

Case No.

1221

Application, Transcript,
Small Exhibits, Etc.

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
July 17, 1957.

IN THE MATTER OF:

Application of the Oil Conservation Commission
on its own motion for an order amending Commission
Order R-586 insofar as it relates to the Byers-
Queen and Tubb Gas Pools. Applicant, in the above- :Case 1221
styled cause, seeks an order amending the Special
Rules and Regulations for the Tubb Gas Pool to
make provision in said rules for the regulation
of oil wells completed within the defined limits
of said pool; and further to consider the deletion
of that portion of Order R-586 relating to the
Byers-Queen Gas Pool.

BEFORE:

Mr. Murray Morgan
Mr. A. L. Porter
Governor Edwin L. Mechem

TRANSCRIPT OF PROCEEDINGS

MR. PORTER: We will take up next Case 1221.

MR. COOLEY: Case 1221. Application of the Oil Conservation
Commission on its own motion for an order amending Commission
Order R-586 insofar as it relates to the Byers-Queen and Tubb Gas
Pools.

MR. KASTLER: Honorable members of the Oil Conservation
Commission, my name is Bill Kastler, and I am the representative
of the Industry Committee. I am also with Gulf Oil Corporation,
a member of their Law Department, and I am representing the
committee for the reason that Gulf was appointed as the chairman
of this committee. This was the committee which was formed by
letter of January 28, 1957, for the purpose of making a study of

the present rules pertaining to the Tubb Gas Pool and making recommendations to the Commission for the purpose of formulating rules and regulations governing oil wells within the horizontal limits of the Tubb Gas Pool. I wish to state on behalf of the Committee our appreciation for the capable staff assistance given by Mr. Morgan, Mr. Fisher, Mr. Runion, and Mr. Cooley. My intent in presenting this, or my style of presenting it, rather is to present two witnesses, Mr. Guy Swartz, a geologist, and Mr. Bumpass, who is the Area Engineer for the Hobbs Production Office of Gulf Oil Corporation; and I wish also to state that after I have presented this testimony, or elicited it, there will no doubt be some comments from other members, the operators in the Tubb Gas Pool. At this time, may Mr. Bumpass and Mr. Swartz be sworn, please?

(Witnesses sworn.)

MR. KASTLER: Mr. Swartz, please take the stand.

GUY A. SWARTZ

a witness, of lawful age, having been first duly sworn on oath, testified as follows:

DIRECT EXAMINATION

By MR. KASTLER:

Q Will you state your name and position?

A My name is Guy A. Swartz. I am a staff production geologist with the Gulf Oil Corporation in Roswell.

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

A I have.

MR. KASTLER: Are Mr. Swartz's qualifications approved?

MR. PORTER: They are.

Q Mr. Swartz, did you serve as a member of the Industry Committee and attend Committee meetings of the Committee studying this matter?

A Yes, sir, I attended all the Committee meetings related to this matter and was appointed along with Johnnie Higgins, geologist for Ohio Oil Company as a geological sub-committee for the Committee.

Q Have there been exhibits prepared by members of the Committee with your cooperation?

A Yes, sir.

(Exhibits No. 1, 2, 3, 4, 5 marked for identification.)

I would like to present five exhibits numbered 1 through 5, which were prepared by John Runion, a geologist with the Oil Conservation Commission in Hobbs, and which were examined by John Higgins with Ohio and myself, and were found to be correct.

Q Are you thoroughly familiar with these exhibits and can you testify using them as to what they show?

A Yes, sir.

Q All right. In Exhibit No. 1, would you state what it shows?

A Exhibit No. 1 is a structural map contoured on the Tubb marker as defined by the Oil Conservation Commission, and shows a general north-south gentle anticlinal structure with several depressions on top. It's one of a gentle nature and also indicates, it is also indicated on the map the lines of cross-sections which were prepared as Exhibits 2 through 5.

Q Is the location of the oil wells in the Tubb Gas Pool shown

on Exhibit No. 1?

A Yes, sir. The wells which are producing lower gravity oils are indicated by red dots; and two wells which have drill stem tested within the Tubb zone and which have tested oil, have been indicated by red circles.

Q I see. How is this Exhibit No. 1 correlated with Exhibits No. 2, 3, 4, and 5?

A Exhibits 2, 3, 4 and 5 are indicated by heavy dark lines and designated A, A prime, B, B prime, C, C prime, and D, D prime on Exhibit 1.

Q I see. In the line, now A, A prime, is that the matter that is shown in more detail on Exhibit No. 2?

A Yes, sir.

Q Would you please state what that shows?

A Exhibit No. 2 is a cross-section.

Q I believe the next one is Exhibit No. 2.

A Excuse me. Designated as A, A prime on the map, and is located in Sections 9, 10, and 11 of Township 21 South, Range 37 East, and it shows Humble No. 7-N State V, a well which produces low gravity oil; and the Continental No. 2-W Nolan, also a well which is now producing low gravity oil, the relationship to two other gas wells.

Q Mr. Swartz, are these two wells that produce low gravity oil the same two wells as are indicated in lines A, A prime on Exhibit No. 1?

A Yes, sir.

Q All right.

A On Exhibit No. 2 there is also shown a red band which is located in approximate subsea depths of minus 2855 and minus 2875 feet, which indicates a rather narrow oil zone. The perforations of the wells producing the lower gravity oils have, are within or below this interval.

Q I see. Is that a firm interval which might be called a gas-oil contact line?

A No, sir. This is more of an intermediate zone which seems to be erratic and non-continuous throughout the pool, and --

Q (Interrupting) The currents of lower gravity liquids, however, seem to be struck at or below that index line, is that correct?

A That is correct. There is a coincidence, with this zone and the perforated intervals producing lower gravity oils. The cross-section B, B prime is located in Sections 27, 26, and 25, Township 21 South, Range 37 East.

Q Is that the same B, B prime as is indicated on Exhibit No. 1?

A Yes, sir.

Q Thank you.

A This exhibit shows R. Olsen's No. 1 Sarkeys in Section 26, comparison with three gas wells. This well is perforated above and below approximated oil zone, and the initial production was 180 barrels per day, with a gas-oil ratio of 1,035, the gravity of 44 degrees. The production of this well, incidentally, has fallen to approximately 20 barrels of oil per day.

Q Does the well log indicate any existence of high gravity liquid with any certainty?

A Above the minus 2855 point, there seems to be no low gravity oils produced.

Q Please proceed. Go to Exhibit No. 4, if you will.

A Exhibit No. 4 is a cross-section designated C, C prime, which is indicated on Exhibit No. 1, and shows Sinclair No. 2 Rogers, located in Section 12, 22, 37, the relationship to five gas wells extending in an east-west direction across the structure. This well has one set of perforations which lie within the oil zone. Exhibit No. 5 is a cross-section, D, D prime, and is indicated on Exhibit No. 1 and was constructed across the southern end of the structure to compare the oil zone with several gas wells in the area. All wells are perforated above this zone and also produce gas.

Q Mr. Swartz, now will you testify, please, as to what your conclusions are concerning these, this geological data you have presented?

A In conclusion, I would like to emphasize that this zone is not a gas-oil contact, but rather a zone from which oil is derived in some instances. In many instances this zone is open, and wells which don't appear to produce low gravity oil; the zone is not believed to be continuous throughout the pool. The Tubb Gas Pool is directly underlain by the Brinkard Vivian Oil Pool. 401 of 450 wells in this Pool are penalized because of excessive gas. It would appear that this Tubb oil zone is one of an erratic nature, which may or may not always be present throughout

the field, and where it is present, it appears to be sandwiched between a main Tubb gas pay and the gas cap of the Drinkard Vivian zone. Where it is present and being produced, it appears to be of minor and uncommercial quantity. It would appear that considered alone a Tubb oil zone won't possess enough dependable oil potential to even warrant consideration as a salvage zone.

Q Is it your conclusion, in other words, that the Tubb Gas Pool is primarily and predominantly a gas pool and should be continued to be developed as such?

A That is correct.

MR. KASTLER: Are there any questions the Commission wishes to ask.

MR. PORTER: Mr. Mankin has a question.

CROSS EXAMINATION

By MR. MANKIN:

Q Warren Mankin with the Oil Conservation Commission. Mr. Swartz, you mentioned a while ago this oil zone is directly above the Vivian, or Drinkard Vivian, which has some high gas-oil ratios, is that correct?

A That is correct.

Q Have you examined a number of the Drinkard wells that are closely associated to the Tubb formation to see if some of these might not be more properly classified as Tubb oil wells, rather than Drinkard oil wells?

A I am aware that the Vivian pay zone is situated somewhat below the legal or the defined limits of the Tubb gas zone, and rarely are any wells open above this point and productive of oil.

I don't believe this is ever the case.

Q What I meant by my question was, do you feel all the Drinkard wells are properly classified as Drinkard wells, and not some of them might not be Tubb oil wells?

A So far as I know, they are properly classified.

Q Properly classified?

A Yes, sir.

MR. MANKIN: That's all.

MR. PORTER: Anyone else have a question of Mr. Swartz?
The witness may be excused.

(Witness excused.)

MR. KASTLER: Our next witness is Mr. C. M. Bumpass.

C. M. BUMPASS

a witness, of lawful age, having been first duly sworn on oath,
testified as follows:

DIRECT EXAMINATION

By MR. KASTLER:

Q Will you please state your name and position?

A I am C. M. Bumpass, Area Petroleum Engineer for Gulf Oil Corporation in Hobbs.

Q Have you previously been qualified as an expert witness to testify before the New Mexico Oil Conservation Commission?

A Yes, sir, I have.

MR. KASTLER: Are the witness's qualifications satisfactory?

MR. PORTER: They are.

Q Mr. Bumpass, did you serve as a member of the Industrial Committee, or Industry Committee, which was making a study and made

recommendations concerning the Tubb Gas rules?

A Yes, sir.

Q Will you please state what the Committee's activity was and what capacity you served in?

A Well, sir, as a representative of Gulf Oil, chairman of the Committee, I will present the Committee's recommendations in this case.

Since the initial meeting of this Committee, which was held on February 5, 1957, the Committee has been very active in an endeavor to formulate recommendations for additional rules for the Tubb Gas Pool, as requested by the Commission. This has not been an easy task, and the numerous meetings that have been held exemplify the efforts of the Committee to fulfill the obligations to the Commission. I might state the recommendations of the Committee to be presented subsequently are a result of majority vote of the Committee members, and not by unanimous agreement of those members.

Q In other words, there was not a unanimity of agreement on these rules?

A That is correct.

Q I see.

A It was the consensus of the Industry Committee that the Tubb Gas Pool is a gas pool, and that the five wells listed in the oil proration schedule in the unclassified and wildcat section, Group 3, I believe it is, are a minor evidence in relation to this Tubb Gas Pool. I believe those records, according to my figures through July, these figures were taken from the July proration schedule for gas and the oil proration schedule shows there is

114 gas wells in the Pool, and the 5 aforementioned wells in the limits of the Tubb Gas Pool.

Q Those were classified as wells producing low gravity liquid hydrocarbons, is that correct?

A That's my understanding.

Q Yes.

(Exhibit No. 6 marked for identification.)

A I have here an Exhibit 6, which is a tabulation of the gas liquid ratio tests of the Tubb Gas Pool, conducted in an approximate period survey, I think October, 1956.

Q Is that exhibit one that was prepared and released by the Oil Conservation Commission?

A That is correct.

Q All right.

A I believe this would be Exhibit No. 6. In essence what this tabulation shows as indicated by the name, shows the operators and their respective wells in the Tubb Gas Pool and the gravity of the liquid hydrocarbons produced with the liquid hydrocarbon ratio. At the time this was prepared, there were four wells in that category, Group No. 3, listed as oil wells, and since that time there has been the addition of one. I believe that well is Continental Nolan No. 2. That is not indicated on this exhibit here, but that brings to a total of five wells in this particular category. I would like to state at this time that a detailed engineering study of this pool was not made, on the basis the consensus of the Committee members did not feel the probe warranted such a study.

Q Was it the conclusion of a majority of the Committee that

the Tubb Gas Pool is predominantly a gas pool and should be continued to be developed as such?

A I believe that is the contention, yes. It's not intended to enter as an exhibit; however, there was some tabulations on data pertinent to these five wells I have just referred to, such as the producing intervals which have been shown in the geological test. The data was requested and was obtained through, I believe the period was January 31st of '56, and since that time, or just prior to this meeting today I have made some tabulations of the production history of gas and oil of those five wells, and as Mr. Swartz more or less inferred in his testimony, production has dropped. A general statement on these five wells could be that the production has dropped. I think one of the largest producers was around 200 barrels per day when it was completed, and that well is probably producing somewhere around 20 barrels plus or minus at this time. Several of these wells are produced on pump and are apparently producing at capacity. It is also noted that in general the ratios have increased. I recall that one of the wells had an initial ratio of around 700, and that has increased to, I believe around 9,000.

Q Is it your conclusion, therefore, that the oil production record of these wells indicates a rather minor occurrence of oil?

A If the performance as illustrated in this tabulation is an indication, it can be, in my estimation, in view of the fact that this decline has occurred from a year or less period to approximately 20 barrels a day. I think one of the wells has an allowable of 37 on a proration schedule; however, it appears that

its capacity is somewhere in the neighborhood of 600 barrels a month. I might relate that was flowing, maybe some additional production could be obtained and possibly will be in the near future by pumping; however, there are other wells that are pumping and have been for some time. They seem to be stabilized at around forty-six barrels per month.

Q Would you recommend any increase or any continued study on this matter, or do you believe your conclusions are now correct based on all the evidence now available?

A I feel we should terminate this study at this time. I feel the Committee has done as much as it could.

Q Mr. Bumpass, will you now present the rules and regulations which the Committee has offered?

A I believe this would be Exhibit No. 7.

(Exhibit No. 7 marked for identification.)

MR. KASTLER: I have no further questions of this witness.

MR. PORTER: Does anyone else have a question of Mr. Bumpass?

A There's one other item here. The Committee was also asked by the Secretary-Director to advise the Commission on the necessity for continued proration in the Byers-Queen Pool. We would like to the Committee would like to recommend that we feel there is no necessity of continued proration in the Byers-Queen Pool.

MR. KASTLER: Would the Commission like Mr. Bumpass to read these rules into the record? There are additional copies that he has.

MR. PORTER: We feel it might clarify matters if you go

ahead and have Mr. Bumpas read it.

MR. KASTLER: Thank you.

A Tubb Gas Pool. Following are the proposed changes in Order No. R-586:

1. Item 7 will be added to Rule 5 (d): "In the event more than one gas well producing from the Tubb Gas Pool should be included in a standard or less than a standard proration unit, the sum of the allowables allocated to the wells shall be equivalent to that volume of gas allocated to a proration unit of the same size. The operator of such wells shall have the option to determine the proportion of the assigned allowable to be produced by each individual well, provided all of said wells are orthodox gas locations. In the event that one or more of the gas wells on the proration unit is an unorthodox location, the Commission shall establish the proportion of the assigned allowable to be produced from each individual well."

2. The third from last paragraph of Rule 8 will be revised to read as follows: "The allowable assigned to any well capable of producing its normal gas allowable in the Tubb Gas Pool shall be the same proportion of the total remaining allowable allocated to said pool after deducting allowables of marginal wells that the number of acres contained in the gas proration unit for that well bears to the acreage contained in all gas proration units assigned to non-marginal wells in the Tubb Gas Pool except that no well which produces liquid hydrocarbons with a gravity of 45° API or less regardless of the size of the proration unit will be permitted to produce more liquid hydrocarbons than the Statewide oil allowable

for wells on 40-acre units producing at depths between 6,000 and 7,000 feet. Any well subject to such limitation shall be so designated on the Commission's monthly allocation schedule of condensate and other incidental liquid hydrocarbons. Any well subject to this liquid hydrocarbon limitation and which produces more than the allowed volume of liquid hydrocarbons during any one month will make up such overage. Any gas production shortage resulting from application of the liquid hydrocarbon limitation or from shutting in a well because of overproduction of liquid hydrocarbons may be made up under the terms of Rule 9 (underproduction balancing provision) provided the liquid hydrocarbon limits described herein are not exceeded."

3. A rule 8b will be added as follows: "Tests to determine the gravity of the liquid hydrocarbons recovered from each well in the Tubb Gas Pool shall be taken following adoption of these rules and reported to the Commission on Form C-116 not later than the 15th day of the next succeeding month following adoption of these rules. The Commission will then mark on the allocation schedule of condensate and other incidental liquid hydrocarbons the wells which are to be subject to the liquid hydrocarbon limitation. Thereafter gravity tests on each well not subject to the liquid hydrocarbon limitation will be made during the months of January and February and reported to the Commission on Form C-116 not later than the 15th day of March."

That is the rule, those are the rules.

MR. PORTER: Does anyone have a question of Mr. Bumpass?
Mr. Mankin.

CROSS EXAMINATION

By MR. MANKIN:

Q Mr. Bumpass, do you have knowledge at this time as to whether there is presently any of these low gravity, so-called oil wells which was mentioned as five wells, whether any of these five wells presently ^{are} on acreage presently dedicated to a Tubb Gas well?

A No, sir, I haven't. I haven't looked into that fact. I did check in the gas proration schedule for July, and I don't, I may be incorrect, but I am just trying to answer your question the best I can, I don't believe they are on a gas proration schedule.

Q Then if I tell you that the oil, these so-called oil wells, none of them are actually dedicated to acreage dedicated to gas in this Pool; would you feel that would be a correct statement to the best of your knowledge?

A Yes, sir.

Q Do you feel that this small, in oil, acreage, that originally was thought to be maybe gas, and now you find to be, you feel this solution you have in these rules will handle the present situation and any situation that might be developed in the immediate future?

A If there -- I do want to qualify my answer to this, if it is the same as we have for gas, it would be workable, yes.

Q Also you indicated in the second proposed rule that such allowable or compensate allowable is the Statewide allowable. Is it not true at the time that the allowable for those depths during the current

approximately 68 barrels?

A I know when we first figured it was 78 barrels. It may well be, since the allowable is cut, 68 as you state.

Q With the top allowable of 68 barrels as has been suggested, there would be no ^{problem} as far as any well exceeding the allowable due to the low capacity of these five completed wells?

A That is my understanding, yes, sir.

MR. PORTER: Mr. Utz.

By MR. UTZ:

Q Mr. Bumpass, can you tell me, if a well producing, a gas well in the Tubb Gas Pool producing, say twenty million cubic feet of gas and 40 barrels and 46 gravity liquid would void more reservoir space than a gas well in the Tubb Pool which produces only twenty million cubic feet of gas and no liquid?

A I cannot.

MR. UTZ: That's all.

MR. PORTER: Mr. Cooley.

By MR. COOLEY:

Q Mr. Bumpass, in your proposed changes to Rule 8 and your rules and regulations in the Tubb Gas Pool, you suggest a liquid limit equal to 40-acre unit allowable for wells at 6,000 and 7,000 feet on wells producing liquids with a gravity of 45 degrees API?

A Yes.

Q There would be no limit on a well producing 46 gravity oil or 46 gravity liquids?

A That is correct, there hasn't been in the past.

Q Has there been in the past a liquid limit on any wells in the Tubb Gas Pool?

A No, sir, there has not to my knowledge, there hasn't.

Q Do you feel that liquids of 44 gravity oil and 46 gravity liquid would be in competition for the same market?

A If the conditions were right, they possibly could. This, if I might inject a statement here, the 45 is no particular magic number. We feel that, as I recall from this tabulation here, there are six wells that have gravity less than 45. Five of those six are these wells that we are talking about that are on the schedule, probably just as well could have pushed the gravity up to 46 or maybe 47, but we don't think that we even have a problem, even if we did, Mr. Cooley, because the production of those other wells, say that you had a limit set at a 45 and there was a 46 gravity and a 44 gravity well, it doesn't appear that the wells have been producing liquid hydrocarbons to the amounts that you would be competitive. I am sorry if I haven't gotten across the point, but

Q. I think you have. Then it's your thought that this can cause no harm because it will in effect never be enforced due to the fact there is no well that you know of in the pool at the present time with a gravity of 45 degrees or less that would make the allowable, as we --

A (Interrupting) That's true, yes, sir.

Q But if they did make them and they were limited and weren't capable of making in excess of the allowable, there might possibly be some injustice, wouldn't there?

A There possibly could, still the operator

being discriminated against still has the opportunity to go in and maybe try to better his well.

Q Then can you change the gravity of fluids produced from a well by work load?

A No, I wouldn't think so, you might have some influence on what gravity arrives at the surface. Apparently this zone in here is coincidental, or has localized occurrences where it might have some influence on the gravity that you get from the well.

Q Mr. Bumpass, what would you call this well with 45 degrees gravity or less, an oil well or gas well?

A Well, I am not versed on condensate reservoirs, so I don't think I could answer that question, Mr. Cooley.

Q Is this 45 or less liquid still, in your opinion, a condensate?

A No, I don't think so. I think the condensate is somewhere in the neighborhood of 51 gravity as it occurs in the reservoir, to be condensate.

Q Then a well producing 45 degree or less liquids would be producing oil?

A Well, from what I understand, Mr. Cooley, on liquids -- I am not versed on distillate reservoirs, but from my understanding, that 51 is the gravity and if that is so and there are no other elements to classify a reservoir as either oil or distillate, I would say your question you have asked would be yes.

Q It would be. Well, what I am getting to here is the spacing recommendations, under the general rules and regulations of the Oil Conservation Commission, unless they are termed to be

otherwise after special hearing, notice, 40 acres for an oil well, and proration unit in the Tubb Gas Pool is 160 acres for a gas well. What size proration unit would you recommend be assigned to a well producing 45 degree gravity or less?

A The way that we have proposed it here on the rule, I don't know that you would necessarily have to change the gas proration acreage.

Q Then you would leave it at 160 as the spacing for the Tubb Gas Pool.

A Yes, I don't quite understand the line of questioning. It is 160, we are not trying to change that. If we have a gas well on 160 and later someone, due to maybe offset operations, someone goes in with good faith to make a gas well and either drill a gas well to the Tubb or recomplete a Drinkard well, hoping to get a gas well, but they get situations like these five --

Q (Interrupting) That's the precise situation. Now what size proration unit would you give to the offset well that was drilled in good faith as a gas well--

A (Interrupting) In these suggested changes I would think you still have a 160-acre proration unit you can take up to, because it is in a gas pool and the gas pool in the Tubb is defined as 160 acres, but you would either be allowed to take the hydrocarbon equivalent to a volume of a 40-acre unit to the depth of six, seven thousand, or the amount of gas for 640-acre proration unit, whichever came first.

Q Even though there's 160 acres dedicated to this well, you would limit it, as I understand these rules, regardless of the size

of proration unit committed to produce just a 40-acre allowable for oil?

A That's liquid hydrocarbon. It can produce gas.

Q Can produce gas provided it doesn't exceed its thickness?

A That's true.

Q You have both a liquid and gas limit on such a well, whichever it reaches first, you have one or the other?

A You have one or the other, yes, sir.

Q Now you say they drilled this offset well and get -- they drill the offset well, the hypothetical offset well you referred to, and they get oil on a 160-acre unit, there's four other 40-acre tracts there in your unit. Suppose that they drill another well on that same 160-acre unit and get another oil well. Now would the combined production from these two oil wells be one unit allowable, or would you give it two normal unit allowables of oil?

A The way I understand it, you would give, well, let's say that 70 is the depth allowable for that, instead of having to repeat ourselves here so many times, if 70 barrels is the unit allowable and, as you stated, there you have two wells, the operator could take a maximum of 70 barrels out of each well, provided the gas limit was not exceeded for the 160 acres.

Q By both wells?

A By the total, yes, sir, that's provided in Rule 1.

Q Bating that oil production well by well, give each one a full allowable?

A Yes.

Q And divide 160-acre gas allowable between the two?

incentive or advantage to recovery of the oil or gas in the
Tubbs?

Q. Would it be possible in this scenario, from a completion
where one set of perforations would produce oil and another set of
perforations would produce gas, a type of dual completion in the
Tubbs?

A. I don't think I could answer that.

Q. Concerning the Myers-Queen Pool, is it your recommendation
the special rules and regulations contained in Order R-55 be
deleted in their entirety?

A. I am a little bit at a loss there. If there is no need
for proration, there's no need for the rules, is that the thought?

Q. That is correct, and revert back and control the operations
under the general rules and regulations contained in Article 104 of
the general rules and regulations of the Constitution.

A. Yes, sir.

MR. COOLIDGE: That's all.

MR. HANSEN:

Q. Mr. Hansen, is there any other way to control the proration
and the other rules and regulations in the Constitution?

than an active development?

A Well, I don't think I understand your question, Mr. Mankin. You mean the person just opens this zone to take it for salvage or each takes it as he can get it?

Q As he can get it, which amounts to a salvage operation.

A Well, to me that's the sequence of operations here.

Q The only other question I have, Mr. Bumpass, is there's one gas well, Sunray Mid-Continent State 15 Well No. 4-P in Section 16, 21, 37 which shows a condensate gravity of 43 degrees, but it also has a gas liquid, gas condensate ratio of 66,600. Do I understand your recommendations in these proposed rules, even though that is a gravity of less than 45 degrees, there would be no decrease of the 160 acres presently dedicated to that well?

A That's true.

Q It would stay the same as it is?

A That is right. That was the sixth well I referred to, and we feel that these rules would not work a hardship.

MR. MANKIN: That's all.

MR. PORTER: Any other questions of Mr. Bumpass? Mr. Kellahin.

By MR. KELLAHIN:

Q Jason Kellahin, representing Continental Oil Company. Mr. Bumpass, if I understand your testimony correctly, you said there were six wells in the pool now which have a gravity of less than 45 degrees API, and that none of these wells are capable of making the allowable that would be currently assigned, is that correct?

A There are six wells.

Q Well, didn't I understand you to say there were six wells that were producing liquids of gravity of 45 degrees API or less?

A There are six wells producing less than 45 degrees, yes, sir.

Q And didn't you testify that none of these wells would be capable of making their allowable?

A I said that, I believe I said or intended to say, that the records from the Engineering Committee records show that they are not producing that, above this figure, as Mr. Mankin pointed out would be 68 barrels per day for that range.

Q They were, in fact, all of them, producing less than this now, are they not, sir?

A I believe they are on the order of 20 some odd barrels per day.

Q On the basis of that information, and assuming they would not be capable of making that allowable, would there be any reason for opposing a limitation on them?

A I don't think these rules are for these specific five wells.

Q You think there will be other wells that would be affected?

A I couldn't answer that. There are some like these, those will not be affected; there are others that could have a longer life, producing life than these have, they will be.

Q Have you any reason to anticipate there would be additional wells that --

A No, I don't have any reason one way or the other, anticipated or not.

Q There are wells in the pool which are producing liquid in excess of 45 degrees API that would be capable of making the

allowable, are there not?

A Possibly there are.

MR. KELLAHIN: Thank you, sir.

MR. PORTER: Anyone else have a question? Mr. Bumpass, you may be excused.

(Witness excused.)

MR. KASTLER: I would like to move for the admission of Exhibits 1 through 7 in evidence in Case 1221, if you please.

MR. PORTER: Without objection they will be admitted.

(Exhibits No. 1 through 7
admitted in evidence.)

MR. PORTER: Anyone have a statement to make in this case?
Mr. Seth.

MR. SETH: Oliver Seth on behalf of Shell Oil Company.
I would just like to make a brief explanation. The witness indicated that the Committee was not unanimous. Shell was on the Committee and Shell was in the minority. Shell felt that it would be simpler and still equitable to regard all of the wells as gas wells and to prorate them as gas wells. Shell feels very strongly, too, about the elimination of the Byers-Queen Gas Pool regulations, but we would like the record to show and the Commission's understanding that Shell does support the majority opinion at this point. We certainly go along with the majority of the Committee and its recommendations, but I thought an explanation of the witness's reference to the lack of unanimity was in order.

MR. PORTER: Mr. Seth, you mentioned the fact that Shell feels strongly about the elimination of Byers-Queen, which direction?

MR. SETH: Just the elimination of the proration rules,

that's the same as the Committee recommends.

MR. PORTER: You concur in that, do you?

MR. KELLAHIN: That is right.

MR. LAYHE: Bob Layhe, Samedan Corporation. We were the other member of the minority. I have a statement I would like to read.

Samedan is of the opinion that the Tubb Gas Pool is primarily a gas condensate reservoir, and therefore prorated as such. Any ^{regulation} as to gravity of produced liquids could cause violation of correlative rights, and an order which might be sought in forced drilling obligations, compensatory royalty payments and facilities for separate storage would cause hardships; that in our opinion is not the Commission's intent. Therefore, as a member of the Industry Committee appointed to study the Tubb Gas Pool, we recommend the production of liquid hydrocarbons be considered as incidental to the production of gas, and that the Pool be prorated on gas only. Should future development prove the reservoir to have a definite oil ring, that would be ~~economically~~ feasible to develop, then the Commission could cause another study to be made, based on the new evidence.

MR. PORTER: Thank you, Mr. Layhe. Does anyone else have a statement? Mr. Kellahan.

MR. KELLAHIN: If the Commission please, Jason Kellahan representing Continental Oil Company, and we would like to make a statement. In connection with that statement, I would like to call the Commission's attention to some of the testimony given here this morning. In the first place, Mr. Swartz's testimony

shows very clearly, we feel, it would not be economic to drill a well to the oil zone as he referred to it, for oil production, and that this zone is actually accumulations of oil which are erratic throughout the reservoir, and there is no real definite information as to their occurrence except in the wells which have been brought before the Commission; and that some wells are open in this zone and aren't producing oil. Also, Mr. Bumpass's testimony to the effect that the six wells which are producing liquids of less than 45 degree API are not capable, any of them, apparently, of meeting any allowable which might be assigned under their proposed rules; and for that reason, it would seem a futile thing to assign an allowable to those wells, and there's no indication there's going to be any further problem in connection with that at the present time. If such should occur, of course, it could be taken care of at the time the problem arose.

Continental Oil Company is the operator of 15 wells in the Tubb gas pool. Two of these wells produce liquid hydrocarbons of comparatively low API gravity. Our experience to date indicates that there are no wells in the Tubb pool which are capable of producing excessive volumes of liquid hydrocarbon. We recognize, however, the possibility that future wells may change this situation and, in fact, may be capable of producing such volumes of liquids that the statewide oil proration system could be jeopardized unless controls are provided.

We are in general agreement with the intent of the rules proposed by the Industry Committee. We firmly believe, however, that the differentiation between various wells on the basis of

the gravity of produced liquids is unwise and, in fact, discriminatory for the following reasons:

1. It, in effect, provides a definition which infers that some wells are oil wells and raises a question whether that well may legally be allocated more than a standard 40-acre oil unit.

2. It places such wells in a position where their allowable is calculated on a different basis than other wells of virtually identical characteristics.

3. It will not prevent the unlimited production of liquids from wells producing liquids reported to be in excess of the gravity boundary.

4. The proposed system will violate correlative rights because wells on adjoining acreage producing from the same pool will be prorated on different bases.

5. It may violate correlative rights because a well producing liquids below the gravity boundary may be denied the right to have allocated to it an equal amount of acreage that a well producing above the gravity boundary can have.

6. It may cause waste if an operator is limited to a 40-acre allocation because such operator may be forced to drill additional wells which are unnecessary to drain the reservoir but are required by his obligation to protect himself and his royalty owner.

In brief, it is our position that either all wells should have a liquid limit, or none should. It is our opinion that a liquid limit should be provided. The limit we propose will not to our knowledge restrict the liquid production of any well pro-

ducing today, but it will provide a means of limiting gas wells producing large quantities of liquids which could otherwise endanger our statewide oil proration system. We urge the Commission to amend the rules in such a manner as to provide the following features:

1. Classify all Tubb wells as gas wells.
2. Prorate each well on the basis of a gas allowable based 100 per cent on acreage.
3. Place a liquid hydrocarbon limit on all wells equal to a 40-acre oil allowable for wells of this depth.

We submit for the Commission's consideration some proposed additions to the Tubb Pool rules in Order No. R-586, which we believe will accomplish the objectives described.

In this connection, we propose that Rule 5 of gas proration under subsection (a) be amended by inserting some additional matter at the beginning of the rule, reading as follows: "For purposes of allocation of hydrocarbon production all wells in the Tubb gas pool shall be classified as gas wells regardless of the characteristics of fluids produced therefrom." The remainder of Rule 5 (a) will remain as it presently is.

We suggest under Rule 8 that the Commission insert a new paragraph following the fourth paragraph, which will read as follows: "In addition to the gas allowable assigned under the provisions of Rule 5 (a), the monthly production of liquid hydrocarbons shall be limited to a volume equal to the daily allowable assigned to an oil well on a normal 40-acre unit producing from a depth of 6000 to 7000 feet under the provisions of Rule 505 of the

Commission's Rules and Regulations, multiplied by the number of days in the month. A twenty-five per cent overproduction tolerance shall be permitted during any one month. Such overproduction shall be made up by underproduction during succeeding months. Any well which has produced its liquid hydrocarbon limitation plus the twenty-five per cent tolerance for overproduction during any one month shall be shut in for the remainder of the month. All overproduction shall be deducted from the liquid hydrocarbon limitation imposed on such well for the next succeeding month."

MR. COOLEY: Mr. Kellahin, would you care to introduce a copy of your statement as Continental's Exhibit 1 in this case?

MR. KELLAHIN: I would be glad to. You want me to be sworn?

MR. COOLEY: I don't believe your testimony is in the nature of expert testimony. However, will you be sworn here for the purposes of cross examination?

(Witness sworn by Mr. Cooley.)

Governor Mechem: you want to qualify him?

MR. COOLEY: Take the stand.

MR. KELLAHIN: I would like to offer Continental's statement as Continental's Exhibit No. 1 in Case No. 1221.

MR. PORTER: Without objection it will be admitted.

(Continental Oil Company's Exhibit No. 1 admitted in evidence.)

MR. PORTER: You have a question?

MR. KELLAHIN: I didn't appear here as a witness. I want you to know that.

(Discussion off the record.)

JASON KELLAHIN

a witness, of lawful age, having been first duly sworn on oath,
testified as follows:

DIRECT EXAMINATION

By MR. COOLEY:

Q I would like to ask you the same questions I asked Mr. Bumpass. You propose a liquid hydrocarbon limit on all wells in Tubb Gas Pool. Tell me, Mr. Kellahin, what would be the effect if you have two wells, two gas wells that you would term on one 160-acre proration unit, what would be the liquid limit on production from the unit?

A Well, that question, of course, would have to be resolved by the Commission, but as I see it, the limitation would apply to each well, since the allocation is based on a 40-acre allocation, without limitation on the gas. Now that's my own personal opinion, and I am not at all sure that is the position Continental takes.

Q You were very concerned about the necessity of drilling offset wells?

A Yes, sir.

Q It would certainly be to the advantage of the operator to drill a great number of wells on a 160-acre unit, because he would be able to produce more liquids, would you not?

A Not with the records of production in the pool up to this time, and the testimony of Mr. Swartz clearly shows it's not economical to drill oil wells in this pool.

Q Would the drilling have the effect of imposing an offset obligation on an operator?

A I wouldn't think so, no.

MR. COOLEY: That's all.

MR. PORTER: Mr. Walker.

CROSS EXAMINATION

By MR. WALKER:

Q Don Walker with Gulf. Mr. Kellahin, I just have one question. You think it would be Continental's view that all gas fields should be controlled on the amount of liquids produced?

A I couldn't speak for Continental on what their policy might be on the rules.

Q All right, thank you.

A Yes, sir.

MR. PORTER: Anyone else have a question of counsel?

A I want to make this observation. I don't think it's proper to have an attorney who has made a statement sworn.

MR. SELINGER: Are you objecting to your testimony?

A No.

MR. PORTER: The witness may be excused.

(Witness excused.)

MR. PORTER: Anyone else have a statement to make? Mr. Tomlinson.

MR. TOMLINSON: W. P. Tomlinson, Atlantic Refining Company. We have a working interest in approximately twelve wells in this pool, and some of them are gas wells and some are oil. First we would like to state we were not a member of the Industry Committee but we do feel that we would like to add a little bit. We would like to urge the Commission not to set up a separate pool for oil wells, since we feel that there will be confusion in the future if you do set up one. Some wells might vary between what some

people would consider to be a gas well and an oil well at that time. Second, we have no objection to the 45 degree gravity limitations that are proposed at this time. However, in the future we think that it might be reconsidered as necessary.

MR. PORTER: Thank you, Mr. Tomlinson. Mr. Bushnell.

MR. BUSHNELL: H. D. Bushnell, attorney with Amerada. Amerada is a member of the Tubb Industry Committee, and I would like to make a statement on behalf of Amerada, with the understanding, however, that I wouldn't be induced to take the witness stand. Amerada, as a member of that Committee, concurs in the findings, conclusions, recommendations, and proposed changes of the rules made by Gulf in its testimony in this case.

MR. PORTER: Thank you, Mr. Bushnell. Mr. Heald.

MR. HEALD: K. C. Heald, representing Humble Oil and Refining Company. Humble was a member of the Industry Committee, and it concurs in the recommendations of the Committee. Further, we feel that there should be no attempt at allocation of any condensate produced from the Tubb gas field, since gas and condensate are in one phase in the reservoir; and since condensate as such does not occupy any reservoir space, the allocation of condensate as well as the allocation of gas would in effect be non-proration. We wouldn't like to see that. Now we don't want to set a limit on what would be condensate or what would be oil. We feel that that is actually up to the Commission to decide which wells are producing oil and which wells are producing condensates. Since oil does warrant reservoir space as it's produced, some form of allocation should be used to control that reservoir voidage,

just as you control a reservoir voidage by the allocation of gas.

MR. PORTER: Thank you, Mr. Heald. Mr. Walker.

MR. WALKER: Don Walker with Gulf. Speaking separately, as our witnesses were speaking for the Committee, I am speaking for Gulf. We concur with the conclusions of the Committee, and we feel that any attempt to, as suggested by Mr. Heald, any attempt to control gas production by, prorate gas production by distillate control would be a bad precedent, and we would certainly recommend that that method not be adopted. We feel that -- I would like to mention this Committee has worked quite a long time on this problem and it is a little odd in that they do have what might be called oil wells in this Tubb Gas Pool, but for the administrative ease of the Commission, they attempted to set up a rule that would call them all gas wells and give them some means of controlling the production from them; and we would like to underline the Committee's recommendations, and we think this rule would take care of the situation. We also feel that the Byers-Queen proration should be eliminated.

MR. PORTER: Thank you, Mr. Walker. Mr. Steele.

MR. STEELE: Tom Steele, Ohio Oil Company. I would like to read a statement into the record. The Ohio Oil Company favors the purposes indicated in the plan outlined in the Industry Committee's proposed amendments to the Tubb Gas Pool Rules. The Ohio does not choose to make any objection to the text of the rules as proposed by the Industry Committee; likewise we would certainly have no objection to any other reasonable method for solution of the problems, provided an appropriate limitation is placed upon

the liquid hydrocarbon production from any well in the Tubb Pool if such liquid hydrocarbon is in the form generally regarded by the industry as crude oil.

MR. PORTER: Thank you, Mr. Steele. Anyone else have a statement?

Before we take the case under advisement, I would like to express the appreciation of the Commission to the various members of the Industry Committee which have worked on this problem, representing Amerada, Continental, Humble, Onio, Shell, Penrose, Gulf, and Samedan, and our special thanks to Mr. Bumpass for his service as chairman of that committee.

We will take the case under advisement.

* * * * *

C E R T I F I C A T E

STATE OF NEW MEXICO)
 : ss
COUNTY OF BERNALILLO)

I, MARIANNA MEIER, 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 day of , 1957
in the City of Albuquerque, County of Bernalillo, State of New Mexico.

NOTARY PUBLIC

My commission expires:

April 8, 1960.

Memo

From

To

DUPLICATED COPIES OF ORDER R-586-B, Case 1221, WERE
SENT TO THE FOLLOWING:

JASON Kellahin, Santa Fe, (Continental)
Oliver Seth, Santa Fe, (Shell)
Bob Layhe, Samedan Corp., Box 2137, Hobbs
Don Walker, Gulf, Box 1290, Ft. Worth 1
W. P. Tomlinson, Atlantic, Box 6640, Roswell
H. D. Bushnell, Amerada, Box 2040, Tulsa
Tom Steele, Ohio, Box 552, Midland
Humble, Box 1600, Midland
Neville G. Penrose, Inc.
1813 Fair Bldg., Ft. Worth

9-17-57
JST

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

September 10, 1957

Mr. C. M. Sumpass
Gulf Oil Corporation
P.O. Box 2167
Hobbs, New Mexico

Dear Sir:

We enclose a copy of Order R-586-B issued September 9, 1957,
by the Oil Conservation Commission in Case 1221.

Very truly yours,

A. L. Porter, Jr.
Secretary - Director

bp
Encl.

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

September 10, 1957

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

Dear Sir:

We enclose a copy of Order R-586-B issued September 9, 1957,
by the Oil Conservation Commission in Case 1221.

Very truly yours,

A. L. Porter, Jr.
Secretary - Director

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Encl.

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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. 1221
Order No. R-586-B

APPLICATION OF THE OIL CONSERVATION
COMMISSION UPON ITS OWN MOTION FOR
AN ORDER AMENDING THE SPECIAL RULES
AND REGULATIONS FOR THE TUBB GAS POOL
TO MAKE PROVISION IN SAID RULES FOR
THE REGULATION OF OIL WELLS COMPLETED
WITHIN THE DEFINED LIMITS OF SAID POOL;
AND FURTHER, TO CONSIDER THE DELETION
OF THAT PORTION OF ORDER R-586 WHICH
RELATES TO THE BYERS-QUEEN GAS POOL.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on
March 14, 1957, May 16, 1957 and again July 17, 1957, at Santa
Fe, New Mexico, before the Oil Conservation Commission of New
Mexico, hereinafter referred to as the "Commission."

NOW, on this 9th day of September, 1957, the Commission,
a quorum being present, having considered the testimony and evidence
adduced 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 case and the subject
matter thereof.

(2) That several wells have been completed within the
defined limits of the Tubb Gas Pool which are capable of producing
liquid hydrocarbons with gravities in the range which is commonly
accepted to be that of crude petroleum oil, and that such wells
should be classified as oil wells.

(3) That to classify, space, and prorate the aforesaid
wells as though they were gas wells could be unfair to the royalty
owners in the Tubb Gas Pool.

(4) That an oil well in the Tubb Gas Pool should be
defined as a well which produces liquid hydrocarbons possessing
a gravity of 45° API or less.

(5) That an oil well in the Tubb Gas Pool should have
dedicated thereto a proration unit consisting of 40 acres, more
or less, being a governmental quarter-quarter section legal sub-
division of the United States Public Land Surveys.

(6) That no acreage should be simultaneously dedicated to an oil well and to a gas well in the Tubb Gas Pool.

(7) That the limiting gas-oil ratio for oil wells in the Tubb Gas Pool should be 2000 cubic feet of gas for each barrel of oil produced.

(8) That the Special Rules and Regulations for the Byers-Queen Gas Pool as set forth in Order R-586 should be deleted since the production from the said Byers-Queen Gas Pool is no longer of sufficient consequence to warrant its continued prorationing.

IT IS THEREFORE ORDERED:

(1) That the Special Rules and Regulations for the Tubb Gas Pool as set forth in Order R-586, be and the same are hereby amended to include the following rules:

SPACING AND OPERATION OF OIL WELLS

RULE 16. An oil well in the Tubb Gas Pool shall be defined as a well which produces hydrocarbons possessing a gravity of 45° API or less.

RULE 17. An oil well in the Tubb Gas Pool shall have dedicated thereto a proration unit consisting of 40 acres, more or less, being a governmental quarter-quarter section legal subdivision of the United States Public Land Surveys.

RULE 18. No acreage shall be simultaneously dedicated to an oil well and to a gas well in the Tubb Gas Pool.

RULE 19. The limiting gas-oil ratio for oil wells in the Tubb Gas Pool shall be 2000 cubic feet of gas for each barrel of oil produced.

(2) That the Special Rules and Regulations for the Byers-Queen Gas Pool, as set forth in Order R-586, be and the same are hereby deleted effective September 30, 1957.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

E. L. Mechem
EDWIN L. MECHEM, Chairman

M. E. Morgan
MURRAY E. MORGAN, Member

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



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

This letter was sent to the Committee
members listed in the attached memo.

January 28, 1957

C
O
P
Y

Amerada Petroleum Corporation
Box 2040
Tulsa, Oklahoma

Gentlemen:

You are hereby appointed as a member of an Industry Committee, which is being formed for the purpose of making a study of the present rules pertaining to the Tubb Gas Pool and to make recommendations to the Commission at a hearing on March 14, for the purpose of formulating rules and regulations governing oil wells within the horizontal limits of the Tubb Gas Pool.

The Committee will hold its first meeting at 9:00 A.M., February 5, 1957, at the Office of the Oil Conservation Commission, 1000 West Broadway, Hobbs, New Mexico.

Appointed to work with the Committee will be Mr. Montgomery, Mr. Fischer, and Mr. Runyan of the Commission Staff.

Attached is a memo showing the full membership of the Committee.

Your usual cooperation will be appreciated.

Yours very truly,

A. L. Porter, Jr.
Secretary - Director

ALP:sp

NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

MEMORANDUM

TO: TUBB GAS POOL OPERATORS

FROM: A. L. PORTER, JR.

SUBJECT: INDUSTRY COMMITTEE

Due to the recent completion of several oil wells in the Tubb formation within the horizontal limits of the Tubb Gas Pool, the Commission feels that consideration should be given to the matter of the adoption of rules governing the operation of such wells. In order that the Commission may have the most complete information available for use in the formulation of such rules, the following operators of wells in the Tubb Pool have been appointed to an Industry Committee with instructions to prepare and make recommendations to the Commission at a hearing to be held on March 14, 1957.

Amerada Petroleum Corporation
Continental Oil Company
Humble Oil & Refining Company
Ohio Oil Company
Shell Oil Company
N. G. Penrose, Incorporated
Gulf Oil Corporation
Samedan Oil Corporation

Commission Staff Members appointed to work with the Committee are Mr. Montgomery, Mr. Fischer, and Mr. Runyon.

The first meeting of the Committee will be held at 9:00 A.M., February 5, 1957, at the Commission Office, 1000 West Broadway, in Hobbs.

Representatives of all Tubb Pool Operators are welcome to attend the Committee meetings or to submit suggestions to the Commission Office at Hobbs.

January 28, 1957

GOVERNOR JOHN F. SIMMS
CHAIRMAN

New Mexico
OIL CONSERVATION COMMISSION

LAND COMMISSIONER E. S. WALKER
MEMBER



P. O. Box 87
SANTA FE, NEW MEXICO

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

Memorandum regarding Industry Committee for the Tubb Gas Pool was sent

to the following Tubb Gas Pool Operators:

✓ Continental Oil Company, 1710 Fair Bldg., Ft. Worth
Cities Service Oil Co., Cities Service Bldg., Bartlesville, Okla.
J. R. Cone, 1706 Great Plains Life Bldg., Lubbock, Texas
Greenbrier Oil Co., 327 S. Adams, Ft. Worth
✓ Humble Oil & Refining Co., Box 1600, Midland
N. B. Hunt, 700 Mercantile Bank Bldg., Dallas
Markham, Cone & Redfern, 1706 Great Plains Life Bldg., Lubbock
Moran Oil Corp., Box 1712, Hobbs
✓ Ohio Oil Company, Box 552, Midland,
R. Olsen Oil Co., 2805 Liberty Bank Bldg., Okla. City.
✓ Samedan Oil Corp., Box 2137, Hobbs
✓ Shell Oil Co., Box 1957, Hobbs
Sinclair Oil & Gas Co., 1103 Fair Bldg., Ft. Worth
Sunray Mid-Continent, Box 2039, Tulsa
Tidewater Oil Co., Box 1404, Houston
Western Oil Fields, 1636 Stout St., Denver 2,
✓ Gulf Oil Corp., Box 1290, Ft. Worth 1,
Magnolia Oil Corp., Box 633, Midland
Amerada Petr. Corp., Box 2040, Tulsa
Cosden Petr. Corp., Box 1311, Big Springs
✓ H. G. Penrose, Inc., 1813 Fair Bldg., Ft. Worth
Rowan Oil Co., 1915 Fair Bldg., Ft. Worth
Skelly Oil Co., Box 1650, Tulsa
Stanolind Oil Corp., Box 1410, Ft. Worth
Texas Co., Box 1720, Ft. Worth.

Case 1221

GOVERNOR
EDWIN L. MECHEM
CHAIRMAN
New Mexico
OIL CONSERVATION COMMISSION

LAND COMMISSIONER, MURRAY E. MORGAN
MEMBER

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



P. O. BOX 871
SANTA FE, NEW MEXICO

September 3, 1957

MEMORANDUM:

TO: GOVERNOR EDWIN L. MECHEM and
MR. MURRAY E. MORGAN

FROM: A. L. PORTER, Jr., Secretary-Director

The Tubb Gas Pool in Lea County has existed for several years. During the latter part of 1956 and early months of 1957, several wells were completed within the vertical and horizontal limits of this pool which by all normal standards are oil wells and have been prorated as such.


The question arose as to whether the Tubb Gas Pool Rules should be amended to cover these oil wells or a separate oil pool should be created. The matter was called for hearing and an Industry Committee appointed to make recommendations to the Commission. The Committee was first inclined to follow the procedure established in the Eumont, Jalmat, and Blinbry Pools, of defining an oil well in a gas pool. Later a majority of the Committee recommended that all wells in the pool be considered gas wells and prorated as such with liquid limitation to be placed on wells which produce oil possessing a gravity of 45° or less.

To follow this recommendation the Commission would have to depart from its established procedure of recognizing an oil well in a gas pool. The danger here would be to the royalty holder. Gas proration units in this pool are 160 acres, therefore if an obvious oil well were

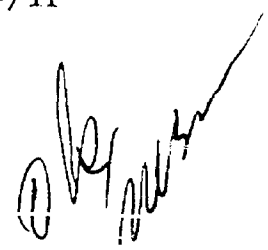
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drilled on John Smith's 40 acres under the recommendations of the Committee, he would receive only one-fourth (1/4) of the royalty to which he is entitled since he would have to share his royalty with the holders of the other 120 acres in the 160 acre unit.

In view of the possible inequities to the royalty owner under the Committee's proposed plan, it is my opinion that we should not follow their recommendations. We therefore have chosen to adhere to the established precedent of defining an oil well in the Tubb Pool.


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

ALP/ir



OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Date 8-6-57

CASE 1221

Hearing Date 7-7-57

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

1. All wells in the Furb Gas pool be classified as gas wells.
2. Each well be perforated for gas ~~area~~ unit based as it is now.
3. That a liquid production limit be applied to each well in the pool.
4. The liquid limit ^{for each well} should be equal to the Normal unit allowable ^{40 ac.} x the applicable ^{40 ac.} depth factor (.6000 - 2000) (1.77)
5. No person shall produce more ~~than~~ liquids from any well than the liquid limit is stated in a production schedule.

Robert H. King
Staff Member

TUBB GAS POOL

Following are the proposed changes in Order No. R-586:

1. Item 7 will be added to Rule 5 (d): "In the event more than one gas well producing from the Tubb Gas Pool should be included in a standard or less than a standard proration unit, the sum of the allowables allocated to the wells shall be equivalent to that volume of gas allocated to a proration unit of the same size. The operator of such wells shall have the option to determine the proportion of the assigned allowable to be produced by each individual well, provided all of said wells are orthodox gas locations. In the event that one or more of the gas wells on the proration unit is an unorthodox location, the Commission shall establish the proportion of the assigned allowable to be produced from each individual well."

2. The third from last paragraph of Rule 8 will be revised to read as follows: "The allowable assigned to any well capable of producing its normal gas allowable in the Tubb Gas Pool shall be the same proportion of the total remaining allowable allocated to said pool after deducting allowables of marginal wells that the number of acres contained in the gas proration unit for that well bears to the acreage contained in all gas proration units assigned to non-marginal wells in the Tubb Gas Pool except that no well which produces liquid hydrocarbons with a gravity of 45° API or less regardless of the size of the proration unit will be permitted to produce more liquid hydrocarbons than the Statewide oil allowable for wells on 40-acre units producing at depths between 6,000 and 7,000 feet. Any well subject to such limitation shall be so designated on the Commission's monthly allocation schedule of condensate and other incidental liquid hydrocarbons. Any well subject to this liquid hydrocarbon limitation and which produces more than the allowed volume of liquid hydrocarbons during any one month will make up such overage. Any gas production shortage resulting from application of the liquid hydrocarbon limitation or from shutting in a well because of overproduction of liquid hydrocarbons may be made up under the terms of Rule 9 (underproduction balancing provision) provided the liquid hydrocarbon limits described herein are not exceeded."

3. A rule 8b will be added as follows: "Tests to determine the gravity of the liquid hydrocarbons recovered from each well in the Tubb Gas Pool shall be taken following adoption of these rules and reported to the Commission on Form C-116 not later than the 15th day of the next succeeding month following adoption of these rules. The Commission will then mark on the allocation schedule of condensate and other incidental liquid hydrocarbons the wells which are to be subject to the liquid hydrocarbon limitation. Thereafter, gravity tests on each well not subject to the liquid hydrocarbon limitation will be made during the months of January and February and reported to the Commission on Form C-116 not later than the 15th day of March."

BEFORE THE
OIL CONSERVATION COMMISSION
Hobbs, New Mexico
May 16, 1957

IN THE MATTER OF
CONTINUED CASE
No. 1221

TRANSCRIPT OF PROCEEDINGS

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

BEFORE THE
OIL CONSERVATION COMMISSION
Hobbs, New Mexico
May 16, 1957

IN THE MATTER OF:

Application of the Oil Conser-
vation Commission on its own
motion for an order amending
Commission Order R-586 insofar
as it relates to the Byers-
Queen and Tubb Gas Pools. Ap-
plicant, in the above-styled
cause, seeks an order amending
the Special Rules and Regulations
for the Tubb Gas Pool to make
provision in said rules for the
regulation of oil wells completed
within the defined limits of said
pool; and further to consider the
deletion of that proration of Order
R-586 relating to the Byers-Queen
Gas Pool.

CONTINUED CASE
NO. 1221

BEFORE:

The Honorable Edwin L. Mocham
Mr. Porter
Mr. Murray Morgan

TRANSCRIPT OF HEARING

MR. PORTER: We will consider next a continued case, No.
1221.

MR. COOLEY: Case 1221. Application of the Oil Conservation
Commission on its own motion for an order amending Commission Order
R-586 insofar as it relates to the Byers-Queen and Tubb Gas Pools.

MR. PORTER: Mr. Walker.

MR. WALKER: Don Walker with Gulf Oil Corporation, I am

substituting for C. M. Bumpass, the Chairman of the Industry Committee which was appointed recently to study the problem of low ratio wells which have been completed in the Tubb Gas Pool, and since the last statewide hearing, the Study Committee has received yet another proposal as to a method to solve this problem, which we don't think is a very big problem, and we, the Committee, have not yet had sufficient time to completely digest this new proposal, and as a result, they agreed to ask for another continuance, in order to come up with some concrete recommendations which they feel will be the answer, and it has been suggested to me this morning, that since we really don't have anything we have to solve today or tomorrow, possibly July would be a good date to reconvene on this matter, because many members of the Industry Committee would like to go to the Compact Meeting in June, and on behalf of the Committee, I would move for a continuance of the Case 1221.

MR. PORTER: Is there any objection to Mr. Walker's motion for continuance of Case 1221 to the regular July hearing? Case will be continued at the Regular Hearing Date in July.

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NOTARY PUBLIC

NOTARY PUBLIC

NOTARY PUBLIC

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
March 14, 1957

TRANSCRIPT OF HEARING

Case No. 1221

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

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
March 14, 1957

IN THE MATTER OF:

Application of the Oil Conservation Commission)
on its own motion for an order amending Commission)
Order R-586 insofar as it relates to the Byers-Queen)
and Tubb Gas Pools. Applicant, in the above-styled)
cause, seeks an order amending the Special Rules)
and Regulations for the Tubb Gas Pool to make)
provision in said rules for the regulation of oil)
wells completed within the defined limits of said)
pool; and further to consider the deletion of that)
portion of Order R-586 relating to the Byers-Queen)
Gas Pool.)

Case 1221

BEFORE:

Honorable Edwin L. Mechem
Mr. A. L. Porter
Mr. Murray Morgan

TRANSCRIPT OF HEARING

MR. PORTER: The Commission will consider next Case 1221.

MR. COOLEY: Application of the Oil Conservation Commission
on its own motion for an order amending Commission Order R-586 inso-
far as it relates to the Byers-Queen and Tubb Gas Pools.

MR. PORTER: In this case I might say that it is occasioned
by the completion of I believe four oil wells within the horizontal
limits of the Tubb Gas Pool. On January 28 the Commission appoint-
ed an industry committee composed of Amerada, Continental, Amerada,
Shell, Penrose, Gulf and Samedan for the purpose of making a study
and recommending rules for the handling of oil wells within the

Tubb Gas Pool.

I might say that at the first meeting of the committee in Hobbs we appointed Gulf as chairman of the committee, and I recall that all members of the industry committee were present representatives of each committee. The Commission appreciates very much your interest in this matter and the response to our committee call. I would like to call on Mr. Bumpas for Gulf Oil Company, who is chairman of the committee.

MR. BUMPAS: If it please the Commission, I would like to read into the record some matter in this case. C. M. Bumpas, Gulf Oil Company, chairman of the Tubb Gas Pool industry committee. We wish to advise the Commission that the committee has been active in its assignment and there have been several meetings, the last of which was held 3:00 P. M. March 13. Continuance of this case to the May hearing is requested.

MR. PORTER: Mr. Bumpas, would you mind stating why the committee is requesting a continuance for two months?

A Well, sir, there was some different thoughts on the rules that were being formulated, to fulfill the responsibility that you assigned the committee, we thought that we needed some additional time since there were different opinions on the rules.

MR. PORTER: You ask for a continuance date to May 16?

MR. BUMPAS: Yes, sir.

MR. PORTER: Does anyone have any objection to the motion

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for continuance?

The Commission has decided to continue Case 1221 to the regular May 16 hearing.

C E R T I F I C A T E

STATE OF NEW MEXICO)
: SS
COUNTY OF BERNALILLO)

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 *28th* day of *March* 1957.

Ada Dearnley
Notary Public - Court Reporter

My commission expires:

June 19, 1959.

GAS LIQUID RATIO TESTS IN THE TUBE GAS POOL-OCTOBER 1956 TESTS

OPERATOR	Lease Name Well No.	S-T-R	Date of Test	Condensate Gravity- ^o	Gas Cond. Ratio
AMERADA PET. CORP.					
	Baker #3-I	10-22-37	11/24/56	65	51,675
	Corrigan #4-A	4-22-37	11/24/56	62	35,546
	Hare #7-M	35-21-37	11/22/56	67	78,252
	State D"A" #3-J	16-21-37	11/24/56	60	75,708
	E. Wood #7-A	22-22-37	11/24/56	49	16,423
CITIES SERVICE OIL CO.					
	Brunson "B" #3-M	3-22-37	11/15/56	----(si-no pc)	9,070
	Brunson "C" #6-I	3-22-37	11/15/56	62.7	86,000
	Owen #3-J	35-21-37	11/15/56	62.3	41,509
	State S #2-F	15-21-37	11/16/56	64.0	13,913
CONE, J. R.					
	Anderson #1-I	21-21-37	1/26/57	71.5	167,040
CONTINENTAL OIL CO.					
	Hawk B-3 #1-T	3-21-37	1/17/57	37	1,236 (Oil Well)
	Hawk B-9 #3-C	9-21-37	1/12/57	53	63,727
	Hawk B-9 #5-K	9-21-37	1/15/57	---	---
	Hawk B-9 #7-P	9-21-37	1/2/57	55	12,388
	Lockhart A-27 #1-D	27-21-37	1/11/57	63	66,388
	Lockhart A-27 #1-G	27-21-37	1/12/57	63	102,285
	Lockhart A-35 #3-C	35-21-37	1/13/57	56	37,800
	Lockhart B-35 #1-G	35-21-37	1/12/57	56	24,500
	Nolan #2-N	11-21-37	1/9/57	44	26,200
	State 10 #3-D	10-21-37	1/12/57	54	614,000
	Wantz D-21 #3-J	21-21-37	1/21/57	54	61,000
	Wantz D-21 #4-K	21-21-37	1/12/57	54	42,200
COSDEN PET. CORP.					
	E. Butler #3-N	18-22-38	12/4/56 (csg.-tbg.)	66.3	59,523
			12/8/56	66.3	62,791
GREENBRIER OIL CO.					
	Sarkeys #1-B	26-21-37	12/14/56	77.2	61,304
GULF OIL CORP.					
	Amanda #1-J	25-22-37	11/21/56	69	97,640
	Andrews #2-G	32-22-38	11/22/56	71.8	42,770
	Carson "C" #3-P	28-21-37	11/26/56	73.4	29,929
	Danglade #1-M	13-22-37	11/22/56	71.3	44,952
	Eaves #5-H	10-22-37	11/26/56	68.9	31,813
	Eubank #1-B	22-21-37	11/22/56	67.6	49,307
	Gutman #1-N	19-22-38	12/10/56	65.5	104,350
	Gutman #2-C	19-22-38	11/20/56	68.1	29,336
	Hugh #4-O	14-22-37	12/3/56	67.9	41,247
	Hugh #7-C	14-22-37	11/26/56	60.5	46,283
	E. King #13-A	28-21-37	No connection		
	E. King #22-C	28-21-37	11/23/56	70	44,283
	Leonard "E" #4-A	16-21-37	11/22/56	66.8	62,068
	Mark #5-A	3-22-37	11/26/56	72.8	19,091
	M. Owen #5-A	34-21-37	11/26/56	68.4	40,024
	McCormack #7-I	32-21-37	11/21/56	70.6	31,844
	Paddock #3-P	1-22-37	12/4/56	52.6	21,412
	Vivian #1-C	20-22-38	11/20/56	61.9	41,896
	Watkins #1-O	29-22-38	11/20/56	61.9	52,617
HUMBLE OIL & REFINING CO.					
	Ellebry Tubb Gas Unit #1-O				
		10-21-37	12/8/56	56.4	51,057
	Hardison B #1-H	34-21-37	10/15/56	61.6	48,843
	Hardison B #7-P	27-21-37	11/5/56	69.1	61,771
	Penrose #2-H	13-22-37	12/10/56	70	46,453
	N. M. State S #12-A	2-22-37	12/12/56	45.2	45,641
	N. M. State S #13-B	2-22-37	11/3/56	68.6	42,547
	N. M. State S #20-E	2-22-37	12/2/56	66.5	65,339
	N. M. State S #21-L	2-22-37	12/6/56	67.9	50,741
	N. M. State S #23-P	2-22-37	11/2/56	63.5	37,019
	N. M. State S #24-N	10-21-37	12/6/56	54.4	4,563 (Oil)

Oil Well No.	S-T-R	Date of Test	Condensate Gr. sp. gr.	Gas Cond. Ratio
N. B. POPE Weatherly E-1-G	21-21-37	11/21/56	67	74,800
MAGNOLIA PET. CO. Bannon Argo #5-E	10-22-37	1/14/57	63.8	30,350
Garson #3-E	23-21-37	1/14/57	67.8	47,000
Garson #10-L	25-21-37	1/14/57	70.0	57,000
Garson #7-P	21-21-37	1/14/57	64.3	125,000
Williamson #1-A	23-21-37	1/14/57	61	32,000
Long #8-J	11-21-37	1/14/57	66	-----
MARSHAM, CONE AND REDFERN Eubanks #2-L	14-21-37	12/9/56	72	124,542
MORAN OIL PRODUCING & DRILG. CORP. Owen #1-E	14/21/37	12/14/56 12/5/56	54.2 59.8	42,633 42,633
OHIO OIL COMPANY Lynch #1-D	1-22-37	11/29/56	66.4	39,664
Marshall "B" #2-M	27-21-37	12/6/56	70.5	84,579
J. L. Maney #1-P	24-22-37	11/22/56	66.8	83,978
M. Owen #3-N	35-21-37	11/2/56	70.8	51,379
L. G. Warlick "C" #1-J	15-21-37	12/7/56	68.3	67,489
Worthen #9-E	11-22-37	11/22/56	68.1	34,366
Worthen #11-F	11-22-37	12/7/56	72.4	36,260
R. OLSEN Sarkeys #1-E comp. 1/8/57	26-21-37			(Oil)
R. OLSEN OIL COMPANY Boyd #5-B	23-22-37	10/26/56	60.9	51,260 (?)
Cone #1-J	26-21-37	11/15/56	65	79,960
Owens #1-M	25-21-37	11/15/56	56	33,700
PENROSE, NEVILLE G. Hinton #3T-N	12-22-37	12/19/56	67.8	58,490
Hinton #5-P	12-22-37	12/5/56	67.1	64,284
Elliott Hinton #1-E	12-22-37			No p c
ROWAN OIL COMPANY Walden #3-T C	15-22-37	12/12/56	----tstm	150,000
SAMEDAN OIL CORP. Parks "A" #4-O	14-22-37	12/2/56	58	39,585
Parks #6-P	14-22-37	12/2/56	56	40,745
SHELL OIL COMPANY Argo #1-H	15-21-37	1/11/57	63.3	108,382
Argo A #3-D	22-21-37	1/9/57	69.6	315,393
Long #5-E	11-22-37	1/11/57	60.4	61,709
Sarkeys #1-M	23-21-37	1/9/57	68.2	114,505
State 15 #1-C	15-21-37	1/9/57	56.5	30,484
Turner #2-L	22-21-37	1/9/57	72	62,875
Turner #3-J	22-21-37	1/11/57	63.7	53,774
SINCLAIR OIL & GAS CO. Alexander Rogers #2-A	12-22-37	11/8/56	43.9	1892(Oil Well)
State 367 #3-N	36-21-37	11/8/56	52.1	19,924
Sarkeys #2-O	23-21-37	11/9/56	70	81,350
SHELL OIL COMPANY Baker B #15-J	10-22-37	12/12/56	72	71,489

Oilfield	Lease Name Well No.	S-T-R	Date of Test	Condensate Gravity	Gas Cond. Ratio
STANOLINE (PAN AMERICAN PET. CORP.)					
	Southland Royalty "A" #2-B	9-21-37	9-21-37		
	" #4-X	4-21-37	11/13/56	57	104,400
	State C Tr. 12 #6-X-C16-21-37	11-14-56	11/21/56	69	51,100
	State C Tr. 13 #3-D	36-21-37	11/14/56	70	45,000
	Eva Owen "D" #2-L	31-21-37	11/15/56	67	34,100
	W. H. Turner #3-P	29-21-37	11/12/56	65	83,600
			11/20/56	66	57,100
SUNRAY MID-CONTINENT OIL COMPANY					
	Elliott "A" #2-H	1-22-37	1/8/57	48	33,400
	Ilum "Y" #3-A	29-21-37	1/8/57	63	180,000
	W. Lynch #4-L	1-22-37	1/8/57	72	56,200
	State Land 15 #4-P	16-21-37	1/8/57	43	66,500
THE TEXAS COMPANY					
	A. H. Blinebry NCT-1 #1-0 19-22-38		11/15/56	57.8	22,000
	A. H. Blinebry NCT-1 #7-G19-22-38		11/19/56	57.9	76,000
TIDEWATER OIL COMPANY					
	S. J. Sarkeys #4-F	26-21-37	12/10/56	68.2	74,198
	Williamson #2-E	23-21-37	12/6/56	68.5	79,143
	State "S" #2-C	15-21-37	12/6/56	53.8	28,838
WESTERN OIL FIELDS, INC.					
	Drinkard #2-L	30-22-38	11/27/56	68.1	52,100
	Gulf State #1-A	36-22-37	11/27/56	65.2	75,689
	Drinkard #5-G	25-22-37	12/2/56	69	138,000

DOCKET: REGULAR HEARING JULY 17, 1957

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

ALLOWABLE: (1) Consideration of the oil allowable for August, 1957.

(2) Consideration of the allowable production of gas for August, 1957, from the seven prorated pools in Lea County, New Mexico; also consideration of the allowable production of gas from the six prorated pools in San Juan and Rio Arriba Counties, New Mexico, for August, 1957.

CASE 1275: Application of Shell Oil Company for an exception to Rule 309 of the Commission Rules and Regulations to permit the transportation of oil from the basic lease prior to measurement, and to produce more than eight wells into a central plant, and to commingle production from the participating area of the Carson Unit with production from other wells in the area. Applicant, in the above-styled cause, seeks an order authorizing off-lease measurement of oil produced from the Bisti-Lower Gallup Oil Pool and an undesignated Lower Gallup Oil Pool in Township 25 North, Range 11 West, and Township 25 North, Range 12 West, San Juan County, New Mexico, by means of an automatic custody transfer system; and to authorize the production of more than eight wells into a central testing and measuring plant and further, to authorize the commingling of non-participating area production with participating area production in the Carson Unit, with royalty payments to be calculated by means of periodic production rate tests.

CASE 1276: Application of Amerada Petroleum Corporation for an order amending Order No. R-991 insofar as said order pertains to the Bagley-Lower Pennsylvanian Gas Pool, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order amending Order No. R-991 to extend the horizontal limits of the Bagley-Lower Pennsylvanian Gas Pool to include the S/2 Section 34, Township 11 South, Range 33 East, and the NE/4 Section 3, Township 12 South, Range 33 East, Lea County, New Mexico, and to increase the size of the standard drilling unit for said pool from 160 acres to 320 acres and to enter such other rules and regulations for said pool as the Commission may deem necessary.

CASE 1277: Application of the Oil Conservation Commission at the request of Wilson Oil Company for an order establishing a new oil pool with special pool rules in the Potash-Oil Area, Lea County, New Mexico, in accordance with Section 3, Paragraph III, of Order R-III-A. Applicant, in the above-styled cause, seeks an order creating a new oil pool in the area of Wilson Oil Company's recently completed oil well located in the NE/4 NE/4 Section 21, Township 20 South, Range 34 East, Lea County, New Mexico; and for the promulgation of special pool rules to govern future drilling in said pool in order to afford adequate protection for the potash deposits in the area.

CASE 1278: In the matter of the hearing called by the Oil Conservation Commission upon its own motion to permit Roy T. Short and the Hartford Accident and Indemnity Company and all other interested parties to appear and show cause why the Roy T. Short, et al, Millard Eidson No. B-3 Well located in the SW/4 SE/4 of Section 26, Township 16 South, Range 35 East, in the Shoe Bar Area of Lea County, New Mexico, should not be ordered plugged and abandoned in accordance with the Rules and Regulations of the Oil Conservation Commission of New Mexico.

CASE 1279: In the matter of the hearing called by the Oil Conservation Commission upon its own motion to permit Roy T. Short, M. N. Hamilton, Apache Basin Oil Company, and Basin Oil Company, and all other interested parties to appear and show cause why the hole located 660 feet from the South and West lines of Section 25, Township 16 South, Range 35 East, Lea County, New Mexico, should not be ordered plugged and abandoned in accordance with the Rules and Regulations of the Oil Conservation Commission of New Mexico.

CASE 1280: Application of Sunray Mid-Continent Oil Company for an order authorizing a pilot secondary recovery project in the Bisti-Lower Gallup Oil Pool in exception to Rule 701 of the Commission Rules and Regulations. Applicant, in the above-styled cause, seeks an order authorizing it to drill and operate a well at a point five feet southeast of the northwest corner of Section 6, Township 25 North, Range 12 West, San Juan County, New Mexico, for the injection of liquified petroleum gases and dry gas into the Lower Gallup formation of the Bisti-Lower Gallup Oil Pool for the purpose of secondary recovery of oil from said pool.

CASE 1281: Application of Skelly Oil Company for approval of an unorthodox oil well location in an undesignated oil pool in Rio Arriba County, New Mexico, in exception to Rule 104 of the Commission Rules and Regulations. Applicant, in the above-styled cause, seeks an order authorizing an unorthodox oil well location in an undesignated oil pool for its Jicarilla "R" Well No. 2 located 1590 feet from the South line and 990 feet from the East line of Section 31, Township 25 North, Range 5 West, Rio Arriba County, New Mexico. Said well was projected as a gas well in accordance with the Commission gas well location rules but was found to be productive of oil.

CASE 1282: Southeastern New Mexico Nomenclature case calling for an order creating new pools and extending and deleting certain areas from existing pools in Eddy and Lea Counties, New Mexico.

(a) Create a new oil pool for Grayburg production, designated as the Teague-Grayburg Pool, and described as:

TOWNSHIP 23 SOUTH, RANGE 37 EAST
Section 20: SE/4

- (b) Create a new oil pool for Pennsylvanian production, designated as the Kemnitz-Pennsylvanian Pool, and described as:

TOWNSHIP 16 SOUTH, RANGE 33 EAST
Section 13: SE/4

- (c) Extend the Dollarhide-Drinkard Pool to include:

TOWNSHIP 24 SOUTH, RANGE 38 EAST
Section 19: NW/4
Section 20: W/2 SW/4

- (d) Extend the Drinkard Pool to include:

TOWNSHIP 22 SOUTH, RANGE 37 EAST
Section 27: E/2 NE/4

- (e) Extend the Gladiola Pool to include:

TOWNSHIP 12 SOUTH, RANGE 37 EAST
Section 25: N/2 NE/4

TOWNSHIP 12 SOUTH, RANGE 38 EAST
Section 17: NW/4
Section 18: N/2 NE/4

- (f) Extend the North Gladiola-Devonian Pool to include:

TOWNSHIP 11 SOUTH, RANGE 38 EAST
Section 32: SE/4

TOWNSHIP 12 SOUTH, RANGE 38 EAST
Section 6: SW/4
Section 7: NW/4
Section 8: NW/4

- (g) Extend the West Henshaw-Grayburg Pool to include:

TOWNSHIP 16 SOUTH, RANGE 30 EAST
Section 4: SE/4
Section 5: SE/4
Section 8: NE/4

- (h) Extend the Langlie-Mattix Pool to include:

TOWNSHIP 23 SOUTH, RANGE 36 EAST
Section 4: E/2 SE/4

- (i) Extend the Pearl-Queen Pool to include:

TOWNSHIP 19 SOUTH, RANGE 35 EAST
Section 22: S/2 SE/4

- (j) Extend the Townsend-Wolfcamp Pool to include:

TOWNSHIP 16 SOUTH, RANGE 36 EAST
Section 6: W/2 SW/4

- (k) Extend the Terry-Blinebry Pool to include:

TOWNSHIP 21 SOUTH, RANGE 37 EAST
Section 3: Lot 16
Section 4: Lot 1

- (l) Delete the following area from the Blinebry Gas Pool:

TOWNSHIP 21 SOUTH, RANGE 37 EAST
Section 3: Lot 16
Section 4: Lot 1

CASE 1283: Northwestern New Mexico nomenclature case calling for an order extending existing pools in San Juan and Rio Arriba Counties, New Mexico.

- (a) Extend the Aztec-Pictured Cliffs Pool to include:

TOWNSHIP 28 NORTH, RANGE 9 WEST
All of Sections 9, 10, 11, 12, 13, & 14
Section 15: E/2 & SW/4
Section 24: All

TOWNSHIP 31 NORTH, RANGE 11 WEST
Section 34: All

- (b) Extend the Otero-Pictured Cliffs Pool to include:

TOWNSHIP 23 NORTH, RANGE 5 WEST
Section 9: E/2
Section 16: N/2

TOWNSHIP 24 NORTH, RANGE 5 WEST
Section 13: SW/4
Section 14: S/2
Section 21: NE/4
Section 22: N/2 & SE/4
All of Sections 23, 24, & 25
Section 31: S/2

- (c) Extend the South Blanco-Pictured Cliffs Pool to include:

TOWNSHIP 24 NORTH, RANGE 4 WEST
Section 5: W/2

TOWNSHIP 27 NORTH, RANGE 8 WEST
Section 4: All

(d) Extend the Blanco-Mesaverde Pool to include:

TOWNSHIP 28 NORTH, RANGE 9 WEST
Section 32: All

(e) Extend the Bisti-Lower Gallup Oil Pool to include:

TOWNSHIP 26 NORTH, RANGE 13 WEST
Section 36: NW/4

(f) Extend the Verde-Gallup Oil Pool to include:

TOWNSHIP 31 NORTH, RANGE 14 WEST
Section 18: All

TOWNSHIP 31 NORTH, RANGE 15 WEST
Section 13: N/2

CONTINUED CASES

CASE 1221: Application of the Oil Conservation Commission on its own motion for an order amending Commission Order R-586 insofar as it relates to the Byers-Queen and Tubb Gas Pools. Applicant, in the above-styled cause, seeks an order amending the Special Rules and Regulations for the Tubb Gas Pool to make provision in said rules for the regulation of oil wells completed within the defined limits of said pool; and further to consider the deletion of that portion of Order R-586 relating to the Byers-Queen Gas Pool.

CASE 1261: Application of Gulf Oil Corporation and Western Oil Fields, Inc., for an order force pooling certain acreage in the Blinebry and Tubb Gas Pools, Lea County, New Mexico. Applicants, in the above-styled cause, seek an order force pooling the interests of all persons having any right, title or interest in the Blinebry and Tubb formations underlying the SW/4 Section 30, Township 22 South, Range 38 East, Lea County, New Mexico.

CASE 1262: Application of Gulf Oil Corporation and Western Oil Fields, Inc., for an order force pooling certain acreage in the Blinebry and Tubb Gas Pools, Lea County, New Mexico. Applicants, in the above-styled cause, seek an order force pooling the interest of all persons having any right, title or interest in the Blinebry and Tubb formations underlying the SE/4 Section 30, Township 22 South, Range 38 East, Lea County, New Mexico.

CASE 1263: Application of Gulf Oil Corporation and Western Oil Fields, Inc., for an order force pooling certain acreage in the Blinebry and Tubb Gas Pools, Lea County, New Mexico. Applicants, in the above-styled cause, seek an order force pooling the interests of all persons having any right, title or interest in the Blinebry and Tubb formations underlying the NE/4 Section 25, Township 22 South, Range 37 East, Lea County, New Mexico.

-6-

Docket No. 21-57

CASE 1264: Application of Gulf Oil Corporation and Western Oil Fields, Inc., for an order force pooling certain acreage in the Blinebry and Tubb Gas Pools, Lea County, New Mexico. Applicants, in the above-styled cause, seek an order force pooling the interests of all persons having any right, title or interest in the Blinebry and Tubb formations underlying the SE/4 Section 25, Township 22 South, Range 37 East, Lea County, New Mexico.

CASE 1265: Application of R. Olsen Oil Company for an order force pooling certain acreage in the Justis Gas Pool, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order force pooling the interests of all persons having any right, title or interest in the Glorieta formation of the Justis Gas Pool underlying the NE/4 Section 23, Township 25 South, Range 37 East, Lea County, New Mexico.

ir/

DOCKET: REGULAR HEARING MAY 16, 1957

Oil Conservation Commission 9 a.m., Hobbs Senior High School, 1300 E. Scharbauer

HOBBS, NEW MEXICO

- ALLOWABLE: (1) Consideration of the oil allowable for June, 1957.
- (2) Consideration of purchasers' nominations for the six-month period beginning July 1, 1957, for six prorated pools in Lea County, New Mexico; also consideration of the allowable production of gas for June, 1957, for seven prorated pools in Lea County, New Mexico, and consideration of the allowable production of gas from six prorated pools in San Juan and Rio Arriba Counties, New Mexico for June, 1957.

NEW CASES

CASE 1252: Application of the Oil Conservation Commission upon its own motion for an order revising Commission Form C-104, as established by Rule 1107 of Commission Rules and Regulations. Applicant, in the above-styled cause, seeks an order revising the format and information required on Commission Form C-104, Request For (oil-gas) Allowable.

CASE 1253: Application of Sinclair Oil and Gas Company for the creation of a new oil pool to be known as the Seaman Wolfcamp Pool underlying portions of Township 16 South, Range 33 East, and Township 16 South, Range 34 East, Lea County, New Mexico, and for the establishment of 80-acre well spacing and proration units, and for the promulgation of special rules and regulations for said pool. Applicant, in the above-styled cause, seeks an order creating a new oil pool for production from the entire Wolfcamp formation underlying Sections 13, 24, and 25, Township 16 South, Range 33 East, and Sections 16, 17, 18, 19, 20, 21, 28, 29, and 30, Township 16 South, Range 34 East, Lea County, New Mexico, and for the establishment of 80-acre well spacing and proration units consisting of any contiguous 80-acres within a given quarter section with no designated quarter quarter section in which a well must be drilled, and for the promulgation of special rules and regulations for said pool.

CASE 1254: Application of Tennessee Gas Transmission Company for the creation of a new oil pool to be known as Kemnitz Lower Wolfcamp Pool underlying portions of Township 16 South, Range 33 East, and Township 16 South, Range 34 East, Lea County, New Mexico, and for the establishment of temporary 80-acre well spacing and proration units, and for the promulgation of special rules and regulations for said pool. Applicant, in the above-styled cause, seeks an order creating a new oil pool for Lower Wolfcamp production in the Kemnitz Area embracing Sections 23, 24, 25, 26, 35, and 36, Township 16 South, Range 33 East, and Sections 16, 17, 18, 19, 20, 21, 28, 29, 30, 31, 32, and 33, Township 16 South, Range 34 East, Lea County, New Mexico, and for the establishment of temporary 80-acre well spacing and proration units consisting of the North and South halves of each quarter section with drilling locations limited to the Northeast quarter and Southwest quarter of each quarter section, and for the promulgation of special rules and regulations for said pool.

CASE 1255: Southeastern New Mexico nomenclature case calling for the extension of existing pools in Lea, Chaves, Eddy and Roosevelt Counties, New Mexico.

(a) Extension of the Artesia Pool to include:

Township 17 South, Range 28 East
Section 36: S/2 NW/4

(b) Extension of the Atoka Pool to include:

Township 18 South, Range 26 East
Section 12: W/2 NW/4

(c) Extension of the Brown Pool to include:

Township 10 South, Range 26 East
Section 22: SE/4 SE/4
Section 23: S/2 SW/4

(d) Extension of the Cass Pool to include:

Township 20 South, Range 37 East
Section 14: SW/4
Section 15: SE/4

(e) Extension of the Dollarhide-Drinkard Pool to include:

Township 24 South, Range 38 East
Section 19: N/2 NE/4

(f) Extension of the E-K Queen Pool to include:

Township 18 South, Range 33 East
Section 23: NW/4

(g) Extension of the Fowler-Devonian Pool to include:

Township 24 South, Range 37 East
Section 10: W/2 SW/4

(h) Extension of the Gladiola Pool to include:

Township 12 South, Range 38 East
Section 18: N/2 SE/4 & S/2 NE/4

(i) Extension of the South High Lonesome Pool to include:

Township 17 South, Range 29 East
Section 4: SW/4

(j) Extension of the Milnesand-Pennsylvanian Pool to include:

Township 8 South, Range 34 East
Section 13: SE/4 NE/4

Township 8 South, Range 35 East
Section 18: S/2 NW/4

- (k) Extension of the Roberts Pool to include:

Township 17 South, Range 33 East
Section 8: SE/4

CASE 1256: Northwestern New Mexico nomenclature case calling for the creation of a new pool and the extension of existing pools in San Juan and Rio Arriba Counties, New Mexico.

- (a) Creation of a new gas pool for Fruitland production, designated as the Flora Vista-Fruitland Pool, and described as:

Township 30 North, Range 12 West
All of Sections 9 & 10

- (b) Extension of the Aztec-Pictured Cliffs Pool to include:

Township 30 North, Range 11 West
Section 6: SE/4

- (c) Extension of the Ballard-Pictured Cliffs Pool to include:

Township 25 North, Range 7 West
Section 19: S/2

- (d) Extension of the South Blanco-Pictured Cliffs Pool to include:

Township 25 North, Range 5 West
Section 26: SW/4
Section 27: S/2
Section 28: S/2
Section 33: All

Township 26 North, Range 5 West
Section 23: SW/4
Section 26: W/2
Section 35: NW/4

- (e) Extension of the Bisti-Lower Gallup Oil Pool to include:

Township 26 North, Range 13 West
Section 26: SE/4

- (f) Extension of the Verde-Gallup Oil Pool to include:

Township 31 North, Range 15 West
Section 12: NW/4 & SE/4

-4-

Docket No. 16-57

CASE 1257: Application of Great Western Drilling Company for an order promulgating special rules and regulations for the South Carter-San Andres Pool, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order promulgating special rules and regulations for the South Carter-San Andres Pool, Lea County, New Mexico, to provide a method for the establishment of well allowables in said pool which would be commensurate with allowables for wells in the same common source of supply lying outside the State of New Mexico.

CONTINUED CASE

CASE 1221: Application of the Oil Conservation Commission on its own motion for an order amending Commission Order R-586 insofar as it relates to the Byers-Queen and Tubb Gas Pools. Applicant, in the above-styled cause, seeks an order amending the Special Rules and Regulations for the Tubb Gas Pool to make provision in said rules for the regulation of oil wells completed within the defined limits of said pool; and further to consider the deletion of that portion of Order R-586 relating to the Byers-Queen Gas Pool.

bp/

PERMIAN

PERMIAN

MAXIMUM SHUT IN PRESSURES

TUBB GAS POOL

Pan American Petroleum Corporation

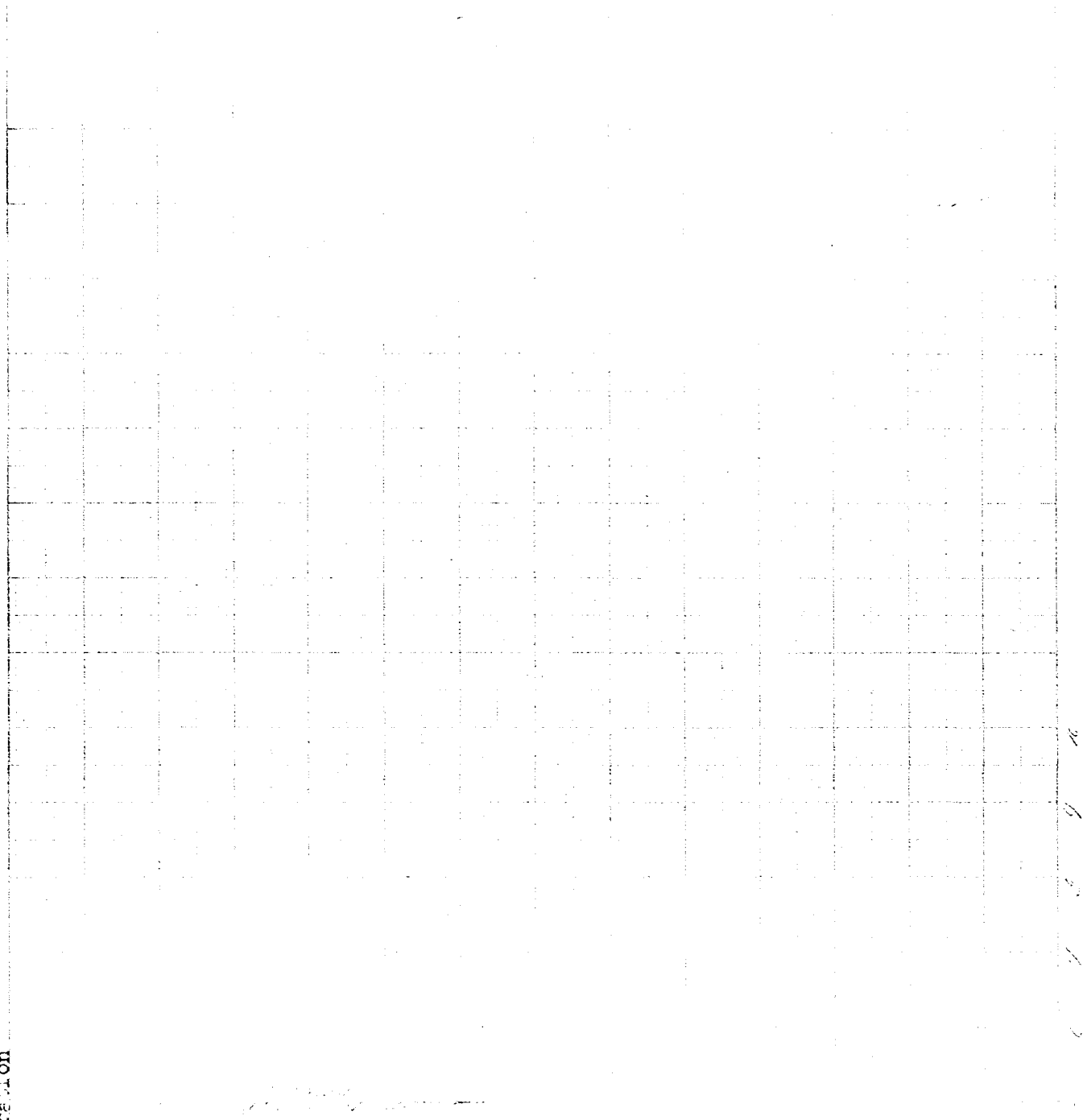
Southland Royalty "A" 2

WV MS 9-213-17E

Tub Gas Pool

Date of Test = 11-7-58

to 11-12-58



LENGTH OF SHUT IN PRESSURE (Days)

BACK-PRESSURE TEST WORKSHEET

COMPANY Pan American Pet. Corporation LEASE Southland Royalty "A" WELL NO. 2

WELL ON PREFLOW: WELL SHUT IN: PRESSURE TAKEN:
DATE 10-30-58 TIME 8:45 AM DATE 11-7-58 TIME 10:30 AM DATE 11-12-58 TIME 10:30 AM

AVG. PREFLOW RATE 3100 Mcfd LENGTH OF PREFLOW 8 Days SHUT-IN PRESS. CSG. 1541.5 TAG _____ LENGTH OF SHUT-IN 5 Days P. 2 2417.1

SEP. GAS API GRAVITY METER RUN ORIFICE TYPE
GRAVITY 0.685 OF LIQUID None SIZE 4" SIZE 2.25" TAPS Pipe CO, 0.10% H, 2.19%

TIME OF DAY	W.H. FLOWING PRESS.				WELL- HEAD TEMP.	METER OR PROVER PRESS.	DIFF.	METER OR PROVER TEMP.	BBL'S. OF LIQUID	P_t^2	$P_c^2 - P_t^2$	Q
	CASING Psig	ΔP Csq.	TUBING Psig	ΔP TDq.								
FRIDAY, NOVEMBER 7, 1958												
10:30	1215.0		Flowing Pressure									
10:30	WELL SHUT IN											
MONDAY, NOVEMBER 10, 1958												
10:30	1539.8		(72.00 HOUR SHUT IN PRESSURE)									
TUESDAY, NOVEMBER 11, 1958												
10:30	1540.8		(96.00 HOUR SHUT IN PRESSURE)									
WEDNESDAY, NOVEMBER 12, 1958												
10:30	1541.5		(5 DAY SHUT IN PRESSURE)									
	This is the maximum shut in pressure obtained.											
THURSDAY, NOVEMBER 13, 1959												
10:30	1541.2		(6 DAY SHUT IN PRESSURE)									
	TEST COMPLETE											

Sinclair Oil & Gas Company

Barton 1

SW NE 23-21S-37E

Tubb Gas Pool

Date of Test = 1-2-59
to 2-4-59

(SHUT IN PRESSURE (psi))

TIME OF SHUT IN PERIOD (Days)

BACK-PRESSURE TEST WORKSHEET

COMPANY Sinclair Oil & Gas Company LEASE Barton WELL NO. 1

WELL ON PREFLOW DATE 1-1-59 TIME 2:00 PM WELL SHUT IN: DATE 1-2-59 TIME 2:30 PM PRESSURE TAKEN: DATE 2-4-59 TIME 9:15 AM

AVG. PREFLOW RATE 2220 Mcfd LENGTH OF PREFLOW 24.50 Hrs. SHUT-IN PRESS. CSG. 1797.1 TDS. LENGTH OF SHUT-IN 33 Days p_c^2 3277

SEP. GAS GRAVITY 0.65 API GRAVITY 50 METER RUN SIZE 2 GRIFFICE SIZE 2 TYPE TAPS CO₂ H₂

TIME OF DAY	W.H. FLOWING PRESS.				WELL HEAD TEMP.	METER OR PROVER PRESS.	DIFF.	METER OR PROVER TEMP.	BBL'S. OF LIQUID	p_t^2	$p_c^2 - p_t^2$	Q
	CASING Psig	I.P. Csg.	TUBING Psig	I.P. Tdg.								
FRIDAY, JANUARY 2, 1959 2:30	WELL SHUT IN											
TUESDAY, JANUARY 6, 1959 12:15	1769.5		(93.75 HOUR SHUT IN PRESSURE)									
WEDNESDAY, JANUARY 7, 1959 12:00	1773.4		(5 DAY SHUT IN PRESSURE)									
THURSDAY, JANUARY 8, 1959 1:30	1776.4		(6 DAY SHUT IN PRESSURE)									
FRIDAY, JANUARY 9, 1959 12:00	1777.6		(7 DAY SHUT IN PRESSURE)									
MONDAY, JANUARY 12, 1959 1:30	1782.7		(10 DAY SHUT IN PRESSURE)									
TUESDAY, JANUARY 13, 1959 10:45	1784.2		(11 DAY SHUT IN PRESSURE)									
WEDNESDAY, JANUARY 14, 1959 11:30	1785.2		(12 DAY SHUT IN PRESSURE)									
THURSDAY, JANUARY 15, 1959 11:15	1785.7		(13 DAY SHUT IN PRESSURE)									
FRIDAY, JANUARY 16, 1959 11:30	1786.7		(14 DAY SHUT IN PRESSURE)									
MONDAY, JANUARY 19, 1959 11:45	1789.9		(17 DAY SHUT IN PRESSURE)									
TUESDAY, JANUARY 20, 1959 10:30	1791.0		(18 DAY SHUT IN PRESSURE)									

See Page (2)

Tested By: R. L. West & J. D. Horton (Perman) None

FORM 903
(REV. 9-1-50)

BACK-PRESSURE TEST WORKSHEET

COMPANY Sinclair Oil & Gas Company LEASE Barton WELL NO. 1

WELL ON PREFLOW: DATE _____ TIME _____ WELL SHUT IN: DATE _____ TIME _____ PRESSURE TAKEN: DATE _____ TIME _____

AVG. PREFLOW RATE _____ LENGTH OF PREFLOW _____ SHUT-IN PRESS. CSG. _____ TGB. _____ LENGTH OF SHUT-IN _____ P_c^2 _____SEP. GAS GRAVITY _____ API GRAVITY _____ METER RUN SIZE _____ COEFFIC. SIZE _____ TAPS _____ CO_2 _____ H_2 _____

TIME OF DAY	W.H. FLOWING PRESS.				WELL-HEAD TEMP.	METER OR PROVER PRESS.	DIFF.	METER OR PROVER TEMP.	BBL'S. OF LIQUID	P_t^2	$P_c^2 - P_t^2$	Q
	CASING PSIG	N.P. CSQ.	TUBING PSIG	N.P. TGB.								
WEDNESDAY, JANUARY 21, 1959												
11:15	1790.8		(19 DAY SHUT IN PRESSURE)									
THURSDAY, JANUARY 22, 1959												
10:45	1791.0		(20 DAY SHUT IN PRESSURE)									
FRIDAY, JANUARY 23, 1959												
10:15	1792.1		(21 DAY SHUT IN PRESSURE)									
MONDAY, JANUARY 26, 1959												
10:00	1793.8		(24 DAY SHUT IN PRESSURE)									
TUESDAY, JANUARY 27, 1959												
11:00	1794.1		(25 DAY SHUT IN PRESSURE)									
WEDNESDAY, JANUARY 28, 1959												
10:30	1794.4		(26 DAY SHUT IN PRESSURE)									
THURSDAY, JANUARY 29, 1959												
10:30	1795.2		(27 DAY SHUT IN PRESSURE)									
FRIDAY, JANUARY 30, 1959												
10:30	1795.0		(28 DAY SHUT IN PRESSURE)									
TUESDAY, FEBRUARY 3, 1959												
9:15	1796.3		(32 DAY SHUT IN PRESSURE)									
WEDNESDAY, FEBRUARY 4, 1959												
9:15	1797.1		(33 DAY SHUT IN PRESSURE)									
	This is the maximum shut in pressure obtained.											
THURSDAY, FEBRUARY 5, 1959												
9:00	1796.8		(34 DAY SHUT IN PRESSURE)									
FRIDAY, FEBRUARY 6, 1959												
8:45	1797.0		(35 DAY SHUT IN PRESSURE)									

TEST COMPLETE

Tested By: R. L. West & J. D. Horton (Permian) Witness: None

Gulf Oil Corporation
Andrews 2-T
SW NE 32-22S-18E
Tubb Gas Pool
Date of Test " 11-30-58
to 2-6-59

See 11-30-58

SW IN PRESSURE (psi)

LENGTH OF SHUT IN PRESSURE (Days)

FORM 987
(REV. 2-1-57)

BACK-PRESSURE TEST WORKSHEET

COMPANY Gulf Oil Corporation LEASE Andrews WELL NO. 2-T

WELL ON PREFLOW: DATE 11-28-58 TIME 10:30 AM WELL SHUT IN: DATE 11-30-58 TIME 10:30 AM PRESSURE TAKEN: DATE 1-30-59 TIME 9:15 AM

AVG. PREFLOW RATE 1300 Mcfd LENGTH OF PREFLOW 48.50 Hrs. SHUT-IN PRESS. CSG. 1864.1 LENGTH OF SHUT-IN 61 Days P_c^2 3524

SEP. GAS GRAVITY _____ API GRAVITY _____ METER RUN SIZE _____ ORIFICE SIZE _____ TYPE TAPS _____ CO_2 _____ H_2 _____

TIME OF DAY	W.H. FLOWING PRESS.				WELL HEAD TEMP.	METER OR PROVER PRESS.	DIFF.	METER OR PROVER TEMP.	BBL'S. OF LIQUID	P_t^2	$P_c^2 - P_t^2$	Q
	CASING PSIG	ΔP CSG.	TUBING PSIG	ΔP TBG.								
SUNDAY, NOVEMBER 30, 1958												
10:30	WELL SHUT IN											
MONDAY, DECEMBER 1, 1958												
8:45			1790.0			(22.25 HOUR SHUT IN PRESSURE)						
TUESDAY, DECEMBER 2, 1958												
8:45			1828.1			(16.25 HOUR SHUT IN PRESSURE)						
WEDNESDAY, DECEMBER 3, 1958												
8:45			1834.6			(70.25 HOUR SHUT IN PRESSURE)						
THURSDAY, DECEMBER 4, 1958												
8:45			1836.8			(94.25 HOUR SHUT IN PRESSURE)						
FRIDAY, DECEMBER 5, 1958												
8:45			1836.0			(5 DAY SHUT IN PRESSURE)						
TUESDAY, DECEMBER 9, 1958												
8:45			1840.5			(9 DAY SHUT IN PRESSURE)						
WEDNESDAY, DECEMBER 10, 1958												
8:45			1841.2			(10 DAY SHUT IN PRESSURE)						
THURSDAY, DECEMBER 11, 1958												
8:45			1841.7			(11 DAY SHUT IN PRESSURE)						
FRIDAY, DECEMBER 12, 1958												
8:45			1843.2			(12 DAY SHUT IN PRESSURE)						
MONDAY, DECEMBER 15, 1958												
8:45			1845.4			(15 DAY SHUT IN PRESSURE)						
TUESDAY, DECEMBER 16, 1958												
10:00			1847.1			(16 DAY SHUT IN PRESSURE)						

See Page (2)

Tested by: R. L. West & J. D. Horton (Permian) Witness: None

FORM 903
(REV. 2-1-57)

BACK-PRESSURE TEST WORKSHEET

COMPANY Gulf Oil Corporation LEASE Andrews WELL NO. 2-T

WELL ON PREFLOW: DATE _____ TIME _____ WELL SHUT IN: DATE _____ TIME _____ PRESSURE TAKEN: DATE _____ TIME _____

AVG. PREFLOW RATE _____ LENGTH OF PREFLOW _____ SHUT-IN PRESS. CSG. _____ TBG. _____ LENGTH OF SHUT-IN _____ P_c^2 _____SEP. GAS GRAVITY _____ API GRAVITY OF LIQUID _____ METER RUN SIZE _____ ORIFICE SIZE _____ TYPE TAPS _____ CO_2 _____ H_2 _____

TIME OF DAY	W.H. FLOWING PRESS.				WELL HEAD TEMP.	METER OR PROVER PRESS.	DIFF.	METER OR PROVER TEMP.	BBL'S. OF LIQUID	P_t^2	$P_c^2 - P_t^2$	Q
	CASING Psig	ΔP Csg.	TUBING Psig	ΔP Tbg.								
WEDNESDAY, DECEMBER 17, 1958												
8:45			1847.1	(17 DAY SHUT IN PRESSURE)								
THURSDAY, DECEMBER 18, 1958												
8:45			1848.3	(18 DAY SHUT IN PRESSURE)								
FRIDAY, DECEMBER 19, 1958												
8:45			1850.0	(19 DAY SHUT IN PRESSURE)								
MONDAY, DECEMBER 22, 1958												
8:45			1851.0	(22 DAY SHUT IN PRESSURE)								
TUESDAY, DECEMBER 23, 1958												
9:30			1851.9	(23 DAY SHUT IN PRESSURE)								
WEDNESDAY, DECEMBER 24, 1958												
9:00			1851.9	(24 DAY SHUT IN PRESSURE)								
FRIDAY, DECEMBER 26, 1958												
9:00			1853.8	(26 DAY SHUT IN PRESSURE)								
MONDAY, DECEMBER 29, 1958												
9:00			1855.9	(29 DAY SHUT IN PRESSURE)								
TUESDAY, DECEMBER 30, 1958												
9:00			1856.2	(30 DAY SHUT IN PRESSURE)								
WEDNESDAY, DECEMBER 31, 1958												
9:00			1856.2	(31 DAY SHUT IN PRESSURE)								
FRIDAY, JANUARY 2, 1959												
9:00			1857.1	(33 DAY SHUT IN PRESSURE)								
MONDAY, JANUARY 5, 1959												
9:00			1857.0	(36 DAY SHUT IN PRESSURE)								

See Page (3)

Tested By: R. L. West & J. D. Horton (Permian) Witness: None

BACK-PRESSURE TEST WORKSHEET

FORM 983
(REV. 2-1-58)COMPANY Gulf Oil Corporation LEASE Andrews WELL NO. 2-T

WELL ON PREFLOW: DATE _____ TIME _____ WELL SHUT IN: DATE _____ TIME _____ PRESSURE TAKEN: DATE _____ TIME _____

AVG. PREFLOW RATE _____ LENGTH OF PREFLOW _____ SHUT-IN PRESS. CSG. _____ TBO. _____ LENGTH OF SHUT-IN _____ P_c^2 _____SEPT. GAS GRAVITY _____ API GRAVITY OF LIQUID _____ METER RUN SIZE _____ ORIFICE SIZE _____ TYPE TAPS _____ CO_2 _____ H_2 _____

TIME OF DAY	W.H. FLOWING PRESS.				WELL-HEAD TEMP.	METER OR PROVER PRESS.	DIFF.	METER OR PROVER TEMP.	BBL'S. OF LIQUID	P_t^2	$P_c^2 - P_t^2$	Q
	CASING PSIG	I.N. P. CSG.	TUBING PSIG	I.N. P. TBO.								
TUESDAY, JANUARY 6, 1959												
9:00			1857.0	(37 DAY SHUT IN PRESSURE)								
WEDNESDAY, JANUARY 7, 1959												
9:00			1858.1	(38 DAY SHUT IN PRESSURE)								
THURSDAY, JANUARY 8, 1959												
9:00			1858.4	(39 DAY SHUT IN PRESSURE)								
FRIDAY, JANUARY 9, 1959												
11:15			1858.2	(40 DAY SHUT IN PRESSURE)								
MONDAY, JANUARY 12, 1959												
9:00			1858.0	(43 DAY SHUT IN PRESSURE)								
TUESDAY, JANUARY 13, 1959												
9:00			1859.0	(44 DAY SHUT IN PRESSURE)								
WEDNESDAY, JANUARY 14, 1959												
9:00			1859.3	(45 DAY SHUT IN PRESSURE)								
THURSDAY, JANUARY 15, 1959												
9:45			1859.6	(46 DAY SHUT IN PRESSURE)								
FRIDAY, JANUARY 16, 1959												
10:00			1859.8	(47 DAY SHUT IN PRESSURE)								
MONDAY, JANUARY 19, 1959												
10:00			1860.9	(50 DAY SHUT IN PRESSURE)								
TUESDAY, JANUARY 20, 1959												
9:30			1861.3	(51 DAY SHUT IN PRESSURE)								
WEDNESDAY, JANUARY 21, 1959												
9:15			1861.0	(52 DAY SHUT IN PRESSURE)								

See Page (1)

Tested By: R. L. West & J. D. Horton (Permian) Witness: None

Page (4)
BACK-PRESSURE TEST WORKSHEET

COMPANY Gulf Oil Corporation LEASE Andrews WELL NO. 2-T

WELL ON PREFLOW: DATE _____ TIME _____ WELL SHUT IN: DATE _____ TIME _____ PRESSURE TAKEN: DATE _____ TIME _____

AVG. PREFLOW DATE _____ LENGTH OF PREFLOW _____ SHUT-IN PRESS. CSG. _____ TBG. _____ LENGTH OF SHUT-IN _____ P_c^2 _____

SEPT. GAS GRAVITY _____ API GRAVITY OF LIQUID _____ METER RUN SIZE _____ ORIFICE SIZE _____ TYPE TAPS _____ CO_2 _____ H_2 _____

TIME OF DAY	W.H. FLOWING PRESS.				WELL HEAD TEMP.	METER OR PROVER PRESS.	DIFF.	METER OR PROVER TEMP.	BBLs. OF LIQUID	P_t^2	$P_c^2 - P_t^2$	Q
	CASING Psig	I.P. CSG.	TUBING Psig	I.P. TBG.								
THURSDAY, JANUARY 22, 1959												
9:15			1862.0	(53)		DAY SHUT IN PRESSURE						
FRIDAY, JANUARY 23, 1959												
9:15			1861.0	(54)		DAY SHUT IN PRESSURE						
MONDAY, JANUARY 26, 1959												
9:15			1862.2	(57)		DAY SHUT IN PRESSURE						
TUESDAY, JANUARY 27, 1959												
9:15			1863.0	(58)		DAY SHUT IN PRESSURE						
WEDNESDAY, JANUARY 28, 1959												
9:15			1862.8	(59)		DAY SHUT IN PRESSURE						
THURSDAY, JANUARY 29, 1959												
9:15			1863.6	(60)		DAY SHUT IN PRESSURE						
FRIDAY, JANUARY 30, 1959												
9:15			1864.1	(61)		DAY SHUT IN PRESSURE						
This is the maximum shut in pressure obtained.												
TUESDAY, FEBRUARY 3, 1959												
9:15			1863.4	(65)		DAY SHUT IN PRESSURE						
WEDNESDAY, FEBRUARY 4, 1959												
9:15			1863.2	(66)		DAY SHUT IN PRESSURE						
THURSDAY, FEBRUARY 5, 1959												
9:15			1862.7	(67)		DAY SHUT IN PRESSURE						
FRIDAY, FEBRUARY 6, 1959												
9:15			1862.3	(68)		DAY SHUT IN PRESSURE						

TEST COMPLETE

Tested by: R. L. West & J. D. Horton (Permian) witness: None

Skelly Oil Company
Baker "B" 15-T
NW SE 10-22S-37E
Tubb Gas Pool
Date of Test = 12-24-58
to 2-9-59

SHUT IN PRESSURE (psig)

LENGTH OF SHUT IN PRESSURE (Days)

BACK-PRESSURE TEST WORKSHEET

COMPANY Skelly Oil Company LEASE Baker "B" WELL NO. 15-T

WELL ON FLOW: DATE 12-16-58 TIME 12:45 PM WELL SHUT IN: DATE 12-21-58 TIME 10:00 AM PRESSURE TAKEN: DATE 2-5-59 TIME 9:30 AM

AVG. FLOW RATE 2650 Mcfd LENGTH OF FLOW 8 Days SHUT-IN PRESS. CSG. 1689.0 LENGTH OF SHUT-IN 43 Days P_c^2 2897

REL. GAS GRAVITY 0.685 APP. GRAVITY OF LIQUID None METER RUN SIZE 4" ORIFICE SIZE 2.00" TYPE TAPS Pipe CO₂ 0.05% H₂ 1.60%

TIME OF DAY	W.H. FLOWING PRESS.				WELL HEAD TEMP.	METER OR PROVER PRESS.	DIFF.	METER OR PROVER TEMP.	BBL'S. OF LIQUID	P_c^2	$P_c^2 - P_t^2$	Q
	CASING PSIG	IN P. CSG.	TUBING PSIG	IN P. TBL.								
WEDNESDAY, DECEMBER 24, 1958												
10:00			592.1			Flowing Pressure						
10:00	WELL SHUT IN											
FRIDAY, DECEMBER 26, 1958												
10:00			1589.6			(18 HOUR SHUT IN PRESSURE)						
MONDAY, DECEMBER 29, 1958												
10:00			1634.1			(5 DAY SHUT IN PRESSURE)						
TUESDAY, DECEMBER 30, 1958												
10:00			1640.8			(6 DAY SHUT IN PRESSURE)						
WEDNESDAY, DECEMBER 31, 1958												
10:00			1646.0			(7 DAY SHUT IN PRESSURE)						
FRIDAY, JANUARY 2, 1959												
10:00			1656.3			(9 DAY SHUT IN PRESSURE)						
MONDAY, JANUARY 5, 1959												
10:30			1664.6			(12 DAY SHUT IN PRESSURE)						
TUESDAY, JANUARY 6, 1959												
10:15			1667.0			(13 DAY SHUT IN PRESSURE)						
WEDNESDAY, JANUARY 7, 1959												
10:00			1669.2			(14 DAY SHUT IN PRESSURE)						
THURSDAY, JANUARY 8, 1959												
11:30			1670.8			(15 DAY SHUT IN PRESSURE)						
FRIDAY, JANUARY 9, 1959												
10:00			1671.8			(16 DAY SHUT IN PRESSURE)						

See Page (2)

Page (2)
BACK-PRESSURE TEST WORKSHEET

COMPANY Skelly Oil Company LEASE Baker "B" WELL NO. 15-T

WELL ON PREFLOW: DATE _____ TIME _____ WELL SHUT IN: DATE _____ TIME _____ PRESSURE TAKEN: DATE _____ TIME _____

AVG. PREFLOW RATE _____ LENGTH OF PREFLOW _____ SHUT-IN PRESS. CSG. _____ TBG. _____ LENGTH OF SHUT-IN _____ P_c^2 _____

SEP. GAS QUANTITY _____ API GRAVITY OF LIQUID _____ METER RUN SIZE _____ GRIFFICE SIZE _____ TYPE TAPS _____ CO_2 _____ H_2 _____

TIME OF DAY	W.H. FLOWING PRESS.				WELL HEAD TEMP.	METER OR PROVER PRESS.	DIFF.	METER OR PROVER TEMP.	BBL'S. OF LIQUID	P_t^2	$P_c^2 - P_t^2$	Q
	CASING PSIG	ΔP CSG.	TUBING PSIG	ΔP TBG.								
MONDAY, JANUARY 12, 1959												
10:30			1675.8	(19 DAY SHUT IN PRESSURE)								
TUESDAY, JANUARY 13, 1959												
9:45			1677.3	(20 DAY SHUT IN PRESSURE)								
WEDNESDAY, JANUARY 14, 1959												
9:45			1678.4	(21 DAY SHUT IN PRESSURE)								
THURSDAY, JANUARY 15, 1959												
10:00			1679.0	(22 DAY SHUT IN PRESSURE)								
FRIDAY, JANUARY 16, 1959												
10:30			1679.4	(23 DAY SHUT IN PRESSURE)								
MONDAY, JANUARY 19, 1959												
9:45			1682.3	(26 DAY SHUT IN PRESSURE)								
TUESDAY, JANUARY 20, 1959												
9:45			1683.0	(27 DAY SHUT IN PRESSURE)								
WEDNESDAY, JANUARY 21, 1959												
9:45			1683.2	(28 DAY SHUT IN PRESSURE)								
THURSDAY, JANUARY 22, 1959												
9:45			1684.1	(29 DAY SHUT IN PRESSURE)								
FRIDAY, JANUARY 23, 1959												
9:45			1683.6	(30 DAY SHUT IN PRESSURE)								
MONDAY, JANUARY 26, 1959												
9:45			1685.2	(33 DAY SHUT IN PRESSURE)								
TUESDAY, JANUARY 27, 1959												
9:45			1685.4	(34 DAY SHUT IN PRESSURE)								

COMPANY Skelly Oil Company LEASE Baker "B" WELL NO. 15-T

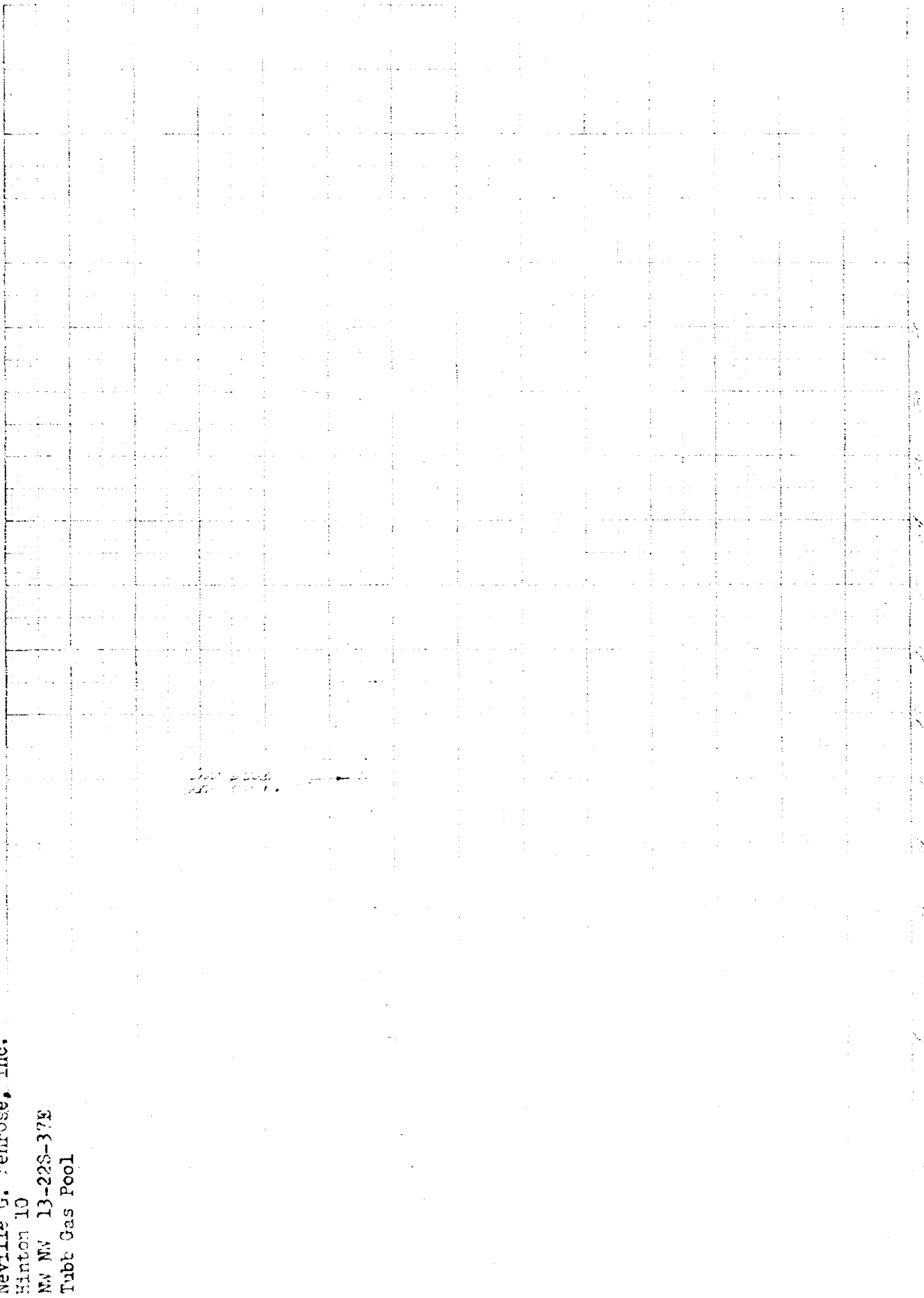
WELL ON OFFICE: _____ WELL SHUT IN: _____ PRESSURE TAKEN: _____
DATE _____ TIME _____ DATE _____ TIME _____ DATE _____ TIME _____

AVG. PREFLOW _____ LENGTH OF _____ SHUT-IN _____ LENGTH OF _____
 RATE _____ PREFLOW _____ PRESS. CSG. _____ TAG _____ SHUT-IN _____ P.C. ² _____

SEPL. GAS _____ API GRAVITY _____ METER RUN _____ ORIFICE _____ TYPE _____
 QUANTITY _____ OF LIQUID _____ SIZE _____ SIZE _____ TAPS _____ CO₂ _____ H₂ _____

Tested By: R. L. West & J. D. Horton (Permian) witness: None

Neville G. Penrose, Inc.
Hinton 10
NW NW 13-22S-37E
Tubb Gas Pool



LENGTH OF SHUT IN PRESSURE (Days)

BACK-PRESSURE TEST WORKSHEET

COMPANY Neville G. Penrose, Inc. LEASE Hinton WELL NO. 10

WELL ON FLOW: DATE 11-18-58 TIME 10:00 AM WELL SHUT IN: DATE 12-14-58 TIME 10:00 AM PRESSURE TAKEN: DATE 12-30-58 TIME 8:30 AM

AVG. PREFL. DATE 1900 10cf/d LENGTH OF PREFLOW 27 Days SHUT-IN PRESS. CSG. 1707.4 T8G. LENGTH OF SHUT-IN 16 Days P_c^2 2960

TYPE GAS CO₂ API GRAVITY 1.2 METER RUN SIZE 1/2" ORIFICE SIZE 1/8" TYPE TAPS CO₂ H₂

TIME OF DAY	W.H. FLOWING PRESS.				WELL-HEAD TEMP.	METER OR PROVER PRESS.	DIFF.	METER OR PROVER TEMP.	BBL'S. OF LIQUID	P_t^2	$P_c^2 - P_t^2$	Q
	CASING PSIG	IN P. CSQ.	FLOWING PSIG	IN P. T8G.								
SUNDAY, DECEMBER 14, 1958												
10:00												
MONDAY, DECEMBER 15, 1958												
10:30	1299.5											
TUESDAY, DECEMBER 16, 1958												
10:30	1472.5											
WEDNESDAY, DECEMBER 17, 1958												
10:30	1510.0											
THURSDAY, DECEMBER 18, 1958												
10:30	1547.6											
FRIDAY, DECEMBER 19, 1958												
10:30	1580.1											
MONDAY, DECEMBER 22, 1958												
10:30	1620.2											
TUESDAY, DECEMBER 23, 1958												
10:00	1626.7											
WEDNESDAY, DECEMBER 24, 1958												
8:30	1645.2											
FRIDAY, DECEMBER 27, 1958												
8:30	1660.3											
MONDAY, DECEMBER 29, 1958												
8:30	1668.1											
TUESDAY, DECEMBER 30, 1958												
8:30	1707.4											

This is the maximum shut in pressure obtained.

See Page (2)

Tested By: R. L. West & J. D. Horton (Permian) Witness: None

COMPANY Neville G. Penrose, Inc. LEASE Hinton WELL NO. 10

WELL ON PREFLOW: _____ WELL SHUT IN: _____ PRESSURE TAKEN: _____
DATE _____ TIME _____ DATE _____ TIME _____ DATE _____ TIME _____

AVG. PREFLOW _____ LENGTH OF _____ SHUT-IN _____ LENGTH OF _____
 RATE _____ PREFLOW _____ PRESS. CSG. _____ T8G _____ SHUT-IN _____ ft^2 _____

SEPL GAS _____ API GRAVITY _____ METER RUN _____ ORifice _____ TYPE _____
GRAVITY _____ OF LIQUID _____ SIZE _____ SIZE _____ TAPS _____ CO₂ _____ H₂ _____

[illegible]

Tested By: R. L. West & J. D. Horton (Permian) Witness: None

Gulf Oil Corporation

McCormack 13

NE NE 32-21S-37E

Tubt Gas Pool

Date of Test = 1-4-59
to 1-26-59

SHUT IN PRESSURE (psi)

LENGTH OF SHUT IN PRESSURE (Days)

BACK-PRESSURE TEST WORKSHEET

COMPANY Gulf Oil Corporation LEASE McCormack WELL NO. 13

WELL ON PREFLOW: DATE 12-24-58 TIME 11:00 AM WELL SHUT IN: DATE 1-4-59 TIME 7:45 AM PRESSURE TAKEN: DATE 1-22-59 TIME 10:45 AM

AVG. PREFLOW RATE 2650 Mcfd LENGTH OF PREFLOW 11 Days SHUT-IN PRESS. CSG. 1762.8 T8G. LENGTH OF SHUT-IN 18 Days P_c^2 3154

SEP. GAS GRAVITY _____ API GRAVITY _____ METER RUN SIZE _____ GRIFFICE SIZE _____ TYPE TAPS _____ CO₂ _____ H₂ _____

TIME OF DAY	W.H. FLOWING PRESS.				WELL-HEAD TEMP.	METER OR PROVER PRESS.	DIFF.	METER OR PROVER TEMP.	BBL'S. OF LIQUID	P_t^2	$P_c^2 - P_t^2$	Q
	CASING Psig	ΔP Csg.	TUBING Psig	ΔP T8G.								
SUNDAY, JANUARY 4, 1959 7:45	WELL SHUT IN											
MONDAY, JANUARY 5, 1959 11:15	1620.5		(27.50 HOUR SHUT IN PRESSURE)									
TUESDAY, JANUARY 6, 1959 11:00	1691.7		(51.25 HOUR SHUT IN PRESSURE)									
WEDNESDAY, JANUARY 7, 1959 11:15	1708.4		(75.50 HOUR SHUT IN PRESSURE)									
THURSDAY, JANUARY 8, 1959 12:00	1719.4		(100.25 HOUR SHUT IN PRESSURE)									
FRIDAY, JANUARY 9, 1959 11:00	1727.1		(5 DAY SHUT IN PRESSURE)									
MONDAY, JANUARY 12, 1959 12:15	1741.9		(8 DAY SHUT IN PRESSURE)									
TUESDAY, JANUARY 13, 1959 10:15	1744.8		(9 DAY SHUT IN PRESSURE)									
WEDNESDAY, JANUARY 14, 1959 10:15	1748.3		(10 DAY SHUT IN PRESSURE)									
THURSDAY, JANUARY 15, 1959 10:30	1749.0		(11 DAY SHUT IN PRESSURE)									
FRIDAY, JANUARY 16, 1959 11:00	1750.7		(12 DAY SHUT IN PRESSURE)									
MONDAY, JANUARY 19, 1959 11:45	1756.3		(15 DAY SHUT IN PRESSURE)									

See Page (2)

Tested By: H. L. West & J. D. Horton (Permian) Witness: None

COMPANY Gulf Oil Corporation LEASE McCormack WELL NO. 13

WELL ON PRODUCE: _____ WELL SHUT IN: _____ PRESSURE TAKEN: _____
DATE _____ TIME _____ DATE _____ TIME _____ DATE _____ TIME _____

AVG. PREFLOW _____ LENGTH OF _____ SHUT-IN _____ LENGTH OF _____
 RATE _____ PREFLOW _____ PRESS. CSG. _____ TAG _____ SHUT-IN _____ P. 2

SER. GAS _____ API GRAVITY _____ METER RUN _____ ORIFICE _____ TYPE _____
 GRAVITY _____ OF LIQUID _____ SIZE _____ SIZE _____ TAPS _____ CO₂ _____ W₂ _____

[illegible]

Tested By: R. L. West & J. D. Horton (Permian) witness: None

Sunray Mid-Continent Oil Company

State "15" L

SE SE 16-213-37E

Tubb Gas Pool

Date of Test = 12-19-48

to 1-2-59

SHUT IN PRESSURE (psig)

LENGTH OF SHUT IN PRESSURE (Days)

BACK-PRESSURE TEST WORKSHEET

COMPANY Sunray Mid-Continent Oil Company LEASE State "15" WELL NO. 4

WELL ON PREFLOW: DATE _____ TIME _____ WELL SHUT IN: DATE 12-19-58 TIME 10:00 AM PRESSURE TAKEN: DATE 1-2-59 TIME 12:00 PM

AVG. PREFLOW RATE _____ LENGTH OF PREFLOW _____ SHUT-IN PRESS. CSG. _____ TAG _____ LENGTH OF SHUT-IN _____ P_c^2 _____

SEP. GAS GRAVITY _____ API GRAVITY _____ METER RUN SIZE _____ GRIFFICE SIZE _____ METER TAGS _____ CO_2 _____ H_2 _____

TIME OF DAY	W.H. FLOWING PRESS.				WELL-HEAD TEMP.	METER OR PROVER PRESS.	DIFF.	METER OR PROVER TEMP.	BBL'S. OF LIQUID	P_t^2	$P_c^2 - P_t^2$	Q
	CASING Psig	I.P. CSG.	TUBING Psig	I.P. TBG.								
FRIDAY, DECEMBER 19, 1958												
10:00												
MONDAY, DECEMBER 22, 1958												
10:00	1512.0											
TUESDAY, DECEMBER 23, 1958												
1:00	1512.0											
WEDNESDAY, DECEMBER 24, 1958												
12:15	1511.9											
FRIDAY, DECEMBER 26, 1958												
12:15	1513.0											
MONDAY, DECEMBER 29, 1958												
12:15	1514.6											
TUESDAY, DECEMBER 30, 1958												
12:15	1514.8											
WEDNESDAY, DECEMBER 31, 1958												
12:00	1513.5											
FRIDAY, JANUARY 2, 1959												
12:00	1515.0											
	This is the maximum shut in pressure obtained.											
MONDAY, JANUARY 5, 1959												
12:00	1513.2											
TUESDAY, JANUARY 6, 1959												
11:45	1513.7											

See Page (2)

Tested By: R. L. West & J. D. Horton (Permian) Witness: None

COMPANY Sunray Mid-Continent Oil Company LEASE State "15" WELL NO. 4

WELL ON PREFLOW: _____ WELL SHUT IN: _____ PRESSURE TAKEN: _____
DATE _____ TIME _____ DATE _____ TIME _____ DATE _____ TIME _____

AVG. PREFLOW _____ LENGTH OF _____ SHUT-IN _____ LENGTH OF _____
 RATE _____ PREFLOW _____ PRESS. CSG. _____ T8G _____ SHUT-IN _____ P_{-2} _____

SEPL. GAS _____ API GRAVITY _____ METER RPM _____ ORIFICE _____ TYPED _____
 GRAVITY _____ OF LIQUID _____ SIZE _____ SIZE _____ TAPS _____ CO₂ _____ H₂ _____

[illegible]

Tested: R. L. West & J. D. Horton (Permian) Witness: None

The Ohio Oil Company
Warlick "C" 1
NW SE 15-21S-37E
Tubb Gas Pool
Date of Test = 11-27-58
to 1-2-59

(219d) SHUT IN PRESSURE (psi)

LENGTH OF SHUT IN PRESSURE (Days)

FORM 303
REV. 1-58

BACK PRESSURE TEST WORKSHEET

COMPANY: The Ohio Oil Company LEASE: Warlick "C" WELL NO.: 1

WELL ON TEST: 11-19-58 WELL SHUT IN: 8:00 AM DATE 11-27-58 PRESSURE TAKEN: TIME 2:00 AM DATE 12-29-58 TIME 12:00 PM

APPL. FLOW: 2900 Mcfd LENGTH OF: 8 Days SHUT IN: 1108.9 LENGTH OF: 32 Days 2022

TEST GAS: N₂ API GRAVITY: 0.85 MOLEC. WT.: 28.95 CORRECTION: 1.0 FACTS: CO₂

TIME OF DAY	CAVING PSIG	IN. P. C&G.	FLOWING PRESS. PSIG	IN. P. TD.	ALL. HEAD TEMP.	METER OR PROVER PRESS.	DEPT.	METER OR PROVER TEMP.	PHYS. LIQUID	$P_c^2 - P_t^2$	Q
THURSDAY, NOVEMBER 27, 1958											
9:00	WELL SHUT IN										
FRIDAY, NOVEMBER 28, 1958											
10:45	1319.8		(23.75 HOUR SHUT IN PRESSURE)								
MONDAY, DECEMBER 1, 1958											
10:00	1360.7		(97.00 HOUR SHUT IN PRESSURE)								
TUESDAY, DECEMBER 2, 1958											
10:00	1366.9		(5 DAY SHUT IN PRESSURE)								
WEDNESDAY, DECEMBER 3, 1958											
10:00	1374.0		(6 DAY SHUT IN PRESSURE)								
THURSDAY, DECEMBER 4, 1958											
10:00	1376.5		(7 DAY SHUT IN PRESSURE)								
FRIDAY, DECEMBER 5, 1958											
10:00	1379.8		(8 DAY SHUT IN PRESSURE)								
MONDAY, DECEMBER 8, 1958											
10:00	1389.1		(11 DAY SHUT IN PRESSURE)								
TUESDAY, DECEMBER 9, 1958											
10:00	1390.7		(12 DAY SHUT IN PRESSURE)								
WEDNESDAY, DECEMBER 10, 1958											
10:00	1392.7		(13 DAY SHUT IN PRESSURE)								
THURSDAY, DECEMBER 11, 1958											
10:00	1394.6		(14 DAY SHUT IN PRESSURE)								
FRIDAY, DECEMBER 12, 1958											
10:00	1396.0		(15 DAY SHUT IN PRESSURE)								

See Page (2)

Tested By: R. L. West & J. D. Horton (Permian) Witness: None

FORM 987
(REV. 3.1.58)

BACK-PRESSURE TEST WORKSHEET

COMPANY The Ohio Oil Company LEASE Warlick "C" WELL NO. 1

WELL ON PRESSION: DATE _____ TIME _____ WELL SHUT IN: DATE _____ TIME _____ PRESSURE TAKEN: DATE _____ TIME _____

AVG. PREFLOW DATE _____ LENGTH OF PREFLOW _____ SHUT-IN PRESS. CSG. _____ FRG. _____ LENGTH OF SHUT-IN _____ P_c^2 _____SEPT. GAS GRAVITY _____ API GRAVITY _____ METER RUN SIZE _____ GOLFICE SIZE _____ TYPE TAPS _____ CO_2 _____ H_2 _____

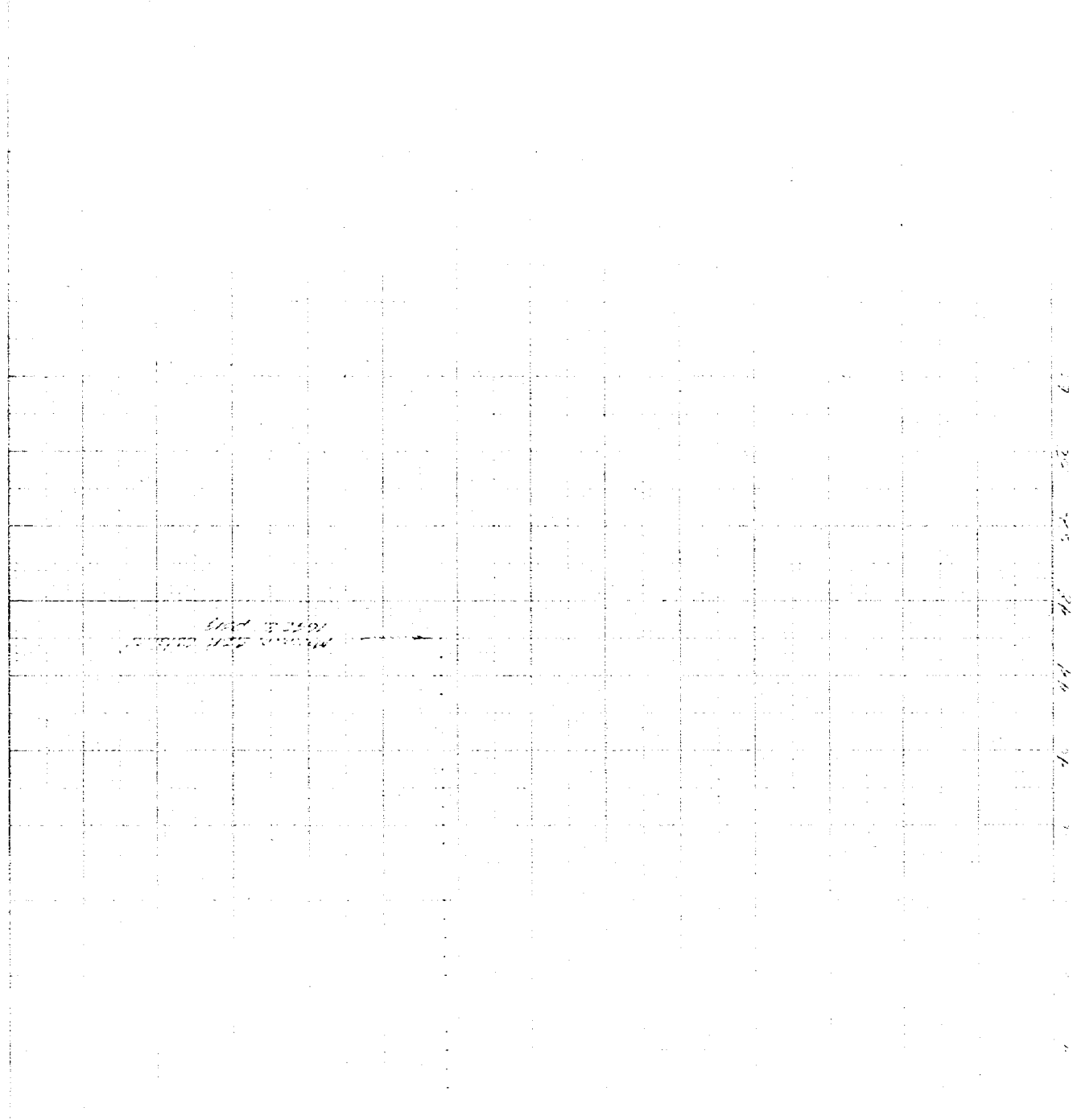
TIME OF DAY	W.H. FLOWING PRESS.				WELL-HEAD TEMP.	METER OR PROVER PRESS.	DIFF.	METER OR PROVER TEMP.	BBL'S. OF LIQUID	P_t^2	$P_c^2 - P_t^2$	Q
	CASING Psig	ΔP Csg.	TUBING Psig	ΔP Tbg.								
MONDAY, DECEMBER 15, 1958												
10:00	1399.8		(18 DAY SHUT IN PRESSURE)									
TUESDAY, DECEMBER 16, 1958												
10:00	1401.0		(19 DAY SHUT IN PRESSURE)									
WEDNESDAY, DECEMBER 17, 1958												
10:00	1402.0		(20 DAY SHUT IN PRESSURE)									
THURSDAY, DECEMBER 18, 1958												
10:00	1403.0		(21 DAY SHUT IN PRESSURE)									
FRIDAY, DECEMBER 19, 1958												
10:00	1404.8		(22 DAY SHUT IN PRESSURE)									
MONDAY, DECEMBER 22, 1958												
10:00	1405.2		(25 DAY SHUT IN PRESSURE)									
TUESDAY, DECEMBER 23, 1958												
12:45	1406.1		(26 DAY SHUT IN PRESSURE)									
WEDNESDAY, DECEMBER 24, 1958												
12:00	1406.6		(27 DAY SHUT IN PRESSURE)									
FRIDAY, DECEMBER 26, 1958												
12:00	1407.7		(29 DAY SHUT IN PRESSURE)									
MONDAY, DECEMBER 29, 1958												
12:00	1408.9		(32 DAY SHUT IN PRESSURE)									
This is the maximum shut in pressure obtained.												
TUESDAY, DECEMBER 30, 1958												
12:00	1407.8		(33 DAY SHUT IN PRESSURE)									
WEDNESDAY, DECEMBER 31, 1958												
12:00	1407.6		(34 DAY SHUT IN PRESSURE)									
FRIDAY, JANUARY 2, 1959												
12:00	1407.4		(36 DAY SHUT IN PRESSURE)									

TEST COMPLETE

Tested by: R. L. West & J. D. Horton (Permian) Witness: None

Sinclair Oil & Gas Company
 J. R. Cone Tubb Unit 1-A
 SW SW 26-21S-37E
 Tubb Gas Pool.
 Date of Test = 12-22-58
 to 2-6-59

DEPTH IN PRESSURE (psi)



LENGTH OF SHUT IN PRESSURE (Days)

BACK-PRESSURE TEST WORKSHEET

COMPANY Sinclair Oil & Gas Company LEASE J. R. Cone WELL NO. 1-A

WELL ON PREFLOW: DATE 11-19-58 TIME 10:00 AM WELL SHUT IN: DATE 12-22-58 TIME 9:00 AM PRESSURE TAKEN: DATE 2-6-59 TIME 8:45 AM

AVG. PREFLOW RATE 2500 Mcfd LENGTH OF PREFLOW 34 Days SHUT-IN PRESS. CSG. 1642.2 TSG. _____ LENGTH OF SHUT-IN 46 Days p_c^2 2740

SEP. GAS GRAVITY _____ API GRAVITY _____ METER RUN SIZE _____ ORIFICE SIZE _____ TYPE TAPS _____ CO₂ _____ H₂ _____

TIME OF DAY	W.H. FLOWING PRESS.				WELL-HEAD TEMP.	METER OR PROVER PRESS.	DIFF.	METER OR PROVER TEMP.	BBL'S. OF LIQUID	p_t^2	$p_c^2 - p_t^2$	Q
	CASING Psig	Δ P Csg.	TUBING Psig	Δ P Tbg.								
MONDAY, DECEMBER 22, 1958												
9:00	WELL SHUT IN											
TUESDAY, DECEMBER 23, 1958												
11:15	1498.1		(26.25 HOUR SHUT IN PRESSURE)									
WEDNESDAY, DECEMBER 24, 1958												
11:15	1533.4		(50.25 HOUR SHUT IN PRESSURE)									
FRIDAY, DECEMBER 26, 1958												
11:15	1566.7		(98.25 HOUR SHUT IN PRESSURE)									
MONDAY, DECEMBER 29, 1958												
11:15	1590.7		(7 DAY SHUT IN PRESSURE)									
TUESDAY, DECEMBER 30, 1958												
11:15	1596.6		(8 DAY SHUT IN PRESSURE)									
WEDNESDAY, DECEMBER 31, 1958												
11:15	1599.7		(9 DAY SHUT IN PRESSURE)									
FRIDAY, JANUARY 2, 1959												
11:15	1602.2		(11 DAY SHUT IN PRESSURE)									
MONDAY, JANUARY 5, 1959												
11:45	1616.0		(14 DAY SHUT IN PRESSURE)									
TUESDAY, JANUARY 6, 1959												
11:45	1621.2		(15 DAY SHUT IN PRESSURE)									
WEDNESDAY, JANUARY 7, 1959												
11:45	1620.9		(16 DAY SHUT IN PRESSURE)									
THURSDAY, JANUARY 8, 1959												
1:15	1623.1		(17 DAY SHUT IN PRESSURE)									

See Page (2)

Tested By: R. L. West & J. D. Horton (Perkins) Witness: None

FORM 983
(REV. 3.1.59)

BACK-PRESSURE TEST WORKSHEET

COMPANY Sinclair Oil & Gas Company LEASE J. R. Cone Tubb Unit WELL NO. 1-A

WELL ON PREFLOW: DATE _____ TIME _____ WELL SHUT IN: DATE _____ TIME _____ PRESSURE TAKEN: DATE _____ TIME _____

AVG. PREFLOW RATE _____ LENGTH OF PREFLOW _____ SHUT-IN PRESS. CSG. _____ TUB. _____ LENGTH OF SHUT-IN _____ P_c^2 _____SEPT. GAS GRAVITY _____ API GRAVITY OF LIQUID _____ METER RUN SIZE _____ ORIFICE SIZE _____ VENT TAPS _____ CO_2 _____ H_2 _____

TIME OF DAY	W.H. FLOWING PRESS.				WELL-HEAD TEMP.	METER OR PROVER PRESS.	DIFF.	METER OR PROVER TEMP.	BBL'S. OF LIQUID	P_t^2	$P_c^2 - P_t^2$	Q
	CASING Psig	ΔP Csg.	TUBING Psig	ΔP Tub.								
FRIDAY, JANUARY 9, 1959												
11:30	1624.2		(18 DAY SHUT IN PRESSURE)									
MONDAY, JANUARY 12, 1959												
1:30	1629.2		(21 DAY SHUT IN PRESSURE)									
TUESDAY, JANUARY 13, 1959												
10:45	1629.2		(22 DAY SHUT IN PRESSURE)									
WEDNESDAY, JANUARY 14, 1959												
11:15	1632.2		(23 DAY SHUT IN PRESSURE)									
THURSDAY, JANUARY 15, 1959												
11:15	1631.4		(24 DAY SHUT IN PRESSURE)									
FRIDAY, JANUARY 16, 1959												
11:30	1632.7		(25 DAY SHUT IN PRESSURE)									
MONDAY, JANUARY 19, 1959												
11:45	1635.2		(28 DAY SHUT IN PRESSURE)									
TUESDAY, JANUARY 20, 1959												
10:30	1636.2		(29 DAY SHUT IN PRESSURE)									
WEDNESDAY, JANUARY 21, 1959												
11:00	1635.6		(30 DAY SHUT IN PRESSURE)									
THURSDAY, JANUARY 22, 1959												
10:45	1636.7		(31 DAY SHUT IN PRESSURE)									
FRIDAY, JANUARY 23, 1959												
10:00	1637.0		(32 DAY SHUT IN PRESSURE)									
MONDAY, JANUARY 26, 1959												
9:45	1639.3		(35 DAY SHUT IN PRESSURE)									

See Page (3)

Tested By: R. L. West & J. D. Horton (Permian) Address: None

COMPANY Sinclair Oil & Gas Company LEASE J. R. Cone Tubb Unit WELL NO. 1-A

WELL ON OFFLINE: _____ WELL SHUT IN: _____ PRESSURE TAKEN: _____
DATE _____ TIME _____ DATE _____ TIME _____ DATE _____ TIME _____

AVG. PREFLOW _____ LENGTH OF _____ SHUT-IN _____ LENGTH OF _____
 RATE _____ PREFLOW _____ PRESS. CSG. _____ TRG _____ SHUT-IN _____ p. 2

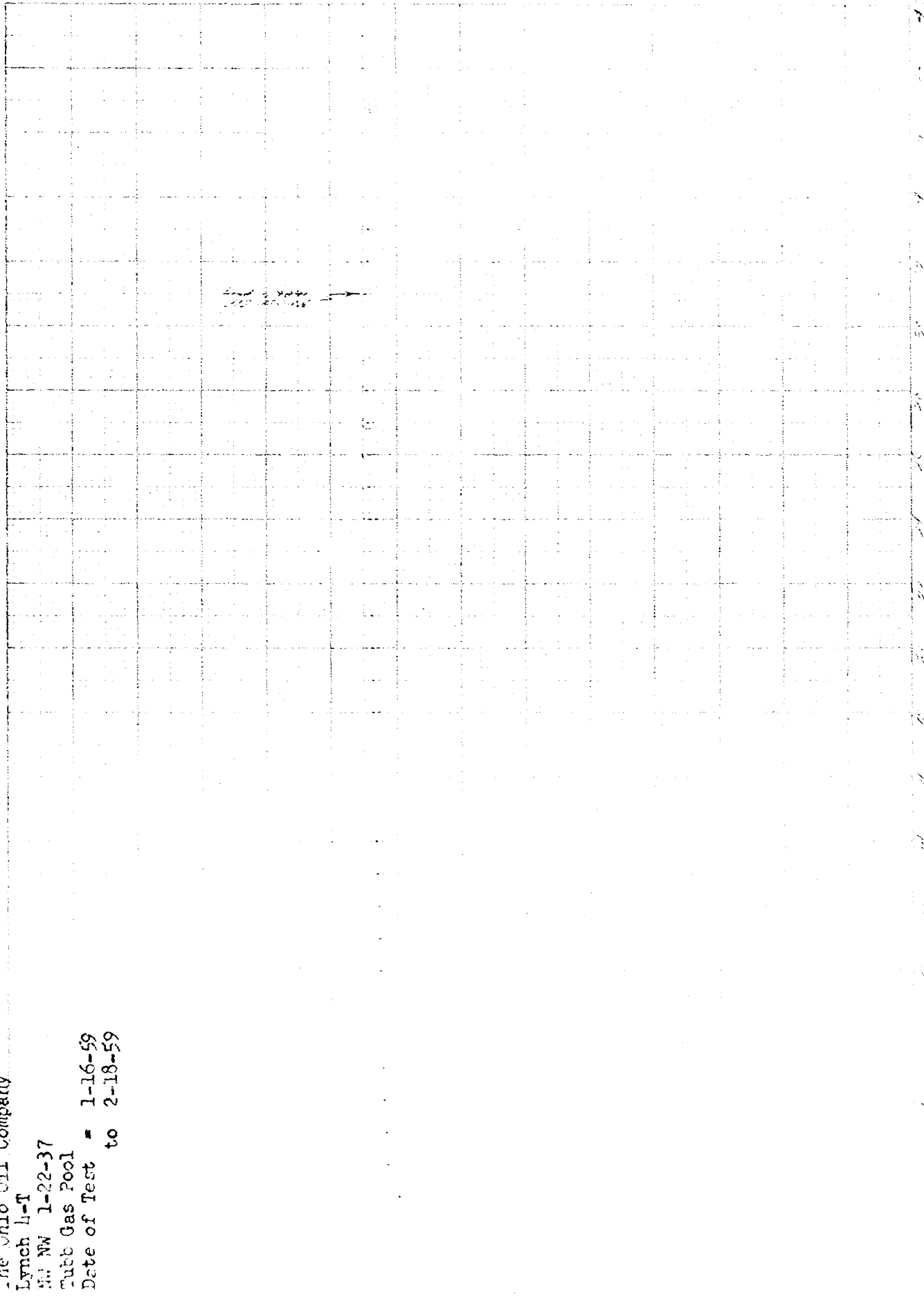
SEPL. GAS _____ API GRAVITY _____ METER RUN _____ ORIFICE _____ TYPE _____
GRAVITY _____ OF LIQUID _____ SIZE _____ SIZE _____ TAPS _____ CO₂ _____ H₂ _____

[illegible]

Tested By: R.L. West & J.D. Horton (Permian) witness: None

The Ohio Oil Company
Lynch 4-T
SW NW 1-22-37
Tubb Gas Pool
Date of Test = 1-16-59
to 2-18-59

SHUT IN PRESSURE (psig)



LENGTH OF SHUT IN PRESSURE (Days)

FORM 907
(REV. 3-1-59)

BACK-PRESSURE TEST WORKSHEET

COMPANY The Ohio Oil Company LEASE Lynch WELL NO. L-7

WELL ON PRESSION DATE 1-15-59 TIME 9:15 AM WELL SHUT IN DATE 1-16-59 TIME 1:00 PM PRESSURE TAKEN DATE 2-16-59 TIME 2:15 PM

AVG. FLOW RATE 2500 Mcfd LENGTH OF FLOW 27.75 Hrs. SHUT-IN PRESS. CSG. 1686.7 LENGTH OF SHUT-IN 31 Days 2890

WELL GAS GRAVITY 0.680 API GRAVITY None METER RUN SIZE 4" ORIFICE SIZE 2.00" TAPS Pipe CO. 0.00% H. 2.99%

TIME OF DAY	W.H. FLOWING PRESS.				WELL HEAD TEMP.	METER OR PROVER PRESS.	DIFF.	METER OR PROVER TEMP.	BBL'S. OF LIQUID	P_t^2	$P_c^2 - P_t^2$	Q
	CASING PSIG	IN P. CSQ.	TUBING PSIG	IN P. TD.								
FRIDAY, JANUARY 16, 1959												
1:00			1243.7			Flowing Pressure						
1:00						WELL SHUT IN						
MONDAY, JANUARY 19, 1959												
11:30			1599.7			(70.50 HOUR SHUT IN PRESSURE)						
TU. JAN. 20, 1959												
10:15			1631.0			(93.25 HOUR SHUT IN PRESSURE)						
WEDNESDAY, JAN. 21, 1959												
10:15			1635.6			(1 DAY SHUT IN PRESSURE)						
THURSDAY, JANUARY 22, 1959												
8:30			1611.5			(1 DAY SHUT IN PRESSURE)						
FRIDAY, JANUARY 23, 1959												
8:30						(1 DAY SHUT IN PRESSURE)						
MONDAY, JANUARY 26, 1959												
8:30						(1 DAY SHUT IN PRESSURE)						
TUESDAY, JANUARY 27, 1959												
8:30						(1 DAY SHUT IN PRESSURE)						
WEDNESDAY, JANUARY 28, 1959												
8:30			1610.0			(1 DAY SHUT IN PRESSURE)						
THURSDAY, JANUARY 29, 1959												
8:30			1600.0			(1 DAY SHUT IN PRESSURE)						
FRIDAY, JANUARY 30, 1959												
8:30			1600.0			(1 DAY SHUT IN PRESSURE)						

Page (2)

Tested by: R. L. West & J. D.

None

BACK-PRESSURE TEST WORKSHEET

FORM 903
(REV. 2-1-59)COMPANY The Ohio Oil Company LEASE Lynch WELL NO. 1-T

WELL ON PREFLOW: DATE _____ TIME _____ WELL SHUT IN: DATE _____ TIME _____ PRESSURE TAKEN: DATE _____ TIME _____

AVG. PREFLOW RATE _____ LENGTH OF PREFLOW _____ SHUT-IN PRESS. CSG. _____ TSG. _____ LENGTH OF SHUT-IN _____ P_c^2 _____GEL. GAS GRAVITY _____ API GRAVITY _____ METER RUN SIZE _____ ORIFICE SIZE _____ TYPE TAPS _____ CO_2 _____ H_2 _____

TIME OF DAY	W.H. FLOWING PRESS.				WELL- HEAD TEMP.	METER OR PROVER PRESS.	DIFF.	METER OR PROVER TEMP.	BBL'S. OF LIQUID	P_t^2	$P_c^2 - P_t^2$	Q
	CASING Psig	Δ P Csg.	TUBING Psig	Δ P Tbg.								
TUESDAY, FEBRUARY 3, 1959												
9:15			1671.0	(18	DAY SHUT IN PRESSURE)							
WEDNESDAY, FEBRUARY 4, 1959												
8:30			1671.7	(19	DAY SHUT IN PRESSURE)							
THURSDAY, FEBRUARY 5, 1959												
8:45			1672.3	(20	DAY SHUT IN PRESSURE)							
FRIDAY, FEBRUARY 6, 1959												
8:30			1674.6	(21	DAY SHUT IN PRESSURE)							
MONDAY, FEBRUARY 9, 1959												
8:30			1680.3	(24	DAY SHUT IN PRESSURE)							
TUESDAY, FEBRUARY 10, 1959												
8:30			1681.8	(25	DAY SHUT IN PRESSURE)							
WEDNESDAY, FEBRUARY 11, 1959												
9:00			1682.3	(26	DAY SHUT IN PRESSURE)							
THURSDAY, FEBRUARY 12, 1959												
8:30			1684.6	(27	DAY SHUT IN PRESSURE)							
FRIDAY, FEBRUARY 13, 1959												
2:30			1685.6	(28	DAY SHUT IN PRESSURE)							
MONDAY, FEBRUARY 16, 1959												
2:15			1686.7	(31	DAY SHUT IN PRESSURE)							
This is the maximum shut in pressure obtained.												
TUESDAY, FEBRUARY 17, 1959												
1:15			1683.6	(32	DAY SHUT IN PRESSURE)							
WEDNESDAY, FEBRUARY 18, 1959												
8:30			1683.1	(33	DAY SHUT IN PRESSURE)							

TEST COMPLETE

Tested By: R. L. West & J. D. Horton (Permian) Witness: None

Gulf Oil Corporation

King 13

NE NE 26-21S-37E

Tubb Gas Pool

Date of Test = 12-12/23-58

SHUT IN PRESSURE (psi)

LENGTH OF SHUT IN PRESSURE (Days)

BACK-PRESSURE TEST WORKSHEET

COMPANY Gulf Oil Corporation LEASE King WELL NO. 13

WELL ON FLOW: DATE 11-28-58 TIME 10:15 AM WELL SHUT IN: DATE 12-12-58 TIME 11:15 AM PRESSURE TAKEN: DATE 12-19-58 TIME 11:30 AM

AVG. PREFLOW RATE	5700 Mcfd	LENGTH OF PREFLOW	14 Days	SHUT-IN PRESS. CSG.	1352.8	TRG.	LENGTH OF SHUT-IN	7 Days	1866
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SEPL GAS _____ API GRAVITY _____ METER RUN _____ GRIDICE _____ TYPE _____
GRAVITY 0.680 OF LIQUID None SIZE 4" SIZE 2.50" TAPS Pipe CO, 0.00% H, 2.36%

TIME OF DAY	W.H. FLOWING PRESS.			WELL HEAD TEMP.	METER OR PROVER PRESS.	DIFF.	METER OR PROVER TEMP.	BBL'S. OF LIQUID	P_t^2	$P_c^2 - P_t^2$	Q
	CASING Psig	ΔP Csg.	TUBING Psig								
FRIDAY, DECEMBER 12, 1958											
11:15	1044.2		Flowing Pressure								
11:15	WELL SHUT IN										
MONDAY, DECEMBER 15, 1958											
11:30	1335.7		(72.25 HOUR SHUT IN PRESSURE)								
TUESDAY, DECEMBER 16, 1958											
11:30	1341.2		(96.25 HOUR SHUT IN PRESSURE)								
WEDNESDAY, DECEMBER 17, 1958											
11:30	1343.3		(5 DAY SHUT IN PRESSURE)								
THURSDAY, DECEMBER 18, 1958											
11:30	1348.5		(6 DAY SHUT IN PRESSURE)								
FRIDAY, DECEMBER 19, 1958											
11:30	1352.8		(7 DAY SHUT IN PRESSURE)								
	This is the maximum shut in pressure obtained.										
MONDAY, DECEMBER 22, 1958											
11:30	1349.5		(10 DAY SHUT IN PRESSURE)								
TUESDAY, DECEMBER 23, 1958											
11:00	1348.0		(11 DAY SHUT IN PRESSURE)								
	TEST COMPLETE										
										</	

Tested By: R. L. West & J. D. Horton (Permian) witness: None

SHUT IN PRESSURE (psig)

Gulf Oil Corporation

Mark 5

NE NE 3-22S-37E

Tubb Gas Pool

Date of Test * 11-26-58
to 1-16-59

LENGTH OF SHUT IN PRESSURE (Days)

BACK-PRESSURE TEST WORKSHEET

COMPANY Gulf Oil Corporation LEASE Mark WELL NO. 5

WELL ON PREFLOW: DATE 11-21-58 TIME 11:00 AM WELL SHUT IN: DATE 11-26-58 TIME 11:15 AM PRESSURE TAKEN: DATE 1-14-59 TIME 10:00 AM

AVG. PREFLOW RATE 2250 Mcfd LENGTH OF PREFLOW 5 Days SHUT-IN PRESS. CSG. 1781.2 TUB. LENGTH OF SHUT-IN 49 Days P_c^2 3220

SEP. GAS GRAVITY 0.665 API GRAVITY None METER RUN SIZE 4" ORIFICE SIZE 1.75" TYPE TAPS Pipe CO₂ 0.00% H₂ 2.17%

TIME OF DAY	W.H. FLOWING PRESS.				WELL HEAD TEMP.	METER OR PROVER PRESS.	DIFF.	METER OR PROVER TEMP.	BDTS. OF LIQUID	P_t^2	$P_c^2 - P_t^2$	Q
	CASING Psig	IN P Csg.	TUBING Psig	IN P Tbg.								
WEDNESDAY, NOVEMBER 26, 1958												
11:15	653.4		Flowing Pressure									
11:15	WELL SHUT IN											
FRIDAY, NOVEMBER 28, 1958												
11:15	1652.3		(48.00 HOUR SHUT IN PRESSURE)									
MONDAY, DECEMBER 1, 1958												
11:15	1721.4		(5 DAY SHUT IN PRESSURE)									
TUESDAY, DECEMBER 2, 1958												
11:15	1731.7		(6 DAY SHUT IN PRESSURE)									
WEDNESDAY, DECEMBER 3, 1958												
11:15	1739.0		(7 DAY SHUT IN PRESSURE)									
THURSDAY, DECEMBER 4, 1958												
11:15	1745.5		(8 DAY SHUT IN PRESSURE)									
FRIDAY, DECEMBER 5, 1958												
11:15	1749.0		(9 DAY SHUT IN PRESSURE)									
MONDAY, DECEMBER 8, 1958												
11:15	1758.7		(12 DAY SHUT IN PRESSURE)									
TUESDAY, DECEMBER 9, 1958												
11:00	1760.0		(13 DAY SHUT IN PRESSURE)									
WEDNESDAY, DECEMBER 10, 1958												
11:00	1761.7		(14 DAY SHUT IN PRESSURE)									
THURSDAY, DECEMBER 11, 1958												
11:00	1762.8		(15 DAY SHUT IN PRESSURE)									

See Page (2)

Tested By: R. L. West & J. D. Horton (Permian) Witness: None

FORM 983
(REV. 9-1-58)

BACK-PRESSURE TEST WORKSHEET

COMPANY Gulf Oil Corporation LEASE Mark WELL NO. 5

WELL ON PREFLOW: DATE _____ TIME _____ WELL SHUT IN: DATE _____ TIME _____ PRESSURE TAKEN: DATE _____ TIME _____

AVG. PREFLOW RATE _____ LENGTH OF PREFLOW _____ SHUT-IN PRESS. CSG. _____ TGB. _____ LENGTH OF SHUT-IN _____ P_c^2 _____SEP. GAS GRAVITY _____ API GRAVITY OF LIQUID _____ METER RUN SIZE _____ ORIFICE SIZE _____ TYPE TAPS _____ CO_2 _____ H_2 _____

TIME OF DAY	W.H. FLOWING PRESS.				WELL-HEAD TEMP.	METER OR PROVER PRESS.	DIFF.	METER OR PROVER TEMP.	BBL'S. OF LIQUID	P_t^2	$P_c^2 - P_t^2$	Q
	CASING Psig	ΔP Csg.	TUBING Psig	ΔP Tbg.								
FRIDAY, DECEMBER 12, 1958												
11:00	1763.5		(16 DAY	SHUT	IN PRESSURE)							
MONDAY, DECEMBER 15, 1958												
11:15	1764.9		(19 DAY	SHUT	IN PRESSURE)							
TUESDAY, DECEMBER 16, 1958												
11:15	1766.1		(20 DAY	SHUT	IN PRESSURE)							
WEDNESDAY, DECEMBER 17, 1958												
11:15	1765.6		(21 DAY	SHUT	IN PRESSURE)							
THURSDAY, DECEMBER 18, 1958												
11:15	1766.3		(22 DAY	SHUT	IN PRESSURE)							
FRIDAY, DECEMBER 19, 1958												
11:15	1768.2		(23 DAY	SHUT	IN PRESSURE)							
MONDAY, DECEMBER 22, 1958												
11:15	1769.7		(26 DAY	SHUT	IN PRESSURE)							
TUESDAY, DECEMBER 23, 1958												
10:15	1770.2		(27 DAY	SHUT	IN PRESSURE)							
WEDNESDAY, DECEMBER 24, 1958												
10:15	1770.3		(28 DAY	SHUT	IN PRESSURE)							
FRIDAY, DECEMBER 26, 1958												
10:15	1772.6		(30 DAY	SHUT	IN PRESSURE)							
MONDAY, DECEMBER 29, 1958												
10:15	1773.2		(33 DAY	SHUT	IN PRESSURE)							
TUESDAY, DECEMBER 30, 1958												
10:15	1773.5		(34 DAY	SHUT	IN PRESSURE)							

See Page (3)

Tested By: R. L. West & J. D. Horton (Permian) None

FORM 921
(REV. 3-1-58)

BACK-PRESSURE TEST WORKSHEET

COMPANY Gulf Oil Corporation LEASE Mark WELL NO. 5

WELL ON PREFLOW: DATE _____ TIME _____ WELL SHUT IN: DATE _____ TIME _____ PRESSURE TAKEN: DATE _____ TIME _____

AVG. PREFLOW RATE _____ LENGTH OF PREFLOW _____ SHUT-IN PRESS. CSG. _____ TBC. _____ LENGTH OF SHUT-IN _____ P_c^2 _____SEP. GAS GRAVITY _____ API GRAVITY OF LIQUID _____ METER RUN SIZE _____ ORIFICE SIZE _____ TYPE TAPS _____ CO_2 _____ H_2 _____

TIME OF DAY	W.H. FLOWING PRESS.				WELL-HEAD TEMP.	METER OR PROVER PRESS.	DIFF.	METER OR PROVER TEMP.	BBL'S. OF LIQUID	P_t^2	$P_c^2 - P_t^2$	Q
	CASING PSIG	ΔP CSG.	TUBING PSIG	ΔP TBL.								
WEDNESDAY, DECEMBER 31, 1958												
10:15	1773.6		(35 DAY	SHUT IN PRESSURE)								
FRIDAY, JANUARY 2, 1959												
10:15	1775.0		(37 DAY	SHUT IN PRESSURE)								
MONDAY, JANUARY 5, 1959												
10:45	1775.2		(40 DAY	SHUT IN PRESSURE)								
TUESDAY, JANUARY 6, 1959												
10:45	1776.0		(41 DAY	SHUT IN PRESSURE)								
WEDNESDAY, JANUARY 7, 1959												
10:45	1778.7		(42 DAY	SHUT IN PRESSURE)								
THURSDAY, JANUARY 8, 1959												
11:45	1777.2		(43 DAY	SHUT IN PRESSURE)								
FRIDAY, JANUARY 9, 1959												
10:30	1777.6		(44 DAY	SHUT IN PRESSURE)								
MONDAY, JANUARY 12, 1959												
11:00	1779.2		(47 DAY	SHUT IN PRESSURE)								
TUESDAY, JANUARY 13, 1959												
10:00	1780.5		(48 DAY	SHUT IN PRESSURE)								
WEDNESDAY, JANUARY 14, 1959												
10:00	1781.2		(49 DAY	SHUT IN PRESSURE)								
This is the maximum shut in pressure obtained.												
THURSDAY, JANUARY 15, 1959												
10:15	1781.0		(50 DAY	SHUT IN PRESSURE)								
FRIDAY, JANUARY 16, 1959												
10:30	1780.9		(51 DAY	SHUT IN PRESSURE)								
	TEST COMPLETE											

Tested by: R. L. West & J. D. Horton (Permian) Witness: None

Cities Service Oil Company

Well 3

NW 34 35-21S-37E

Tubt Gas Pool

Date of test = 11-26-58
to 12-21-58

LENGTH OF SHUT IN PRESSURE (Days)

BACK-PRESSURE TEST WORKSHEET

COMPANY Cities Service Oil Company LEASE Owen WELL NO. 3

WELL ON PREFLOW: DATE 11-20-58 TIME 10:00 AM WELL SHUT IN: DATE 11-26-58 TIME 11:45 AM PRESSURE TAKEN: DATE 12-24-58 TIME 10:30 AM

AVG. PREFLOW RATE 1600 Mcfd LENGTH OF PREFLOW 6 Days SHUT-IN PRESS. CSG. 1719.2 TRG. 1719.2 LENGTH OF SHUT-IN 28 Days P_c^2 3001

SEP. GAS GRAVITY 0.685 API GRAVITY OF LIQUID None METER RUN SIZE 4" GRIFFICE SIZE 2.00" TYPE TAPS Pipe CO_2 0.03% H_2 1.80%

TIME OF DAY	W.H. FLOWING PRESS.				WELL- HEAD TEMP.	METER OR PROVER PRESS.	DIFF.	METER OR PROVER TEMP.	BBLs. OF LIQUID	P_t^2	$P_c^2 - P_t^2$	Q
	CASING Psig	ΔP Csg.	TUBING Psig	ΔP Tbg.								
WEDNESDAY, NOVEMBER 26, 1958												
11:45	718.5		Flowing	Pressure								
11:45	WELL SHUT IN											
FRIDAY, NOVEMBER 28, 1958												
11:45	1686.7		(18.00 HOUR SHUT IN PRESSURE)									
MONDAY, DECEMBER 1, 1958												
11:00	1704.6		(5 DAY SHUT IN PRESSURE)									
TUESDAY, DECEMBER 2, 1958												
11:00	1706.7		(6 DAY SHUT IN PRESSURE)									
WEDNESDAY, DECEMBER 3, 1958												
11:00	1708.2		(7 DAY SHUT IN PRESSURE)									
THURSDAY, DECEMBER 4, 1958												
11:00	1709.9		(8 DAY SHUT IN PRESSURE)									
FRIDAY, DECEMBER 5, 1958												
11:00	1710.5		(9 DAY SHUT IN PRESSURE)									
MONDAY, DECEMBER 8, 1958												
11:00	1712.7		(12 DAY SHUT IN PRESSURE)									
TUESDAY, DECEMBER 9, 1958												
10:45	1713.1		(13 DAY SHUT IN PRESSURE)									
WEDNESDAY, DECEMBER 10, 1958												
10:45	1713.0		(14 DAY SHUT IN PRESSURE)									
THURSDAY, DECEMBER 11, 1958												
10:45	1714.2		(15 DAY SHUT IN PRESSURE)									

See Page (2)

Tested By: R. L. West & J. D. Horton (Permian) Witness: None

COMPANY Cities Service Oil Company LEASE Owen WELL NO. 3

WELL ON PROBLEM: _____ WELL SHUT IN: _____ PRESSURE TAKEN: _____
DATE _____ TIME _____ DATE _____ TIME _____ DATE _____ TIME _____

AVG. PREFLOW LENGTH OF SHUT-IN LENGTH OF
RATE _____ PREFLOW _____ PRESS. CSG. _____ TdG. _____ SHUT-IN _____ p. 2

SEPL GAS _____ API GRAVITY _____ METER RUN _____ ORIFICE _____ TYPE _____
 QUANTITY _____ OF LIQUID _____ SIZE _____ SIZE _____ TAPS _____ CO₂ _____ H₂ _____

TIME OF DAY	W.H. FLOWING PRESS.				WELL HEAD TEMP.	METER OR PROVER PRESS.	DIFF.	METER OR PROVER TEMP.	BBL'S. OF LIQUID	P_t^2	$P_c^2 - P_t^2$	Q
	CASING PSIG	IN P Csq.	TUBING PSIG	IN P IDI.								
FRIDAY, 10:45	DECEMBER 12, 1958 1714.9		(16 DAY SHUT IN PRESSURE)									
MONDAY, 11:00	DECEMBER 15, 1958 1715.5		(19 DAY SHUT IN PRESSURE)									
TUESDAY, 11:00	DECEMBER 16, 1958 1716.0		(20 DAY SHUT IN PRESSURE)									
WEDNESDAY, 11:00	DECEMBER 17, 1958 1716.3		(21 DAY SHUT IN PRESSURE)									
THURSDAY, 11:00	DECEMBER 18, 1958 1717.0		(22 DAY SHUT IN PRESSURE)									
FRIDAY, 11:00	DECEMBER 19, 1958 1717.5		(23 DAY SHUT IN PRESSURE)									
MONDAY, 11:00	DECEMBER 22, 1958 1719.0		(26 DAY SHUT IN PRESSURE)									
TUESDAY, 10:15	DECEMBER 23, 1958 1719.2		(27 DAY SHUT IN PRESSURE)									
WEDNESDAY, 10:30	DECEMBER 24, 1958 1719.2		(28 DAY SHUT IN PRESSURE)									
	This is the maximum shut in pressure obtained. TEST COMPLETE											

Tested By: R. I. West & J. D. Horton (Permian) witness: None

Gulf Oil Corporation

Paddock 5

NW NE 1-22S-37E

Subb Gas Pool

Date of Test - 2-4/24-59

SHUT IN PRESSURE (psi)

LENGTH OF SHUT IN PRESSURE (Days)

ORM 903
(REV. 9-1-50)

BACK-PRESSURE TEST WORKSHEET

COMPANY Gulf Oil Corporation LEASE Alice Paddock WELL NO. 5

WELL ON PREFLOW: DATE 1-31-59 TIME 11:00 AM WELL SHUT IN: DATE 2-4-59 TIME 8:00 AM PRESSURE TAKEN: DATE 2-24-59 TIME 10:30 AM

AVG. PREFLOW RATE 4100 Mcfd LENGTH OF PREFLOW 4 Days SHUT-IN PRESS. CSG. 1768.6 TBG. _____ LENGTH OF SHUT-IN 20 Days P_c^2 3175

SEP. GAS GRAVITY _____ API GRAVITY _____ METER RUN SIZE _____ ORIFICE SIZE _____ TYPE TAPS _____ CO_2 _____ H_2 _____

TIME OF DAY	W.H. FLOWING PRESS.				WELL HEAD TEMP.	METER OR PROVER PRESS.	DIFF.	METER OR PROVER TEMP.	Bbls. OF LIQUID	P_t^2	$P_c^2 - P_t^2$	Q
	CASING Psig	IN P Csg.	TUBING Psig	IN P TBG.								
WEDNESDAY, FEBRUARY 4, 1959 8:00	WELL SHUT IN											
FRIDAY, FEBRUARY 6, 1959 9:00	1501.4		(19.00 HOUR SHUT IN PRESSURE)									
MONDAY, FEBRUARY 9, 1959 9:30	1667.0		(5 DAY SHUT IN PRESSURE)									
TUESDAY, FEBRUARY 10, 1959 9:00	1681.2		(6 DAY SHUT IN PRESSURE)									
WEDNESDAY, FEBRUARY 11, 1959 8:30	1696.2		(7 DAY SHUT IN PRESSURE)									
THURSDAY, FEBRUARY 12, 1959 8:45	1707.3		(8 DAY SHUT IN PRESSURE)									
FRIDAY, FEBRUARY 13, 1959 2:45	1719.7		(9 DAY SHUT IN PRESSURE)									
MONDAY, FEBRUARY 16, 1959 2:00	1742.1		(12 DAY SHUT IN PRESSURE)									
TUESDAY, FEBRUARY 17, 1959 1:45	1746.8		(13 DAY SHUT IN PRESSURE)									
WEDNESDAY, FEBRUARY 18, 1959 9:00	1751.2		(14 DAY SHUT IN PRESSURE)									
THURSDAY, FEBRUARY 19, 1959 3:00	1755.8		(15 DAY SHUT IN PRESSURE)									
TUESDAY, FEBRUARY 24, 1959 10:30	1768.6		(20 DAY SHUT IN PRESSURE)									

This is the maximum shut in pressure obtained.

See Page (2)

Tested By: R. L. West & J. D. Horton (Permian) Witness: None

COMPANY Gulf Oil Corporation LEASE Alice Paddock WELL NO. 5

AVG. PREFLOW LENGTH OF SHUT-IN LENGTH OF
RATE _____ PREFLOW _____ PRESS. CSG. _____ TBG. _____ SHUT-IN _____ p. 2

SEP. GAS _____ API GRAVITY _____ METER RUN _____ COEFFIC _____ DATE _____
GRAVITY _____ OF LIQUID _____ SIZE _____ SIZE _____ TAPS _____ CO₂ _____ H₂ _____

[illegible]

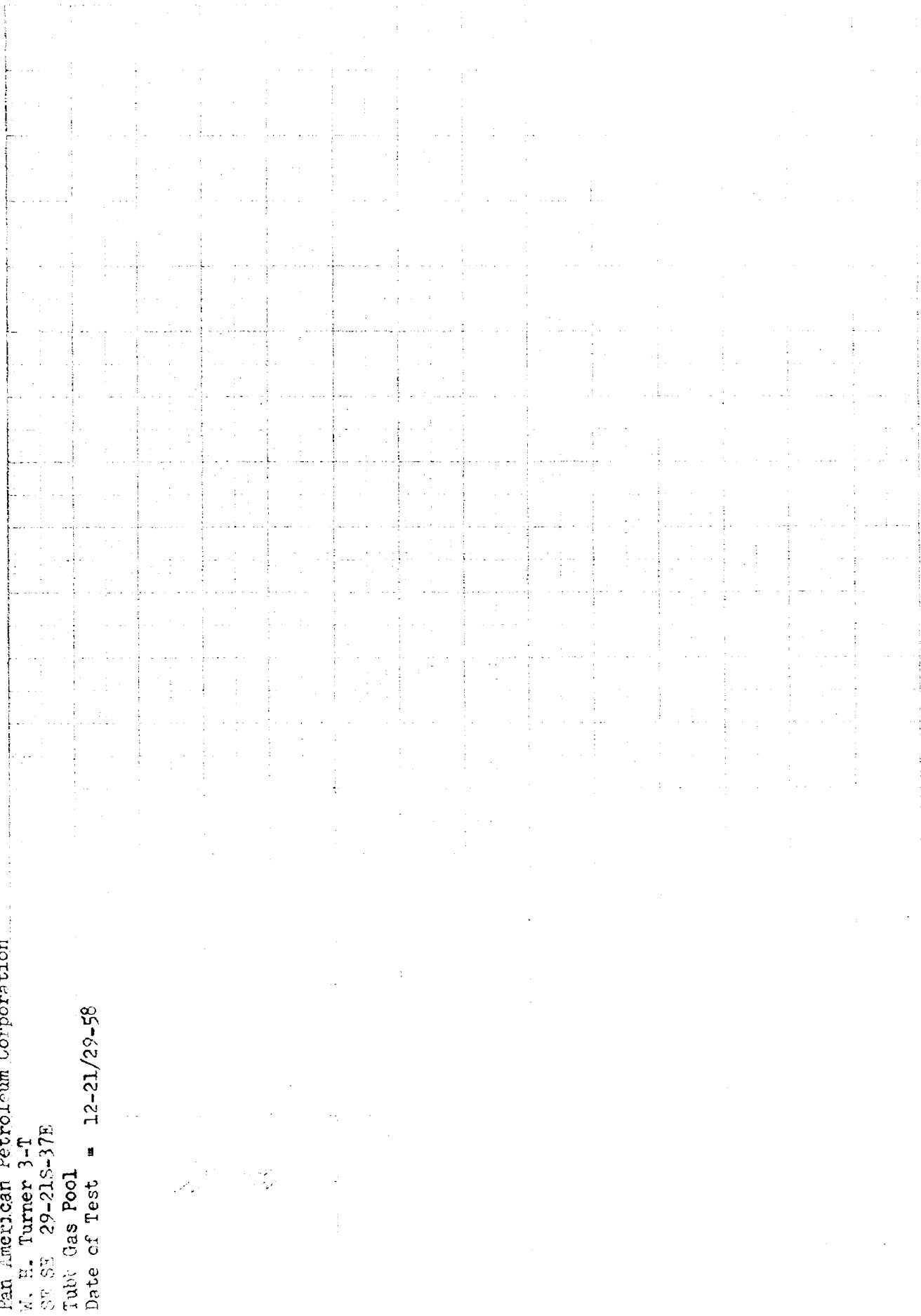
Pan American Petroleum Corporation

W. H. Turner 3-F

ST SE 29-21S-37E

Tubb Gas Pool

Date of Test = 12-21/29-58



SHUT IN PRESSURE (psi)

LENGTH OF SHUT IN PRESSURE (days)

BACK-PRESSURE TEST WORKSHEET

COMPANY Pan American Pet. Corporation LEASE W. H. Turner WELL NO. 3-T

WELL ON PREFLOW: DATE 12-7-58 TIME 9:45 AM WELL SHUT IN: DATE 12-21-58 TIME 8:40 AM PRESSURE TAKEN: DATE 12-23-58 TIME 10:45 AM

AVG. PREFLOW RATE 1550 Mcfd LENGTH OF PREFLOW 14 Days SHUT-IN PRESS. CSG. 1805.0 TAG. _____ LENGTH OF SHUT-IN 49.75 Hrs. p. 2 3306

SEPL. GAS API GRAVITY METER RUN COLLECTOR TYPE
GRAVITY 0.680 OF LIQUID None SIZE 4" SIZE TAPS Pipe CO. 0.12% H. 2.73%

TIME OF DAY	W.H. FLOWING PRESS.				WELL HEAD TEMP.	METER OR PROVER PRESS.	DIFF.	METER OR PROVER TEMP.	BBL'S. OF LIQUID	P_t^2	$P_c^2 - P_t^2$	Q
	CASING Psig	Δ P Csq.	TUBING Psig	Δ P Tsq.								
SUNDAY, 8:40	DECEMBER 21, 1958 WELL SHUT IN											
TUESDAY, 10:30	DECEMBER 23, 1958 1805.0 (49.75 HOUR SHUT IN PRESSURE) This is the maximum shut in pressure obtained.											
WEDNESDAY, 10:45	DECEMBER 24, 1958 1804.8 (74.00 HOUR SHUT IN PRESSURE)											
FRIDAY, 10:30	DECEMBER 26, 1958 1804.8 (5 DAY SHUT IN PRESSURE)											
MONDAY, 10:30	DECEMBER 29, 1958 1804.6 (8 DAY SHUT IN PRESSURE) TEST COMPLETE											

Tested By: R. J. West & J. D. Horton (Permian) witness: None

The Ohio Oil Company

Northam 11

SE NW 11-228-37E

Tub Gas Pool

Date of Test = 1-11-59
to 2-6-59

SHUT IN PRESSURE (psi)

LENGTH OF SHUT IN PRESSURE (Days)

FORM 903
(REV. 3-1-58)

BACK-PRESSURE TEST WORKSHEET

COMPANY The Ohio Oil Company LEASE Wortham WELL NO. 11

WELL ON PREFLOW: DATE 12-29-58 TIME 10:00 AM WELL SHUT IN: DATE 1-4-59 TIME 9:45 AM PRESSURE TAKEN: DATE 2-4-59 TIME 9:30 AM

AVG. PREFLOW RATE 3000 Mcfd LENGTH OF PREFLOW 6 Days SHUT-IN PRESS. CSG. 1804.9 TRG. _____ LENGTH OF SHUT-IN 31 Days P_c^2 3305

GEOL. GAS GRAVITY _____ API GRAVITY _____ METER RUN SIZE _____ ORIFICE SIZE _____ TYPE TAPS _____ CO_2 _____ H_2 _____

TIME OF DAY	W.H. FLOWING PRESS.				WELL-HEAD TEMP.	METER OR PROVER PRESS.	DIFF.	METER OR PROVER TEMP.	BBL'S. OF LIQUID	P_t^2	$P_c^2 - P_t^2$	Q
	CASING Psig	ΔP Csg.	TUBING Psig	ΔP Tbg.								
SUNDAY, JANUARY 4, 1959 9:45	WELL SHUT IN											
MONDAY, JANUARY 5, 1959 10:00	1500.0		(24.25 HOUR SHUT IN PRESSURE)									
TUESDAY, JANUARY 6, 1959 10:00	1596.9		(48.15 HOUR SHUT IN PRESSURE)									
WEDNESDAY, JANUARY 7, 1959 9:45	1646.2		(72.00 HOUR SHUT IN PRESSURE)									
THURSDAY, JANUARY 8, 1959 11:15	1677.0		(97.50 HOUR SHUT IN PRESSURE)									
FRIDAY, JANUARY 9, 1959 12:00	1699.6		(5 DAY SHUT IN PRESSURE)									
MONDAY, JANUARY 12, 1959 10:15	1738.2		(8 DAY SHUT IN PRESSURE)									
TUESDAY, JANUARY 13, 1959 9:30	1747.2		(9 DAY SHUT IN PRESSURE)									
WEDNESDAY, JANUARY 14, 1959 9:30	1754.2		(10 DAY SHUT IN PRESSURE)									
THURSDAY, JANUARY 15, 1959 10:00	1760.5		(11 DAY SHUT IN PRESSURE)									
FRIDAY, JANUARY 16, 1959 10:15	1765.7		(12 DAY SHUT IN PRESSURE)									
MONDAY, JANUARY 19, 1959 10:00	1779.7		(15 DAY SHUT IN PRESSURE)									

See Page (2)

Tested By: R. L. West & J. D. Horton (Permian) Witness: None

FORM 983
(REV. 9-1-58)

BACK-PRESSURE TEST WORKSHEET

COMPANY The Ohio Oil Company LEASE Wortham WELL NO. 11

WELL ON PREFLOW: DATE _____ TIME _____ WELL SHUT IN: DATE _____ TIME _____ PRESSURE TAKEN: DATE _____ TIME _____

AVG. PREFLOW RATE _____ LENGTH OF PREFLOW _____ SHUT-IN PRESS. CSG. _____ TAG. _____ LENGTH OF SHUT-IN _____ P_c^2 _____SEP. GAS GRAVITY _____ API GRAVITY OF LIQUID _____ METER RUN SIZE _____ ORIFICE SIZE _____ TYPE TAPS _____ CO_2 _____ H_2 _____

TIME OF DAY	W.H. FLOWING PRESS.				WELL-HEAD TEMP.	METER OR PROVER PRESS.	DIFF.	METER OR PROVER TEMP.	BBL'S. OF LIQUID	P_t^2	$P_c^2 - P_t^2$	Q
	CASING Psig	ΔP Csg.	TUBING Psig	ΔP TO T.								
TUESDAY, JANUARY 20, 1959												
10:00	1782.7		(16 DAY SHUT IN PRESSURE)									
WEDNESDAY, JANUARY 21, 1959												
10:15	1784.8		(17 DAY SHUT IN PRESSURE)									
THURSDAY, JANUARY 22, 1959												
9:45	1788.7		(18 DAY SHUT IN PRESSURE)									
FRIDAY, JANUARY 23, 1959												
9:30	1790.6		(19 DAY SHUT IN PRESSURE)									
MONDAY, JANUARY 26, 1959												
9:30	1796.3		(22 DAY SHUT IN PRESSURE)									
TUESDAY, JANUARY 27, 1959												
9:30	1799.4		(23 DAY SHUT IN PRESSURE)									
WEDNESDAY, JANUARY 28, 1959												
9:30	1798.5		(24 DAY SHUT IN PRESSURE)									
THURSDAY, JANUARY 29, 1959												
9:30	1800.0		(25 DAY SHUT IN PRESSURE)									
FRIDAY, JANUARY 30, 1959												
9:30	1800.7		(26 DAY SHUT IN PRESSURE)									
TUESDAY, FEBRUARY 3, 1959												
10:00	1803.6		(30 DAY SHUT IN PRESSURE)									
WEDNESDAY, FEBRUARY 4, 1959												
9:30	1804.9		(31 DAY SHUT IN PRESSURE)									
	This is the maximum shut in pressure obtained.											

See Page (3)

Tested By: R. L. West & J. D. Horton (Pernian) Witness: None

COMPANY The Ohio Oil Company LEASE Wortham WELL NO. 11

WELL ON PROLOG: _____ WELL SHUT IN: _____ PRESSURE TAKEN: _____
DATE _____ TIME _____ DATE _____ TIME _____ DATE _____ TIME _____

AVG. PREFLOW LENGTH OF SHUT-IN LENGTH OF
RATE PREFLOW PRESS. CSG. TRG SHUT-IN p. 2

SEPL. GAS _____ API GRAVITY _____ METER RUN _____ GRIFFICE _____ TYPE _____
GRAVITY _____ OF LIQUID _____ SIZE _____ SIZE _____ TAPS _____ CO₂ _____ H₂ _____

[illegible]

Tested by: R. L. West & J. D. Horton (Permaian) Witness: None

" THESE ARE THE ONLY COPIES SENT TO YOUR COMPANY."

Hobbs, New Mexico
June 5, 1957

To: Operators in Tubb Gas Pool

Subject: Minutes of the Tubb Gas Pool Industry Committee Meeting of May 29, 1957.

You will recall Mr. Porter's memorandum of January 28, 1957, concerning the appointment of an Industry Committee for a study and recommendations concerning rules for oil wells recently completed in the Tubb Gas Pool. Mr. Porter's memorandum is quoted in part as follows:

"Due to the recent completion of several oil wells in the Tubb formation within the horizontal limits of the Tubb Gas Pool, the Commission feels that consideration should be given to the matter of the adoption of rules governing the operation of such wells. In order that the Commission may have the most complete information available for use in the formulation of such rules, the following operators of wells in the Tubb Pool have been appointed to an Industry Committee with instructions to prepare and make recommendations to the Commission at a hearing to be held on March 14, 1957.

Amerada Petroleum Corporation
Continental Oil Company
Humble Oil & Refining Company
Ohio Oil Company
Shell Oil Company
N. G. Penrose, Incorporated
Gulf Oil Corporation
Samedan Oil Corporation

"Commission Staff Members appointed to work with the Committee are Mr. Montgomery, Mr. Fischer, and Mr. Runyun."

This committee has been quite active in an effort to fulfill the charge assigned it by the Commission and from the meeting of May 3, 1957, there developed two proposed plans for regulation of these specific wells in the Tubb Gas Pool. You will also recall that at the May 16th hearing, continuation of Case 1221 to the July Statewide hearing was requested of the Commission. This letter is to apprise you of the Committee's work conducted on May 29, 1957, which was concerned mainly with the formulation of final recommendations to be made to the Commission at the July hearing.

The two plans, one offered by Humble Oil and Refining Company and amended by the Industry Committee, and the other proposed by Continental Oil Company, are attached.

In considering adoption of the Humble plan, the Industry Committee voted as follows:

Amerada	Yes	Continental	Abstained
Humble	Yes	Penrose	Absent
Gulf	Yes	Ohio	Yes
Shell	No	Samedan	No

In considering adoption of the plan submitted by Continental, the voting results were as follows:

Amerada	No
Continental	Abstained
Gulf	No
Humble	No
Penrose	Absent
Shell	Yes
Samedan	Yes
Ohio	No

Following the voting presented above, Continental made the following statement in expressing their views in this matter. In general, Continental is in favor of;

- (1) Classifying all wells as gas wells.
- (2) Place a gas allowable on all wells as now in effect.
- (3) Place a liquid limit on each well equivalent to the basic unit allowable of an oil well for the depth of 6000' to 7000'.

By majority vote, although not unanimous, the Humble plan was selected for recommendation to the Commission.

Another matter which Mr. Porter asked the Industry Committee to consider was the necessity of continued proration in the Byers-Queen Gas Pool. The Industry Committee will recommend to the Commission that proration in the Byers-Queen Gas Pool be discontinued.

In presenting the work of the Committee to the Commission the Chairman will make general comment relating the contention that the Tubb Gas Pool is primarily a gas pool and will present the recommendations of the Committee, which are;

- (1) Humble's plan as amended by the Committee.
- (2) Abolish proration of Byers-Queen Gas.

Geologists of Ohio Oil Company and Gulf Oil Corporation will present for the Commission record, the Geological work done by Mr. Runyon, Commission Staff Geologist, and make general statements pertaining to same.

C. M. BULPASS
Chairman Industry Committee
Tubb Gas Pool

CC: To All Tubb Pool Operators
Oil Conservation Commission
Att: Mr. A.L. Porter, Jr.
Box 871 Santa Fe, New Mexico
OCC— Hobbs, N.M.
Att: Mr. R. F. Montgomery

TUBB GAS POOL

Following are the proposed changes in Order No. R-586 as proposed by Humble Oil & Refining Company as amended by the Industry Committee:

1. Item 7 will be added to Rule 5 (d): "In the event more than one gas well producing from the Tubb Gas Pool should be included in a standard or less than a standard proration unit, the sum of the allowables allocated to the wells shall be equivalent to that volume of gas allocated to a proration unit of the same size. The operator of such wells shall have the option to determine the proportion of the assigned allowable to be produced by each individual well, provided all of said wells are orthodox gas locations. In the event that one or more of the gas wells on the proration unit is an unorthodox location, the Commission shall establish the proportion of the assigned allowable to be produced from each individual well."

2. The third from last paragraph of Rule 8 will be revised to read as follows: "The allowable assigned to any well capable of producing its normal gas allowable in the Tubb Gas Pool shall be the same proportion of the total remaining allowable allocated to the said pool after deducting allowables of marginal wells that the number of acres contained in the gas proration unit for that well bears to the acreage contained in all gas proration units assigned to non-marginal wells in the Tubb Gas Pool except that no well which produces liquid hydrocarbons with a gravity of 45 degrees API or less regardless of the size of the proration unit will be permitted to produce more liquid hydrocarbons than the Statewide oil allowable for wells on 40-acre units producing at depths between 6,000 and 7,000 feet. Any well subject to such limitation shall be so designated on the Commission's monthly allocation schedule of condensate and other incidental liquid hydrocarbons. Any well subject to this liquid hydrocarbon limitation and which produces more than the allowed volume of liquid hydrocarbons during any 1 month will make up such overage. Any gas production shortage resulting from application of the liquid hydrocarbon limitation or from shutting in a well because of overproduction of liquid hydrocarbons may be made up under the terms of Rule 9 (underproduction balancing provision) provided the liquid hydrocarbon limits described herein are not exceeded."

3. A rule 8a will be added as follows: "Tests to determine the gravity of the liquid hydrocarbons recovered from each well in the Tubb Gas Pool shall be taken following adoption of these rules and reported to the Commission on Form C-116 not later than the 15th day of the next succeeding month following adoption of these rules. The Commission will then mark on the allocation schedule of condensate and other incidental liquid hydrocarbons the wells which are to be subject to the liquid hydrocarbon limitation. Thereafter, gravity tests on each well not subject to the liquid hydrocarbon limitation will be made during the months of January and February and reported to the Commission on Form C-116 not later than the 15th day of March."

TUBB GAS POOL

Continental's proposed plan for recommendation to the Commission is as follows:

1. The committee has made a study and finds that there is no regulatory problem resulting from liquid production in the Tubb Gas Pool at present.
2. The committee recommends that all wells in the Tubb Pool be classified as gas wells and prorated on the basis of the volume of gas produced, in accordance with present rules and that no limit be placed on liquid production.
3. The committee recommends that should liquid production from the Tubb Pool become a problem in the future that a study be made at that time to determine appropriate action.

Those present were as follows:

J. H. Moore	Continental Oil Company	Roswell, New Mexico
C. R. Smith	Continental Oil Company	Eunice, New Mexico
V. T. Lyon	Continental Oil Company	Roswell, New Mexico
V. R. Cammack	Atlantic Refining Company	Midland, Texas
R. E. Layne	Samedan Oil Corporation	Hobbs, New Mexico
A. K. Palmer	Shell Oil Company	Hobbs, New Mexico
W. G. Abbott	Amerada Petroleum Corporation	Monument, New Mexico
J. J. Riha	Ohio Oil Company	Midland, Texas
D. E. Morris	Ohio Oil Company	Midland, Texas
Jack Cooley	Oil Conservation Commission	Santa Fe, New Mexico
R. F. Montgomery	Oil Conservation Commission	Hobbs, New Mexico
Eric Engbrecht	Oil Conservation Commission	Hobbs, New Mexico
J. W. Runyan	Oil Conservation Commission	Hobbs, New Mexico
R. C. Heald, Jr.	Humble Oil & Rfg. Company	Midland, Texas
H. B. Wofford, Jr.	Gulf Oil Corporation	Roswell, New Mexico
G. A. Swartz	Gulf Oil Corporation	Roswell, New Mexico
C. M. Bumpass	Gulf Oil Corporation	Hobbs, New Mexico

PERMIAN BASIN PRODUCTION

SOUTHWESTERN FIELD

TURB GAS TOOL

<u>Company - Well & No.</u>	<u>Unit</u>	<u>S-T-R</u>	<u>No. of Days on Line</u>	<u>Volume</u>	<u>Average Daily Rate of Flow</u>
<u>AMERADA PETROLEUM CORPORATION</u>					
** Baker 3 T	I	10-22-37	18	*22 380	1 243
Corrigan 4	A	4-22-37	31	18 895	610
Hare 7	M	33-21-37	30	31 043	1 035
State D A 3	J	16-21-37	30	34 330	1 144
Wood 7	A	22-22-37	27	10 865	402
<u>CITIES SERVICE OIL COMPANY</u>					
Brunson C 6	I	3-22-37	30	28 014	934
Oven 3	J	35-21-37	22	34 803	1 582
<u>GULF OIL CORPORATION</u>					
Amada 1 F	J	25-22-37	31	10 187	329
Andrews 2 T	G	32-22-38	30	30 092	1 003
Carson C 3	P	28-21-37	30	22 513	750
Danglade 1	M	13-22-37	30	33 091	1 103
Eaves 5	H	10-22-37	12	19 552	1 629
Eubank 1	B	22-21-37	30	26 200	873
Gulf State 1 (W.O.F.)	A	36-22-37	19	13 363	703
Gutman 1 T	N	19-22-38	31	34 838	1 124
Gutman 2 T	C	19-22-38	14	26 935	1 910
Hugh 4	A	14-22-37	7	24 665	3 524
Hugh 7 T	C	14-22-37	30	40 966	1 366
King 13	A	28-21-37	7	40 863	5 838
** King 22	C	28-21-37	2	*17 100	8 550
Leonard 4 T	A	16-21-37	11	24 380	2 216
Mark 5	A	3-22-37	31	29 806	961
McCormack 7	I	32-21-37	31	9 338	301
Oven 5	P	34-21-37	30	34 436	1 148
Vivian 1	C	30-22-38	10	9 791	979
Watkins 1	O	29-22-38	16	7 365	460
<u>MAGNOLIA PETROLEUM COMPANY</u>					
Brunson Argo 6 T	E	10-22-37	31	6 446	208
Carson 8 T	F	33-21-37	19	34 422	1 812
Corrigan 7 T	P	33-21-37	15	3 002	200
** Long 8 T	J	11-22-37	5	*11 710	2 342
Williamson 1 T	A	23-21-37	31	2 790	90
<u>THE OHIO OIL COMPANY</u>					
Butler 3 (Coaden)	N	18-22-38	30	8 829	294
Lynch 4 T	D	1-22-37	5	13 656	2 731
Marshall B 2	M	27-21-37	31	16 591	600
Oven 3	N	35-21-37	30	26 260	875
Warlick C 1	J	15-21-37	25	49 946	1 978
Worthan 9 T	S	11-22-37	16	10 761	673
Worthan 11	N	11-22-37	10	46 654	4 665
<u>PAN AMERICAN PETROLEUM CORP.</u>					
Oven B 2	L	34-21-37	30	37 624	1 254
Southland Royalty A 2	B	9-21-37	19	33 138	1 744
Southland Royalty A 4	X	4-21-37	6	24 116	4 019
State C 6X	C	16-21-37	4	14 357	3 589
State C 8	B	36-21-37	20	39 190	1 960
** Turner 3	F	29-21-37	13	*30 370	2 375
<u>NAVILLE G. PENROSE, INC.</u>					
Hinton 3 T	H	12-21-37	12	31 534	2 628
Hinton 5	L	12-22-37	30	25 415	849
<u>POWELL OIL COMPANY</u>					
Walden 3 T	C	15-22-37	31	4 688	151

<u>Company - Well & No.</u>	<u>Unit</u>	<u>S-T-R</u>	<u>No. of Days on Line</u>	<u>Volume</u>	<u>Average Daily Rate of Flow</u>
<u>SINCLAIR OIL & GAS COMPANY</u>					
** Barton 1	G	23-21-37	15	*45 810	3 054
** Come A 1	M	26-21-37	10	"34 490	3 449
State 367 3 T	K	36-21-37	31	8 984	290
<u>SHULLY OIL COMPANY</u>					
Baker B 15 T	J	10-22-37	18	51 701	2 872
<u>SUNRAY MID-CONTINENT OIL CO.</u>					
** Elliott A 2	H	21-21-37	5	* 9 420	1 884
Linnam V 3	A	29-21-37	30	36 701	1 223
State 15 4	P	16-21-37	18	46 177	2 565
<u>THE TEXAS COMPANY</u>					
** Blinberry 7	G	19-22-38	11	*31 650	2 877

** Data obtained from month's production other than January 1957.

* Estimated volumes.

GOVERNOR
EDWIN L. MECHEM
CHAIRMAN

New Mexico

OIL CONSERVATION COMMISSION

LA COMMISSIONER MURRAY E. MORGAN
MEMBER

STATE GEOLOGIST A.L. PORTER JR.
SECRETARY DIRECTOR



P. O. BOX 2045
HOBBS, NEW MEXICO

February 26, 1957

Mr. A. L. Porter, Jr., Director
Oil Conservation Commission
Box 871
Santa Fe, New Mexico

Dear Mr. Porter:

The Tubb Gas Pool Committee had their second meeting at 1:00 P.M. the 25th. At this time the various sub-committees presented their work and discussion of the material took about two hours.

John Runyon made a structure map and four cross-sections, all on short notice. It required considerable night work to finish, however the work was well done.

Considerable discussion was on the definition of an oil well. The committee will probably recommend that an oil well be defined as a well with less than 45 degree gravity and a ratio less than 20,000 : 1 with the limiting ratio being 3,000 : 1. Ernest Fischer worked on this committee and furnished the enclosed test data.

The Commission staff was very active in the committee work, however no attempt was made to make any recommendations to the Committee other than when requested.

Mr. Chuck Bumpass did an excellent job as chairman, and I attribute the extra effort that was shown to his being chairman.

Yours very truly,

OIL CONSERVATION COMMISSION

R. F. Montgomery

R. F. Montgomery
Proration Manager

RFM/mc
encl.

ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED

Gas Pool Operators

Gas Pool Operators

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will recall Mr. Ford
of an Industry Co.

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the 1990s, the number of people in the world who are illiterate has increased from 1.2 billion to 1.5 billion. The number of illiterate people in the world is projected to increase to 1.7 billion by the year 2015. The number of illiterate people in the world is projected to increase to 1.7 billion by the year 2015. The number of illiterate people in the world is projected to increase to 1.7 billion by the year 2015.

2020.09

Summary

17-00163-0003

A - 22-22-37
H - 3-22-37
F - 2-22-37
B - 11-21-37
M - 30-01-37
E - 26-21-37
A - 32-22-37

Community Development

GAS LIQUID RATIO TESTS IN THE TUBB GAS POOL-OCTOBER 1956 TESTS

OPERATOR	Lease Name Well No.	S-T-R	Date of Test	Condensate Gravity-°	Gas Cond. Ratio
AMERADA PET. CORP.					
	Baker #3-I	10-22-37	11/24/56	65	51,675
	Corrigan #4-A	4-22-37	11/24/56	62	35,546
	Hare #7-M	33-21-37	11/22/56	67	78,252
	State D"A" #3-J	16-21-37	11/24/56	60	75,708
	E. Wood #7-A	22-22-37	11/24/56	49	16,423
CITIES SERVICE OIL CO.					
	Brunson "B" #3-M	3-22-37	11/15/56	---(si-no pc)	9,070
	Brunson "C" #6-I	3-22-37	11/15/56	62.7	86,000
	Owen #3-J	35-21-37	11/15/56	62.3	41,509
	State S #2-F	15-21-37	11/16/56	64.0	18,913
CONE, J. R.					
	Anderson #1-I	21-21-37	1/26/57	71.5	167,040
CONTINENTAL OIL CO.					
	Hawk B-3 #1-T	3-21-37	1/17/57	37	1,236 (Oil Well)
	Hawk B-9 #3-C	9-21-37	1/12/57	53	63,727
	Hawk B-9 #5-K	9-21-37	1/15/57	---	---
	Hawk B-9 #7-P	9-21-37	1/2/57	55	12,388
	Lockhart A-27 #1-DT	27-21-37	1/11/57	63	66,388
	Lockhart A-27 #1-G	27-21-37	1/12/57	63	102,285
	Lockhart A-35 #3-C	35-21-37	1/13/57	56	37,800
	Lockhart B-35 #1-G	35-21-37	1/12/57	56	24,500
	Nolan #2-N	11-21-37	1/9/57	44	26,200
	State 10 #3-D	10-21-37	1/12/57	54	614,000
	Wantz D-21 #3-J	21-21-37	1/21/57	54	61,000
	Wantz D-21 #4-K	21-21-37	1/12/57	54	42,200
COSDEN PET. CORP.					
	E. Butler #3-N	18-22-38	12/4/56 (csg.-tbg.)	66.3	59,523
			12/8/56	66.3	62,791
GREENBRIER OIL CO.					
	Sarkeys #1-B	26-21-37	12/14/56	77.2	61,304
GULF OIL CORP.					
	Amanda #1-J	25-22-37	11/21/56	69	97,640
	Andrews #2-G	32-22-38	11/22/56	71.8	42,770
	Carson "C" #3-F	28-21-37	11/26/56	73.4	29,929
	Danglade #1-M	13-22-37	11/22/56	71.3	44,952
	Eaves #5-H	10-22-37	11/26/56	68.9	31,813
	Eubank #1-B	22-21-37	11/22/56	67.6	49,307
	Gutman #1-N	19-22-38	12/10/56	65.5	104,350
	Gutman #2-C	19-22-38	11/20/56	68.1	29,336
	Hugh #4-O	14-22-37	12/3/56	67.9	41,247
	Hugh #7-C	14-22-37	11/26/56	60.5	46,283
	E. King #13-A	28-21-37	No connection		
	E. King #22-C	28-21-37	11/23/56	70	44,283
	Leonard "E" #4-A	16-21-37	11/22/56	66.8	62,068
	Mark #5-A	3-22-37	11/26/56	72.8	19,091
	M. Owen #5-A	34-21-37	11/26/56	68.4	40,024
	McCormack #7-I	32-21-37	11/21/56	70.6	31,844
	Paddock #3-P	1-22-37	12/4/56	52.6	21,412
	Vivian #1-C	20-22-38	11/20/56	61.9	41,896
	Watkins #1-O	29-22-38	11/20/56	61.9	52,617
HUMBLE OIL & REFINING CO.					
	Blinebry Tubb Gas Unit #1-O				
		10-21-37	12/8/56	56.4	51,057
	Hardison B #1-H	34-21-37	10/15/56	61.6	48,843
	Hardison B #7-P	27-21-37	11/5/56	69.1	61,771
	Penrose #2-H	13-22-37	12/10/56	70	46,483
	N. M. State S #12-A	2-22-37	12/12/56	45.2	45,601
	N. M. State S #13-B	2-22-37	11/3/56	68.6	48,347
	N. M. State S #20-E	2-22-37	12/8/56	66.5	63,869
	N. M. State S #21-L	2-22-37	12/6/56	67.9	50,961
	N. M. State S #23-P	2-22-37	11/8/56	68.5	37,019
	N. M. State V #7-M	10-21-37	12/6/56	36.4	2,563 (Oil)

OPERATOR	Lease Name Well No.	S-T-R	Date of Test	Condensate Gravity-o	Gas Cond. Ratio
M. B. HUNT	Weatherly E-1-G	21-21-37	11/21/56	67	74,000
MAGNOLIA PET. CO.	Brunson Argo #6-E	10-22-37	1/14/57	63.8	30,350
	Carson #1-F	33-21-37	1/14/57	67.8	47,000
	Carson #19-L	28-21-37	1/14/57	70.0	57,200
	Cornigan #7 P	33-21-37	1/14/57	64.0	125,500
	Williamson #1-A	23-21-37	1/14/57	61	33,000
	Long #8-J	11-22-37	1/14/57	66	
MARKHAM, CONE AND REDFERN	Eubanks #2-L	14-21-37	12/9/56	72	124,542
MORAN OIL PRODUCING & DRILG. CORP.	Owen #1-E	14-21-37	11/14/56	54.2	42,633
			12/5/56	59.8	42,633
CHIO OIL COMPANY	Lynch #4-D	1-22-37	11/29/56	66.4	39,664
	Marshall "B" #2-M	27-21-37	12/6/56	70.5	84,579
	J. L. Nancy #1-P	24-22-37	11/29/56	66.8	83,978
	M. Owen #3-N	35-21-37	11/29/56	70.8	51,379
	L. G. Warlick "C" #1-J	15-21-37	12/7/56	68.3	67,489
	Worhan #9-E	11-22-37	11/29/56	68.1	34,366
	Worhan #11-F	11-22-37	12/7/56	72.4	36,260
R. OLSEN	Sarkeys #1-E comp. 1/8/57	26-21-37	3/12/57	44.2	2500 (oil)
R. OLSEN OIL COMPANY	Boyd #5-B	23-22-37	10/26/56	60.9	51,260 (?)
	Cone #1-J	26-21-37	11/15/56	65	79,960
	Owens #1-M	25-21-37	11/15/56	56	33,700
PENROSE, NEVILLE G.	Hinton #3T-N	12-22-37	12/19/56	67.8	58,490
	Hinton #5-P	12-22-37	12/5/56	67.1	64,284
	Elliott Hinton #1-E	12-22-37			No p c
ROWAN OIL COMPANY	Walden #3-T C	15-22-37	12/12/56	----tstm	150,000
SAMEDAN OIL CORP.	Parks "A" #4-O	14-22-37	12/2/56	58	39,585
	Parks #6-P	14-21-37	12/2/56	56	40,745
SHELL OIL COMPANY	Argo #1-M	15-21-37	1/11/57	63.4	108,382
	Argo A #1-D	22-21-37	1/9/57	69.6	315,393
	Long #5-N	11-22-37	1/11/57	60.4	61,709
	Sarkeys #1-M	23-21-37	1/9/57	68.2	114,505
	State 15 #1-C	15-21-37	1/9/57	56.5	30,484
	Turner #2-L	22-21-37	1/9/57	72	62,075
	Turner #3-J	22-21-37	1/11/57	68.7	53,774
SINCLAIR OIL & GAS CO.	Alexander Rogers #2-A	12-22-37	11/8/56	43.9	1832 (oil Well)
	State 367 #3-N	23-21-37	11/8/56	53.1	19,924
	Sarkeys #2-O	23-21-37	11/9/56	70	81,950
SKELLY OIL COMPANY	Baker B #15-J	10-22-37	12/12/56	72	71,489

Company Land Name Well No.	S-T-R	Date of Test	Condensing Gravity	Gas Cond. Ratio
STANDARD OIL (PAN AMERICAN PET. CORP.)				
Southland Royalty "A" #2-B	9-21-37	11/13/56	57	104,500
" #4-X	4-21-37	11/21/56	69	53,100
State "C" Tr. 12 #6-X-C16	21-37	11/14/56	70	45,000
State "C" Tr. 13 #8-D	36-21-37	11/15/56	67	39,100
Evergreen "D" #2-L	34-21-37	11/12/56	65	81,600
W. E. Turner #3-P	29-21-37	11/10/56	63	57,000
SUNRAY MID-CONTINENT OIL COMPANY				
Elliott "A" #2-H	1-22-37	1/8/57	48	33,400
Linan "V" #3-A	29-21-37	1/8/57	63	180,000
W. Lynch #4-L	1-22-37	1/8/57	72	56,500
State Land 15 #4-P	16-21-37	1/8/57	43	66,600
THE TEXAS COMPANY				
A. H. Blinebry NCT-1 #1-0	19-22-38	11/15/56	57.8	22,000
A. H. Blinebry NCT-1 #7-G19	22-38	11/19/56	57.9	76,000
TIDEWATER OIL COMPANY				
S. J. Sarkeys #4-F	26-21-37	12/10/56	68.2	74,198
Williamson #2-E	23-21-37	12/6/56	63.5	79,143
State "S" #2-C	15-21-37	12/6/56	53.8	23,838
WESTERN OIL FIELDS, INC.				
Drinkard #2-L	30-22-38	11/27/56	68.1	52,100
Gulf State #1-A	36-22-37	11/27/56	65.2	75,689
Drinkard #5-G	25-22-37	12/2/56	69	138,000

1567.9

777.72

106

1567.9 of 22-38-38.

1567.9 of 22-38-38.

Industry Committee

Industry Committee. Robb Gas Pool

A meeting of the Industry Committee and the Senior Staff Members will be held at 9:30 a.m. on WED. 14/3/1957; Robb Gas Pool and Conservation Commission

to advise the committee

SUBJECT: A meeting of the [redacted]
 at 9:30 a.m. WST, 14/3/1957, [redacted]

This letter is to announce the subject meeting and to advise the committee members of the business to be conducted, which is namely:

1. The proposed changes in Order 1445 as provided by Article Of [redacted] concerning the [redacted] (very attached).

2. [redacted] for the purpose of [redacted]

- (1) Review the proposed changes in Order 1221 as presented by Humble Oil and Refining Company concerning the fact that Paul (copy attached).
- (2) Selection of an Industry Geological Committee for the purpose of preparing geological exhibits and presenting same to the Commission on the hearing of this matter, Case 1221.
- (3) Polling of the committee members for continuance of Case 1221 to the regular June Hearing. Continuance is required because of the line element that will be involved in the work to be done by the Geological Committee and review of the Committee's recommendations by management of the respective companies.

(3) Regular June meeting that will be involved in the and review of the Committee's recommendations and report of the Industry representatives.

Mr. A. L. Taylor, Jr., Secretary Director of the Oil Conservation Commission, has stated that the Commission would meet with representatives of the Industry Committee for consultation to the June meeting.

SECRET
Committee

J. M. CAMPBELL
Chairman Industry Committee
1965-1966

[illegible]

10-10-68

the 1990s, the number of people in the world who are under 15 years of age is expected to increase from 1.1 billion to 1.5 billion, and the number of people aged 65 and over is expected to increase from 250 million to 450 million (United Nations, 1994).

Continental Oil Co.
Attn: J. L. Moore
340 E. Second St.
Oklahoma City, Oklahoma

1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

Industry Committee
Page 2
April 26, 1957

Samedan Oil Corp.
Attn: R. E. Layhe
Box 2137
Hobbs, New Mexico

Gulf Oil Corporation
Attn: M. I. Taylor
Box 962
Roswell, New Mexico

New Mexico Oil Conservation Commission
Attn: A. L. Porter, Jr.
Box 871
Santa Fe, New Mexico

Oil Conservation Commission
Attn: F. J. Montgomery
Box 2045
Hobbs, New Mexico

Following are the present changes in the 1980 model:

1. Item 7 will be added to Rule 3 (a). It is agreed that one gas well producing from the Tebo Gas Pool shall be deemed to be standard or less than a standard proration unit, the sum of the allocations attributed to the other shall be equivalent to that volume of gas allocated to a proration unit of the same size. The operator of such wells shall have the option to determine the proportion of the assigned allowable to be produced by each individual well, provided all of said wells are on standard gas locations. In the event that one or more of the gas wells are the proved or unproved on non-standard location, the Commission shall establish, after notice and hearing, the proportion of the assigned allowable to be produced from each individual well.

[illegible]

TO: TUBB GAS POOL OPERATORS

March 5, 1957

SUBJECT: "INDUSTRY COMMITTEE" - Supplement to Letter of February 28, 1957.

Subsequent to the letter of February 28, 1957, which was the Minutes of Industry Committee Meeting of February 25th, one of the Committee members suggested that a Commission Attorney be invited to join the Committee in presenting the testimony in this matter to the Commission. A poll of a majority of the committee members revealed this action to be a favorable one.

An informal meeting was held at 10:30 A. M., March 4, 1957, at the Hobbs Office of the Commission for the purpose of acquainting and reviewing the Industry Committee's work with Mr. Jack Cooley, Attorney for the Commission. Those attending the meeting are listed and consisted, in addition to the Commission Staff Members, of Amerada, Shell & Gulf. An attempt to notify all members of the Committee was not made because of the nature of the meeting to acquaint the Attorney with the Committee's work.

You will recall the set of rules attached to the February 28th letter, which was submitted for your consideration and for which it was stated that these rules "may be proposed at the March 14th Hearing." These rules were drafted to serve as a guide and to accomplish the end result of the objective, this is, the regulation of oil wells in the Tubb Gas Pool.

Following the review of the "Special Rules and Regulations for the Tubb Gas Pool" at the March 4th meeting with Mr. Jack Cooley, it was the opinion that to make new rules to replace that portion of the Tubb Gas Pool Rules in the Commission Order R-586 was beyond the call of the hearing in Case 1221. That required of the Industry Committee was to make provisions in the existing Commission Rules for regulation of oil wells in the Tubb Gas Pool, and further to consider the deletion of that portion of Order R-586 relating to the Byers-Queen Gas Pool.

Therefore, as a result of the above meeting, submitted for your consideration are the suggested rules to be incorporated into Order R-586 for regulation of oil wells in the Tubb Gas Pool. (The Special Rules submitted February 28th may be discarded).

SPECIAL RULES AND REGULATIONS FOR
OIL WELLS IN THE TUBB GAS POOL

1. Acreage dedicated to a gas well in the Tubb Gas Pool shall not be simultaneously dedicated to an oil well in said Pool.
2. In the event an oil well is reclassified as a gas well in the Tubb Gas Pool, the operator of such well will be afforded the opportunity to form a non-standard proration unit for the well.
3. In the event such reclassification should cause the occurrence of more than one gas well producing from the Tubb Gas Pool within a standard or less than a standard proration unit, the sum of the allowables allocated to the wells shall be equivalent to that volume of gas allocated to a proration unit of the same size. The operator of such wells shall have the option to determine the proportion of the assigned allowable to be produced by each individual well, provided all of said wells are orthodox gas locations. In the event that one or more of the gas wells on the proration unit is an unorthodox location, the Commission shall establish, after notice and hearing, the proportion of the assigned allowable to be produced from each individual well.

TUBB GAS POOL OPERATORS - CONT'D.

4. A gas well in the Tubb Gas Pool shall mean a well producing from within the vertical and horizontal limits of the Tubb Gas Pool which:

- (a) Produces liquid hydrocarbons possessing a gravity greater than 45° API, or,
- (b) Produces liquid hydrocarbons possessing a gravity of 45° API or less, but with a producing gas-liquid ratio in excess of 20,000 cubic feet of gas per barrel of liquid hydrocarbon.

5. A well producing from within the horizontal and vertical limits of the Tubb Gas Pool and not classified as a gas well as defined in rule 4, shall be classified as an oil well in the Tubb Gas Pool.

6. The Proration Manager may reclassify a well under rule No. 4 or 5, if production data, gas-oil ratio tests or other evidence reflects the need for such reclassification.

The Proration Manager will notify the operator of the reclassified well of such reclassification and the effective date thereof; provided, however, that operator may appeal such reclassification to the Secretary-Director of the Commission in writing.

7. Gas-liquid ratio tests and determinations of the gravity of that liquid hydrocarbon recovered from wells in the Tubb Gas Pool shall be conducted annually during the months of July and August on all wells located in and producing from the Tubb Gas Pool. Results of such tests will be reported to the Commission on Form C-116 on or before the 15th day of September of each calendar year, respectively.

8. The limiting gas-oil ratio for an oil well in the Tubb Gas Pool shall be 3,000 cubic feet of gas for each barrel of oil produced, and all oil proration units having a gas-oil ratio exceeding the limit of 3,000 cubic feet of gas per barrel of oil produced will be penalized in accordance with the customary formula designated by Commission Rule 506 (b).

Because of these special rules for oil wells in the Tubb Gas Pool, the following amendment to Rule 8 of Order R-586 pertaining to the Special Rules and Regulations for the Tubb Gas Pool is proposed:

Delete the last paragraph of Rule 8 and insert "If during a proration month there is a change in acreage dedicated to a gas well the change of allowable allocated to the well shall be effective on the 1st day of the month following approval of such change by the Oil Conservation Commission."

For sake of review and for clarification, such being deemed advisable as a result of the March 4th meeting described above, and since the conclusions made by the Committee remain the same and are:

(1) Available information indicates an oil rim on the eastern flank of the Tubb Gas Pool.

(2) By majority vote of the committee members definition of a gas well and of an oil well in the Tubb Gas Pool was deemed necessary.

In view of the conclusions presented and to comply with the Commission's request of the Industry Committee, the following recommendations and these matters for consideration are presented:

TUBB GAS POOL OPERATORS - CONT'D.

(a) The Special Rules and Regulations for oil wells in the Tubb Gas Pool as stated previously herein, rules 1 through 8.

(b) Delete last paragraph of Rule 8 of Order R-586 pertaining to the Tubb Gas Pool and adding, "If during a proration month, etc., for consistency of Rule 8 because of these special rules for oil wells in the Tubb Gas Pool."

(c) Mr. A. L. Porter, Jr., also requested of the Industry Committee recommendations as to the need of continued proration of the Byers-Queen Gas Pool. This matter is presented for your consideration as a decision on the matter will be solicited at the meeting of the Industry Committee (all interested operators invited) to be held at the LaFonda Hotel, Santa Fe, New Mexico, March 13, 1957, at 3:00 P. M. MST.

The manner of presentation of the Committee's findings and recommendations to the Commission is as originally planned, that is a joint-members participation.

C. M. Bumpass - Chairman
Industry Committee

cc: All Tubb Gas Pool Operators
OCC - Hobbs, New Mexico
OCC - Santa Fe, New Mexico

ATTENDANCE ROLL MARCH 4, 1957

COMMISSION STAFF MEMBERS

R. F. Montgomery
Jack Cooley
J. W. Runyan
E. J. Fischer

COMMITTEE MEMBERS

Amerada Petroleum Corporation
Shell Oil Company
Gulf Oil Corporation

REPRESENTATIVE

W. G. Abbott
B. Nevill
C. M. Bumpass

GOVERNOR JOHN F. SIMMS
CHAIRMAN

New Mexico
OIL CONSERVATION COMMISSION

LAND COMMISSIONER E. S. WALKER
MEMBER

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



P.O. Box 2045
Hobbs, New Mexico
August 9, 1956

Mr. A. L. Porter, Jr., Director
New Mexico Oil Conservation Commission
P.O. Box 871
Santa Fe, New Mexico

Dear Pete,

Enclosed is an alphabetical list by pools and operators of Dual Completion Orders and R-Orders pertaining to dually completed wells. This listing will enable us to check for the filing of the Packer Leakage form which is to be filed on all dually completed wells during the Gas-Oil Ratio survey of the pool involved. We plan to identify the GOR cards with a code and when C-116's are filed a check can be made for Packer Leakage forms to see if filed.

It is my recommendation that a memorandum be issued before the first of September or October in order that the packer leakage survey can be made in conjunction with the ratio tests which commence at the first of the month.

Yours very truly,

R. F. Montgomery
Promotion Manager

RFM/sc
encl.

DUAL COMPLETION LIST

Lease Name	Well No.	Operator	S-T-R	D.C. No.
Arrowhead Eumont Pool				
State P "A"	# 1	Amerada Petroleum Co.	18-22-37	265
Drinkard Blinebry Pool				
Walden	# 7	Amerada Petroleum Co.	15-22-37	56
E. Wood	# 10	"	22-22-37	58
Lee	# 1	Anderson Prichard	23-22-37	171
Brunson C	# 7	Cities Service Oil Co.	3-22-37	131
Hawk B-3	# 3	Continental Oil Co.	3-21-37	223
Hawk B-9	# 1	"	9-21-37	224
Hawk B-9	# 2	"	9-21-37	206
Hawk B-9	# 6	"	9-21-37	201
State 10	# 2	"	10-21-37	215
Lockhart B-35	# 2	"	35-21-37	221
Eubank	# 4	Gulf Oil Corporation	22-21-37	41
J. M. Carson A	# 4	"	28-21-37	109
Eunice King	# 5	"	28-21-37	255
Eunice King	# 9	"	28-21-37	70
McCormack	# 10	"	32-21-37	115
Mark Owen	# 6	"	34-21-37	89
Mark	# 7	"	3-22-37	243
Eaves	# 6	"	10-22-37	76
Hugh	# 6	"	14-22-37	254
Ollie Boyd	# 3	"	23-22-37	179
Vivian ✓	# 4	"	30-22-38	218
Sarkeys	# 1	Harper Oil Co.	26-21-37	277
F. F. Hardison B	# 8	Humble Oil & Rfg. Co.	27-21-37	91
N. M. State "S"	# 14	"	2-22-37	54
Greenwood	# 11	"	9-22-37	119
Marshall Unit	# 3	Magnolia Petroleum Co.	34-21-37	22
L. G. Warlick "C"	# 2	The Ohio Oil Co.	15-21-37	14
W. S. Marshall	# 4	"	27-21-37	13
Mark Owen	# 2	"	35-21-37	61
Edith Butler "A"	# 1	"	18-22-38	146
Elliott R-15	# 4	Rowan Oil Co.	15-22-37	165
J. O. Parks	# 2	Samedan Oil Co.	14-22-37	6
Parks	# 5	"	14-22-37	5
Southland Royalty "A"	# 5	Stanolind Oil & Gas Co.	4-21-37	105
Southland Royalty "A"	# 6	"	9-21-37	37
State C Track 12	# 4	"	16-21-37	97
Eva Owen B	# 4	"	34-21-37	35
State C Track 13	# 5	"	26-21-37	96
Eva Owen A	# 2	"	3-22-37	110
State Land 15	# 3	Sunray Mid-Continent Oil	16-21-37	67
Elliott Federal A	# 2	"	21-21-37	77
Drinkard	# 4	Western Oilfields Inc.	25-22-37	64

Lease Name	Well No.	Operator	S-T-R	D.C. No.
Drinkard Tubb Pool				
State D "A"	# 3	Amerada Petroleum Co.	16-21-37	25
Corrigan	# 4	"	4-22-37	46
Eugene Wood	# 7	"	22-22-37	44
Owen	# 3	Cities Service Oil Co.	35-21-37	23
Brunson C	# 6	"	3-22-37	213
Hawk B-9	# 3	Continental Oil Co.	9-21-37	225
Hawk B-9	# 5	"	9-21-37	222
State 10	# 3-D	"	10-10-37	74
J. H. Nolan	# 2	"	11-21-37	241
Mary Wantz	# 40	"	21-21-37	189
Lockhart A-27	# 1	"	27-21-37	203
Lockhart A-35	# 3	"	35-21-37	239
Lockhart B-35	# 1	"	35-21-37	202
Edith Butler	# 3	Cosden Petroleum Co.	18-22-38	151
Sarkeys	# 1	Greenbrier Oil Co.	26-21-37	193
Eubank	# 1	Gulf Oil Co.	22-21-37	34
Carson C	# 3	"	28-21-37	83
Eunice King	# 22	"	28-21-37	33
W. T. McCormack	# 7	"	32-21-37	114
Mark Owen	# 5	"	34-21-37	88
Eaves	# 5	"	10-22-37	75
Hugh	# 4	"	14-22-37	259
Ollie Boyd	# 2	"	23-22-37	178
Watkins	# 1	"	29-22-38	231
F. F. Hardison B	# 7	Humble Oil & Rfg. Co.	27-21-37	98
F. F. Hardison B	# 1	"	34-21-37	99
N. M. State S	# 13	"	2-22-37	53
N. M. State S	# 20	"	2-22-37	90
Owen	# 1	"	2-22-37	39
L. G. Warlick	# 1	Moran Oil Company	14-21-37	11
W. S. Marshall	# 2	The Ohio Oil Co.	15-21-37	12
Mark Owen	# 3	"	27-21-37	62
Muncy	# 1	"	35-21-37	124
Parks A	# 4	"	24-22-37	204
Sarkeys	# 2	"	11-22-37	141
Southland Royalty A	# 4	Samedan Oil Co.	23-21-37	104
Southland Royalty A	# 2	Sinclair Oil & Gas Co.	4-21-37	59
State C Track 12	# 6-X	Stanolind Oil & Gas Co.	9-21-37	32
Eva Owen B	# 2	"	16-21-37	36
State C Track 13	# 8	"	34-21-37	196
State Land 15	# 4	"	36-21-37	68
Williamson	# 2	Sunray Mid-Continent	16-21-37	66
Amanda Simms	# 1	Tidewater Oil Co.	23-21-37	65
Drinkard	# 5	Western Oil Fields Inc.	25-22-37	81
		"	25-22-37	

Lease Name	Well No.	Operator	S-T-R	D.C. No.
Eumont Eumont Pool				
H. T. Orcutt C	# 8	Gulf Oil Co.	6-21-36	250
A. Ramsey D	# 3	"	23-21-36	248
Mexico W.	# 4	Skelly Oil Co.	2-21-35	212
State 175	# 1-175	Superior Oil Co.	11-21-35	230
Eumont Jalmat Pool				
W. A. Ramsey D	# 3	Gulf Oil Co.	34-21-36	300
Eunice Eumont Pool				
State W E "F"	# 1	Amerada Petroleum Co.	1-21-35	138
State W E "A"	# 2	"	12-21-35	78
State W E "E"	# 1	"	13-21-35	116
State G	# 1	The Atlantic Rfg. Co.	5-21-36	31
State H	# 1	"	5-21-36	18
O. L. Coleman	# 1	"	17-21-36	1
Gulf State	# 1	Charm Oil Co.	1-21-35	164
Superior State	# 1	"	12-21-35	126
State C	# 3	Cities Service Oil Co.	16-21-36	120
State F	# 3	Drilling Expl. Co.	9-21-36	148
State Endura	# 4	"	12-21-35	122
L. W. White "A"	# 2	Gulf Oil Corporation	25-20-36	169
R. R. Bell "F"	# 2	"	36-20-36	92
Orcutt "C"	# 5	"	36-20-36	270
Graham State "E"	# 2	"	6-21-35	94
R. R. Bell "C"	# 4	"	15-21-36	200
A. Ramsey "C"	# 13	"	21-21-36	197
J. D. Knox	# 1	Humble Oil & Rfg. Co.	10-21-36	112
State I	# 2	Stanolind Oil & Gas Co.	22-21-36	R-308
State 12	# 1-12	Superior Oil Co.	12-21-35	142
State A	# 4	Tidewater Oil Co.	8-21-36	196
State A-20	# 1	Vem Oil Co.	20-20-37	157
Eunice-Monument Eumont Pool				
State W E "B"	# 3	Amerada Petroleum Co.	1-21-35	167
Langlie-Mattix Jalco Pool				
Shahan	# 3	John M. Kelly	8-24-37	19

Lease Name	Well No.	Operator	S-T-R	D. C. No.
Langlie-Mattix Jalmat Pool				
O. M. Hedges	# 1	Amerada Pet. Co.	3-24-37	2
Falby	# 3	"	14-24-37	235
W. H. Henderson	# 1	Dalport Oil Corporation	7-25-37	10
Manda C	# 1	Gulf Oil Corporation	35-23-36	209
J. R. Holt "B"	# 2	"	36-23-36	253
Holt "A"	# 2	"	16-24-37	180
Arnott Ramsey "B"	# 2	"	32-25-37	236
Van Zandt	# 1	R. Olsen Oil Co.	25-24-36	130
Meyer	# 2	"	5-24-37	155
Meyer Federal	# 1	"	6-24-37	139
Mosley	# 1	Sinclair Oil & Gas Co.	34-24-37	185
J. D. Young	# 3	The Texas Company	5-24-37	198
Steeler	# 2	Western Natural Gas Co.	19-23-37	133
Toby	# 1	"	12-24-36	262
Langlie-Mattix Langmat Pool				
Fowler Hair	#1	John M. Kelly	8-24-37	20
E. L. Steeler	# 7	Skelly Oil Co.	17-23-37	106
J. C. Johnson	# 4	"	20-23-37	125
Steeler	# 1	Western Natural Gas Co.	19-23-37	101
Cooper	# 1	"	12-24-36	100
McCormack Tubb Pool				
W. H. Turner	# 3	Stanolind Oil & Gas Co.	29-21-37	194
Monument-Blinebry Eumont Pool				
Anderson	# 4	Amerada Pet. Co.	8-20-37	144
Monument Eumont Pool				
Weir B	# 1	Amerada Pet. Co.	26-19-36	27
M. E. Gaither	# 1	"	34-19-36	103
State F	# 1	"	36-19-36	191
State G	# 1	"	18-19-37	29
State T	# 5	"	20-19-37	192
Phillips	# 2	"	33-19-37	263
State D	# 3	"	1-20-36	30
State J	# 3	"	2-20-36	294
Federal D	# 5	"	26-20-36	187
L. W. White	# 1	"	34-20-36	145
State G	# 1	General Crude Oil Co.	16-20-37	211
State C	# 1	Gulf Oil Corporation	24-19-36	227
Graham State F	# 4	"	36-19-36	135

Lease Name	Well No.	Operator	S-T-R	D.C. No.
Monument Eumont Pool (continued)				
Graham State F	# 8	Gulf Oil Corporation	25-19-36	234
C. H. Kyte	# 1	"	7-19-37	181
Elbert Shipp B	# 3	"	7-19-37	266
Graham State G	# 1	"	17-19-37	87
B. V. Culp A	# 3	"	19-19-37	267
Fred Luthy	# 2	"	29-19-37	274
R. R. Bell	# 1	"	13-20-36	281
Theo Anderson	# 1	"	8-20-37	149
B. Whitmire	# 2	"	8-20-37	251
Theo Anderson	# 4	"	17-20-37	136
Laughlin	# 3	The Ohio Oil Co.	9-20-37	143
Hobbs	# 4	Phillips Petroleum Co.	18-20-37	161
Mixico	# 3	"	18-20-37	152
W. C. Roach	# 1	Sinclair Oil & Gas Co.	21-20-37	127
Christmas	# 1	Skelly Oil Co.	25-19-36	63
Gilluly B	# 6-X	Stanolind Oil & Gas Co.	21-20-37	85
Gilluly B	# 4	"	22-20-37	80
Wm. Weir	# 1	The Texas Company	25-19-36	163
State of N. M. "G"	# 2	"	19-19-37	176
State J	# 3	Tidewater Oil Co.	17-19-37	3

Tubb--Blinbry Pool (Gas-Gas) Duals

Carson	# 8	Magnolia Pet. Co.	33-21-37	8
Long	# 8	"	11-22-37	9
Brunson Argo	# 6	"	10-22-37	16
Williamson	# 1	"	23-21-37	16-A
Hugh	# 7-T	Gulf Oil Corporation	14-22-37	42
Amanda	# 1	"	25-22-37	49
Baker	# 3	Amerada Petroleum Co.	10-22-37	57
Lou Worthan	# 9 ✓	Ohio Oil Co.	11-22-37	60
Lynch	# 4	"	1-22-37	69
H. Leonard E.	# 4	Gulf Oil Corporation	16-21-37	72
Walden	# 3	Rowan Oil Co.	15-22-37	107
W. Lynch	# 4	Mid Continent Petroleum Co.	1-22-37	123
Long	# 5	Shell Oil Co.	11-22-37	140
Gutman	# 2	Gulf Oil Corporation	19-22-38	153
Eva Owen	# 1	R. Olsen Oil Co.	25-21-37	154-A
S. E. Cone	# 1	"	26-21-37	156
Hilton	# 3	N. G. Penrose	12-22-37	170
Andrews	# 2	Gulf Oil Corporation	32-22-38	175
State S	# 23	Humble Oil & Rfg. Co.	2-22-37	190
State 367	# 3	Sinclair Oil & Gas Co.	36-21-37	195
Parks	# 6	Samedan Oil Co.	14-22-37	214
N. M. State S	# 21	Humble Oil & Rfg. Co.	2-22-37	228
Carson	# 19	Magnolia Petroleum Co.	28-21-37	252

DUAL COMPLETION R* ORDERS

Lease Name	Well No.	Operator	R-Order No.	S-T-R
		Cooper-Jal Jalco Pool		
E. J. Wells	# 1	Continental Oil Co.	R-28	1-25-37
		Cooper-Jal Jalmat Pool		
Lynn A	# 5	Continental Oil Co.	R-242	28-23-36
		Cooper-Jal Langmat Pool		
Shell State G	# 2	Continental Oil Co.	R-21	21-21-37
		Drinkard Blinebry Pool		
Shell Turner	# 5	Shell Oil Co.	R-131	22-21-37
Eubank	# 1	Marcham, Cone, & Redfern		
			R-137	14-21-37
Lou Worthan	# 12	Ohio Oil Co.	R-139	11-22-37
Turner	# 13	Shell Oil Co.	R-188	22-21-37
State	# 1	"	R-189	15-21-37
Argo	# 3	"	R-193	15-21-37
Argo	# 5	"	R-194	22-21-37
Dauron	# 2	Aztec Oil & Gas Co.	R-209	10-21-37
Livingston	# 8	Shell Oil Co.	R-225	3-21-37
Livingston	# 9	"	R-226	3-21-37
Owen	# 2	E. F. Moran	R-228	14-21-37
Hardison B	# 4	Humble Oil & Rfg. Co.	R-244	34-21-37
State S	# 12	"	R-250	2-22-37
State S	# 1	Cities Service Oil Co.	R-253	15-21-37
Sims	# 4	Phillips Pet. Co.	R-255	24-22-37
Sarkeys	# 3	Tidewater Oil Co.	R-266	26-21-37
State DA	# 4	Western Natural Gas.	R-304	16-21-37
Boyd	# 4	Sinclair	R-308	23-22-37
Lockhart A-27	# 5	Continental Oil Co.	R-319	27-21-37
Lockhart A-27	# 7	"	R-320	27-21-37
Sarkeys	# 2	Shell Oil Co.	R-131	23-21-37
		Drinkard Tubb Pool		
Anderson	# 1	S. E. Cone	R-83	21-21-37
Turner	# 2	Shell Oil Co.	R-134	22-21-37
Eubank	# 2	Marcham, Cone & Redfern		
			R-138	14-21-37
Turner	# 3	Shell Oil Co.	R-187	22-21-37
State	# 1	"	R-190	15-21-37
Argo A	# 1	"	R-191	22-21-37

Lease Name	Well No.	Operator	R-Order No.	S-T-R
Drinkard Tubb Pool (Continued)				
Argo	# 1	Shell Oil Co.	R-192	15-21-37
State S	# 2	Cities Service Oil Co.	R-254	15-21-37
Sarkeys	# 4	Tidewater Oil Co.	R-267	26-21-37
Sarkeys	# 1	"	R-277	23-21-37
Mary Wantz	# 3-D	Continental Oil Co.	R-21	21-21-37
Eumont Eumont Pool				
State B	# 1	Humble Oil & Rfg. Co.	R-227	29-21-36
Eunice Eumont Pool				
Coleman	# 3	Tidewater Oil Co.	R-173	17-21-36
State	# 2-E	"	R-180	16-21-36
State A	# 2	Aztec Oil Co.	R-196	8-21-36
State L	# 2	Shell Oil Co.	R-217	12-21-35
State H	# 2	"	R-222	13-21-35
Fopeano Fed.	# 1	Humble Oil & Rfg. Co.	R-229	25-20-36
Devonian State	# 1	Tidewater Oil Co.	R-270	20-21-36
State H	# 4	"	R-271	13-21-35
Meyer B-4	# 7	Continental	R-290	4-21-36
Meyer B-8	# 3	"	R-291	8-21-36
Meyer A-17	# 4	"	R-293	17-21-36
Meyer B-8	# 4	"	R-294	8-21-36
Eunice Jalco Pool				
State A	# 2	Shell Oil Co.	R-218	12-21-35
Langlie-Mattix Jalmat Pool				
State LMT	# 2	Amerada Pet. Co.	R-33	36-23-36
Vosburg	# 1	Culberson & Irwin	R-213	18-25-37
State LMT	# 5	Amerada Pet. Co.	R-295	36-23-36
Langford	# 1	Western Natural Gas	R-306	25-23-36
Combest	# 1-X	"	R-318	35-23-36
Winters C	# 1	Dalport Oil Co.	R-332	7-25-37
Meyer B	# 11	Stanolind Oil & Gas	R-130	6-24-37
Langlie Mattix Langmat Pool				
State M	# 3	Skelly Oil Co.	R-85	32-24-37
Mixico D	# 1	"	R-801	36-23-36
Jack	# 1	Howard Hogan	R-121	8-24-37

Lease Name	Well No.	Operator	R-Order No.	S-T-R
Monument Eumont Pool				
Britt B-10	# 1	Continental Oil Co.	R-140	10-20-37
State A	# 1	Shell Oil Co.	R-215	35-19-36
Shell St. F.	# 1	"	R-224	29-19-37
State B	# 1	Tidewater	R-272	36-19-36
Weir	# 4	Amerada Pet. Co.	R-297	35-19-36
Laughlin	# 1	"	R-298	9-20-37
State V	# 3	"	R-300	36-19-36
State U	# 1	"	R-301	32-19-37
State P	# 2	"	R-302	29-19-37
State O	# 1	"	R-303	30-19-37
Monument-Paddock Eumont Pool				
Britt A-6	# 4	Continental Oil Co.	R-82	6-20-37
North Eunice Eumont Pool				
State G	# 1	Skelly Oil Co.	R-86	30-20-37
GAS GAS DUALS				
Blinebry Tubb Pool				
State S	# 2	Tidewater Oil Co.	R-307	15-21-37
Baker B	# 15	Skelly Oil Co.	R-590	10-22-37
Eumont Eumont Pool				
State B	# 7	Humble Oil & Rfg. Co.	R-239	29-21-36
Justis Langlie-Mattix Pool				
Coats C	# 1	Tidewater Oil Co.	R-378	24-25-37

186,072.000 MAY

From

To	YEAR	DAY
Bk @ 1000 GOR	196.072	509.7
" " 2000 "	98.036	254.7
" " 3000 "	62.024	161.9
" " 4000 "	46.518	127.7
" " 5000 "	37.214	101.9
" " 6000 "	31.012	84.9
" " 7000 "	26.571	71.8

716

FOLLOWING WILL BE THE RECOMMENDATIONS OF
THE INDUSTRY COMMITTEE FOR THE TUBB GAS POOL:

SPECIAL RULES & REGULATIONS
FOR OIL WELLS IN THE TUBB GAS
POOL

RULE 1. Acreage dedicated to a gas well in the Tubb Gas Pool shall not be simultaneously dedicated to an oil well in said Pool.

RULE 2. In the event an oil well is reclassified as a gas well in the Tubb Gas Pool, the operator of such well will be afforded the opportunity to form a non-standard proration unit for the well.

RULE 3. In the event such reclassification should cause the occurrence of more than one gas well producing from the Tubb Gas Pool within a single standard or less than standard proration unit, the sum of the allowables allocated to the wells shall be equivalent to that volume of gas allocated to a proration unit of the same size. The operator of such wells shall have the option to determine the proportion of the assigned allowable to be produced by each individual well, provided all of said wells are orthodox gas locations.

RULE 4. A gas well in the Tubb Gas Pool shall mean a well producing from within the vertical and horizontal limits of the Tubb Gas Pool which:

- (a) Produces liquid hydrocarbons possessing a gravity greater than 45⁰ API, or,
- (b) Produces liquid hydrocarbons possessing a gravity of 45⁰ API or less, but with a producing gas-liquid ratio in excess of 20,000 cubic feet of gas per barrel of liquid hydrocarbon.

RULE 3. A well producing from within the horizontal and vertical limits of the Tubb Gas Pool and not classified as a gas well as defined in Rule ⁴17, shall be classified as an oil well in the Tubb Gas Pool.

RULE 6. The Proration Manager may reclassify a well under Rules ^{4 or 5}17 or 18 if production data, gas-oil ^{ratio} tests or other evidence reflects the need for such reclassification.

The Proration Manager will notify the operator of the reclassified well of such reclassification and the effective date thereof; provided, however, that operator may appeal such reclassification to the Secretary-Director of the Commission in writing.

RULE 7. Gas-liquid ratio tests and determinations of the gravity of that liquid hydrocarbon recovered from wells in the Tubb Gas Pool shall be connected annually during the months of July and August on all wells located in and producing from the Tubb Gas Pool. Results of such tests will be reported to the Commission on Form C-116 on or before the 15th day of September of each calendar year.

RULE 8. The limiting gas-oil ratio for an oil well in the Tubb Pool shall be 3,000 cubic feet of gas for each barrel of oil produced, and all oil proration units having a gas-oil ratio exceeding the limit of 3,000 cubic feet of gas per barrel of oil produced will be penalized in accordance with the customary formula designated by Commission Rule 506 (b).

It is further recommended that the last paragraph of Rule 8 of the Special Rules and Regulations for the Tubb Gas Pool as set forth in Order R-586 be amended as follows:

"If during a proration month there is a change in the acreage dedicated to a gas well, the change of allowable allocated to the well shall be effective on the first day of the month following approval of such change by the Commission.