

CASE 1372: Gulf Oil Corp. application for
oil-gas dual of its Alice Paddock #5 Well,
Sec. 1-228-373, Blinbry Oil & Tubb Gas Pool:

W. H. H. H.

Case No.

1373

Application, Transcript,
Small Exhibits, Etc.

EXAMINER HEARING
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
January 29, 1958

IN THE MATTER OF: Case No. 1373

TRANSCRIPT OF PROCEEDINGS

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

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EXAMINER HEARING
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
January 29, 1958

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IN THE MATTER OF:)

Application of Gulf Oil Corporation for a dual)
completion. Applicant, in the above-styled)
cause, seeks an order authorizing an oil-gas)
dual completion for its Alice Paddock No. 5)
Well, located 990 feet from the North line) Case 1373
and 2310 feet from the East line of Section 1,)
Township 22 South, Range 37 East, Lea County,)
New Mexico, in the Blinebry Oil Pool and Tubb)
Gas Pool.)
-----)

BEFORE: Mr. Daniel S. Nutter, Examiner

TRANSCRIPT OF PROCEEDINGS

MR. NUTTER: We will proceed next to Case 1373.

MR. COOLEY: Case 1373: Application of Gulf Oil Corporation
for a dual completion.

MR. KASTLER: If the Commission please, I am Bill Kastler,
attorney, representing Gulf Oil Corporation, and our two witnesses
this morning are Mr. Gerald J. Savage and Mr. H. B. Wofford, Jr.
I would like them to be sworn at this time.

(Witnesses sworn.)

Mr. Savage, will you please take the stand?

GERALD J. SAVAGE

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

DIRECT EXAMINATION

By MR. KASTLER:

Q Would you please state your name and where you reside and by whom you are employed?

A Gerald J. Savage, Roswell, New Mexico, Gulf Oil Corporation.

Q What is your position with Gulf Oil Corporation, Mr. Savage?

A I'm a staff geologist in the employ of the Gulf Oil Corporation.

Q Have you previously testified before the New Mexico Oil Conservation Commission as an expert witness?

A No, sir, I have not.

Q Where did you take your formal education?

A At the University of Colorado. I graduated in 1951 with a Bachelor of Arts Degree in Geology.

Q After your education, were you employed in the oil and gas industry?

A Yes, sir. In June of 1951 I was employed by the Gulf Oil Corporation, variously in Fort Worth and Midland, Texas, followed by a period of seventeen months in the Navy; and in September of 1954, I was transferred to the Roswell District of the Gulf Oil Corporation, where I am presently employed as a staff geologist.

MR. KASTLER: Mr. Nutter, I submit that Mr. Savage is qualified.

MR. NUTTER: Mr. Savage is qualified.

Q Mr. Savage, are you familiar with the general geologic

patterns in and around Gulf's Alice Paddock Well No. 5?

A Yes, sir, I am.

Q Are you familiar with the well history of Alice Paddock No. 5?

A Yes, sir.

Q Would you please outline that?

A The Alice Paddock No. 5 was originally projected as a test of the Tubb Gas and Drinkard Oil Zones. When the Drinkard Oil Zone was found to be non-productive, an attempt was made to complete as a gas well in the Blinebry Gas and Tubb Gas Zones. The producing GOR and the gravity of the fluid in the Blinebry Zone indicated an oil well, and application was made for a dual completion as a Blinebry Oil and Tubb Gas well.

(Applicant's Exhibit No. 1
marked for identification.)

Q I call your attention to Exhibit No. 1, Case No. 1373, Gulf Oil Corporation. Would you identify what that is and what it shows?

A It is a lease plat of the area around the Alice Paddock No. 5, which I have labeled Exhibit No. 1.

Q Would you please describe that area by Section, Township, and Range?

A The Alice Paddock lease is the east half of Section 1, Township 22 South, Range 37 East. The Alice Paddock No. 5 well is located 990 feet from the north line and 2310 feet from the east

line of that Section 1, and is located 330 feet from the lease boundary.

Q Mr. Savage, has an authorization been given Gulf Oil Corporation, to the best of your information and belief, authorizing this non-standard location?

A I have been informed that the non-standard location, Order No. 114, has authorized the non-standard location.

Q Was that the order dated September 1, 1957?

A Yes, sir, it is.

Q Mr. Savage, what is shown by the yellow square in this Exhibit No. 1?

A The yellow square outlines the standard proration unit for the Tubb Gas Pool, 159.87 acres.

Q The standard proration unit for the Blinebry Oil Pool, do you know how many acres that is and which unit that would be?

A The standard proration unit of 39.9 acres has been applied to the Blinebry Zone of this well.

Q Would that be the northwest quarter of the northeast quarter of Section 1?

A Yes, sir, it is.

Q Would you explain what other wells are shown on Gulf's Alice Paddock lease on this plat?

A On the Alice Paddock lease are shown Wells No. 1, 2, and 4 which are Paddock producers, and the No. 3 Alice Paddock, located 660 feet from the south and east lines of Section 1 is a Blinebry

Oil and Tubb Gas dual completion.

Q Was that Alice Paddock No. 3 dual recently authorized by this Commission?

A Yes, it was.

Q Does this plat, Exhibit No. 1, also show the offsetting or surrounding operators?

A Yes, sir, it does.

Q Do you have a log showing the formations penetrated by Alice Paddock No. 5 and showing the intervals perforated?

(Applicant's Exhibit No. 2
marked for identification.)

A Yes, sir, and this log I have labeled Exhibit No. 2.

Q Was this log prepared by you or at your supervision?

A Yes, sir, it was.

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

A Specifically, this log shows the top of the Blinebry formation at a depth of 5,570 feet, perforated through the interval 5,517 feet to 5,828 feet, which on a 24-hour O.C.C. test ending 1-20-1958, through two and three-eighth inch tubing and 15/64 inch shock flowed 25 barrels of oil and 2 barrels of water with a gas volume of 753 cubic feet of gas, which gives a gas-oil ratio of 30,120 cubic feet of gas per barrel at a tubing pressure of 550 pounds; and also the top of the Tubb formation at a depth of 6,050 feet perforated through the interval 6,154 feet, 6,249 feet, which on

a 15-minute O.C.C. test dated 9-10-57 through two and seven-eighths inch tubing and four inch orifice flowed 8,400,000 cubic feet of gas per day with 400 pounds back pressure, with an estimated open flow of ten and a half million cubic feet of gas per day.

MR. KASTLER: Mr. Examiner, that's all the questions I have of this witness at this time.

CROSS EXAMINATION

By MR. NUTTER:

Q Mr. Savage, did you mention the gravity of the fluid that is being produced?

A No, sir, I did not. However, the gravity of the oil in the Blinbry Zone is in the range of 36 degrees A.P.I.

Q So this well, by the classification system prescribed in Rule 2 of the rules for the Blinbry Pool, would definitely be an oil well, is that correct?

A At the time of this particular test it would be.

Q Mr. Savage, do you believe that this 160-acres is productive of gas from the Tubb Pool?

A Yes, sir, I do.

Q The entire 160?

A Yes, sir. I believe it could be considered to be productive of gas.

Q Are there any Tubb gas wells to the east of this well?

A No, sir, there are not.

Q What evidence do you have that the east half of the 160 acres

would be productive of gas?

A Well, it is a known fact that the Tubb gas pay is approximately 225 feet thick, and there is a dip on the Tubb formation from the west side of the Alice Paddock lease to the east side of the Alice Paddock lease of approximately 125 feet, and by this correlation, I believe that the entire 160 acres would be productive of gas.

Q You haven't prepared any cross sections, however, to show that structure dipping to the east?

A No, sir, I have not.

MR. KASTLER: Mr. Savage -- Off the record.

(Discussion off the record.)

MR. KASTLER: Do you wish to correct your answer to that last question?

A Yes, sir. We had prepared a structure exhibit, but decided not to present it in this case, but at this time I would like to present this exhibit, which is a contour map on top of the Tubb formation.

MR. KASTLER: We had previously marked this as Exhibit No. 2. It should be remarked as No. 3, if you please.

(Applicant's Exhibit No. 3
marked for identification.)

MR. NUTTER: Gulf's contour map of the area has been marked Exhibit No. 3 in this case.

MR. KASTLER: Do you care to have me question him?

MR. NUTTER: Yes.

DIRECT EXAMINATION (Continued)

By MR. KASTLER:

Q Was Exhibit No. 3 prepared by you or at your direction or under your supervision?

A Yes, it was.

Q Would you please explain what is shown on Exhibit No. 3?

A On Exhibit No. 3 is shown the area of the Gulf's Alice Paddock lease. It is a contour map on top of the Tubb formation with a contour interval of 25 feet. The location of the Alice Paddock No. 5 well is encircled in red, and the 160-acre proration unit is outlined in yellow, and the Alice Paddock lease is outlined with dashed lines.

Q Now would you please explain what is shown on this plat which leads you to conclude that Alice Paddock No. 5 would be productive of the entire area outlined in yellow as a standard production unit?

A As I stated to Mr. Nutter, the dip on the top of the Tubb formation is to the east over the Alice Paddock lease, with a dip of 125 feet in a distance of one-half mile, and inasmuch as the Tubb gas section is approximately 225 feet and we are producing high enough in the Tubb Gas Zone that I believe that it could be reasonably stated that the entire 160 acres is productive of gas.

MR. KASTLER: I have no further questions at this time, Mr. Nutter.

MR. NUTTER: Does anyone have any questions of Mr. Savage?

MR. KASTLER: Mr. Nutter, if the Commission please, I would like to offer as our explanation of the reason for not including this plat or exhibit originally, we felt this being an application for a dual completion on a standard unit with an unorthodox unit location authorized, that it was not necessary or pertinent to this hearing.

MR. NUTTER: Your explanation is satisfactory, Mr. Kastler.

CROSS EXAMINATION (Continued)

By MR. NUTTER:

Q Are you acquainted with the location of the Blinebry and Tubb markers as those have been defined on the log, and what would the location be on the Exhibit No. 2?

A As I previously indicated, the Blinebry Zone, the top of the Blinebry formation in this well is at a depth of 5,570 feet. However, the Blinebry interval as defined by the Commission takes in an interval of 75 feet above the top of the Blinebry Zone to, I believe, 225 feet below the Blinebry formation.

Q These tops that you have marked on your Exhibit No. 2 are the Blinebry marker and the Tubb marker, then, rather than the tops of the formations?

A To the best of my knowledge, the Blinebry is as is called in the area, and corresponds to the top of the Blinebry as has been picked on surrounding wells that had penetrated to that depth, and the top of the Tubb formation is the top of the Tubb formation as

defined by the Oil Conservation Commission.

Q Would all perforations in the Blinebry area be within 75 feet above the top of the Blinebry marker and 300 feet below the top of the Blinebry marker?

A Yes, sir, they would fall within that zone.

Q Would all the perforations in the Tubb Zone be within a hundred feet of the Tubb marker and 225 feet below the bottom of the Tubb marker?

A Yes, sir, they are within that zone.

Q Mr. Savage, does the Tubb formation produce any liquid in this well?

A It is not known specifically what liquid will be produced inasmuch as we have not recovered all of our oil load from the Tubb Zone. However, condensate, that has been produced has a gravity of 46.8 degrees A.P.I.

Q Which under the Tubb definition would be classified as a gas well?

A I am not familiar with the Tubb gas definition. Is it the same as the Blinebry?

Q No, it is not. The rules for the Tubb as defined by Commission Order R-576-B is "That an oil well in the Tubb Gas Pool should be defined as a well which produces liquid hydrocarbons possessing a gravity of 45 degrees API or less." So would this well be classified as an oil well or a gas well?

A To the best of my knowledge, if it could be considered that

the condensate produced is from the formation, it would be a gas well.

Q But all of the load oil has not been recovered?

A All of the load oil has not been recovered.

MR. NUTTER: Any further questions of Mr. Savage? If no further questions, the witness may be excused.

(Witness excused.)

MR. KASTLER: Mr. Wofford, would you please take the stand?

H. B. WOFFORD, JR.

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

DIRECT EXAMINATION

By MR. KASTLER:

Q Would you please state your name, your place of residence, and by whom you are employed?

A My name is H. B. Wofford, Jr. I am in the employ of Gulf Oil Corporation as District Reservoir Engineer in Roswell, New Mexico.

Q As District Reservoir Engineer, are you familiar with the proposed dual completion of Alice Paddock No. 5?

A Yes, sir.

Q Have you prepared or had prepared a schematic diagram showing the mechanism involved in this hearing?

A Yes, sir. At my direction a schematic was prepared which we have labelled 4.

MR. KASTLER: Yes, this previously was Exhibit No. 3 and I

would like to have it re-labelled or re-numbered to No. 4.

(Applicant's Exhibit No. 4
marked for identification.)

Q Will you please explain Exhibit No. 4?

A Yes, sir. The well was drilled to a total depth of 6,710 feet and as was testified previously, when the Drinkard was found to be non-productive, it was plugged back with mud and cement to 6,324 feet. We have 13-3/8 inch C.D. surface casing set at 257 feet and the cement was circulated on that. We have an intermediate string of casing, 8-5/8 inch O.D., set at 2,948 feet. It was cemented with 1100 sacks with the top of the cement at 595 feet, determined by temperature survey. The producing string of 5-1/2 inch O.D. casing is set at 6,350 feet, cemented with 775 sacks with the cement top at 2935 feet, which connects with the intermediate string. That top was also determined by temperature survey.

Q What is the total depth of the well?

A 6,710 feet, approximately.

Q Is the well presently plugged back?

A Yes, sir.

Q To what depth?

A 6,324 feet.

Q Would you go on and continue to explain this diagram?

A Yes, sir. The Tubb formation was perforated in the interval indicated by Mr. Savage with the F.I. technique, or that is, there were 6-1/2 inch holes in a circle at each of the intervals indicated.

The Blinebry was perforated in the same manner. In the installation of the dual completion equipment, a Baker Model "D" production packer was set at 6,101 feet, and a Baker Model "D-A" production packer was set at 5,470 feet. 2-3/8 inch tubing was then run and suspended at 6,236 feet, the tubing perforations as indicated on the diagram as 6,234 feet to 6,237 feet. In the string of tubing was a Baker Model "E" changeover flow tube seated in the top packer and above that is a Garrett circulating valve which was used in the installation and under normal operating conditions is closed. The flow of fluids in this well are indicated by the yellow for the Tubb and the red for the Blinebry. The Tubb fluids enter the well bore through the perforations, enter the tubing perforations and flow up the tubing to the changeover flow tube where they are, the Tubb fluids are diverted into the casing annulus, the casing tubing annulus above the top packer, where they flow to the surface to the flow line. The Blinebry fluids enter the Blinebry perforations between the two packers, entering the flow tube directly and flowing directly into the 2-3/8 inch tubing to the surface.

Q Have you used a 2-3/8 inch tubing entirely in this well?

A Yes, sir.

Q Would you explain the reason for completion with a single string of tubing rather than double tubing?

A Well, we were, with the 5-1/2 inch casing that was run in the well, we were limited in the amount of space available in which to install the equipment.

Q Is it more economical to use a single string of tubing in that instance?

A Yes, sir.

Q Is this type of packer and crossover assembly successful, has it been experienced and tried out and successfully proven itself?

A Yes, sir, I believe it has.

Q Can adequate tests be performed to assure a complete separation of the respective zones to determine if any leakage occurs?

A Yes, sir.

Q Can any leakage occur, in your opinion?

A No, sir. Of course, we have tested the installation and have detected no leakage as yet, and don't anticipate any under normal conditions.

Q Will Gulf comply with such operating tests, reports and procedures required by the New Mexico Oil Conservation Commission?

A Yes, sir.

Q Is this application in the interest of correlative rights?

A Yes, sir, I believe it is.

Q Will it promote the conservation of oil and gas?

A Yes, sir.

Q Do you have anything else to add?

A No, sir, I believe not.

Q Was this schematic diagram prepared by you or under your direction or supervision?

A Under my supervision.

MR. KASTLER: I would like to move at this time for the admission of Exhibit No. 4 into evidence in Case No. 1373.

MR. NUTTER: Without objection, Gulf's Exhibit No. 4 will be admitted in this case.

MR. KASTLER: That's all the questions I have.

MR. NUTTER: Any questions of Mr. Wofford?

CROSS EXAMINATION

By MR. NUTTER:

Q Mr. Wofford, you heard Mr. Savage state that the gravity of the Blinebry liquids was 36 degrees API. Is that a stabilized gravity, or has there been any change in the gravity in the production from the Blinebry zone?

A To my knowledge, and as a matter of record, that is the only gravity that has been reported. I couldn't say if that is a stabilized gravity.

Q What about the GOR, what is that?

A The test made on the Blinebry zone for O.C.C. potential was 30,000 gas-oil ratio.

Q Is it a reasonable expectation to believe that the Blinebry is classified as an oil pool in this well, or that the Blinebry completion is classified as an oil well completion and that it will so remain?

A I believe that it is reasonable at this time; of course, by Commission rules, or the definition in the Commission rules and regulations, that gas-oil ratio would only have to increase two or

three thousand cubic feet per barrel for it to be classified as an oil well, and I anticipate that that will occur in a short time with continued production and depletion.

MR. KASTLER: As a gas well, you mean?

A Yes, as a gas well.

Q That is providing the gravity was more than 51 degrees?

A No, sir, a gas-oil ratio in excess of 32,000.

Q I believe according to the Rule 2 of the Special Rules of the Blinebry Oil Pool, Mr. Wofford, that it would have to produce with a gravity of 51 degrees and a GOR not exceeding 32,000 to be classified as an oil well?

A Yes, sir.

Q How about the liquids in the Tubb completion?

A As Mr. Savage testified, I believe that the only reported gravity we had is approximately 48 degrees API, and as he stated, the well is not completely stabilized; so that we are not sure at this time that that will be the stabilized gravity of the fluid, but according to the rules, it does qualify as a gas well at this time.

Q Is there any way of knowing whether it will so remain?

A No, sir, I don't believe I could say.

Q What is your expectation, that it will be an oil well or gas well eventually?

A I feel that it will be a gas well because a good many of the oil wells in the area indicated much more gravity of fluid

produced.

Q You think it will remain a Tubb gas well, then?

A Yes, sir' I believe it will.

MR. NUTTER: Let the record show that if there are any statements or observations as to a classification of a well as an oil well or gas well in the Blinebry Pool, that the definition as prescribed by Commission Order R-610-B will be the criteria for determining what that well will be classified as.

Are there any further questions of Mr. Wofford?

MR. COOLEY: Yes, I have one.

MR. NUTTER: Mr. Cooley.

By MR. COOLEY:

Q Mr. Wofford, I believe you testified that the Blinebry completion has a present GOR of approximately 30,000 to 1?

A Well, if I said "presently", I didn't mean that exactly. That was according to O.C.C. test taken the 20th of January.

Q Do you have any reason to doubt the accuracy of that test? Do you believe that would properly reflect the condition as it now exists?

A Yes, sir, under the conditions of that particular test, I would say that it was accurately represented production.

Q Do you think that the Blinebry completion can be produced in such a manner as to keep the GOR below 32,000 cubic feet per barrel of oil?

A Certainly, changing the choke size has an effect on that,

and we have tested various choke sizes over the past week and if we produce it at, oh, say with a one inch choke, we found that we can produce some 25 barrels of fluid and 25 to 50 barrels of fluid with a gas-oil ratio of 25,000 to 30,000; but we restrict that choke and we find that, well, our liquid decreases 10 to 15 barrels and the gas-oil ratio then may range up to 40,000 or more, recent test is 60,000. So it depends on flowing conditions. It is teetering on the borderline between an oil well and gas well.

Q I asked if the GOR exceeds the 32,000, it would become a gas well, in accordance with Rule 610-B?

A Yes, sir, I believe that's right.

Q The trend would be, would it not, through production of this well for the GOR to increase?

A Yes, sir, I think that would be the normal situation.

Q If and when the well does become a gas well under the definition in 610-B, you would then make application for a gas-gas dual and dedication of 160 acres to the well?

A I'm not completely clear on procedure in these. I think we would ask for a reclassification of the Blinebry zone, I don't know what would be required.

MR. KASTLER: Yes.

A Yes.

MR. COOLEY: That's all the questions I have.

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

(Witness excused.)

MR. NUTTER: Does anyone have anything to offer in Case 1373?

MR. COOLEY: Off the record.

(Discussion off the record.)

MR. KASTLER: If I may, I would like to state for the record that by administrative approval, DC Order 492 has been given to Gulf permitting a completion in this very well for a gas-gas dual and subsequent to that time, it was found that the Blinebry zone was productive of oil.

MR. NUTTER: That was a gas-gas dual in the Blinebry and the Tubb formation?

MR. KASTLER: Yes, it was. Thank you.

MR. NUTTER: Anything further in Case 1373? If not, we will take the case under advisement.

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C E R T I F I C A T E

STATE OF NEW MEXICO)
) ss
 COUNTY OF BERNALILLO)

I, ADA DEARNLEY, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Proceedings before the New Mexico Oil Conservation Commission was reported by me in stenotype and reduced to typewritten transcript under my personal supervision, and that the same is a true and correct record to the best of my knowledge, skill and ability.

WITNESS my Hand and Seal this 17th day of February, 1958, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

Ada Dearnley
 NOTARY PUBLIC

My commission expires:

June 19, 1959.

I do hereby certify that the foregoing is
 a complete record of the proceedings in
 the hearing before the Commission on Case No. 1373
 heard by me on 1-29-58.
[Signature] Examiner
 New Mexico Oil Conservation Commission

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

February 14, 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 Order R-1121 issued February 12, 1958, by the Oil Conservation Commission in Case 1373, which was heard on January 29th 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. 1373
Order No. R-1121

APPLICATION OF GULF OIL CORPORATION
FOR AN OIL-GAS DUAL COMPLETION IN
THE BLINEBRY OIL POOL AND 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 January 29, 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 12th day of February, 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 Alice Paddock No. 5 Well, located 990 feet from the North line and 2310 feet from the East line of Section 1, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico.

(3) That the Commission, by Administrative Order No. NSL-114, dated September 1, 1957, authorized the unorthodox gas well location of the above-described Alice Paddock No. 5 Well.

(4) That the Commission, by Administrative Order No. DC-492, dated August 22, 1957, authorized the applicant to effect a gas-gas dual completion of the above-described well in the Blinebry and Tubb formations; upon the actual dual completion of said well it was found that the Blinebry formation is productive of oil rather than gas.

(5) That the applicant now seeks authority to dually complete the above-described Alice Paddock No. 5 Well in such a manner as to permit the production of gas from the Tubb Gas Pool through tubing up to the Blinebry formation and thence through a cross-over flow assembly into the casing-tubing annulus to the surface, and to permit the production of oil from the Blinebry Oil Pool through the tubing.

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

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

(8) That the subject application should be approved.

IT IS THEREFORE ORDERED:

(1) That the applicant, Gulf Oil Corporation, be and the same is hereby authorized to dually complete its Alice Paddock No. 3 Well, located 990 feet from the North line and 2310 feet from the East line of Section 1, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico, in such a manner as to permit the production of gas from the Tubb Gas Pool through tubing up to the Blinebry formation and thence through a cross-over flow assembly into the casing-tubing annulus to the surface and to permit the production of oil from the Blinebry Oil Pool 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-122, 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 Gas-Liquid Ratio Test Period for the Tubb Gas Pool, commencing in the year 1959, and whenever the packer is disturbed, but not excluding any

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Case No. 1373
Order No. R-1121

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

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 reservoir 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



EDWIN L. MECHEM, Chairman



MURRAY E. MORGAN, Member



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



ir/

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Date 1-29-58

CASE

1373

Hearing Date

1/29/58 DSN SF 9am

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

Enter an order authorizing the dual completion proposed by gulf in the subject case, i.e., for a Blinberry oil and Tuba gas Dual. Applicant has received previous authority for a non-standard gas well location (NSP 114, dated 9-1-57) and has also received previous authority for a dual completion of the subject well in the Blinberry and Tuba formations (DC 492, dated 8-22-57). However the previous DC was for a gas-gas dual and it now appears that the Bl. will be oil productive rather than gas productive. DC 492 should not be cancelled but should remain in effect to cover the well in the event the Bl. goes to gas.

Jan Miller
Staff Member

DOCKET: EXAMINER HEARING JANUARY 29, 1958

Oil Conservation Commission 9 a.m., Mabry Hall, State Capitol, Santa Fe, New Mex.

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

CASE 1372: Application of Zapata Petroleum Corporation for permission to produce more than eight oil wells into common storage. Applicant, in the above-styled cause, seeks an order authorizing the production into common storage of all oil produced from thirteen oil wells in Section 28, Township 17 South, Range 33 East, Maljamar Pool, Lea County, New Mexico.

CASE 1373: Application of Gulf Oil Corporation for a dual completion. Applicant, in the above-styled cause, seeks an order authorizing an oil-gas dual completion for its Alice Paddock No. 5 Well, located 990 feet from the North line and 2310 feet from the East line of Section 1, Township 22 South, Range 37 East, Lea County, New Mexico, in the Blinebry Oil Pool and Tubb Gas Pool.

CASE 1374: Application of Western Natural Gas Company for a dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its Wimberley No. 3 Well, located 660 feet from the North line and 660 feet from the West line of Section 24, Township 25 South, Range 37 East, Lea County, New Mexico, in such a manner as to produce oil from an undesignated Fusselman pool and oil from an undesignated Drinkard pool through parallel strings of tubing.

CASE 1375: Application of Western Natural Gas Company for a dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its Wimberley No. 4 Well, located 1980 feet from the North line and 990 feet from the West line of Section 24, Township 25 South, Range 37 East, Lea County, New Mexico, in such a manner as to produce oil from an undesignated Fusselman pool and oil from an undesignated Drinkard pool through parallel strings of tubing.

CONTINUED CASE

CASE 1357: Application of Standard Oil Company of Texas for an order authorizing the production into a common tank battery of all oil produced from five leases in the Atoka Pool, Eddy County, New Mexico. Applicant in the above-styled cause, seeks an order authorizing the production into a common tank battery of all oil produced from the Atoka Pool from the following described leases: SW/4 SE/4, NW/4 NW/4, NW/4 SE/4, SE/4 NW/4, and SW/4 NE/4 of Section 12, Township 18 South, Range 26 East, Eddy County, New Mexico.



PETROLEUM AND ITS PRODUCTS

GULF OIL CORPORATION

P. O. DRAWER 1290 FORT WORTH 1, TEXAS

B. E. THOMPSON
DIVISION PRODUCTION COORDINATOR

December 16, 1957

FORT WORTH
PRODUCTION DIVISION

Oil Conservation Commission
State of New Mexico
Santa Fe, New Mexico

Re: Application to Dually Complete Gulf's Alice Paddock
No. 5 so as to Produce from the Blinebry 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:

- 5517
Bl Oil
5828
6154
Tb gas
6249
- (1) Gulf Oil Corporation's Alice Paddock Well No. 5 is located 990 feet from the north line and 2310 feet from the east line of Section 1, T-22-S, R-37-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-productive and plans were changed to provide for a Tubb and Blinebry gas-gas dual completion. After perforating and treating the Blinebry zone, it was found that the producing GOR and gravity of the fluid indicated a completion of an oil well in the Blinebry Pool. The Tubb gas zone was perforated and production tests indicated a rate of 8,400 MCF per day at 400 psi back pressure in what is now known as the Tubb Gas Pool. Subject well and the location of all offset wells are shown on the attached plat.
 - (2) This well was drilled to a depth of 6710 feet and 5½-inch casing set at 6350 feet and cemented with 775 sacks. The plugged back total depth is 6324 feet. The Tubb zone is perforated at 6154, 6164, 6178, 6211, 6221 and 6249 feet. The Blinebry zone is perforated at 5517, 5544, 5565, 5580, 5657, 5727 and 5828 feet.

December 16, 1957

- (3) In dually completing the well, applicant proposes to use Baker crossover equipment. In utilizing this equipment, the Tubb gas production will enter the tubing and pass through the crossover equipment and up the tubing-casing annulus. The Blinebry oil production will pass through the crossover equipment and to the surface through the 2-inch tubing. A Baker Model "D" packer is set at 6094 feet to separate the two pays.

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 B. E. Thompson
Division Production Coordinator

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

Humble Oil and Refining Company
P. O. Box 1600
Midland, Texas

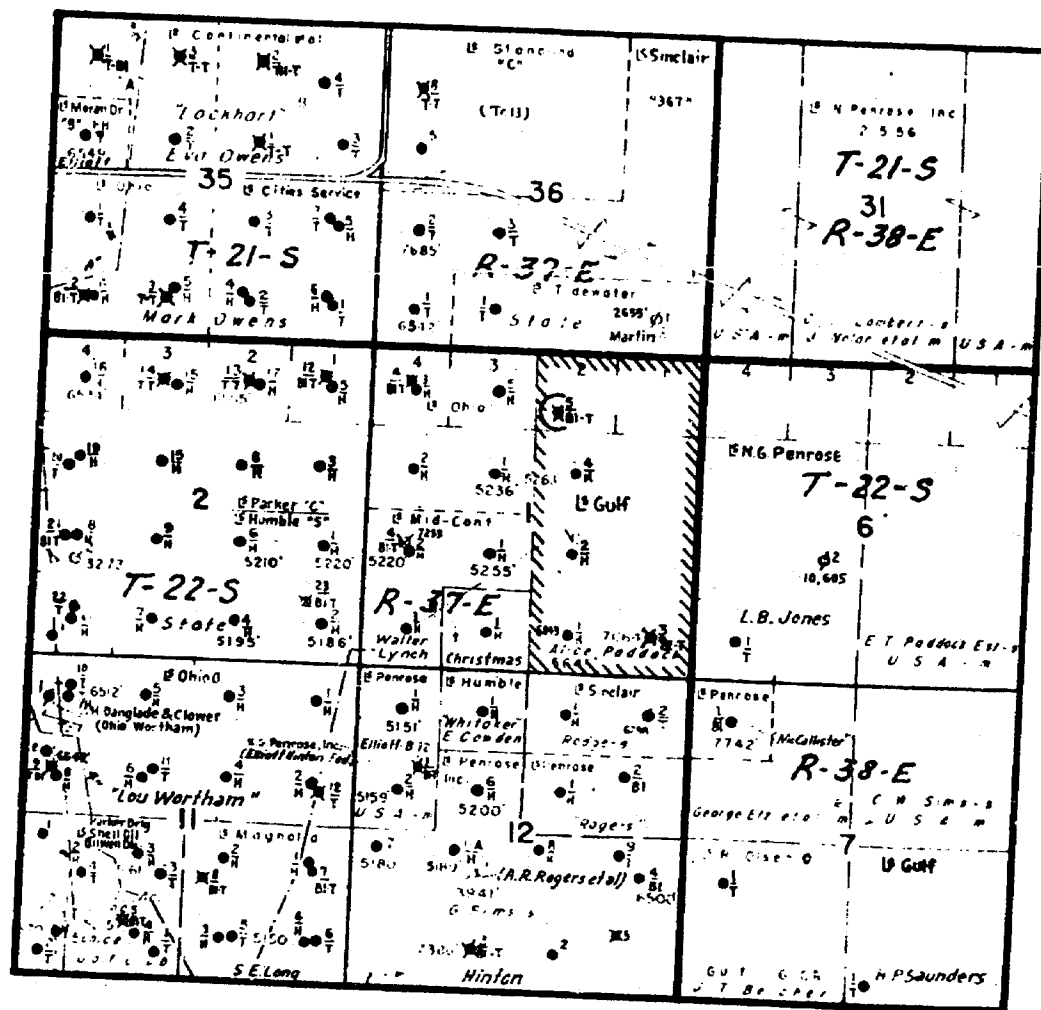
The Ohio Oil Company
P. O. Box 552
Midland, Texas

N. G. Penrose, Inc.
1815 Fair Building
Fort Worth, Texas

Sinclair Oil and Gas Company
P. O. Box 1470
Hobbs, New Mexico

Sunray Mid-Continent Oil Company
P. O. Box 128
Hobbs, New Mexico

Tidewater Oil Company
P. O. Box 1404
Houston, Texas



GULF'S ALICE PADDOCK LEASE
LEA COUNTY, NEW MEXICO

Legend

- Blaine Oil Unit 39.90 Ac.
- Tubb Gas Unit 159.87 Ac.
- Proposed Oil over Gas Dual
- completion

GULF OIL CORPORATION

SCALE 1" = 3,000'

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

January 2, 1957

C
O
P
Y

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

Re: Application to Dually Complete Gulf's
Alice Paddeck No. 5 so as to Produce
from the Blinbry Oil Pool and the Tubb
Gas Pool

Attention: B. E. Thompson

Gentlemen:

With reference to your application of December 16, 1957,
please be advised that approval of said application is being held up
pending receipt of a diagrammatic sketch of the proposed dual comple-
tion.

Upon receipt of the above mentioned, we will be in a position
to proceed with your application.

Very truly yours,

Daniel S. Nutter

DANIEL S. NUTTER
District Engineer

DSN:omg

cc: Oil Conservation Commission, Hobbs

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

Date January 9, 1958

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

Gentlemen:

Your application for a dual completion in the Rlinebry Oil Pool and
Tubb Gas Pool

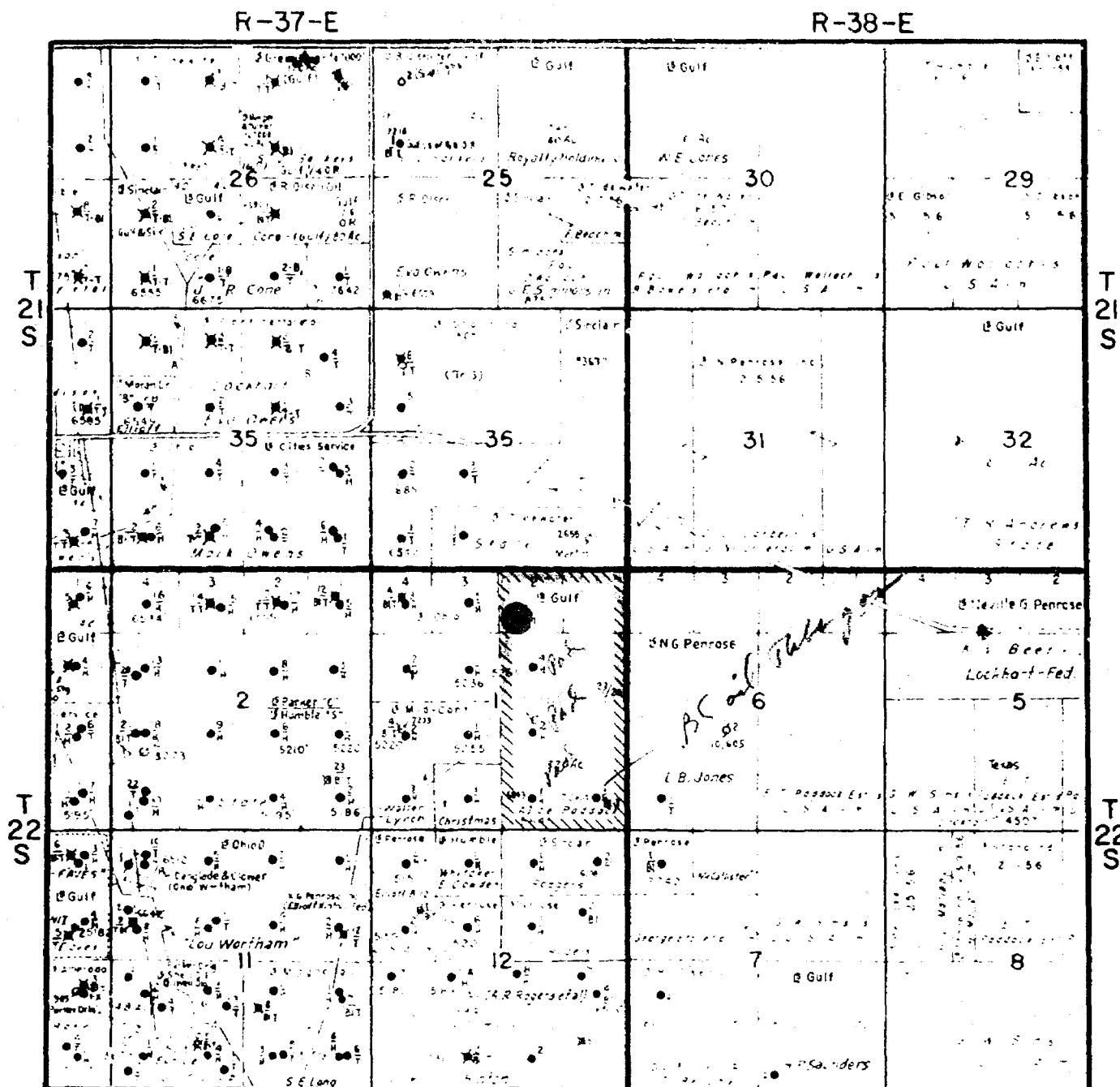
dated December 16, 1957 has been received, and has been tentatively
scheduled for hearing before an examiner on
January 29, 1958.

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



ALICE PADDOCK WELL NO. 5

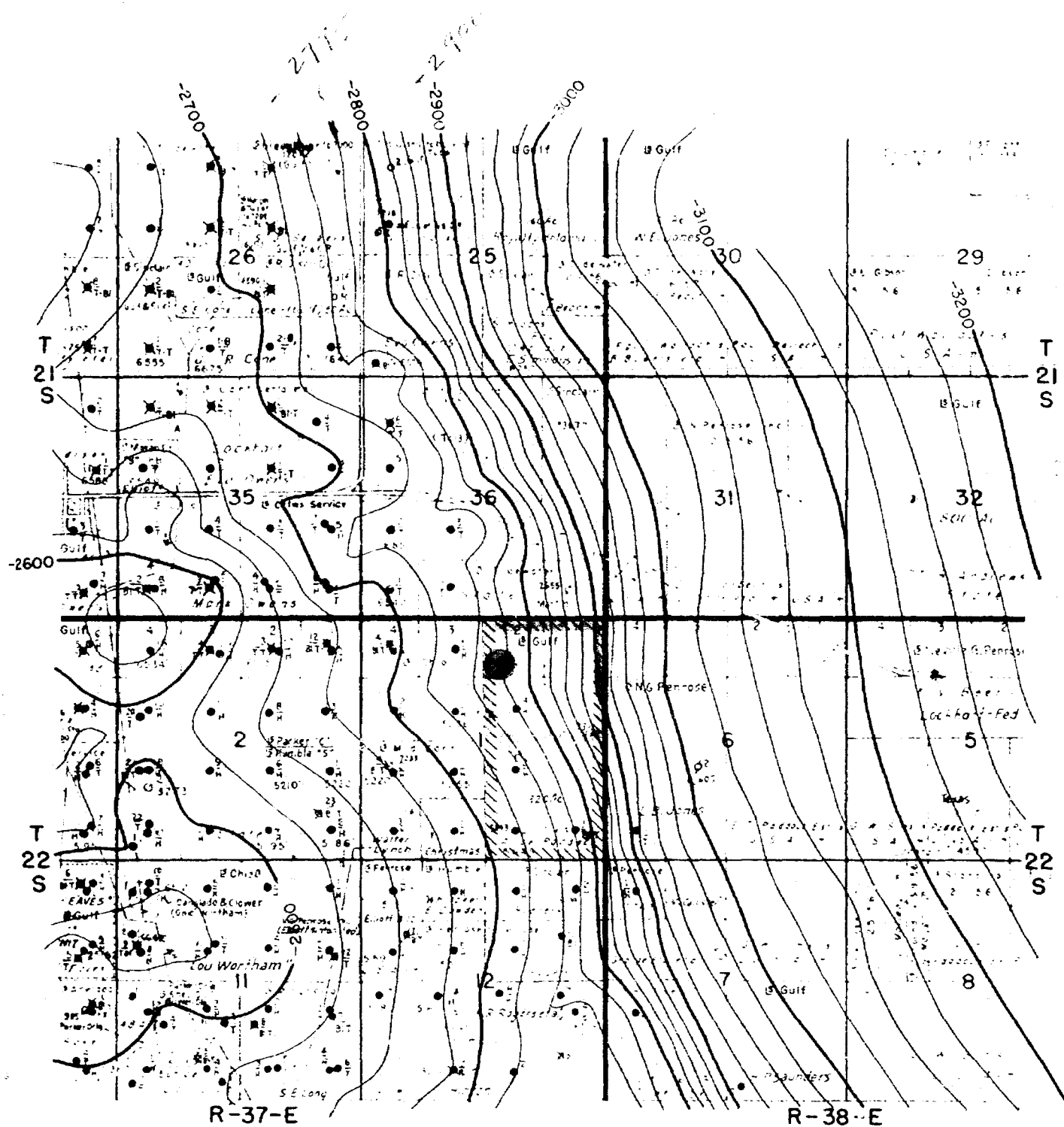
BLINEBRY & TUBB GAS POOLS, LEA COUNTY, NEW MEXICO

Gulf Oil Corporation

January 29, 1958

Case No. 1373
Exhibit No. 1

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
EXHIBIT No. 1
CASE 1373



Contour Map on Top of Tubb Formation

Case No. 1373 Exhibit No. 1

Gulf Oil Corporation January 29, 1958

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
Gulf EXHIBIT No. 3
CASE 1373