

MAIN OFFICE 600
PHILLIPS PETROLEUM COMPANY

1004 JUL Amarillo, Texas
July 1, 1954

Mr. W. B. Macey
Chief Engineer
New Mexico Oil Conservation Commission
Santa Fe, New Mexico

Re: Proposed Gas Proration Order,
Lea County, New Mexico

Dear Sir:

Transmitted herewith is the proposed Lea County Gas Proration Order which you were kind enough to lend me.

In connection with this order I have a few suggestions which I believe would make the order more complete with respect to administration. I have made no suggestions with respect to pool delineations, since such delineations are subject to the interpretation of the testimony presented.

On page 15 under Rule 5 (a) in the first paragraph, I would suggest that the paragraph be changed to read as follows:

"RULE 5.(a) The acreage allocated to a gas well for proration purposes shall be known as the gas proration unit for that well. For the purpose of gas allocation in the Jalmat Gas Pool, a standard proration unit shall consist of between 632 and 648 contiguous surface acres substantially in the form of a square which shall be a legal subdivision (section) of the U. S. Public Land Surveys, with a well located at least 1980 feet from the nearest property line; provided, however, that a non-standard gas proration unit may be formed after notice and hearing by the Commission, or under the provision of Paragraph (b) of this Rule."

I believe that this additional language with respect to well location will prevent any attempt to assign 640 acres to a well located only 660 feet from the nearest property lines.

On page 15 under Rule 5 (a) I would suggest that the second paragraph be changed to read as follows:

"The allowable production from any non-standard gas proration unit as compared with the allowable production therefrom if such tract were a full unit shall be in the ratio of the area of such non-standard proration unit to 640 acres."

I believe that this change will make the application of the rule clearer without regard to the type of allocation formula adopted, so long as such allocation formula contains acreage in each term of the proration formula.

With respect to this same Rule 5 (a) I would suggest an additional paragraph which would read as follows:

3 "In establishing a non-standard gas proration unit the location of the well with respect to the two nearest boundary lines thereof shall govern the maximum amount of acreage that may be assigned to the well for the purposes of gas proration. The maximum acreage which shall be assigned with respect to the well's location shall be as follows:

<u>Location</u>	<u>Maximum Acreage</u>
660' - 660'	160 Acres
660' - 1980'	320 Acres."

I believe that such a rule is necessary to prevent inequities from developing due to the location of wells previously drilled to other horizons which may be re-completed in the particular gas field.

On page 20 under Rule 13, the last paragraph appears to exempt from consideration any gas used on the lease, regardless of the purpose for which it is used. I would therefore recommend that this paragraph be changed to read as follows:

"The full production of gas from each well shall be charged against the well's allowable regardless of what disposition has been made of the gas; provided, however, that gas used for the purposes of producing the particular well in question shall not be charged against the well's allowable."

Mr. W. B. Macey

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July 1, 1954

I believe that this will more clearly comply with the intent that gas used for compression or used in cleaning the wells shall not be charged against the well's allowable, since such use is often necessary in the production of gas wells.

I appreciate your consideration in giving me this opportunity to comment on the proposed order and feel that generally the order is a very good solution to the complicated problem of placing old gas fields on production. If there is any way that I may be of assistance in regard to matters other than those I have mentioned, I would appreciate hearing from you.

Very truly yours,

M H Cullender
M. H. Cullender

Enc.
MHC:fe



Case 673
MAIN OFFICE OCC

CONTINENTAL OIL COMPANY

FAIR BUILDING
FORT WORTH 2, TEXAS

H. L. JOHNSTON
REGIONAL MANAGER OF PRODUCTION
SOUTHWESTERN REGION

May 21, 1954

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

Attention of Mr. R. R. Spurrier

Gentlemen:

Re: Case 673 - New Mexico
Oil Conservation
Commission Docket

It will be recalled that because of the extreme shortage of time the Commission was compelled to close the hearing in the subject case on May 11, 1954, without all operators having explained their respective positions as fully and completely as they may have desired, and that in recognition of such fact the Commission extended an invitation to all operators who might desire to do so, to file a brief or letter more fully setting out the position of such operator filing the same. Continental Oil Company desires to hereby avail itself of this privilege.

During the latter part of the year 1950 Continental Oil Company and the other companies who are members of the New Mexico Federal Unit made a study of the geological and engineering features of the occurrence of shallow gas production in Southeast New Mexico. At the conclusion of this study the results thereof and the plats and cross sections prepared in connection therewith were exhibited to, and discussed with, the members of the then Lea County Operators Committee. Thereafter, at the April 1951 hearing of the New Mexico Oil Conservation Commission, Continental Oil Company, as operator of the New Mexico Federal Unit, presented to the Commission in Case No. 245 testimony and documentary evidence representing the results of the aforesaid study. The record of the hearing in Case No. 245 will reflect the fact that no operator offered any serious objections to any of the recommendations made by Continental Oil Company at said hearing.

Thereafter, on February 17, 1953, the Commission issued Order No. R-264, in Case No. 245, delineating, among others, the Jalco, Langmat, Arrow and Eumont pools, substantially as recommended by Continental Oil Company with some minor changes requested by other operators and to which changes Continental made no objections.

In Case No. 582 another operator attempted to prove to the Commission that the line separating the Jalco and Langmat Pools was not fully supported by geological or engineering information. Because of testimony presented in that hearing the Commission called the present hearing for the purpose of determining the proper pool boundaries and the proper rules with which to regulate the shallow gas production in the southeast Lea County area.

Continental engineers reviewed the data which had been prepared in 1950 and 1951, in addition to other information which had been made available since that time. On the basis of that study our engineers were unable to find any reason to change the pool boundaries as established by Order No. R-264.

Some comments were made, perhaps in jest, that there was some significance to the fact that until the hearing just completed the operator who had recommended the present pool delineation had not spoken in support of the present pool boundaries. Actually there was no significance to that fact other than that Continental felt it had discharged its duty by recommending the present pool delineations and was satisfied therewith. Considerable comment was made in Case No. 582 that the testimony upon which the present pool delineations is based was meager and was supported by only three exhibits. True though this charge may be, it must be remembered that all operators had the opportunity to examine our exhibits and our findings and that in Case No. 245 the operators were substantially in agreement with the pool boundaries as recommended by Continental.

In recognition of the fact that the testimony supporting the present pool delineations in Case No. 245 was not as complete as might be desired, Continental decided that it owed an obligation to the Commission to present sufficient testimony and exhibits upon which to base a sound order which would not be subject to attack in the courts. We believe we have done this.

Continental Oil Company does not desire to take a position of dogmatically defending the present pool delineations. We believe they are correct. We agree that the exact definition

of the pool boundaries is not capable of definite proof. We do believe, however, that a separation between Jalco and Langmat probably does exist and that it is in the general vicinity of the line as currently drawn.

Each witness who testified as to the geology in this particular area recognized the rapid change in stratigraphy at the crest of the reef. These witnesses virtually admitted that some separation may exist in this vicinity. It is our opinion that any communication across the reef occurs through the fact that lenses from either side of the reef have been penetrated by well bores and thus joined.

Our Mr. Bailey's testimony showed that there were practical considerations which directed the separation of Jalco and Langmat. The sulphur content of the gas between the two areas is considerably different. There has been and perhaps still is some pressure differential between the two areas, although this appears to be lessening.

Furthermore, the large number of oil producing wells as compared to the gas producing wells almost dictates that special rules and special consideration should be given to the Jalco area which need not be applied to the Langmat area.

As we indicated in our statements during the hearing just concluded, Continental will have no objection if the Commission sees fit to remove the line between Jalco and Langmat. However, we do believe that sufficient evidence is in this record upon which the Commission can issue an order preserving the present delineation of the two pools. This evidence was presented by Continental because we felt that our company owed an obligation to the Commission to provide the evidence upon which the Commission could preserve the "status quo" if it saw fit to do so.

Inasmuch as the call of the hearing included a consideration of field rules, Continental Oil Company prepared some proposed changes in field rules which we feel will facilitate gas proration in Lea County. We were prepared to present these changes by sworn testimony but were prevented from doing so by shortage of time.

The changes in field rules which we are recommending are not of major consequence and are explained as follows:

RULE 1: Substitute the words "outside the boundary" for the words "from the outer boundary". This change was made for clarification.

RULE 2: The old Rule 2 was deleted inasmuch as it is felt to be unnecessary.

RULE 2: This is the previous Rule 3 and was changed to obtain automatic approval of well locations for those wells which were drilled prior to the existing field rules in conformance with rules then in existence.

RULE 3: This is the previous Rule 4 and provides that operators requesting exception for unorthodox locations shall include in their application a list of names and addresses of all operators within a radius of 1,320 feet from applicant's well, together with a stipulation that such operators have been given notice. The waiting period before approval by the Commission has been extended from ten days to twenty days.

RULE 5: This is the previous Rule 7 and has been changed for the purpose of attempting to clarify the classification of proration units as standard or non-standard, thereby eliminating the term "unorthodox proration unit".

Paragraph (b) of this rule provides for gas proration units up to 640 acres in size which is accomplished by a requirement that the length or width of the proration unit shall not exceed 5,280 feet. The rule also provides for the consideration of lots and quarter quarter sections. The necessity of obtaining waivers from offset operators has been diminished in requirement (5) of Rule 5 (b). It is believed that this requirement adequately protects all operators who could be damaged by formation of an unorthodox gas proration unit. Requirement (6) of Rule 5 (b) provides that an operator may have a non-standard proration unit approved without waiver provided that offset operators are notified and do not object within a period of thirty (30) days. This provision is felt to be important in view of the fact that there is sometimes considerable difficulty in obtaining waivers from offset operators.

RULE 6: Paragraph (b) has been added to spell out in detail that the allocation formula is based 100% on acreage.

RULE 8: This is the previous Rule 9, and has been changed to provide that gas purchasers may file supplemental nominations, but shall not be required to do so provided that no change in their market situation has developed since the filing of the "Preliminary Nomination".

RULE 10: This is the previous Rule 11, and has been changed to provide that a well which is over produced for two

consecutive proration periods shall not be shutin if it has been brought into balance within the two such proration periods.

RULE 14: This is the previous Rule 15 which has been changed to provide that the definition of a gas well shall be any well producing with a gas-oil ratio in excess of 100,000 cubic feet per barrel of oil.

RULE 15: This rule has been added and provides that any well not classified as a gas well shall be classified as an oil well.

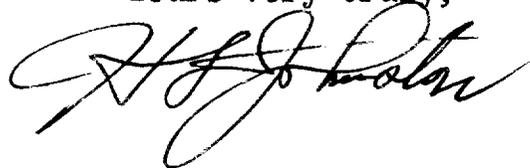
RULE 17: This has been added and provides that no gas shall be flared from the particular gas pool covered by this order.

RULE 18: This has been added and provides a limiting gas-oil ratio of 6,000 cubic feet of gas per barrel of oil and that no oil well producing from this pool shall be allowed to produce oil in excess of the normal unit allowable provided for in Rule 505. The gas-oil ratio mentioned is not particularly the recommendation of Continental Oil Company, but we feel that the proper gas-oil ratio limitation should be in the range of 6,000 to 10,000 to 1.

We should like to take this opportunity to express our appreciation to the Commission for the courtesy and consideration shown to us and the other operators during the period of time this matter has been in issue.

We should like to suggest to the Commission that an order be issued promptly, setting out the changes in pool delineations and field rules, if any such changes are to be made. Continental Oil Company is not particularly in disagreement with present pool delineations or the present field rules, however, we are anxious to get our operations working smoothly and the status of the orders and rules governing these pools must be clarified before that can be accomplished. It is respectfully requested that this statement be incorporated in the record of Case 673 and that the Commission give it proper consideration in determining the course of action which the Commission shall take.

Yours very truly,



HLJ-FD

Carbon copies to:
Oil Conservation Commission (2)
Mr. Jason Kellahin
Santa Fe, New Mexico



CONTINENTAL OIL COMPANY

FAIR BUILDING
FORT WORTH 2, TEXAS

H. L. JOHNSTON
REGIONAL MANAGER OF PRODUCTION
SOUTHWESTERN REGION

July 20, 1954

FOR
Case 673
file
MAIN OFFICE OCC
1954 JUL 25 AM 9:41

Mr. W. B. Macey
Secretary and Director
New Mexico Oil Conservation Commission
P.O. Box 871
Santa Fe, New Mexico

Dear Bill:

As you requested last week, I have reviewed in detail the proposed order in Case 673. I regret that I was unable to check back with you before leaving Santa Fe, but the additional time has given me an increased opportunity to study the rules. The following changes are suggested for clarification and perhaps some improvement.

In the caption the last line appears to be repetitious inasmuch as the Arrow, Eumont, Jalco, and Langmat Gas Pools are enumerated in the first part of the second paragraph.

On page 2, paragraph 2 of the findings, the date of Order No. R-264 is given as February 17, 1954, and the year should be 1953. The same error occurs in paragraph 3 of the findings and the date should be September 28, 1953.

On page 3, paragraph 10, the "no flare gas" provision need not include the Falby-Yates Oil Pool, inasmuch as that

pool is abolished on page 4, paragraph 11. The necessity of the Arrow, Eumont, and Jalmat Gas Pools being included in this list is doubtful, inasmuch as they are covered by Rule 404. I fail to see, however, how this repetition can be harmful.

It is noted on page 13 that the special rules are applicable only to the Jalmat Gas Pool. It appears that the Eumont and Arrow Pools also should be included in this order, inasmuch as they were a part of the same case.

Rule 2 has only one paragraph, and, therefore, the designation (a) is unnecessary. Also, the last sentence of Rule 2 appears to be excessively liberal in view of the change to a standard unit of 640 acres rather than the 160 acres contemplated at the writing of the original rules. I would suggest similar wording at a more appropriate place in Rule 5(a).

In the second paragraph of Rule 3, it is suggested that all operators within a radius of 1,980 feet of the well be notified in order to be consistent with the spacing requirements in Rule 2.

It is suggested that the second paragraph of Rule 5(a) read as follows: "The allowable production from any non-standard gas proration unit as compared with the allowable production therefrom, if such tract were a standard full unit, shall be in the ratio of the area of such non-standard proration unit expressed in acres to 640 acres."

It is also suggested that the following proviso be added at the end of the first sentence of paragraph 3 of Rule

Mr. W. B. Macey
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5(a), following the words "gas proration." "Provided, however, that any well drilled to and producing from the Jalmat Gas Pool, as defined herein, prior to the effective date of this order at a location conforming with the spacing requirements effective at the time said well was drilled shall be granted a tolerance not exceeding 330 feet with respect to the required distances from the boundary lines."

It is suggested that paragraph 5 of Rule 8 be deleted and that appropriate wording approximately as follows be added to Rule 11: "An operator desiring to increase the size of a gas proration unit shall file amended plats and forms. The proration manager shall increase the allowable of said well, effective the first day of the month following approval of said plats and forms."

In my opinion, all of the wording following the word "cancelled" in line 8 of Rule 9 should be deleted. It seems improper that allowable cancelled from under-produced wells should be distributed among the remaining wells. It is preferable that this allowable merely be cancelled entirely.

In paragraph 4 of Rule 9, the word "succeeding" should be substituted for the word "preceding" on line 4. This appears to correspond more with your intent according to my interpretations. If it is your intent to commence the allowable prior to the date of recompletion, I would suggest the wording to be

Mr. W. B. Macey
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"effective on the first day of the proration month in which such recompletion was performed."

The rules as presented to me are quite comprehensive and, on the whole, satisfactory. However, I believe that some of the changes suggested, if not all of them, would bring about some improvement. I appreciate the opportunity which you have afforded me to make comments on your proposed rules.

I should like to say, also, that you and the Commission have done a very fine job in the work to date on gas proration. We all expect some difficulties and problems to arise, but with the leadership which you have shown to this time, these instances should be kept at a minimum. I am confident that the system will go into effect with a minimum of difficulty.

Yours very truly,



V. T. Lyon
Regional Proration Engineer
Southwestern Region

VTL-IG

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MAIN OFFICE 000

PHILLIPS PETROLEUM COMPANY

LEGAL DEPARTMENT

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AND GENERAL COUNSEL

HARRY D. TURNER
GENERAL ATTORNEY

AMARILLO, TEXAS

August 20, 1954

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Re: Case No. 673, Order No. R-520
Jalco, Langmat, Eumont, and
Arrow Gas Pools, Lea County,
New Mexico

Mr. W. B. Macey
New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Dear Mr. Macey:

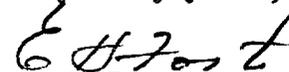
In connection with the order of the Commission of August 12, 1954 -
Case No. 673, Order No. R-520 - I would like to suggest that the
definition of a gas well as contained in Rule 14 which reads as
follows:

"A gas well shall mean a well producing with a gas-oil
ratio in excess of 100,000 cubic feet of gas per barrel
of oil,"

be changed to read as follows:

"The term 'gas well' is any well (a) which produces
natural gas not associated or blended with crude
petroleum oil at the time of production, and produced
from a common source of gas supply defined by the
Commission as a gas pool, or (b) which produces more
than one hundred thousand (100,000) cubic feet of
natural gas to each barrel of crude petroleum oil from
the same producing horizon."

Very truly yours,


E. H. Foster

EHF:fe

cc: Messrs: Harry D. Turner
L. E. Fitzjarrald
M. H. Cullender