

Case No.

156

Application, Transcript,
Small Exhibits, Etc.

No.

No. 156 Application of N.M. Oil Commission
for an order amending Order 712. (See-
Rddy-Chaves Counties Gas-oil ratio order)

ADDRESS

DATE

FORM A-2-48

DATE

To

Remarks

From

6/30/48

R.R. Spurr

Floor No.

Santa Fe, N.M.

LEA COUNTY OPERATORS COMMITTEE

Fort Worth, Texas
June 30, 1948

File: GHC-807-310.17

Re: Proposed Amendment to New Mexico
Oil Commission Order No. 712

Mr. J. W. House
Humble Oil and Refining Company
Midland, Texas

Mr. M. C. Brunner
Shell Oil Company
Midland, Texas

Mr. J. N. Dunlavy
Shelly Oil Company
Hobbs, New Mexico

Gentlemen:

Attached you will kindly find copy of the minutes of the June 24th meeting of the Engineering Advisory Committee, including their suggested amendment to the New Mexico Oil Conservation Commission Order No. 712. I wish that your committee would kindly consider this suggested amendment and have your recommendations ready to make to the Executive Committee. A meeting of the Executive Committee will be held in Fort Worth in the Stanolind Conference Room (14th Floor, Fair Building) at 10:00 A.M. on Monday, July 12. At this meeting the Executive Committee will also consider the committee's report on proposed pipe line transportation order and proposed tank cleaning order. I have today talked with Mr. Spurrier, and the Commission will set the hearing for Thursday, July 29.

In relation to Mr. Staley's comments on the Blinbry Pool, in the attached minutes, it is requested that he bring the necessary information on this pool to the Executive Committee meeting on July 12.

Yours very truly,

ORIGINAL SIGNED BY
G. H. CARD

G. H. CARD

GHC:gp
Attn.

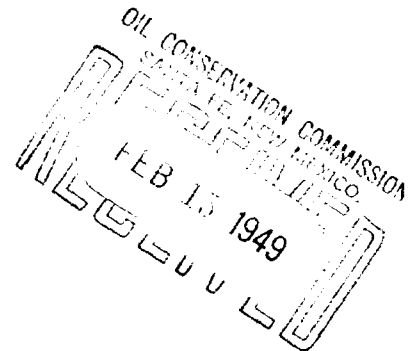
cc: H. B. Hurley
W. E. Hubbard
S. G. Sanderson
D. A. Powell
P. C. Wilson
C. G. Staley
J. O. Seth



CENTRAL SURETY
AND INSURANCE
CORPORATION

PAUL S. BROWN

208 No. TURNER STREET
HOBBS, NEW MEXICO



February 12, 1949

Mr. R.R. Spurrier, Secretary and Director
New Mexico Oil Conservation Commission
Post Office Box 871
Santa Fe, New Mexico

Re: Order No. 784, effective September 10, 1948
amending Order 712, August 4, 1947

Dear Sir:

I wish to thank you for your letter of February 9th which calls attention to the fact that we have not filed a gas-oil ratio test. The reason is that we have been having considerable trouble with this well, and really have not been in very good position to give you a good gas-oil ratio test.

I believe our difficulties are behind us, and we will therefore, take immediate steps to furnish you with a gas-oil ratio test.

Yours very truly,

M.M. BROWN AND PAUL S. BROWN

By

Paul S. Brown/crl
CC: Lea County Operators Committee

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MINUTES OF ENGINEERING ADVISORY COMMITTEE

June 24, 1948

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The meeting was called to order at 10:30 A.M. in the office of the Lea County Operators Committee, Hobbs, New Mexico. The following members were present:

Robert Schuehle	Texas-Pacific Coal and Oil Company
R. S. Dewey	Humble Oil and Refining Company
E. J. Gallagher	Gulf Oil Corporation
G. H. Gray	Repollo Oil Company
G. H. Hirschfeld	Lea County Operators Committee
C. H. Danchertsen for R.S.Christie	Amerada Petroleum Corporation
H. F. Forbes for Homer Dailey	Continental Oil Company

The suggested amendment to Commission Order No. 712 submitted to Mr. Dunlavy and Mr. Brunner by Mr. J. W. House on May 7, 1948, was discussed and it was unanimously agreed that the following addition to Order No. 712 be recommended:

"Any well producing from a reservoir which contains both oil and gas shall be permitted to produce only that volume of gas equivalent to the applicable limiting gas-oil ratio multiplied by the top unit oil allowable (deep pool adaptation) currently assigned to the pool, to be effective in all pools in New Mexico where the gas-oil ratio is limited by Commission Order. This will place all producing wells, whether oil or gas, in these pools on the proration schedule."

It is further recommended that the Executive Committee advise the operators in the Blinebry Pool that a hearing may be in order to determine whether the Blinebry Pool is predominately oil, gas or condensate reservoir, or whether Blinebry Pool has the proper gas-oil ratio limit or should be deleted from Commission Order No. 712, as above amended.

The Advisory Committee, in making a study of the data compiled as a result of cooperative gas-oil ratio tests in the Eunice-Monument Pool, recommends the following:

1. That a tabulation of comparisons be made between gas volumes obtained in the gas-oil ratio tests and the gas volumes submitted on Commission Form C-114, showing sub-totals for each company.
2. That a tabulation of dry gas production from the area showing comparative data be made up.
3. That a tabulation be made of producing zones for all dry gas wells within the area.
4. That a history be made of gasoline plant operations over a four-year period to be taken from the Lea County Operators Committee Annual Report.

Respectfully submitted,

/s/ Glenn Staley

LEA COUNTY OPERATORS COMMITTEE
HOBBS, NEW MEXICO

Glenn Staley

June 25, 1948

COPY

712
HUMBLE OIL & REFINING COMPANY
HOUSTON 1, TEXAS

May 7, 1948

Mr. Jim Dunlavy
Skelly Oil Company
Hobbs, New Mexico

Mr. Mike Bruner
Shell Oil Company
Midland, Texas

Dear Sir:

In line with the Committee's assignment with reference to the displacement factor in New Mexico oil and gas conservation rules, I would like to suggest the following amendment:

"Any well producing from a reservoir which contains both oil and gas shall be permitted to produce only that volume of gas equivalent to the applicable limiting gas-oil ratio multiplied by the top unit oil allowable (with deep pool adaptation) currently assigned to the pool."

This amendment will apply to Commission Order 712 and would be effective in all pools in New Mexico where the gas-oil ratio is limited by Commission order. This would in effect place all producing wells, whether oil or gas, in these pools on a proration schedule.

We have reviewed the present practice of reporting and taking gas-oil ratios as now set up by the Lea County Operators, and it is our belief that the present Form A-116 and the schedules worked out for the various fields would be adequate for the intended purpose. We have also asked our attorneys to review the New Mexico statutes and advise us whether they felt that additional legislation would be necessary to enable the Commission to promulgate gas conservation regulations and they cite the following in this connection:

1. 69-210 "The Commission is hereby empowered, and it is its duty, to prevent the waste prohibited by this act. To that end, the Commission is empowered to make and enforce rules, regulations and orders, and to do whatever may be reasonably necessary to carry out the purposes of this act, whether or not indicated or specified in any section hereof."
2. 69-211 "Included in the power given to the Commission is the authority to.....limit and prorate production of crude petroleum oil and natural gas."
3. 69-203 defines "waste" as including "the locating, spacing, drilling, equipping, operating or producing, of any well or wells in a manner to reduce or tend to reduce the total quantity of crude petroleum oil or natural gas ultimately recoverable from any pool."

COPY

HUMBLE OIL & REFINING COMPANY
HOUSTON 1, TEXAS

Mr. Jim Dmlavy
Mr. Mike Bruner

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May 7, 1948

4. 69-202 "The production or handling of crude petroleum or natural gas, or the handling of products thereof, in such a manner or under such conditions or in such amounts as to constitute or result in waste is each hereby prohibited."

In their opinion, sufficient statutes are already in effect to give the Commission an adequate basis for the issuance of the proper regulations. Under a plan such as has been initiated by this Committee, it would be a relatively simple thing to establish whether or not a reservoir was primarily oil and gas or gas alone. In this case, the suggested amendment would apply to that gas which is normally called associated gas. It will then be necessary for the Commission to adopt other rules with reference to reservoirs containing nonassociated gas.

For the purpose of this committee, I am offering these suggestions and would appreciate your immediate opinions as to the workability of this plan. I have been advised that a joint meeting of the Texas Railroad Commission and the New Mexico Conservation Commission is planned for May 28. If we could arrive at a joint recommendation in time to request a hearing of the Commission the day after the above date, it would be convenient for all concerned.

As soon as you have had time to review this proposal and forward your comments, I will contact you by telephone in reference to a date for a Committee hearing for additional discussion.

Very truly yours,

J. W. House

JWH:aws

cc: Mr. Glenn Staley
Lea County Operators Committee
Hobbs, New Mexico

Mr. George Card
Stanolind Oil & Gas Company
Fort Worth, Texas

Mr. W. E. Hubbard

Afternoon session of the
hearing before the Oil
Conservation Commission
of July 29, 1948.

MR. SETH: On behalf of the Lea County Operators we would like to return to Case 152, the Grayburg and Western Production Co. matter. The announced decision of the Commission we fear will establish a bad precedent or a precedent that might be troublesome. It may be right in this case. But this departure from a unit allowable to a lease allowable might cause all manner of complications, and as I understand that application would--the order of the Commission would authorize that in certain cases. I would like on behalf of the Lea County Operators to have an opportunity to get a copy of the transcript and be further heard. The unit allowable has been the rule in this State for so long and operated so well we question anything that might be a departure from it. As soon as we can get the transcript and a copy of the application, Lea County Operators will either ask for further hearing or withdraw their objections. I also want to call your attention to the fact that the notice gave no warning other than unorthodox location of wells. It comes to us entirely by surprise, and as a matter of fact, we couldn't hear one third of the testimony taken on the matter this morning. I hope the stenographer could hear more of it.

COMMISSIONER SPURRIER: Judge, your thought is to ask for the case to be continued?

MR. SETH: That's right.

COMMISSIONER SPURRIER: More or less indefinitely?

MR. SETH: We don't want to delay these people. We want a chance to study the transcript. I hope the stenographer heard more of it than we did sitting in the back.

COMMISSIONER SPURRIER: The objection, if there is any, is to the allowable or to the proration scheme, not to the drilling of the unorthodox locations?

MR. SETH: Not at all, no. We have no objection to that. That is what we thought the application was for.

COMMISSIONER MILES: I tried to question somebody on that. I wasn't sure that I understood it fully, too. This morning I thought that perhaps somebody would bring up some objections and I talked to some of the people later, and they said they didn't hear the testimony.

MR. SETH: The matter is two wells on more than a 40-acre allowable being produced through those two wells, as I understand the proposition.

MR. COCHRAN: If the Commission please, Grayburg and Western Production Co. regret that some of the people here didn't hear all the testimony this morning. We certainly want Lea County Operators to have a chance to review the testimony. However, naturally since there is no objection to the drilling of unorthodox locations, and since Grayburg has two rigs available, they would like to proceed with the drilling of the first two wells.

MR. SETH: No objection on our part to that.

MR. COCHRAN: And naturally also with reference to the allowable question, they would like that the matter not be continued for any longer time than possible because it is an extensive drilling program and they would like to know what their allowable position is. Now, with reference to Mr. Seth's remarks about the notice. Well, my observation has been and I believe the Commission will agree that in an application asking for any unorthodox location it always involves a question of allowable. I mean that appears to me to be part of the question itself. And it certainly wasn't Grayburg's or Western Production Co.'s idea that the notice not disclose fully everything that they intended to present. And I know that wasn't in the mind of the Commission when they prepared the notice. But we would like to go ahead with the drilling of these wells, and go into this allowable question further with the Lea County Operators at the earliest possible date. It may be that Mr. Morrell might have some suggestions with reference to this that might be helpful.

MR. MORRELL: If the Commission please, the thought occurs to me in view of the fact that I had considerable contact with the formulation and preparation of the agreement leading to the application to the Commission that I might be able to add some history and background and thoughts that might be helpful to the operators in Lea County.

I wonder though at this time whether to save the time of the Commission to allow you to proceed with the remainder of the cases on your docket and upon completion of those I would be glad to make several remarks for the benefit of the Lea County Operators.

COMMISSIONER MILES: Mr. Seth, you wanted an opportunity to study the testimony?

MR. SETH: Yes. It may be that under the circumstances Grayburg is entirely proper. But we don't know and we don't want a precedent established. That is our whole interest.

COMMISSIONER MILES: You will as soon as possible -----

MR. SETH: As soon as we get it--the stenographer's transcript.

COMMISSIONER MILES: Then it will be continued until such time as you have an opportunity to study the transcript.

MR. SETH: All right.

MR. COCHRAN: The continuance will be only as to the allowable question? The unorthodox locations are granted?

COMMISSIONER MILES: Anybody else want to say anything?

MR. MORRELL: Will I have an opportunity to say something after the finish of this meeting?

COMMISSIONER MILES: Yes, sir.

MR. MORRELL: I may be able to answer some thoughts that have not been yet presented.

COMMISSIONER MILES: We will be glad to hear you. Call the next case.

(Mr. Graham reads the notice of publication in Case No. 155.)

MR. CARD: I represent Lea County Operators.

COMMISSIONER SPURRIER: Mr. Card, will you please come forward?

MR. CARD: I represent Lea County Operators Committee. This proposed order was considered at a meeting of the Lea County Operators Committee yesterday and it was unanimously--the motion was unanimously adopted that this proposed order should be presented to the Commission for adoption. Mr. Hosford,

MR. SETH: As the Commission sees, it is a paragraph to take the place of two paragraphs in the old Order 52. I would like to have Mr. Hosford sworn.

Eugene Hosford, having been first duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. SETH:

Q. Please state your name.

A. Eugene Hosford.

Q. By whom are you employed?

A. Gulf Oil Corporation.

Q. In what capacity?

A. Assistant Chief Production Engineer.

Q. You have never testified before this Commission.

A. No, sir.

Q. Will you please state your training and qualifications briefly? And experience.

A. I graduated from the University of Oklahoma with an engineering degree, and since that time, the last thirteen years, have been employed by Gulf as an engineer.

Q. In oil production?

A. In oil production.

Q. Have you been employed in Lea County?

A. No, sir, I have not.

Q. This order provides for the production of oil with a certain maximum per cent, above which they shall not go on any one day. Will you please state the substance of the order and your view as to whether it is proper or not?

A. In effect, the order states that any unit cannot be produced in excess of 125 per cent of its daily allowable in any one day. In my opinion, the amendment is a good one in that there is some question in the minds of the pipe line companies as to whether they should run available oil that would exceed the summation of the daily allowable to that date. Now this amendment will clarify this situation. It goes even further than that, and probably of more importance in that it is a conservation measure. First, it restricts the rate of flow, and does not permit excessive rates, and this in itself would be more conducive to the proper operation of the reservoir. Secondly, and even more important these days, is the fact that by distributing the

oil and gas production throughout the month in place of producing it in one or two days, or I should say in a week's time, it will make possible a more continuous flow of natural gas into the gasoline plants, and this in turn will permit more efficient operation of the plants and minimize wastage of gas.

Q. Under this order a man couldn't produce a week's allowable in one day?

A. That's right.

Q. It must be spread more or less evenly over the month?

A. That is correct.

Q. Do you favor its adoption as a conservation measure?

A. Yes, sir, I do.

MR. SETH: I believe that is all we have.

COMMISSIONER MILES: Anyone else have a question?

MR. MORRELL: I would like a clarification of that testimony just presented. A week's allowable could be made up in one day?

A. Could not be.

Q. I would also like a little clarification, if possible, for the benefit of those who were not in attendance of the Lea County Operators Committee meeting yesterday. There was one or two that made the comment that this would allow a well to be produced at the rate of 125 per cent normal allowable for each day in the calendar month. I don't think that this is what the order intends.

A. I don't believe the order says that, Mr. Morrell. I believe it says that the owner or operator shall not produce from any unit during any calendar month any more oil than the allowable production for such unit as shown by the proration schedule. That is pretty plain. The other provision is that it shouldn't be produced over 125 per cent of the daily allowable on any one day.

Q. I think your statement is correct. I just wanted to call your attention to the fact so that there wouldn't be any erroneous impressions.

COMMISSIONER MILES: You were reading from the order?

A. From the proposed amendment.

COMMISSIONER MILES: Anyone else? If not, we will take it under advisement. Next case.

(Mr. Graham reads the notice of publication in Case No. 156.)

MR. CARD: I represent Lea County Operators Committee. This proposed order likewise was considered yesterday in the meeting of the Lea County Operators and a motion was unanimously adopted that the proposed order be presented for adoption to the Commission.

R. S. Dewey, having been first duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. SETH:

Q. State your name, please.

A. R. S. Dewey.

Q. By whom are you employed?

A. I am employed by the Humble Oil and Refining Co.

MR. SETH: I don't think it is necessary to qualify Mr. Dewey before this Commission.

COMMISSIONER SPURRIER: No.

Q. Mr. Dewey, please state to the Commission the effect of this proposed amendment and your views as to whether it is a proper one for conservation of gas and oil.

A. As I understand the intent and purpose of this amendment, it is to establish a method of gas proration in an oil reservoir on a comparable and similar basis to the method now used for prorating oil in the same reservoir. When and if the Commission sees fit to adopt this amendment, the effect will be to automatically set a top allowable for gas production on a unit basis similar to the top allowable that is now in effect for oil production on a unit basis.

Q. It is applicable only to pools producing both oil and gas?

A. That's right. It is limited to those oil and gas reservoirs in which the Commission has deemed it advisable to set a limiting gas-oil ratio. It does not refer at all to gas fields where no oil production is available. I believe that it is a conservation measure in keeping with the statutes as outlined in Section 12, and that it will afford the operators an opportunity to more nearly recover their proportionate part of the oil and gas underlying their properties. I think the first paragraph has particular reference to the first paragraph of Section 12 of the statutes. I believe

that is all I have to say, unless somebody has a question they care to ask.

Q. The effect of it would be this, as I understand it. If the oil-gas ratio is 4,000, and the top unit allowable is 40 barrels, it would be 40 times 4,000, which would be all the gas from a field producing both oil and gas—all the gas they would be permitted to produce?

A. That is correct. If an operator on one unit had an oil well under the current proration schedule the Commission had established—a limiting ratio of 4,000 for that particular reservoir and the allowable of 40 barrels—then the operator on that adjoining tract of land who had a gas well would be permitted to produce 40 times 4,000 cu. ft. of gas per day.

Q. You welcome its adoption?

A. I do.

Q. And you appear here for the Lea County Operators?

A. I do.

MR. SETH: That is all.

COMMISSIONER SPURRIER: Mr. Dewey, just for the purpose of clarification for myself

COMMISSIONER MILES: And me to. (Laughter)

COMMISSIONER SPURRIER: And Governor Miles. I interpret what you have said, and Judge Seth has said, to mean that any pool in New Mexico, or Lea, Eddy and Chaves counties, New Mexico, that has a gas-oil ratio will fall within the meaning of this order. But that fields which do produce oil—well, for example Langlie-Mattix—and have no gas-oil ratio will not be affected by this order.

A. That is my interpretation of it. I think that is the intent of this amendment.

COMMISSIONER SPURRIER: While the Commission has no order which defines a gas well from an oil well, or a gas pool from an oil pool, this order has the purpose of preventing the withdrawal of excessive amounts of reservoir energy in the form of gas from a pool which is primarily an oil pool?

A. That's right. It is an order to equalize the withdrawals between operators, to give everybody the same opportunity to recover the fluids and benefit by the energy contained in the gas.

COMMISSIONER SPURRIER: That is all I have.

COMMISSIONER MILES: Anyone else have any statements or questions?

MR. MORRELL: Governor Miles, I would like to enter in the record that we do concur in that proposed order as to Federal lands. We are at the present time using that exact process. We have two wells on a Federal lease in the Square Lake pool producing solely gas from a definite oil-producing zone. And they have been allowed—although not taken the opportunity—to produce the allowable gas-oil ratio to the top oil allowable for that pool. We are doing the same thing for the Amon G. Carter well in Section 22 South, 37 East, which was recently completed as a gas producing well in the Drinkard zone. And they are limited to withdrawals exactly in accordance with this proposed order.

COMMISSIONER MILES: Anyone else wish to ask any questions or make any statements regarding this matter? If not, it will be taken under advisement.

MR. GRAHAM: May I ask one question? Judge Seth, this suggested amendment to the Commission's order. Where do you suggest it go?

MR. SETH: I don't think it is on the general Lea County order. That is where I think it belongs. 712.

MR. GRAHAM: 712, but no specific section?

MR. SETH: No, just a new rule.

MR. GRAHAM: That will be an addition to that order?

MR. SETH: Yes, that's right.

COMMISSIONER SPURRIER: I have a question. I believe that Order 52 applies to Lea County only. Is that right?

MR. SETH: We recommend that it apply to all of them.

COMMISSIONER SPURRIER: The recommendation is that this order apply to Lea, Eddy, and Chaves counties?

COMMISSIONER MILES: What was the answer, yes?

MR. SETH: Yes.

COMMISSIONER MILES: This case will be taken under advisement and we will proceed with the next case.

(Mr. Graham reads the notice of publication in Case No. 110)

MR. CARD: I represent Lea County Operators Committee. This proposed order covering Case No. 110 was also considered in the meeting of the Lea County Operators Committee yesterday. And a motion was unanimously adopted that the proposed order be submitted to the Commission for their adoption. We would like to call your attention to the fact that this proposed order doesn't cover gasoline plants and pipe line operations with regard to reclaiming waste oil, and it is suggested that the Commission appoint a committee representative of the gasoline plant operators to write a proposed order.

R. S. Dewey, recalled for further testimony, testified as follows:

DIRECT EXAMINATION BY MR. SETH:

Q. You are the same R. S. Dewey that testified in the preceding case?

A. I am.

Q. Have you gone over this proposed order?

A. I have.

Q. To get the record clear. It is limited entirely to lease oil, is it not?

A. That's right. It is an operator's order.

Q. And it has nothing to do with pipe cleaning, pipeline tank bottoms or the recovery of drippings from gasoline plants?

A. That's right. It might have some application in that it sets up some rules and regulations about cleaning plants and that sort of thing, but it is not applicable to either pipe lines or gasoline plants in the full sense.

Q. Will you discuss the purpose of the order and your view as to it, Mr. Dewey?

A. The purpose of this order, as I see it, is to set up the mechanics to be followed by the oil producer in the reclamation of tank bottoms and provide means that such reclaimed production can be disposed of under the regulations of the Commission. The proposed order sets out in detail the method of making reports to the Commission relative to the amount of reclaimed merchantable oil, and provides a means for a processing plant to dispose of the merchantable oil, all under the Commission's direction. It also sets out a means for any person or firm desiring to enter into the reclamation of tank bottoms as a business, how they shall proceed to obtain a permit from the Commission to engage in that business. Besides the reclamation of tank bottoms, it also provides for a means for reclaiming ~~merchantable~~ ~~oil~~ ~~that is incident to drilling in operations or otherwise lost in pits.~~ The order further defines the terms that are used in the main body of the order.

Q. It requires this reclaimed oil to be charged back against allowable of the unit, does it not?

A. That's right. Whatever oil merchantable oil accumulates and can be recovered from tank bottoms is subject to the royalty being paid by the producer.

Q. In your opinion, does it provide proper safeguards against any possible abuse through these reclamation plants?

A. I think that it will prevent abuse by these reclamation plants due to the fact that sworn statements are required from the operator or producer relative to the location and amount of tank bottoms that are to be processed. And also by the reclamation unit in the amount of recoverable merchantable oil that they obtain from such tank bottoms.

Q. It requires the operator of one of these reclamation plants to give bond to comply with the law?

A. That's right. His charter can be revoked.

Q. His permit is good only for one year and has to come up for review of the situation every year. Is that right?

A. That's right.

MR. SETH: I believe that is all I have.

COMMISSIONER MILES: Anybody else have any questions or statements regarding the matter?

MR. FAMARISS: If the Commission please. Mr. Dewey, under rule 1, section d, the first sentence.

COMMISSIONER MILES: What are you referring to now?

MR. FAMARISS: Rule , section d. In this section the following words appear;

"Nothing contained in this Order shall apply to tank bottoms used on the lease from which the tank bottoms accumulated." Is this construed to mean that if a tank is cleaned and the bottom used on the lease, no tank cleaning permit is necessary or must be filed with the Commission, and that there shall be no charge back of any allowable in this instance?

A. That is my understanding of it, Mr. Famariss. That is, if the operator wants to clean his own tanks, and the oil is not disposed of except in the regular manner similar to any oil produced on the lease. The operator doesn't have to get a permit to clean his tanks.

Q. What do you mean by if it is disposed of in the regular manner?

A. I think under C-110, the regular form that the operator....

Q. Isn't that taken care of in the second part, "or to the treating of tank bottoms on the lease by the producer or operator where the merchantable oil recovered therefrom is disposed of through a duly authorized transporter as shown on Form C-110 filed with the Commission." Is that particular instance permitting the producer the rightful liberty to treat his own tank bottoms and run them through a pipe line?

A. That is the intent of the order. If a producer desires to treat his own tank bottoms, he should be permitted to do so.

Q. Yes, but the first thought in my mind would not indicate that. In other words, nothing contained in this order shall apply to tank bottoms used on the lease. Not treated and sold through a pipe line.

A. As I understand the intent of this, Mr. Famariss, it is that every operator in his discretion has the right to go in and clean his tanks and recover what merchantable oil he can, and that merchantable oil can be pumped right into the other stock tanks on the lease and be disposed of in the normal manner through some authorized transporter. There will probably be some residue that accumulates in that process that there would be no point in making a report to the Commission relative to.

Q. If we delete my citation, would not that liberty still exist?

A. Oh, I think the inference would be there that the operator still had the right. This just sets it out specifically. He has the right to reclaim his own oil and dispose of it.

Q. That part I thoroughly agree with.

A. Which part do you wish to delete?

COMMISSIONER MILES: And why.

MR. FAMARISS: I wish to delete the following: "Nothing contained in this order shall apply" and delete the words "to tank bottoms used on the lease from which the tank bottoms accumulated or". The deletion is as follows: "to tank bottoms used on the lease from which the tank bottoms accumulated or " Just those words. They are the exact deletions in my request.

THE WITNESS: Would you mind reading out--reading it after you get through with all this deletion business? I can't write as rapidly as this gentlemen here.

MR. FAMARISS: Yes, sir. Nothing contained in this Order shall apply to the treating of tank bottoms on the lease by the producer or operator where the merchantable oil recovered therefrom is disposed of through a duly authorized transporter as shown on Form C-110 filed with the Commission."

A. You know I can't keep up with this gentleman in taking this thing down. If you wouldn't mind going a little bit slower.

MR. FAMARISS: All right. "Nothing contained in this Order shall apply to the treating of tank bottoms on the lease by the producer or operator where the merchantable oil recovered therefrom is disposed of through a duly authorized transporter as shown on Form C-110 filed with the Commission." If the Commission please, that request is made with the following thought. It would seem that a producer could have the right to clean a tank bottom into a pit, which would constitute its remaining on the lease, and destroy that tank bottom. And by the inference contained in the words which I requested be deleted, he therefore would come under no provisions of this order. He would not have to file a tank cleaning report. He would have no allowable charge back. So, in deduction, it would round itself out to mean that if a producer--of which there are some--wishes to market his emulsions through a reclamation plant, then he must fill out under oath a tank cleaning order.

He must go through a very elaborate test of that emulsion by virtue of A.P.I. Code 25, Section 5--by the way, a minimum number of turns of the centrifuge machine is 9,000--and then it is to be charged back against his allowable. I can only construe this to mean that in order to do business with a reclamation plant, the operator must therefore suffer expense and penalty. Whereby, were those words which I requested deleted, there would be no one exempt from filing a tank cleaning report if he had a tank to clean, and the merchantable oil therefrom returned by the A.P.I. test would be charged back against his allowable from the producing unit from which the accumulation came. In other words, in my opinion it is an instance to evade any jurisdiction of the order in that specific instance. I have no quarter to ask at all in the producer being able to treat his own bottoms. I think that is just good oil business. I would like also to have clarified this matter of the shake-out test.

COMMISSIONER MILES: The matter of what?

MR. FAMARISS: Shake-out test. Rule 1, Section b, where it states that the emulsion shall be subject to the centrifuge test as provided under A.P.I. Code 25, Section 5. Could someone explain to me what would constitute the merchantable oil? Shall it be that mass above the water line, or shall it be that fluid oil above the solid line? The reason I ask that is, in a shake-out test--in a shake-out of a tank bottom there is a very substantial section of solids above your water. And my interpretation is that the crude oil lies above those solids. I would like to have that clarified by someone capable of answering it.

COMMISSIONER MILES: Anyone care to clarify the paragraph?

THE WITNESS: When you heat that oil to 120 degrees as provided here, won't most of those solids that are--that may be considered as merchantable hydrocarbons, won't they go into solution then?

MR. FAMARISS: No, Mr. Dewey, the tank bottoms which we are marketing attain fluidity somewhere above 150 degrees. In other words, at 120 degrees you will have a solid mass above your water line.

MR. DUNLAVEY: Mr. Dunlavey of Skelly Oil. Where are you getting these 150 degrees?

MR. FAMARISS: I have not secured, nor solicited, or processed in any manner or obtained a production tank bottom. The order as submitted covered the producer, and inasmuch as there has never been any specific clear method of obtaining a production tank bottom, we have never handled one.

MR. DUNLAVEY: How many shake-outs have you taken on a producing property from the time you have been in business? Not very many on a producing property.

MR. FAMARISS: I have taken several shake-outs on tank bottoms.

MR. DUNLAVEY: What was the temperature of the oil?

MR. FAMARISS: Everything from cold to 180 degrees.

MR. DUNLAVEY: 180 degrees?

MR. FAMARISS: 180 degrees.

MR. DUNLAVEY: What do you take a shake-out in?

MR. FAMARISS: In a centrifuge machine.

MR. DUNLAVEY: Under what conditions?

MR. FAMARISS: How do you mean?

MR. DUNLAVEY: You develop a heat of 180 degrees.

MR. FAMARISS: We don't heat.

MR. DUNLAVEY: In hot water?

MR. FAMARISS: No, steam. Subject your centrifuge to the steam. Subject your mass before you pour it in to steam.

MR. DUNLAVEY: And you come up with?

MR. FAMARISS: That depends upon what we were sampling. If sampling an unclean bottom, we might come up with sixty per cent water, thirty per cent of a paraffine - natured thick mass, and ten per cent of what could be construed to be oil.

MR. DUNLAVEY: I see. If it please the Commission. About eighty-five per cent of the operators have asked and petitioned the Commission that this proposed order be adopted. I would like to ask Mr. Famarriss if he is an oil producer in Lea County?

MR. FAMARRIS: No, I am not.

MR. DUNLAVEY: Thank you.

MR. KELLY: I am an independent. I would like Mr. Famarris to clarify a statement he just made. I didn't sit in on the Lea County Operators Committee order. But Mr. Famarris has stated that one producer can clean his own tank bottoms, circulate that good oil back into other tanks and sell to a pipe line, or he can hire a service company to do that job for him.

MR. FAMARISS: Sure.

MR. KELLY: What if a producer doesn't want to do either?

MR. FAMARISS: What do you mean?

MR. KELLY: Will you drive your service outfit 150 miles to service a tank bottom?

MR. FAMARRIS: Yes, if there be sufficient oil.

MR. KELLY: In other words, you are stating that the independent operator has to hire at a high fee someone to service his oil that would not be worth the ~~service~~ ~~his oil that would not be worth the~~ service charge?

MR. FAMARRIS: No.

MR. KELLY: You state a producer that does not wish to--suppose a man with a one-well lease. The way he cleans his tank is get his run the best he can and drag the residue out on the ground. He can't do that you think?

MR. FAMARISS: If that was the inference that was made it was certainly unintentional. If there is an allowable charge back--that by virtue of its going into a reclamation market--the charge back is established by any other disposition agreement, including the district, is not charged back against the operator.

MR. KELLY: In order to further clarify it, would you please read through it again?

MR. FAMARISS: Yes, sir.

COMMISSIONER MILES: I think if you will just strike out the words he wants deleted you can read it.

MR. KELLY: All right, sir.

MR. MORRELL: I would like to interject a thought. That the suggestion that Mr. Famarris has made for deletion is rather academic inasmuch as every lease operator has that right under his lease instrument to use oil produced on the property on the leasehold. And that is all that phrase means. As I would take it, the primary purpose is that there would be nothing under this proposed order to prevent an operator from doing what he could do to take a tank bottom and put it on the leasehold.

MR. FAMARISS: But then if there is a tank cleaning order--do you believe that there should be exceptions to the tank cleaning order?

MR. MORRELL: It wouldn't make any difference whether it is in the order or not. Actually this is for transporting and reclamation, and if you use it on a leasehold, you are not doing anything that comes under this order.

MR. KELLY: Would you answer this? If the tank bottom goes into a reclamation market, a tank cleaning permit must be secured, but if anyone else--but if anything else is done with it, it is not necessary to secure one, and there is no allowable charge back.

MR. MORRELL: I think you have a point there. And right along that line, I want to suggest something that may answer Mr. Famarris' proposal. We have a reference under rule 2, (d) to the treating of tank bottoms on the lease. Now, that is the only reference that I find, by quick observation, throughout the whole order to a lease. It occurred to me--the thought I had was to possibly include in the reference clause in the third paragraph, "the following rules and regulations are hereby adopted to govern, regulate and control the cleaning of all tanks used in the handling, production, and/or measuring, and storing of crude oil in the State of New Mexico, the processing of tank bottoms, the construction and operation of treating plants, and the picking up" and insert after "picking up" "the removal from the leasehold on which such oil was produced."

MR. FAMARISS: Then what, Mr. Morrell?

MR. MORRELL: The reclamation from the leasehold on which such oil is produced. This would be an order authorizing that reclamation from the leasehold. I think that would take care of the point that you have in mind.

MR. FAMARISS: Really what I tried to bring out--I can't say in so many words--was that in order to do business with the reclamation plant, the operator suffers a penalty. And that is the way I construed that to be. In other words, the order applies when it hits a reclamation plant, but when not, it doesn't. Naturally,

it goes back to the same argument I have put before the Commission for the last year, that no producer will sell me something for twenty-five cents a barrel that he can dispose of and draw two and a half dollars from the well and market.

MR. KELLY: Mr. Morrell, here, clears up the point I was bring up. That the operator have the full right to use his oil anyway he wants to on the lease.

MR. FAMARISS: Oh, yes.

MR. MORRELL: I would like to ask one further question.

Under this circumstance to which you refer, an operator could clean his own tanks and place the merchantable oil in a pit and that pit oil could be transported to this reclamation....?

MR. FAMARISS: No, that is covered in that order. He still has to have a charge back, whether picked up from the tank or pit. What I was trying to get at is that there was no tank cleaning order involved until it was brought to a reclamation plant.

MR. MORRELL: What did you say about putting merchantable oil into a pit?

MR. FAMARISS: I said a tank could be drawn off into a pit and burned and no charge back.

MR. MORRELL: But should the producer choose to sell it into the market, then he has to go through a tank cleaning permit?

MR. FAMARISS: And A.P.I. test of the emulsion and allowable charge back.

MR. MORRELL: Or if removed from the leasehold?

MR. FAMARISS: In other words, what I am trying to imply is that in order to do business with a reclamation plant an intentional penalty is assessed against the producer that would remove the producer from the market entirely. If I am wrong, I would be very happy to be advised of it.

MR. DEWEY: It is the purpose and intent on the part of the operators in inserting this requirement that operators make application for disposal of tank bottoms off the lease.

We have been operating in Lea County since 1928, and up until the last six months we have done a pretty good job without reclamation plants, and I don't know of any waste oil that hasn't been taken care of by the operators. And the purpose or intent of this order is that if the operator wishes to dispose of his oil that he file an application and obtain a permit, and that is the guts of the whole order. COMMISSIONER MILES: Have you any further statements, Mr. Famariss?

MR. FAMARISS: Yes, I have some I would like to make, please sir. Under Rule 2, Section a in the fourth line. The word "bond" that it be preceded by the word "surety".

COMMISSIONER MILES: What is that again?

COMMISSIONER SPURRIER: I don't find that.

MR. DEWEY: At the foot of the page in Section c.

MR. FAMARISS: No, it is in the second paragraph under Section a, the fourth line out towards the end. It says "approval of bond". Insert the word "surety." It is in section c. It was omitted in that other one.

COMMISSIONER MILES: What is your comment?

MR. FAMARISS: That that word "surety" be inserted preceding the word "bond" to further clarify it. This order as suggested, I believe in the test provision, stated that a reclamation plant operator would have to come up once a year and petition for a hearing and come before the Commission and go through the expense and procedure that originally included getting a permit. I would like to suggest to the Commission that in lieu of that that some provision for a renewal by consent be placed in the order. And as a suggestion--this was very hurriedly written and there may be a loophole in it-- that the following words be added to Rule 2, Section a, fourth paragraph, "Renewal of permit may be secured by consent of the Commission for an additional period of one year without the necessity of additional hearing or notice."

MR. GRAHAM. By inspection and recommendation? It occurred to me by inspection of your plant and a recommendation by somebody.

MR. FAMARISS: That would be a good idea. By inspection of the operation. In other words, that the Commission satisfy themselves that the operation is legal and properly operated. I would like also to have a clarification for my benefit that should the Commission adopt this suggested order of the operators, would it

mean that my operations are permitted to go on for one year past the date of adoption of the order? Should No. 726, which is my permit to operate-- it has no time limit in it. And how would it be construed upon the adoption of this order? COMMISSIONER SPURRIER: Is there someone from Lea County Operators that could answer that question?

MR. DEWEY: I think it would be a matter for the Commission to decide.

MR. SETH: It probably would extend a year.

COMMISSIONER SPURRIER: And while we are talking and getting comments, how about Mr. Famariss' question that he just raised on this fourth paragraph. What is any operator's comment on that?

MR. DEWEY: We thought that this paragraph has covered that situation, and that the plant operator should come back once a year and renew their permit. Give the Commission a chance to review the matter.

COMMISSIONER SPURRIER: By what specific method, Mr. Dewey? Open hearing before the Commission or inspection of his plant by some employee of the Commission or some other means?

MR. DEWEY: Well, that is left to the discretion of the Commission. How they would care to handle that.

MR. FAMARISS: Then the opinion seems to be that the order as existing-726--would continue for one year past the date of adoption of this order.

MR. SETH: Isn't that subject to the third paragraph?

MR. FAMARISS: That is why I asked for an opinion.

MR. CARD: Your present order would be subject to the hold orders as stated in Section 2, a.

COMMISSIONER MILES: Is this being discussed for the benefit of the Commission, or is it a private hearing? I am not getting a word of it.

COMMISSIONER SPURRIER: Are you getting it, Gomp?

THE REPORTER: Yes.

MR. FAMARISS: Judge Seth, would you care to discuss this?

MR. SETH: My opinion is that the new order doesn't apply to him until a year after it is issued. He has a year after that time.

MR. FAMARISS: I wanted that part. If those changes in the order suggested-- particularly the deletion and clarification of the method of renewal, whatever it may be--in other words, clarify that. I would like to concede my argument of a no allowable charge back. I haven't changed my opinion about it, nor have I in any manner changed my thoughts as to what is right and wrong. However, this controversy can't go on forever, and if the Commission pleases, and it is agreeable to make those changes which I have suggested, I would like the Commission to know that the order is acceptable to me. Without the revisions which I have suggested, I have two thoughts. One, the matter be continued. That covers them both anyway.

COMMISSIONER MILES: Let's go back to this "d" under Rule 1. Was there ever any conclusion with regard to whether these words should be deleted from the paragraph?

MR. SETH: I believe they should be left there, if the Commission please. Because the oil can be used on the lease. There is no question about that.

MR. SANDERSON: Engineer of production of the Gulf Oil Corporation. I think it is very important that statement "d" be left in the order. For the reason that we would like the right to use the bottoms, what remains after the--for the purpose of use on the lease, for roads, and any other purpose we see fit to use it for.

COMMISSIONER MILES: That is the manner in which it has been handled prior to the time of any order. The way you choose to do so now. Mr. Famariss, what is your objection to the words?

MR. FAMARISS: That in order to do business with the reclamation plant, the operator must file a tank cleaning permit. He must make a very exacting shakeout of his emulsion and he must charge it back against his allowable. But if he doesn't do business with the reclamation plant, then none of the provisions of the order apply.

COMMISSIONER MILES: Any dispute on that matter?

MR. SANDERSON: None of the oil could be used without a permit. I can't understand Mr. Famariss' objection. It can't be taken away. And as Mr. Morrelli suggested, the basic lease has given you the right to use it for any purpose you want to use it for. I can't see how there will be any waste or any chance of anyone marketing

oil not accounted for.

MR. FAMARISS: If the basic lease gives the right to use the oil for maintenance of the lease, why is it necessary to further state it in this order?

MR. SANDERSON: This is simply for clarification. Because the lease is subject to the orders of the Commission.

MR. MORRELL: In connection with Mr. Famariss' statement about the necessity of a producer, in order to do business with a reclamation plant, as compelled to get a permit, I would like to add for his information and the information of the operators on public lands that they will also have to come to us in addition to the State. It is provided in the regulations that no oil should be taken off a lease without an approved sales contract, diversion order, or other arrangement first approved. And in that same paragraph it is set forth here for clarification purposes, similar to the manner in which it is included in this proposed order that all contracts for the disposition of production on the leased land, except that portion used for purposes of production on the leased land. We have that same type of provision in our regulations. It is merely for clarification in this proposed order. I believe--I see no objection to it.

MR. FAMARISS: If there is nothing else, I have one more piece of information.

MR. LOVERING: Shell Oil Company. Mr. Famariss stated that it would be an imposition on the operators to make out these permits, etc, and get rid of the oil off the lease. The operators together made up this resolution here and knowing that it would cause them additional paper work to handle their oil, and even knowing that, were unanimous in their agreement in having this thing presented to the Commission as it is. It is also inferred by Mr. Famariss that since we are going to be penalized on that little detail we should be penalized on all tank cleaning operations which are normally much greater than treated by an assayer. I don't think it is necessary, and I recommend that paragraph (d) be left in.

MR. FAMARISS: I have this other information to place in the record.

COMMISSIONER MILES: Yes.

MR. FAMARISS: In the hearing of the Commission in the Case 104 and 110, October 15, 1947, the controversy of allowable charge back or no charge back was propounded at quite some length before the Commission. The Commission made the suggestion at that time--I believe if I am correct it came from Governor Mabry--that a committee be appointed of the industry to examine the controversy. Included on that committee, Mr. Spurrier, was a pipeline company, a major oil company, a gasoline plant, an independent operator, a refinery, the United States Geological Survey, and Lea County Operators. That committee met on October 31 and transmitted to the Commission on November 3 a suggested order. I don't believe that this has ever been made a matter of a hearing record, and for that reason I would like to present it. I think everybody here is acquainted with the order. I would like to present it and have it made a part of this hearing. These are my originals from my files. Will you need these?

COMMISSIONER SPURRIER: No, we have copies.

MR. FAMARISS: That is all I have.

MR. SETH: If the Commission please, the proposed order that Mr. Famariss referred to was never circulated among the operators. And we don't know whether or not the committee that prepared the proposed order were representatives of all the producers involved--purchasers, producers, tank cleaners. The suggestion made by Mr. Morrell about going off the lease. We thoroughly approve that. To limit the scope of the order.

COMMISSIONER MILES: Anyone else have any statements regarding this matter?

MR. DEWEY: I discussed this matter of the amount of heat that should be applied in a centrifuge test with our Chief Pipeline Gauger, and he expressed the opinion to me that if you had to heat it much above 120 degrees you get a lot of material that would settle out as soon as the temperature was reduced. That is, the lighter oil--elements of the oil were driven off by the heat and just the heavier hydrocarbons were left, and that from the pipeline standpoint they were not interested in having somebody try to sell them some oil that had been subject to too much heat. It had been their experience where they had taken oil of that nature that as soon as the oil had cooled down that it settled out in the first tank along the pipeline system, and

they had paid for something that they would have to--that they couldn't get down to the refinery. And it would tend to fill up their tanks and cost them money to dispose of. So, I don't know whether that is permissible evidence or not in this hearing. I have no experience myself about the matter. It is just the opinion he expressed to me about it.

MR. FAMARISS: You say the oil then above the solid mass would be considered merchantable oil?

MR. DEWEY: I would think that is the case. But as I say, I have no experience outside of his statement to me to justify it.

MR. FAMARISS: I would like to make a statement that we in processing tank bottoms that we sell no pipeline oil. Tank bottoms are not sold for crude oil. They are sold and shipped in tank cars to chemical companies for the recovery of waxes. Not one barrel of tank bottoms we have produced ever entered the crude oil market. The price is higher for wax purposes.

COMMISSIONER SPURRIER: What do you do with the crude oil after treating it?

MR. FAMARISS: Our operation is the dehydration and the clearing up of sediment, and then shipping the entire mass, which includes the wax and pipeline oil. And our experience is that that oil is somewhere between 10 and 20 per cent. We can't get it out. If we had a cracking unit we could. But there is no practical way to do it in the field. It goes to Kansas from Hobbs on our operation at the present time. The freight rates on that oil into Kansas run somewhere in the neighborhood of \$1.27 and they receive on the Kansas market after distillation of the crude \$1.75 for it. So, you see there is no economic value in handling that crude oil.

COMMISSIONER SPURRIER: There is some in it, but you include it with your shipment?

MR. FAMARISS: Yes, but it is impossible to get it out.

MR. DUNLAVEY: Are you talking about pipeline tank bottoms?

A. Yes.

MR. DUNLAVEY: You are not talking about stock tank bottoms?

MR. FAMARISS: Yes.

MR. DUNLAVEY: You should clarify yourself.

MR. FAMARISS: I did, I said that my statement was for the information of the Commission and the operators on our present tank bottom operations. And we take no producing tank bottoms at all.

COMMISSIONER MILES: Anyone else wish to be heard on this matter? Any other business before this Commission?

COMMISSIONER SPURRIER: May I ask a question before the case is closed? Mr. Dewey, in connection what you said. When is the classification of your oil taken?

MR. DEWEY: They go right to the lease stock tanks. The pipeline gauger does.

COMMISSIONER SPURRIER: And all oil is bought on a classification basis?

MR. DEWEY: That is right.

COMMISSIONER SPURRIER: I might add something to the record....I must add something to the record. W. C. Garand, attorney for Hardin-Houston, addressed a letter to the Commission regarding this case, and he stated that Hardin-Houston had no objection to the order proposed by Lea County Operators. While I don't have the letter right here, we will make that a part of this record.

COMMISSIONER MILES: I assume there is no objection from the operators to that?

MR. DEWEY: I have no objection.

COMMISSIONER MILES: Any other business? Mr. Morrell wanted to make a statement, I believe.

MR. GRAHAM: It was on a previous case.

MR. McCORMICK: It was in 152 that Mr. Morrell wanted to make a statement.

COMMISSIONER SPURRIER: Mr. Morrell, before you start, do you want this for the record?

MR. MORRELL: That would be as the Commission pleases. They may enter it if they so desire for consideration. This would be an extension of my remarks under Case No. 152 on the application of Grayburg. Based somewhat on the request made by Judge Seth for further consideration by the Lea County Operators. This morning I mentioned a distinction between plant cooperative unit operations as contrasted with those of an operator solely operating on his own lease. Reviewing the history of a cooperative unit agreement as affecting the Federal lands, which the Grayburg application does, the department does not approve any unit or cooperative agreement of producing pro-

perties unless some action is taken over and above normal operations. By that I mean a secondary recovery project. That is the basis on which the Grayburg cooperative and unit agreement was approved by the Department of the Interior. They agreed to a single operator for the unit area and to install a plant to inject gas, which they have done in approximately nine different wells, and at the present time are injecting into five. The matter of unitizing 40 acres in connection with the drilling of unorthodox wells has now been before the Commission for several years. We have several in the Grayburg and Square Lake pools in which a third well is drilled on 80 acres and those two 40's are communitized. The 80-acre unit is to receive more than twice the top unit allowable to be distributed among the three wells, as the operator sees fit. We have others in the east end of the Maljamar field involving 160-acre tracts. So, the basic principle of unitizing for proration purposes is approved, but in all cases still limiting those units, whatever their size, to the top unit allowable per 40 times the developed 40 acres. I have observed for a number of years a situation under our present proration plan of the Commission that as we approach stripper conditions in the older areas, that production on some leases is actually done on a lease basis by virtue of the collecting of oil from three or four or more wells into a single tank battery. The effect being that the actual amount of oil from each individual well is not made of record. Well, that situation has made it very unfortunate and undesirable for record purposes in connection with secondary recovery situations. The operators found that to be true in the Maljamar, in the Vacuum studies. In connection with the studies of a proposed secondary recovery in the north end of the Langlie-Mattix pool. It seems to me that if this basic lease allowable for a stripper production could be actually set forth by the Commission, we may be able to have official records in the State shown in such a manner that the engineering data is available for secondary study purposes. That particular statement goes beyond the intent and purpose of this particular case. That is merely made for information purposes. In the instant case of the Grayburg, they have an approved agreement. They have a plan for the drilling of 28 wells. If we can get additional expenditure of capital for the recovery of oil, I think we should encourage it. The only objection that I could see--rather, the point that the Lea County Operators would be interested in--would be how they would be adversely affected by an order on the Grayburg. And so long as the Grayburg order is limited, not in excess of a top allowable, the Lea County Operators would not be adversely affected any more than they had been in the past when all wells were a one well to a 40 and were top allowable wells. They will endeavor to keep the total production up to top production by virtue of the additional wells. I would suggest that you encourage the additional drilling of five-spot wells on unorthodox locations, as they may be called, in Lea County, might be considered on a somewhat similar basis, otherwise we will not obtain all the oil that could be otherwise recovered. I believe that I have nothing further. I believe that is about the sum and substance of the thoughts I have. There may be some questions. If the Lea County Operators have any at the present time I would be glad to endeavor to add to it.

COMMISSIONER MILES: Anyone wish to ask Mr. Morrell any questions relative to the matter?

MR. LOVERING: What becomes the limiting factor in the number of unorthodox wells on any particular sized unit? As you say, we admit that every well you get down might get another barrel of oil, but where is the limiting factor?

MR. MORRELL: You mean as to the total number of wells to be drilled?

MR. LOVERING: What would keep you from having three or four unorthodox wells on one 40 for that matter?

MR. MORRELL: I don't see any limiting factor except the economics involved.

MR. LOVERING: Who would determine that?

MR. MORRELL: The operator. For instance, we have right now in the Russell pool--20-28--five wells to the 40. We are using one 40 acre unit allowable for the five wells. If we have a basic lease with eleven productive 40-acre tracts, we would have 11 times 40 barrels for the basic lease allowable. That is the most that that lease might be produced. It would not make any difference it seems to me to the Lea County Operators whether it was produced out of 11 wells or 44 wells.

MR. LOVERING: It might make some difference to one party who shows and thinks it is more economical to produce with a dozen wells than twenty-four. He might have to drill and produce from each of these offset operators, put in all those unorthodox locations.

MR. MORRELL: We have that exact procedure in effect in the Fren pool in 7-31. Max Friess came to us several years ago and said to us in his opinion he could drill two wells to the 40 in the seven Rivers pay. In order to work out a well-spacing pattern so that it would be in a universal manner, and that is one of the things that should be done and considered in any of these type of well spacings--we called a meeting of the operators--Danciger, Skelly, Fren, and one or two individuals. We worked out and approved two wells to the 40 to the Seven Rivers pay. With that approved, we set up also a well-spacing pattern for Skelly and Danciger on adjoining leases. They did not desire to drill two to a 40. At that time they considered it uneconomic. Our approval was given to Fren Oil Co. with the understanding that it did not require an offset to the second well by the adjoining operators. They would have the same privilege and same right to follow the same spacing pattern, but it was left to them. They have since followed it and are drilling 20-acre wells. Danciger is.

COMMISSIONER MILES: Gentlemen, I am sure that this is a matter of great interest to all, but as far as what it will accomplish here at this time, I can't see. I think it should be called at a meeting of the operators and discussed at some future time.

MR. MORRELL: The only reason I mention it here at the time is you might want to hear it.

MR. COCHRAN: The Grayburg has outlined a specific program. This thought has occurred to me. As Mr. Morrell has said, in some instances there have been 4 wells drilled on a 40-acre tract. In many instances, 5 wells on a 160 acre tract. In the proposed drilling of the Grayburg wells, this situation may occur. That on 160-acre tracts there may be four wells of which three wells are top allowable wells. And the fourth well doesn't quite make top allowable. And in this spacing pattern, I believe the five-spots are located about 25 feet south and 25 feet east of the center of the 160. Well, undoubtedly the Grayburg, if it happened that the second well on a 40 fell on a 40 that there was a well that would make top allowable, then they would have to come in in order to produce top allowable from 4 wells out of 5 wells, and either ask that that location be moved 50 feet to the 40-acre tract where there was a well that didn't quite make allowable, or they would have to go through this cooperative unit and file with the Commission and ask permission to unitize each 160-acre tract. So that they could produce the allowable for four wells out of five wells. If they are not permitted to do it on a lease basis, then that can destroy to a certain extent the spacing pattern and some of the wells may have to be changed.

COMMISSIONER MILES: Anything else?

MR. COCHRAN: One more thing. On using 160-acre units. That would mean that every other five-spot would have to be eliminated because there would be a five-spot in between.

COMMISSIONER MILES: I lost the first part of that statement.

MR. COCHRAN: I say if it is necessary in order to produce this allowable from 160 from 5 wells, then every other five-spot location would be affected in that there will be a five-spot between the north row of wells on a 160, and the South row of wells on the adjoining 160. So a number of those might have to be eliminated.

COMMISSIONER MILES: Does anyone else have a statement to make? If not, the Commission will be adjourned.

C E R T I F I C A T E

I HEREBY CERTIFY that the foregoing transcript of the afternoon proceedings before the Oil Conservation Commission of the State of New Mexico in Santa Fe on July 29, 1948, is a true record of such proceedings to the best of my knowledge, skill and ability.

I FURTHER CERTIFY that I am the Official Reporter for the United States District Court for the District of New Mexico.

DATED at Santa Fe August 9, 1948.

LEA COUNTY OPERATORS COMMITTEE, HOBBS, N.M.
AUGUST 13, 1948

E. E. Greeson
COURT REPORTER

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

CASE NO. 156
ORDER NO. 784

THE APPLICATION OF THE OIL CONSERVATION
COMMISSION UPON ITS OWN MOTION FOR AN
ORDER GOVERNING GAS OIL RATIOS FOR LEA,
EDDY AND CHAVES COUNTIES.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 10:00 A.M. on July 29, 1948 at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico herein-after referred to as the "Commission".

NOW, on this 10th day of September 1948, the Commission having before it for consideration the testimony adduced at the hearing of said case and being fully advised in the premises;

FINDS:

1. That the Commission has jurisdiction in the matter.
2. That the order herein is reasonable and necessary in the material curtailment of avoidable underground and surface forms of waste affording the owner of each property in a pool in the respective counties, the opportunity to produce his just and equitable share of the oil and gas by using his just and equitable share of the reservoir energy of the pool within the meaning of the gas and oil conservation law in Chapter 72, Laws of New Mexico, 1935, taking into consideration all pertinent factors applicable to the various fields; such as age, state of depletion, character of producing formations, water and gas drive, application of gas to beneficial use, and the returning of gas to the formations for storage, repressuring and pressure maintenance projects.

IT IS THEREFORE ORDERED:

That the Order herein amending Order No. 712 shall be applicable to the pools in Lea, Eddy and Chaves Counties, New Mexico and shall be known as the:

LEA-EDDY-CHAVES COUNTIES NEW MEXICO GAS-OIL RATIO ORDER
(AS AMENDED SEPTEMBER 10, 1948)

1. (a) The proration unit shall be the unit of proration as defined by the State-wide Proration Order (with deep-pool adaptation).
- (b) A marginal unit is; for pools having no special proration plan, a proration unit that will not produce the top unit allowable as in the State-wide Proration Order (with deep-pool adaptation); and for pools having such plans, a proration unit that will not produce the acreage factor allowable thereunder-both during the Gas-Oil Ratio Test.
- (c) A non-marginal unit is; for pools having no special proration plans, a proration unit that will produce the top unit allowable as in the State-wide Proration Order (with deep-pool adaptation); and for pools having such plans, a proration unit that will produce the acreage factor allowable - both during the Gas-Oil Ratio Test.

(d) The top unit allowable shall be as in the State-wide Proration Order (with deep pool adaptation).

(e) The gas-oil ratio of a proration unit shall be the total net formation gas produced with the oil from such unit divided by the total net barrels of oil so produced during the Gas-Oil Ratio Test.

(f) The limiting gas-oil ratios for the various pools shall be as in Section 2 hereinbelow.

(g) A high gas-oil ratio unit shall be a proration unit that exceeds the limiting gas-oil ratio prescribed for the pool in which such unit is located.

(h) A low gas-oil ratio unit shall be a proration unit that does not exceed the limiting gas-oil ratio prescribed for the pool in which it is located.

(i) The gas-oil ratio adjustment shall be as in Section 3 hereinbelow.

(j) The unadjusted allowable shall be the allowable a proration unit would receive before the gas-oil ratio adjustment is applied.

(k) The adjusted allowable shall be the allowable a proration unit receives after the gas-oil ratio adjustment is applied.

(l) The Official Gas-Oil Ratio Test applicable shall be such Test designated by the Commission, made by such method and means, in such manner, and at such periods as the Commission in its discretion may prescribe from time to time. That a definite schedule be worked out by the Commission for conducting and submitting such tests of wells in each pool within the counties aforesaid and the making and the filing with the Commission the report of such official gas-oil ratio tests shall be construed a part of such tests. The Commission will drop from the proration schedule any proration unit for failure to make such test as hereinabove described until such time as a satisfactory test has been made or full or proper explanation given.

2. (a) The limiting gas-oil ratios in cubic feet per barrel for the following pools shall be to wit:

<u>POOL</u>	<u>GAS OIL RATIO LIMIT</u>	<u>COUNTY</u>
Anderson	2000	Eddy
Arrowhead	3500	Lea
Artesia	2000	Eddy
Atoka	2000	Eddy
Barber	2000	Eddy
Benson	2000	Eddy
Blinebry	2000	Lea
Brunson	2000	Lea
Burton	2000	Eddy
Caprock	2000	Chaves & Lea
Cass	2000	Lea
Comanche	2000	Chaves
Corbin	2000	Lea
Culwin	2000	Eddy
Daugherty	2000	Eddy
Dayton	2000	Eddy
Dayton, East	2000	Eddy
Drinkard	2000	Lea
Dublin	2000	Lea
Eaves	2000	Lea
Eighty-four Draw	2000	Lea
Empire	2000	Eddy
Eunice-Monument;		
Eunice portion	6000	Lea
Monument	3000	Lea
Eunice, West	2000	Lea

<u>POOL</u>	<u>GAS OIL RATIO LIMIT</u>	<u>COUNTY</u>
Fenton	2000	Eddy
Forrest	2000	Eddy
Fren	2000	Eddy
Getty	2000	Eddy
Grayburg-Jackson	4000	Eddy
Halfway	2000	Lea
Harrison	2000	Lea
Henshaw	2000	Eddy
High-Lonesome	2000	Eddy
High-Lonesome South	2000	Eddy
Hobbs	3500	Lea
Jones	2000	Lea
Lea	2000	Lea
Leo	2000	Eddy
Loco Hills	3000	Eddy
Lovington	2000	Lea
Lovington, West	2000	Lea
Lusk, East	2000	Lea
Lusk	2000	Eddy & Lea
Lusk, West	2000	Eddy
Lynch	2000	Lea
Lynch, North	2000	Lea
Maljamar	3000	Eddy & Lea
Maljamar, North	2000	Lea
Maljamar, South	2000	Lea
McMillan	2000	Eddy
Paddock	2000	Lea
PCA	2000	Eddy
Pearsall	2000	Lea
Premier	2000	Eddy
Red Lake	2000	Eddy
Roberts	2000	Lea
Roberts, West	2000	Lea
Robinson	2000	Eddy & Lea
Russell	2000	Eddy
Salt Lake	2000	Lea
San Simon	2000	Lea
Shugart	2000	Eddy
Shugart, North	2000	Eddy
Skaggs	2000	Lea
Square Lake	2000	Eddy
Tonto	2000	Lea
Turkey Track	2000	Eddy
Young	2000	Lea
Vacuum	2500	Lea
Watkins	2000	Lea
Weir	2000	Lea
New & undesignated pools	2000	

(b) No limiting gas-oil ratio shall be applied in Hardy, Penrose-Skelly, Langlie-Mattix, Rhodes Oil Pool, Cooper-Jal, and South Eunice pools in Lea County, (see order 633) and Scanlon in Eddy County, now primarily gas reservoirs. Provided that the oil produced with the gas shall not be in excess of the current top unit allowable; and provided further that the gas produced from said pools shall be put to beneficial use so as not to constitute waste, except as to proration units in said pools for which there are not facilities for the marketing or application to beneficial use of the gas produced therefrom. As to such proration units the limiting gas-oil ratio in effect immediately prior to the effective date of the order herein shall apply. As to said pools, gas-oil ratio tests shall be required only when the Commission within its discretion may from time to time indicate.

3. The system of gas-oil ratio control shall be that of volumetric control, whereby the current oil allowable for a proration unit, under the provisions of the State-wide Proration Order (with deep-pool adaptation), is adjusted by reason of exceeding the corresponding limiting ratio hereinabove describeu, in accordance with the following formula:

(a) Any proration unit which, on the basis on the latest official gas oil ratio test has a gas oil ratio in excess of the limiting gas oil ratio for the pool in which it is located shall be permitted to produce daily that number of barrels of oil which shall be determined by multiplying the current top unit allowable by a fraction, the numerator of which fraction shall be the limiting gas oil ratio for the pool and the denominator of which fraction shall be the gas oil ratio of said proration unit as determined by the latest official gas oil ratio test.

(b) "Any unit containing a well or wells producing from a reservoir which contains both oil and gas shall be permitted to produce only that volume of gas equivalent to the applicable limiting gas-oil ratio multiplied by the top unit oil allowable (deep pool adaptation) currently assigned to the pool, to be effective in all pools in New Mexico where the gas-oil ratio is limited by Commission Order. This will place all producing wells, whether oil or gas, in these pools on the proration schedule."

(c) A marginal unit shall be permitted to produce the same total volume of gas which it would be permitted to produce if it were a non-marginal unit.

(d) From the pool allocation shall be deducted the amount of oil allocated to marginal units and high gas-oil ratio units, then the remaining oil shall be distributed to the low gas-oil ratio units, within the same pool in accordance with the pool proration plan.

(e) All gas produced with the current oil allowable determined in accordance with this order shall be deemed to have been lawfully produced.

4. No proration units within a repressuring or pressure maintenance project area, where 65% available residue of the total gas withdrawal is returned to the formation shall be affected by the limiting ratios of this order. Such areas shall be those set out by the Commission by Order upon hearing as provided by law.

5. All proration units to which gas-oil ratio adjustments are applied shall be so indicated in the Proration Schedule with adjusted allowables stated.

6. The order herein supersedes Orders 237,250,545,650 and '12.
This order shall become effective on the first day of the proration month next succeeding the month in which said Order is adopted.

7. That jurisdiction of this case is hereby retained by the Commission to approve schedules of time and manner of taking and reporting gas oil ratios for wells in the separate pools of Lea, Eddy, and Chaves Counties and for other purposes connected therewith.

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

OIL CONSERVATION COMMISSION

CHAIRMAN

John E. Miller

MEMBER

L. R. Garrison

SECRETARY