the safeguards were working satisfactorily, and in order that the Commission might have this detail information in mind, I would like to read it at this time.

COMMISSIONER MILES:

You may proceed.

MR. CAMP: Beginning with Paragraph No. 3 - - -

"Provided, however, that said well shall be completed and produced in such manner that there is abdolutely no commingling within the bore of the well of fluids produced from any two separate strata encountered in said well. In order to prevent any commingling of reservoir fluids within the well bore, this dual completion shall be made in the following manner: The well has already been completed in the Drinkard zone through casing perforations from 6390 to 6410 feet. The upper zone to be produced shall be perforated and a formation test made of this horizon. This test and subesquent tests, if any, shall be witnessed by a representative of an offset operator or an agent of the Commission. In the event intercommunication between zones behind the casing is indicated by the formation test, corrective measures shall be applied and formation tests continued until it is indicated that there is no intercommunication between zones behind the casing. If the test or tests indicate that there is no intercommunication between the zones on the outside of the casing, the operator may proceed with the dual completion as outlined below.

"A packer shall be set so as to effectively prevent the migration of reservoir fluids from one zone into another. The well shall be tubed through the packer. Since this dual completion involves only a gas productive zone in the upper horizon, it shall not be necessary for operator to install a circulating port above the packer, though he may do so if he desires, but in case of non-installation above the packer the circulating device shall be incorporated in the packer. The packer shall be properly tested for leakage at the time the well is recompleted and shall be re-tested each may and November thereafter. The original and all subsequent tests shall be witnessed by two offset operators or one offset operator and a representative of the Commission. and the results of each test properly attested to by operator and all witnesses shall be filed with the Commission within five (5) days after completion of the test. In the event intercommunication between the reservoirs is found or is suspected by any witness as a result of any test, the well shall be immediately closed in, the Commission notified, and immediate action shall be taken by operator to prevent intercommunication, following which a re-test for leakage shall be made forthwith.

"The tests for intercommunication between zones herein required shall be made in the following manner:

\*Both zones shall be simultaneously closed in and kept closed a sufficient length of time to reach stabilization as determined by a dead weight tester. A recording depth pressure gauge shall then be run at the maximum depth possible; the zone open to the annulus shall be produced at a maximum safe rate until stabilized flow conditions are obtained. In the event a significant decrease in pressure is shown by the recording pressure gauge, intercommunication shall be deemed to exist.

"The applicant having at the hearing furnished the Commission with an electrical log showing the position and thickness of the sands encountered, together with the designation of each sand and the description of the two sands to be dually produced, no further requirement therefor is made. However, upon the dual completion being finished operator shall furnish the Commission with a drawing or diagrammatic sketch showing the method of completing the well, showing the procedure followed in producing each completion and the equipment employed to effect separation of the productive horizons.

"IT IS FURTHER ORDERED that the failure of the operator to comply with any provision or provisions of this order shall immediately terminate this order and all permission granted herein in its entirety.

"IT IS FURTHER ORDERED that this cause be held open on the docket for such other and further orders as may be necessary."

MR. CAMP:

In your opinion is the provision therein made have completed and tested the well - is that the best method you know of?

- A. In my opinion, yes.
- Q. You are, of course, abreeable to any other reasonable change the Commission desires or sees fit to make?
  - A. Yes.

Q. Will you please present to the Commission such factual data with reference to this well and the gas encountered in drilling the well?

A. In connection with this suggested order, I would like to state I think dual completions of this nature are practical; and will always be times when you will have packer leaks and I think it is certainly of the interest of the Operator and Commission that in the event of any packer leaks those leaks should certainly be found and I think our rder covers that in very nice shape.

#### MR. CAMP:

I would like to present the electrial log - - of J. L. Muncey #2 as Exhibit #3.

MR. WARD: Muncey #w was completed approximately the first of the year or about two months ago. It was completed at a total depth of 6895 feet, 5½" casing was run to a depth of 6505 feet. In running this casing centralizers were used opposite the Drinkard and Blineberry horizon, sufficient cement was used to come back into the shoe of the next larger size string casing—that was determined by temperature. In drilling this well the Blineberry was drilled approximately to depths of 5410 to 5520 feet and a drill steam test at the time this zone was drilled was taken, which is shown by the block in the center of the electric log, and indicated by OST form, a depth of 5415 to 5533 feet. The drill steam test showed 6 mcf of gas measured in one hour's period of time and a very small amount of distillate was recovered in the drill steam test.

Q. Was that test of 6 mcf during a 24 hour period?

#### A. Yes.

On Exhibit #3 this Blineberry zone is colored red for identification. The top of the Drinkard pay is approximately 6370 feet, the bottom approximately 6410 feet. This well was completed through perforations from 6390 feet to 6410 feet, and at the present time is producing as a single completion from the Drinkard zone from the perforations as indicated. We have no analysis of the reservoir fluids, but what little information we could gather together indicates that these two fluids are in all probability sweet fluids and

we think that if this dual completion is permitted, by virtue of the fact that these fluids are sweet, fluids within the bore will not have any corrosive qualities to react on the equipment placed in the well. At the time we made the drill steam test in the Blineberry we did get a pressure of 2310 pounds. We have no record of bottom hole pressure in the Drinkard zone in Muncy #2. However, we have twelve other wells in the Drinkard field completed in this same zone and the average pressure of those 12 wells is 1969 pounds. That gas differential in pressure between the two zones of 341 pounds - we think that we can certainly place equipment in it that will take care of such pressure differential of 341 pounds, and dual completions can be operated efficiently.

- Q. That 341 pounds in your opinion is there any relationship between the pressure differential and possible inclination of pressure to fail?
- A. They make very good equipment at the present time, and within reasonable limits of pressure differential I think that equipment can there handle it very nicely. I am sure ix is going to be some point of maximum differential where you might have a break down. I am not in a position to name a figure on what might be the pressure differential. It is my opinion that if this dual completion is granted there will not be any physical waste, I believe that on two facts:
  - 1. The emulsion produced will be gas, and that gas can be produced naturally and recovered down to whatever pressure the operator may desire in other words, there will be no occasion for artificial lifting on that particular zone being produced in the emulsion.
  - 2. Im my opinion, I think with dual completions granted there will be as much recovered oil by the dual completions from the Drinkard zone as though it had been singly completed in that zone.

In regard to equipment, I might say that there are many types of equipment - proved equipment, on the market at the present time and are available.

While speaking of equipment I would like to state in our particular completions here - or suggested completions, we do not think that possibly the door choke might be necessary, because in reasonable calculation of bottom hole pressure in the gas zone can be made from observation of the well; I would, however, - I might state we have set up in our suggested order that might be optional to the operator. In the event the Commission might think this side-door choke is necessary, we would be very happy to put that piece of equipment in the completion. As I read in the suggested order, we think it is a reasonable method for testing for packer leaks and that there should be periodical periods when those packer leak tests should be made.

I think that is a but all I have to say.

- Q. Mr. Ward, what is the approximate distance in feet between these two productive zones?
  - A. Approximately 900 feet. In connection with that I believe where there is two zones closely associated and there might be a doubt in anybody's mind the operator or Commission's minds that possibly those two zones are not separate and distinct reservoirs, I am inclined to believe no permission should be granted on such zones. There is approximately 900 feet separating the two zones here.

In my opinion, I think there is a good possibility that physical waste will occur if the Commission does not grant this permit.

My reasons are the fact that economically a well cannot be drilled to the Blineberry field — in view of that, no well could be drilled to this particular gas field and recover that gas.

If the offset well does not have effective drainage radius greater than 40 acres this gas will not have been recovered, there will be a loss until dual completion is permitted — we can recover that gas.

- Q. Do you know whether Phillips well is a direct offset was intentionally drilled or drilled for some other reason?
  - A. It is my understanding that well was drilled for Drinkard pay but they found no commercial quantities of production and as a result they came back and completed in the Blinberry.
- Q. It was not designed to be a Blinberry test when instituted?

  A. No.
- Q. So far as you know not any wells in that field started out to be Blinberry wells?
  - A. There may be, but to my knowledge I know of none.
- Q. It is your opinion then that well drilled to the Blineberry zone the operator would not get back his original investment in operating
  cost?
  - A. No, if you drill a well for that express purpose the well would cost approximately 65,000 to 75,000 dollars. a well without calculation or any data.
- Q. From the fact that the gas is the upper zone and oil-gas in the lower zone, does that make the problem more simple or more complex?
  - A. Probably simplifies the matter.
- Q. That is all from this witness.

COMMISSIONER MILES:

Anybody want to question the witness?

(No response)

Anyone want to make any statements regarding the matter presented?

(No response)

Mr. J. W. HOUSE - Humble Oil Company:

Humble does not desire to enter a protest, but we do ask the Commission to make the records of the testimony taken in previous cases concerning dual completion held before this Commission to be made a part of the record of this case.

COMMISSIONER MILES:

Request granted.

MR. MILES

The request is granted and the case will be taken under advisement.

BY MR. E. R. WRIGHT, ATTY.

If the Commission please, this is a petition filed by the Texas Company and Vora V. Hartley, Petitioner, to unitize a 40 acre tract. The original lease, called the Cook lease, covered 36 acres of this 40 acre tract. This 40 acre tract includes part of the townsite of Monument. It is scattered lots and tracts and one platted area included in this 40 acres. The well was completed in 1937 and at that time this Commission was fully advised only 36 acres was under the lease, but a 40 acre allowable was granted. But Vora V. Hartley owned 2 acres and adjustment and settlement of that matter has been made and she has joined in this petition to unitize the 40 acres. There remains 2 acres in this lease that has 25 or 30 claimants.

This acreage is known as the Anderson tract. Mrs. Anderson died and left a will that the heirs got into a scuffle over and determined the will was forged. All the relatives came in for their interest in this 2 acres and has caused a more or less nusiance problem, and if we can unitize it so the Texas Company can produce the oil and when they can determine the legal owner they can make a payment. We desire to present very briefly evidence to show necessity for unitization and continuance of operating as it was down to August 1947. The allowable was cut back to 36 acres, but now we want to go back to the 40 acres, otherwise, the people with fractional interest in this 2 acres cannot have any benefit from it.

Mr. Willig will go into the matter more in detail.

(After being duly sworn, Mr. A. E. Willig testified as follows:)

JUDGE WRIGHT:

Please state your name.

MR. WILLIG: A. E. Willig.

- Q. What is your position with the Texas Company?
  - A. I am Division Engineer for the Texas Company in Ft. Worth, Texas. The Western Division includes among other areas the fields in Lea County, New Mexico, and particularly the field in Monument. New Mexico.

In order to follow this more closely I have several exhibits which constitute, first, a map on which is shown the location of the Texas Company in the Lee Cook lease in section 32, township 19 S, Range 37 E. On this map in red figures are shown the February 1948 allowables of the wells. On Exhibit No. 1 the Texas Company, Lee Cook Lease, is outlined in red and I have another exhibit which is enlarged — a map of the Texas Company Lee Cook Lease allowable; this is Exhibit No. 2.

The Exhibit No. 2 indicates the blocks in the town of Monument which cover that portion of the Texas Company Lease; in the southwest corner of Exhibit No. 2 is shown an area which is termed "unplatted". Of this area the Vora V. Hartley part which has just recently been leased by the Texas Company occupies the extreme southwest corner. The heirs and claimants of Mrs. Elizabeth A. Anderson cover the remaining portion of the unplatted area. Shortly after we acquired the oil and gas lease from Lee Cook, which is described as the NE/4 NE/4 of sec. 32, township 19 S, range 37 %. 36 acres, more or less, except for 4 acres in the southwest corner - the Texas Company made application, drilled its Lee Cook well No. 1 in the approximate center of the NE/4 NE/4 of Section 32. They did not own more than 36 acres and also a statement that the Texas Company would be willing to unitize

the remaining section. This well was completed on March 21, 1937 at a total depth of 2939 feet with initial potential of 198 barrels in 18 hours. It has produced to February 1, 1948 approximately. 152,300 barrels of oil. This well, as has been stated before, is located in what is known as the Monument field. The Oil Conservation Commission of New Mexico adopted the Monument producing area, Order effective August 1, 1936, which covers the allocation of oil and drilling of wells in Monument field in which this well is located. In order to follow uniform spacing, particular results from the order in the Monument field it would be impossible or would be unnecessary drilling of wells on tracts as small as the outstanding tracts as these were. The cost of drilling wells is approximately 38,000 to 40,000 dollars, the separate wells drilled on these small tracts would require other wells offsetting wells. In order to recover for the owners of these small tracts, the Texas Company desires to unitize the Vora V. Hartley claim as well as the area claimed by Anderson heirs, with its 36 acre lease.

We have drawn up a proposed order for the Commission's use that I would like to introduce as Exhibit #4. If the Commission please, I have here photostatic copies of the oil-gas leases which are in the usual form, covering both the Lee Cook and Vora V. Hartley leases, and division and transfer orders covering ownership and royalty interest I can introduce if the Commission desires them.

GOVERNOR MABRY:

We do not desire them.

GEORGE GRAHAM:

DAC.

You filed under Act 12 of the Conservation Law?

JUDGE WRIGHT:

We take the position that unitization will prevent waste and under those two acres if it is unitized it can be produced and when the Claimants show their interest, the money will be available for them.

1/360 interest and 1/8 royalty gets down to where it wouldn't even buy a postage stamp per day or per month, but otherwise the oil will be lost because they cannot aspend a 38 or 40 thousand dollars drilling a well on 2 acres without upsetting the whole allocation pro-ration in the Monument area. Out of these heirs 6/10 of that 2 acres is divided to 1/50 and 1/90 and some attorney had an undivided interest, which gets down to 1/360 interest in the royalty on 2 acres. We think it would be in furtherance of conservation to grant this oil; if the Commission or anyone has any questions to ask we would be glad to answer them. It is one of these nusiance things.

GOVERNOR MABRY:

Anybody object to that?

JUDGE WRIGHT:

No, we have not had any objections. We have had two letters where people wanted their interest protected.

GOVERNOR MABRY:

Any interest there you propose to protect?

#### GEORGE GRAHAM:

The record contains letters from various attorneys and Scheurich Agency?

#### JUDGE WRIGHT:

I would like all of those letters to be considered part of the file in this case just to show the situation and to show we have notified every one of the lease in that probate court proceeding.

MR. V. M. COHAN, Roswell, New Mexico:

Of these runs since 1937, how about the lease interest of these people therein - the royalty interest - are these going to be retroacted?

MR. WILLIG:

No, sir, the royalty owners under the Texas Company 36 acres lease have been paid the full amount of the runs from the well, the royalty on the outstanding tracts will begin with the order of the Commission.

MR. COHAN:

It appears to me up until August, of the 100 percent interest allowable there would be interest out of the 550,000 barrels of oil and be a considerable amount of oil - 1/10 of 40.

#### JUDGE WRIGHT:

Vora V. Hartley has given us a lease, so that would be out of the picture.

MR. COHAN:

Is that going to be a matter of record?

### JUDGE WRIGHT:

No, when you figure the cost of the well that would be most of it. The adjustment has been made with Vora V. Hartley and we have an agreement from all parties.

#### COMMISSIONER MILES:

Anybody else want to question the witness?

### JUDGE WRIGHT:

It is my understanding some other companies have this same problem, more or less, that may be coming before this Commission for similar orders, and I was wondering if any of them have any questions to ask - any companies having this same problem.

MR. ROBERT IMLER - Tulsa, Oklahoma

The Repollo Oil Company which operates in New Mexico - we have a somewhat similar situation that has been put in evidence by the gentleman from the Texas Company; and we are interested in knowing what the Commission's attitude and decision will be in this matter and hoping we can learn more about it. We have a 15 acre lease which is joined by a 25 acre lease owned by the Belville Oil Company, in this 15 acre lease there is probably one acre outstanding in that the heirs refuse to participate in drilling of a well - in putting up the money, their portion of it, and owns royalty under the 15 acres and the 25 acres. A well located on that unit would have to be in the center of

the 40 acres to follow the spacing plan, and that would make the well located on the 25 acre tract. As royalty owner on each tract the heir refuses to unitize the royalty. As lease owners on 15 acres they would refuse to put up their portion of the money drilling the well but would insist the well be drilled at our expense. They would necessarily own double royalty. The situation is rather unusual and may subject us to double royalty and subject us to give them a free ride on the well. If dry it wouldn't cost them anything and if a producer they would participate; and for that reason we come here today to see what action the Commission might take. Our situation is somewhat pressing, the other royalty owners are complaining and would like a well started. We would like to see quick action or a quick decision that is, made if possible.

I thank you.

#### COMMISSIONER MILES:

Any further statements or questions?

#### JUDGE WRIGHT:

The Commission understands, in making this order the Commission is not in any way passing on the title of this 2 acres - that is our problem.

#### COMMISSIONER MILES:

Yes - and the petition is granted.

By JOHN M. KELLY:

If the Commission please, this is a dual completion case similar to the Ohio Oil Company Case. We wish to dual complete a gas pay and oil pay.

I have laid a completion diagram before each member of the Commission showing the way we wish to complete this well. I am acting as consulting engineer for Ralph Lowe, the Petitioner.

This well is located in Lea County, New Mexico in the Langley-Maddox area. In our application we stated the following:

- "(1) That this application cover only the Ralph Lowe, Shell State #26 well located 990 feet from the South and 1650 feet from the West line of Section 36, 'T-23-S, R-36-E, Lea County, New Mexico.
- "(2) That as of this date said well is drilling below 2905 feet and is projected to drill to 3600 feet.
- "(3) That there was encountered between the depths of 2875 and 2905 feet a considerable quantity of hydro-carbon gas under high pressure. The volume of this gas is estimated at between 20 to 30 million cubic feet per day.
- "(4) That there is expected to occur at a depth of between 3500 to 3600 feet the regular oil producing horizon of the Langley-Maddox poolsuch as was found in the Western Gas Company's Combest #1 well in Section 35, T-23-S, R-36-E.
- "(5) That the petitioner to more fully utilize the natural resources of this area nad to prevent excessive underground waste desires to dually complete said Shell State #2c well in such a manner as to produce the gas through the annulus between casing and tubing and the oil through the tubing, placing a suitable retainer to prevent comingling of the products from the different formations.
- "(6) The Petitioner requests that this application be heard at the earliest possible moment as an emergency exists."

In the application I stated as of this date the well was drilling below 2901 feet, we have drilled 3600 feet; at the present time we have shut down. At 2705 feet a considerable quantity of hydro-carbon gas was found, 20 to 30 million cu. ft. per day.

Mr. Low states as follows in a letter to me dated February 7, 1948 -

"We propose to run pipe at total depth of 3450' and cement in two stages. The first stage will be in the usual manner and will bring cement from 3450' up to 3000'. The second stage will cement the casing from 2875' up to the bottom of the surface pipe through use of a Baker Multiplex Cementing Collar with a Baker Sliding Metal Petal Basket immediately below the collar. This will leave the gas zone free from cement and still comply with the Commission's regulations regarding cementing of the production string. The plug will then be drilled out and the well deepened to 3600' and the oil horizon tested in the usual manner. If production is obtained, a Baker Retainer Production Packer will be set in the lower part of the casing, and the casing perforated in the gas horizon from approximately 2875' to 2905'. Tubing will then be rerun and the gas produced through the annulus between the casing and tubing, and the oil through the tubing, with the packer between the pays preventing any co-mingling of the products."

PART OF SQUARE LAKES FIELD

• Producing Well

O Primary Location

Secondary Location

Thomas	Suppes	Thomas	Suppes				
Suppes	Ø Thomas	Suppes	Thomas				Ø
T.T. Co.	Suppes	T.T. Co.	Suppes	Carper	Suppes	Carper	Suppes
Suppes	T.T. Co.	Suppes	T.T. Co.	Suppes	Carper	Suppes  O	Carper

This is shown on the diagram as presented to the Commission, I believe it is complete and shows in detail the statement as just read. We are willing to make any test. We intend to sell the gas to the Gas Company and if the packer does leak the Gas Company will shut it off. We believe if we are allowed to complete the well in this manner we will utilize the resources in the area. Therefore, a relatively low recovery in the gas zone.

#### COMMISSIONER MILES:

Anyone have any questions or statements?

(No response)

If not the case will be taken under advisement.

MR. KELLY:

The Petitioner has requested the application be granted as soon as possible.

GEORGE GRAHAM:

What do you know of the corrosive properties?

A. The gas is sweet gas.

MR. GRAHAM:

It is also above the oil.

MR. PALEFORD - Olsen Oil Company:

Should these two dual completions be granted, would it be necessary to ask the Commission to complete other wells, or will this set a precedent?

COMMISSIONER MILES:

We will request a hearing.