

Case Number  
4670

Application

Transcripts

Small Exhibits

ETC.

BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
CONFERENCE ROOM, STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO  
March 1, 1972

## EXAMINER HEARING

IN THE MATTER OF: )

Application of BTA Oil Producers ) Case Number 4670  
for special gas-oil ratio )  
limitation, Lea County, New Mexico. )

BEFORE: Richard L. Stamets  
Examiner

TRANSCRIPT OF HEARING

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1 MR. STAMETS: The hearing will come to order,  
 2 please. We will proceed next with Case Number 4670.

3 MR. HATCH: The application of BTA Oil Producers  
 4 for a special gas-oil ratio limitation, Lea County, New  
 5 Mexico.

6 MR. STAMETS: Appearances?

7 MR. KELLAHIN: Jason Kellahin of Kellahin and Fox,  
 8 Santa Fe, appearing for the Applicant. We have one witness  
 9 I would like to have sworn.

10 (Whereupon the witness was sworn.)

11 MR. STAMETS: Are there any other appearances  
 12 in Case Number 4670?

13 (No response.)

14 MR. STAMETS: You may proceed, Mr. Kellahin.

15 CHARLES R. PEARSON,  
 16 was called as a witness and having been already duly sworn,  
 17 testified as follows:

18 DIRECT EXAMINATION

19 BY MR. KELLAHIN

20 Q Would you state your name, please?

21 A Charles R. Pearson.

22 Q By whom are you employed and what is your position?

23 A BTA Oil Producers as a reservoir engineer.

24 Q Have you ever testified before the Oil Conservation  
 25 Commission of the State of New Mexico?

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1 A No, sir.

2 Q For the benefit of the Commissioner, would you  
 3 briefly outline your education and experience as an  
 4 engineer?

5 A Yes, I graduated from the University of Oklahoma in  
 6 1965 and I worked for the Union Oil Company of  
 7 California for five and a half years as a petroleum  
 8 engineer.

9 I have been employed by BTA Oil Producers as a  
 10 reservoir engineer for slightly over a year.

11 Q In connection with your work as a reservoir engineer,  
 12 have you examined the problems that exist in the  
 13 production of oil from the Vada-Pennsylvanian Pool?

14 A Yes, I have.

15 MR. KELLAHIN: Are his qualifications acceptable?

16 MR. STAMETS: They are.

17 Q (By Mr. Kellahin) Mr. Pearson, referring to what has  
 18 been -- before we get to that, are you familiar with  
 19 the application of BTA in Case Number 4670?

20 A Yes, sir.

21 Q What is proposed by the Applicant in this case?

22 A We propose to amend the Field Rule Order R3179 in  
 23 the Vada-Pennsylvanian Field to include a gas-oil  
 24 ratio of 10,000 cubic feet of gas per barrel of oil  
 25 produced.

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1 Q That would constitute an exception to Rule 506?

2 A Yes, 506B applies to the field without a gas-oil  
 3 ratio limit set.

4 Q At the present time, is the Vada-Pennsylvanian Pool  
 5 in any gas-oil ratio order?

6 A 506B.

7 Q Which is 2,000 to one?

8 A Yes.

9 Q Referring to Applicant's Exhibit #1, will you identify  
 10 that exhibit, please?

11 A Exhibit #1 is the ownership map showing the outline  
 12 of the Vada-Pennsylvanian Pool. The red circles  
 13 indicate the wells which are now affected by Rule 506B  
 14 in that they produce over the allowable gas limit.

15 The green area is the acreage in the field  
 16 operated by BTA which currently constitute approximately  
 17 fifty-two percent of the wells in the field.

18 The outline does include some undeveloped acreage  
 19 not included in the field, but for all practical  
 20 purposes, the field is completely developed and there  
 21 are few areas which still could be drilled.

22 Q You would not anticipate any great amount of drilling  
 23 in the future?

24 A Not any significant amount, no, sir.

25 Q How many wells are there in the pool at the present

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1 time?

2 A Two hundred and fifty-one wells with allowables as of  
3 the January-February proration schedule.

4 Q There were previously 289 wells; is that correct?

5 A That is correct. The drop from 289 to 251 does not,  
6 however, reflect the total number of wells. For example,  
7 BTA operated a total of 110 wells in the Vada-Pennsylvanian  
8 Pool, but there are only eighty carried on the proration  
9 schedule which is a drop of thirty that have been or  
10 are being plugged and abandoned.11 Q You are pointing to the map, what area are you talking  
12 about in regard to the map?

13 A The south prairie area.

14 Q Which is located where?

15 A In 936 and extended to 935 and 934. The initial  
16 development started out in 1033 and 1034 and extended  
17 up into 933 and 934.

18 Q This pool covers a rather large area?

19 A Yes, sir.

20 Q Is all of it presently producing?

21 A Yes.

22 Q Has production declined in any portion of the area?

23 A Yes, the older area, speaking in terms of 1033 and  
24 1034. That is the area where most of the wells are  
25 being plugged and abandoned.

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1 Q That is the western portion of the pool?

2 A Yes.

3 Q Does that complete your testimony with that exhibit?

4 A Yes.

5 Q Referring to what has been marked Applicant's Exhibit  
 6 #2, would you identify that exhibit please?

7 A Yes. Exhibit #2 is a graph showing the complete  
 8 production history of the Vada-Pennsylvanian Pool and  
 9 the gas-oil ratio performance is outlined in yellow.

10 The water production is shown in blue and the oil  
 11 production in green; the gas production is in red, and  
 12 the bottom hole pressure performance is in purple.  
 13 The gas-oil ratio and gas production are to the left  
 14 and underlined.

15 Q Would you discuss some of the points shown in the  
 16 curve?

17 A Yes. The field reached a peak production of approximately  
 18 1,100,000 barrels per month in mid-1970. The peak  
 19 oil production was immediately preceded by a peak in  
 20 water production of approximately 2,100,000 barrels.

21 The gas-oil ratio is still increasing in spite  
 22 of the fact the oil and gas volume are declining.

23 The producing characteristics of this type of  
 24 well can be seen to some extent in the curve. Stage  
 25 One in the life of a BcWC producer shows a very large

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1 volume of water and oil constitutes a small percentage  
 2 of the gross fluids and increases very little. No  
 3 gas is produced on this curve in Stage One.

4 This Stage will extend from approximately 465  
 5 to 1267.

6 Stage Two is the period when the gross fluids  
 7 of the producing wells decline and the oil increases.  
 8 The wells start to make a significant amount of gas  
 9 in Stage Two. Stage Two would be represented on this  
 10 curve, approximately 1267 to 1268.

11 The Third Stage in the BowC producer's life is  
 12 the period when the gross fluids decline to some  
 13 extent, the water production especially, and the gas  
 14 volume increases. The well usually reaches its peak  
 15 production during this period that can be seen from  
 16 about 1268 to 1293 on this curve.

17 In Stage Four, beginning at 1293 and going to  
 18 1370 on this curve, the well shows a very steep decline  
 19 in production, it is usually from sixty to eighty  
 20 percent. The decline in the curve shown in this graph  
 21 is about sixty-five percent.

22 Q In your opinion, is this pool nearing the end of its  
 23 productive life?

24 A Yes, and that is evidenced by the bottom hole pressures  
 25 and steep decline of oil production. This total field



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1 is in what I have called Stage Four, or the latter  
 2 stage of depletion.

3 Q Although there would be some individual wells which  
 4 have not reached that stage; is that correct?

5 A Yes, sir.

6 Q Referring to what has been marked Exhibit #3a, would  
 7 you identify that exhibit?

8 A Exhibit #3a is a tabulation which supports the  
 9 tabulations on Exhibit #2.

10 Q And Exhibit #3b?

11 A #3b are tabulations of bottom hole pressures showing  
 12 in Exhibit #2. The bottom hole pressure curve shown  
 13 is a representation of the drill test pressures which  
 14 were taken on the wells indicating the initial  
 15 pressures when the wells were drilled and their  
 16 performance with the passing of time.

17 Q It is not necessarily based on current bottom hole  
 18 pressures then?

19 A No, sir.

20 Q Referring to what has been marked Exhibit #4, would  
 21 you identify that exhibit?

22 A Yes, sir. Exhibit #4 is a graph of the production  
 23 history of BTA Oil Producers Well Number 2. This is  
 24 an example of the typical BowC producer with one  
 25 exception.

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1 Stage One was the point where the well produces  
 2 a very large volume of water. In Stage Two where the  
 3 gas volume increases, the water continued to decrease  
 4 and the oil was decreasing to the extent of 770 to  
 5 approximately 271.

6 Stage Three, which usually lasts for approximately  
 7 six to eight months, was cut short to three months,  
 8 approximately, and the reason for the Stage Three  
 9 being cut short was that this well was voluntarily  
 10 restricted by BTA Oil Producers to reduce the gas  
 11 volume and it can be seen in the graph that after the  
 12 restriction was removed at the end of July, the well  
 13 continued on a very sharp decline which is typical  
 14 of a BowC producer in Stage Four.

15 This would indicate that approximately twenty  
 16 to twenty-five thousand barrels of reserve had been  
 17 lost due to the restriction.

18 Q Is that oil that will not be recovered?

19 A Apparently it will never be recovered. The well has  
 20 continued to exhibit a severe decline in production.

21 Q Despite the fact you restricted production, the gas-oil  
 22 ratio continued to climb?

23 A Yes, sir.

24 Q Is that typical of the other wells in the pool?

25 A Yes. Cutting this stage short, Stage Three, severely

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1 reduced the ultimate recovery from that particular  
2 well and probably since there are several wells in  
3 that category in the field, it will ultimately reduce  
4 the total recovery from the field.

5 Q Why do you recommend a 10,000 to one gas-oil ratio?

6 A There are wells in the field which exhibit total gas  
7 volume which would exceed a lower limit. The reason  
8 that we have asked for a 10,000 limit is we feel it is  
9 necessary to allow these wells to produce unrestricted  
10 during Stage Three.

11 Any restriction at all is almost as bad as complete  
12 restriction:

13 Q Would 6,000 to one be satisfactory?

14 A No, it would not be.

15 Q It would not prolong Stage Three?

16 A No, it would still require wells to be restricted  
17 and based on our experience in voluntarily cutting one  
18 of these wells back during June and July of 1971, a  
19 6,000 limit would not prevent the losing of the  
20 reserve.

21 Q Now, referring to what has been marked Exhibit #5,  
22 would you identify that?

23 A Exhibit #5 is a tabulation of the data presented in  
24 Exhibit #4.

25 Q Referring to what has been marked Exhibit #6, would

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1 you identify that exhibit?

2 A Exhibit #6 shows the bottom hole pressure versus the  
3 cumulative oil production. In other words, the line  
4 drawn on the curve shows an initial bottom hole  
5 pressure of 2400 P.S.I. and an ultimate recovery of  
6 approximately 157,000 barrels.

7 Now, there are a lot of wells that have more or  
8 less in reserve than this, but for instance, if we  
9 drilled producers that had the initial bottom hole  
10 pressure and then declined to drill offsets until a  
11 later date, when we finally drilled these wells, if  
12 they had bottom hole pressures of 1500 P.S.I. with  
13 ultimate recovery and abandonment pressure of 500,  
14 the recovery would be approximately 80,000 barrels  
15 whereas if we drilled at the same time the first well  
16 was drilled, we would have recovered 157,000 barrels.

17 Q What happens to a well then if you take this as an  
18 example and restrict the well at the midpoint of its  
19 production history?

20 A Following the line down, let's say we arbitrarily  
21 restrict this well for any given period, the effect  
22 would be that we would move this bottom hole pressure  
23 point down from 1500 P.S.I. to 750 P.S.I. and then  
24 to find the remaining reserve involved in that well,  
25 you could drill a line through the point parallel to

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1 the original line and you would find you lost some  
 2 60,000 barrels of production.

3 Q Is gas being marketed and being produced in this pool?

4 A Yes, it is.

5 Q Does it accomplish anything, in your opinion, in  
 6 increasing the ultimate recovery of oil to restrict  
 7 the gas-oil ratio?

8 A No. The duration of this period where the gas volume  
 9 exceeds the limit is on the order of six to ten months,  
 10 that is evidenced by both Exhibits #2 and #4.

11 Restricting these wells during this peak production  
 12 period in their lives does not eliminate any waste.

13 Q Do you have anything else to add?

14 A We have two more exhibits.

15 Q I am sorry, that is right. Referring to what has  
 16 been marked Applicant's Exhibits #7 and #8, would you  
 17 identify those exhibits, please?

18 A Exhibit #7 is a letter from the Warren Petroleum  
 19 Company supporting our recommendations and stating  
 20 that they have the capacity for an additional 18,000,000  
 21 cubic feet of gas per day.

22 I have calculated from the November production  
 23 figures that the volume of gas which would be produced  
 24 under the 10,000 limit would be from 324 to 330 M.C.F.,  
 25 more than would be produced under the 2,000 limit.

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1 This amounts to 10,811 M.C.F. per day compared  
 2 to 18,000 M.C.F. per day shown in the Warren letter.

3 Exhibit #8 is a similar letter from Cities Service  
 4 stating that they can take the additional gas up to  
 5 the 10,000 limit we are asking for.

6 Q Were Exhibits #1 through #6 prepared by you or under  
 7 your supervision?

8 A Yes, sir.

9 Q And Exhibits #7 and #8 are copies of letters from the  
 10 respective companies?

11 A Yes, sir.

12 MR. KELLAHIN: At this time I would like to offer  
 13 in evidence Exhibits #1 through #8 inclusive.

14 MR. STAMETS: Without objection, Applicant's  
 15 Exhibits #1 through #8 will be admitted.

16 (Whereupon Exhibits #1 through #8 were admitted  
 17 in evidence.)

18 MR. KELLAHIN: That completes our direct examination.

19 MR. STAMETS: Any questions of this witness?

20 (No response.)

21 CROSS-EXAMINATION

22 BY MR. STAMETS

23 Q Mr. Pearson, referring to your Exhibit #6, I wonder  
 24 if you would just run it by me one more time. I am  
 25 not clear on what happens to the reservoir pressure

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1 and the reservoir fluid when one of these wells is  
2 restricted. I would like to know whether there is  
3 migration of the fluids to offset wells and whether  
4 they are produced at another point, or whether they  
5 are lost?

6 A No, I don't believe they migrate to offset wells.  
7 If you would look at Exhibits #4 and #6 together, you  
8 will see that when a well is restricted the bottom  
9 hole pressure continues to decline without compensating  
10 for production.

11 In other words, it does not follow the curve  
12 shown in Exhibit #6 and the pressure point would move  
13 on the line with a much steeper slope than is shown  
14 in Exhibit #6. In other words, the barrels produced  
15 per P.S.I. pressure would be less.

16 Now, when you shut these wells in, the gas volume  
17 depresses the oil from the well and that is the reason  
18 these wells kick off and flow after twenty-one months  
19 of production.

20 There was a paper presented by William Sipps  
21 describing the producing mechanism of the  
22 Vada-Pennsylvanian Pool to be an algae reef with  
23 interconnecting pore spaces, I believe he called them  
24 umbrellas.

25 These are caused by algae forming inverted cups

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1 and what happened originally is the oil accumulated  
 2 and filled these cup shape pore spaces with oil.  
 3 There was insufficient oil to fill the entire  
 4 structure, so the cups were filled, but the interconnecting  
 5 pore spaces were full of water.

6 Well, what happens is when the reservoir pressure  
 7 drops by removing a large volume of water, you form  
 8 tiny gas caps in these umbrellas and they depress  
 9 the oil out and into the interconnecting flow spaces.

10 This happens during Stages One and Two and in  
 11 Stage Three, the gas has completely filled these  
 12 umbrellas and causes the gas-oil ratio to increase  
 13 in the interconnecting flow channels.

14 This is what causes the wells to kick off and  
 15 flow when the bottom hole pressure continues to  
 16 decline. This gas becomes completely mobile and does  
 17 not displace any oil when it moves in the well bore  
 18 causing the gas volume, or gas-oil ratio at the well,  
 19 to increase while the oil is decreasing.

20 It does it to the point where the pressure  
 21 declines and the total gas volume declines and you have  
 22 depletion.

23 Q As the pressure declines, you lose the mobility of  
 24 the oil?

25 A Well, the interconnecting flow spaces become full of



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1 gas and the oil does not tend to move any more.

2 Q And restricting the production of gas would not stop  
 3 this?

4 A No, sir, it would not because the bottom hole pressure  
 5 would continue to decline at that location and withdrawal  
 6 from the well would be insignificant when we are  
 7 talking about the particular volumes being withdrawn  
 8 from the total field.

9 As is shown in Exhibit #4 while the oil declines,  
 10 the gas-oil ratio increases in a lot of the wells  
 11 in the field and there is a much higher gas-oil ratio  
 12 than is exhibited in Stage Three.

13 MR. STAMETS: Are there any additional questions?

14 CROSS-EXAMINATION

15 BY MR. NUTTER

16 Q Are there any new developments going on in the pool  
 17 at this time?

18 A There are some additional locations which can be  
 19 drilled out there, but nothing significant is going  
 20 on at this time.

21 Q Is there a continuous drilling program going on in  
 22 the field as a whole?

23 A Yes, there are wells being drilled at the same time  
 24 that wells are being plugged and abandoned.

25 Q What is the present rate, are more being plugged up?

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1 A Yes, the total number of wells has declined. The  
 2 number of wells reached a peak in approximately  
 3 November of 1971 at 269 wells and now there are 251  
 4 wells carried on the proration schedule.

5 Q So, there has been a decrease of 18 net wells?

6 A Yes, but as I pointed out that doesn't reflect the  
 7 number plugged and abandoned.

8 Q What are the size of these little umbrella type things  
 9 you were talking about?

10 A I am not prepared to say.

11 Q You mentioned that there were tiny gas caps formed?

12 A They would be rather small, but I am not prepared to  
 13 say exactly what their size is.

14 Q They are tiny gas caps?

15 A I would envision them to be about the size of your  
 16 thumbnail.

17 Q I see, thank you.

18 MR. STAMETS: One additional question. What is  
 19 the status of the offset pools, are there any pools  
 20 producing from the same formation offsetting this pool.

21 THE WITNESS: Yes, they are shown on the outer  
 22 edge of Exhibit #1.

23 MR. STAMETS: Do you know offhand what the  
 24 gas-oil ratio is in those pools?

25 THE WITNESS: No, sir, I don't have the numbers

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1 with me here. I would expect that the gas volume would  
 2 be relatively low and the gas-oil ratio high because they  
 3 are in the very late stages of depletion.

4 I think they have the same problem that we  
 5 have presented here.

6 MR. STAMETS: So you don't anticipate any problem  
 7 as far as the offsetting pools are concerned if the gas-oil  
 8 ratio was raised to 10,000 in the pool?

9 THE WITNESS: No, sir. Everyone is aware of the  
 10 total picture in this area and would support us in this  
 11 recommendation.

12 MR. STAMETS: Any additional questions?

13 (No response.)

14 MR. STAMETS: If not, the witness will be excused.

15 (Witness excused.)

16 MR. STAMETS: Are there any other appearances  
 17 or statements?

18 MR. LEMAY: William J. LeMay, Santa Fe, New  
 19 Mexico, representing Midland supporting the BTA Oil  
 20 Producers for the 10,000 to one gas-oil ratio in the field.

21 MR. STAMETS: Any other statements?

22 MR. HATCH: The Commission has received correspondence  
 23 from Lone Star, Western States, Union Oil Company, Wagner  
 24 & Brown, Sun Oil, Conoco Oil, Imperial American Management  
 25 Company in support of the Applicant's application.

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MR. STAMETS: Any other statements?

(No response.)

MR. STAMETS: Case Number 4670 will be taken  
under advisement.

1 STATE OF NEW MEXICO )  
 ) ss  
2 COUNTY OF BERNALILLO )

3 I, RICHARD E. McCORMICK, a Certified Shorthand Reporter,  
4 in and for the County of Bernalillo, State of New Mexico do  
5 hereby certify that the foregoing and attached Transcript of  
6 Hearing before the New Mexico Oil Conservation Commission was  
7 reported by me; and that the same is a true and correct record  
8 of the said proceedings to the best of my knowledge, skill and  
9 ability.

Richard E. McCormick  
CERTIFIED SHORTHAND REPORTER

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 4670, held by me on March 1, 1972.

Richard F. Hambley, Engineer  
New Mexico Oil Conservation Commission

dearnley-meier reporting services

**SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS**

dearnley-meier reporting co.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS  
 209 SIMMS BLDG., P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103  
 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

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I N D E XWITNESS

CHARLES R. PEARSON

Direct Examination by Mr. Kellahin	3
Cross-Examination by Mr. Stamets	14
Cross-Examination by Mr. Nutter	17

E X H I B I T SAPPLICANT'SADMITTEDOFFERED

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## OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO  
P. O. BOX 2088 - SANTA FE  
87501

GOVERNOR  
BRUCE KING  
CHAIRMAN

LAND COMMISSIONER  
ALEX J. ARMIJO  
MEMBER

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

March 15, 1972

Mr. Jason Kellahin  
Kellahin & Fox  
Attorneys at Law  
Post Office Box 1769  
Santa Fe, New Mexico

Re: Case No. 4670  
Order No. R-4278  
Applicant:  
BTA Oil Producers

Dear Sir:

Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case.

Very truly yours,

A. L. PORTER, Jr.  
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC x

Artesia OCC         

Aztec OCC         

Other

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

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

CASE No. 4670  
Order No. R-4278

APPLICATION OF BTA OIL PRODUCERS  
FOR A SPECIAL GAS-OIL RATIO LIMITATION,  
VADA-PENNSYLVANIAN POOL, LEA COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on March 1, 1972, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 15th day of March, 1972, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, BTA Oil Producers, seeks, as an exception to Rule 506 of the Commission Rules and Regulations, a limiting gas-oil ratio of 10,000 cubic feet of gas per barrel of oil in the Vada-Pennsylvanian Pool, Lea County, New Mexico.

(3) That the reservoir characteristics of the subject pool presently available justify the establishment of a gas-oil ratio limitation of 10,000 cubic feet of gas per barrel of liquid hydrocarbons.

(4) That an additional volume of 10,800 MCF per day of casinghead gas production is anticipated to be produced from



-2-

CASE No. 4670

Order No. R-4278

the Vada-Pennsylvanian Pool at a gas-oil ratio of 10,000 cubic feet of gas per barrel of oil.

(5) That the anticipated volume of additional casinghead gas may be produced from the Vada-Pennsylvanian Pool without waste.

(6) That in order to afford to the owner of each property in the Vada-Pennsylvanian Pool the opportunity to produce his just and equitable share of the oil and gas in the subject pool and for this purpose to use his just and equitable share of the reservoir energy, a limiting gas-oil ratio of 10,000 cubic feet of gas per barrel of liquid hydrocarbons should be established for the subject pool.

(7) That approval of the subject application will prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That, effective March 1, 1972, the limiting gas-oil ratio in the Vada-Pennsylvanian Pool, Lea County, New Mexico, shall be 10,000 cubic feet of gas for each barrel of oil produced.

(2) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

  
BRUCE KING, Chairman

  
ALEX J. ARMILLO, Member

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

  
esr/

<sup>4</sup>  
(5) That an ~~additional~~ additional volume of 10,800 MCF per day of casinghead gas production is anticipated to be produced from the Vada-Pennsylvanian pool at a gas-oil ratio of 10,000 cubic feet of gas per barrel.

<sup>5</sup>  
(6) That An addition volume of casinghead gas up to 18,000 MCF per day may be produced from the Vada-Pennsylvanian Pool without waste.

CASE NO. 4590  
Order No. R-4202

equitable share of the oil and gas in the subject pool and for this purpose to use his just and equitable share of the reservoir energy, a limiting gas-oil ratio of <sup>12,000</sup>~~6,000~~ cubic feet of gas per barrel of liquid hydrocarbons should be established for the subject pool.

<sup>7/8</sup> That approval of the subject application will prevent waste and protect correlative rights, ~~provided the flaring or venting of gas in the Drinkard Pool is prohibited.~~  
~~Vada - Pennsylvanian~~

IT IS THEREFORE ORDERED:

(1) That, effective <sup>March 1, 1972</sup>~~November 1, 1971~~, the limiting gas-oil ratio in the ~~Drinkard Pool~~, Lea County, New Mexico, shall be <sup>12,000</sup>~~6,000~~ cubic feet of gas for each barrel of oil produced, ~~that, effective November 1, 1971, each proration unit in the Drinkard Pool shall produce only that volume of gas equivalent to 6,000 multiplied by top unit oil allowable for the pool.~~

(2) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

BRUCE KING, Chairman

ALEX J. ARMIJO, Member

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

S E A L

dr/

*provided that the total volume of gas produced from the Vada - Pennsylvanian pool does not exceed the capacity of the casinghead gas facilities ~~then~~ serving the pool.*

Union Oil and Gas Division: Central Region

Union Oil Company of California  
500 North Marienfeld, Midland, Texas 79701  
Telephone (915) 682-9731

**UNION** 76

RECEIVED

FEB 29 1972

OIL CONSERVATION COMM.  
SANTA FE

*[Handwritten signature]*

Midland District

February 28, 1972

Oil Conservation Commission  
State Land Office  
Santa Fe, New Mexico

Gentlemen:

Case 4670

This is to advise that Union Oil Company of California is knowledgeable of the application of BTA Oil Producers for a gas-oil ratio limitation in the Vada Penn Pool, Lea County, New Mexico.

It is our understanding that the applicant seeks an exception to Rule 506 of the Commission Rules and Regulations, and is requesting a limiting GOR of 10,000 cubic feet of gas per barrel of oil.

Union Oil Company of California operates several wells within the Vada Penn Pool and waives objection to the granting of said application.

Very truly yours,

UNION OIL COMPANY OF CALIFORNIA

*[Handwritten signature: G. W. Coombes]*  
G. W. Coombes  
District Operations Manager

HRW:rb

CASE 4674: Application of Hanagan Petroleum Corporation for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox gas well location for its Millman Deep Well No. 1 located 660 feet from the North line and 1924 feet from the East line of Section 4, Township 19 South, Range 28 East, undesignated Morrow gas pool, Eddy County, New Mexico, with the E/2 of said Section 4, to be dedicated to the well.

CASE 4670: Application of BTA Oil Producers for a special gas-oil ratio limitation, Lea County, New Mexico. Applicant, in the above-styled cause, seeks as an exception to Rule 506 of the Commission Rules and Regulations, a limiting gas-oil ratio of 10,000 cubic feet of gas per barrel of oil for the Vada-Pennsylvanian Pool, Lea County, New Mexico.

CASE 4671: Application of V. F. Vasicek and J. M. Fullinwider, dba V-F Petroleum for compulsory pooling, Lea County, New Mexico. Applicants, in the above-styled cause, seek an order pooling all mineral interests from the surface of the ground down to and including the Wolfcamp formation underlying the SE/4 SW/4 of Section 1, Township 15 South, Range 36 East, Lea County, New Mexico, to form a standard oil proration unit to be dedicated to a well to be drilled at a standard location on said unit. Also to be considered will be the costs of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges for supervision of said well.

CASE 4672: Application of Paul M. Mershon, Jr., and Vincent Shryack for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface of the ground down to and including the Morrow formation underlying the W/2 of Section 15, Township 17 South, Range 29 East, Grayburg-Morrow Gas Pool, Eddy County, New Mexico, to form a standard 320-acre unit for the production of gas to be dedicated to a well to be drilled at a standard location for said unit. Also to be considered will be the costs of drilling said well, a charge for the risk



# Telegram

KA025 NSB149

1972 MAR 1 AM 11:08

(1130)•

NS MDA015 PB PD=MIDLAND TEX 1 1123A CST=  
OIL CONSERVATION COMMISSION OF NEW MEXICO=  
SANTAFE NMEX=

ROGER C HANKS HEREBY SUPPORTS FULLY BTA OIL PRODUCER  
CASE #R-3179-A=  
ROLER C HANKS•==

RECEIVED  
1 1972  
OIL CONSERVATION COMM.  
SANTA FE

BTA #R-3179-A•=

WU 1201 (H 5-59)



## Lone Star Producing Company

J. D. HURD  
District Engineer  
West Texas District  
Production Department

Telephone: AC 915 682-5221

Suite 300 Commercial  
Bank Tower Building  
P.O. Box 4815  
Midland, Texas 79701

February 29, 1972

RECEIVED  
FEB 1 1972  
COUNTY CLERK  
SANTA FE

*JMH*

New Mexico Oil Conservation Commission  
State Land Office Building  
Santa Fe, New Mexico 87501  
Attn: Mr. Richard L. Stamats

Re: Application of BTA Oil  
Producers for Adoption of a  
GOR for the Vada Penn Pool  
Lea County, New Mexico

Dear Sir:

This is to advise that Lone Star Producing Company does support the BTA Oil Producers application for a special gas-oil ratio limitation, Lea County, New Mexico. This is an exception to Rule 506 of the Commission Rules and Regulations adopting a gas/oil ratio limitation of 10,000 cubic feet of gas to one barrel of oil production from the Vada Pennsylvanian Pool.

Respectfully yours,

*T. H. Lambdin*

T. H. Lambdin

THL:rc  
cc BTA Oil Producers



Telegram  
(455)

KA067 NSA460

NS MDA055 PB PD=MIDLAND TEX 28 447P CST FEB 28 PM 8 50  
OIL CONSERVATION COMMISSION OF NEW MEXICO=  
SANTAFE NMEX=

REGARDING AMENDMENT OF ORDER R3179A REGARDING VADA PENN  
POOL SET FOR HEARING 3-1-72 REQUEST BY BTA FOR 10,000  
CFPB LIMITING GOR THE UNDERSIGNED CONCURS WITH REQUEST OF  
APPLICANT=

ARLEN L EDGAR WESTERN STATES PROD CO. *RECEIVED*

FEB 29 1972  
OIL CONSERVATION COMM.  
SANTA FE

*Chen*  
R 3179A 3-1-72 BTA 10,000 CFPB GOR.=

WU 1201 (R 5-69)



Telegram

KA017 NSB127

NS MDA024 XH PD=MIDLAND TEX 28 1135A CST 1972 FEB 28 AM 10 47  
OIL CONSERVATION COMMISSION=  
SANTA FE NMEX=

REGARDING CASE NO. 4670 APPLICATION OF BTA OIL PRODUCERS  
FOR A SPECIAL GAS-OIL RATIO LIMITATION LEA CO  
NEW MEXICO, STOLTZ, WAGNER, AND BROWN REQUESTS THAT  
THIS CASE NO. 4670 BE APPROVED=

JACK BROWN STOLTZ WAGNER AND BROWN.=

*Chen* *SM* *See 2-28-72 to 2-28-72*  
=4670 4670.

WU 1201 (R 5-69)





**SUN OIL COMPANY**

MEADOW PARK BUILDING, POST OFFICE BOX 2880, DALLAS, TEXAS 75221



February 24, 1972

RECEIVED

FEB 28 1972

OIL CONSERVATION COMM.  
SANTA FE

*Handwritten signature/initials*

Mr. A. L. Porter, Jr.  
Secretary - Director  
State of New Mexico  
Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Re: Case #4670  
Lea County, New Mexico

Dear Sir:

We have received notice of the application in the referenced case of BTA Oil Producers requesting an exception to Rule 506 of the Commission Rules and Regulations for a limiting gas-oil ratio of 10,000 cubic feet of gas per one barrel of oil for the Vada - Pennsylvanian Pool, Lea County, New Mexico.

Sun Oil Company, as an operator in this pool, has studied this proposal and in our opinion there would be no violation of correlative rights and would lengthen the economic limit of the properties and, therefore, concur with and support the application.

Yours very truly,

*H. R. Huey*  
H. R. Huey

ERH/ps



# Telegram

KA058 NSC317 NS MDA046

(410).

(NS MDA040) PD=MIDLAND TEX 24 245P CST=

OIL CONSERVATION COMMISSION=

1972 FEB 24 PM 4:41

SANTA FE NMEX=

GENTLEMEN: MIDWEST OIL CORPORATION SUPPORTS BTA OIL  
PRODUCERS IN THEIR REQUEST FOR A LIMITING GOR OF  
10,000/1 FROM THE VADA PENN POOL RESPECTFULLY=

JOHN PULTE MIDWEST OIL CORP=

*Case 4670*

RECEIVED  
FEB 25 1972  
OIL CONSERVATION COMM.  
SANTA FE

CHARLES B. READ  
PRESIDENT

NORMAN L. STEVENS, JR.  
VICE-PRESIDENT

JOHN L. ANDERSON, JR.  
EXPLORATION MANAGER

*Read & Stevens, Inc.*

*Oil Producers*

*P. O. Box 2126*

*Roswell, New Mexico 88201*

February 23, 1972

RECEIVED

FEB 24 1972

OIL CONSERVATION COMM.  
SANTA FE

Oil Conservation Commission  
State of New Mexico  
P. O. Box 2088  
Santa Fe, New Mexico, 87501

*LS*

Attention: Mr. Richard L. Stamets, Examiner

Re: Docket No. 5-72 - Case 4670  
Examiner Hearing 9:00 A.M.  
March 1, 1972

Gentlemen:

The captioned Case 4670 covers BTA Oil Producers application for an exception to Rule 506 of the Commission Rules and Regulations and a limiting gas/oil ratio of 10,000 cubic feet of gas to one barrel of oil production from the Vada-Pennsylvanian Pool, Lea County, New Mexico.

Read & Stevens, Inc. supports this application and requests the Commission to grant the exception to Rule 506 and establish the applied for gas/oil ratio limitation for the Vada-Pennsylvanian Pool. We contend that the increased limit will allow the efficient and economical depletion of the pool and prevent the premature abandonment of wells which will occur under the existing 2000:1 gas/oil ratio limit.

Yours very truly,

READ & STEVENS, INC.

*John L. Anderson, Jr.*  
John L. Anderson, Jr.

JLA:lm

RECEIVED

FEB 24 1972

OIL CONSERVATION COMM.  
SANTA FE

COQUINA OIL CORPORATION

Building of the Southwest, Midland, Texas 79701 Telephone (915) 693-4661

February 23, 1972

New Mexico Oil Conservation Commission  
State Land Office  
Santa Fe, New Mexico 87501

Attention: Mr. A. L. Porter, Jr.

RE: Case #4670 - Hearing set for March 1, 1972.  
Application of BTA Oil Producers for adoption of gas/oil  
ratio for the Vada Penn Pool, Lea County, New Mexico, and  
for amendment of Commission Order R-3179-A

Dear Sir:

This letter is in support of BTA Oil Producers' application to  
raise the limiting GOR for the Vada Penn Pool from 2,000 to 10,000  
cubic feet per barrel of oil.

Production in this field has declined rapidly due to a decrease  
in reservoir pressure with a coincident increase in GOR's. Increasing  
the limiting GOR from 2,000 to 10,000 cubic feet per barrel of oil  
will allow continued depletion of the reservoir. Continued production  
of most wells in the field under a limiting GOR of 2,000 is economically  
not feasible, and will result in premature abandonment of most wells  
with a loss in revenue to producers, royalty owners, gas plant operators,  
and taxing entities.

Sincerely,

COQUINA OIL CORPORATION

*J. B. Taylor*

J. B. Taylor  
Vice President

JBT:jdc

# *Imperial-American Management Company*

February 23, 1972

New Mexico Oil Conservation Commission  
Santa Fe, New Mexico

Re: Application of BTA Oil Producers for  
Adoption of a gas/oil ratio for the Vada-Penn Pool  
Lea County, New Mexico, and for  
Amendment of Commission Order R-3179-A

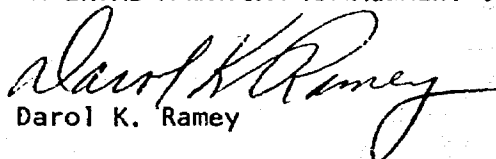
Gentlemen:

Imperial-American Management Company is the operator of one well in the Vada-Penn Pool. We understand that the applicant is requesting an increase in the limiting gas/oil ratio from 2000 to 10,000 cubic feet of gas per barrel of oil.

Imperial-American Management Company has no objection to this request for a change in the gas/oil ratio limit.

Very truly yours,

IMPERIAL-AMERICAN MANAGEMENT COMPANY

  
Darol K. Ramey

DKR:lb

cc: New Mexico Oil Conservation Commission  
Hobbs, New Mexico

*507 Midland Savings Building - Midland, Texas 79701 - 915-684-8241*  
*Cable Address - IMPAM*

OIL OPERATOR

ALLEN K. TROBAUGH

106 WALL TOWERS WEST  
MIDLAND, TEXAS

79701

(915) 683-2738

February 23, 1972

RECEIVED  
FEB 24 1972  
OIL CONSERVATION COMMISSION  
SANTA FE

In re: Application of BTA Oil Producers for  
Adoption of a gas/oil ratio for the Vada-Penn Pool  
Lea County, New Mexico, and for  
Amendment of Commission Order R-3179-A

New Mexico Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

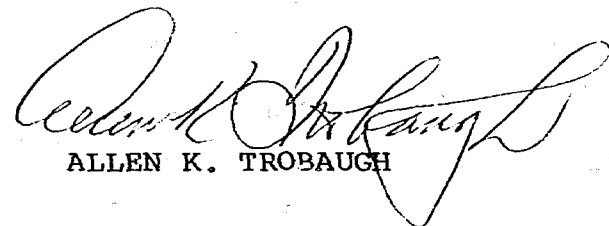
*Amr*

Gentlemen:

A hearing has been set for March 1, 1972 by the Oil Conservation Commission of New Mexico to consider the above captioned application. The undersigned, as an operator in the Vada-Penn Pool, concurs with BTA Oil Producers' application for a limiting gas oil ratio of 10,000 cubic feet of gas per barrel of oil production from this pool.

This increased limit will allow the efficient and economical depletion of the pool and prevent premature abandonment of wells which will occur under the existing limit of 2000:1.

Respectfully submitted,

  
ALLEN K. TROBAUGH

AKT:gp

cc: BTA Oil Producers  
104 South Pecos  
Midland, Texas  
Att: C. R. Pearson

# Gulf Oil Company - U.S.

LAW DEPARTMENT

William V. Kastler  
ATTORNEY

February 28, 1972

P. O. Box 1150  
Midland, Texas 79701

RECEIVED

MAR 1 1972

NEW MEXICO OIL CONSERVATION COMMISSION

Mr. A. L. Porter, Jr.  
Secretary-Director  
New Mexico Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Dear Pete:

Warren Petroleum Company will probably enter its concurrence by telegram in Examiner Hearing No. 4670 on March 1st, but I just thought I'd enclose this copy of our letter to BTA to let you know that we would like to keep up to capacity in our Northern Lea County Plants.

Seriously, we have opinions by some experts that the entire increase sought by BTA would not exceed plant capacities in that area, but we cannot truthfully say at this point that it would not. It appears that increases by stages, experimentally, might be mutually beneficial to the producers, the processors and the State. So long as gas flaring is not involved we do not believe that increased GORs in this field are wasteful.

Sincerely yours,

*Bill*

William V. Kastler

WVK:ejj

Enclosure



A DIVISION OF GULF OIL CORPORATION



# Telegram

KA034 K CCD256

1972 FEB 28 PM 2:30

(SF 059CC617256)PD=GULF WPC TUL

0351P ESTO

=ZCZC 250 PD TULSA OKLA =

A L PORTER, JR SECRETARY-DIRECTOR NEW MEXICO OIL  
CONSERVATION COMM = SANTA FE NEW MEXICO =

REGARDING THE BTA OIL PRODUCERS' REQUEST FOR A SPECIAL  
GAS-OIL =RATIO LIMITATION OF 10,000/1 FOR THE  
VADA-PENNSYLVANIAN POOL IN =EXCEPTION TO RULE 506.  
WARREN PETROLEUM COMPANY OPERATES OUR =GASOLINE PLANTS  
THAT SERVE THIS AREA. THESE FOUR FACILITIES =  
CURRENTLY HAVE EIGHTEEN MILLION CUBIC FEET OF EXCESS  
DAILY =CAPACITY AND COULD PROPERLY PROCESS THE  
INCREASED GAS VOLUMES THAT =OUR CONSULTANTS ESTIMATE

WU 1201 (R 5-69)



# Telegram

(0353P EST) =

WILL RESULT FROM THIS RULE CHANGE. =  
C W MILLER WARREN PET CO ==

WU 1201 (R 5-69)



RECEIVED  
FEB 1 1972  
OIL CONSERVATION COMMISSION

COPY

February 23, 1972

*Ans*

BTA Oil Producers  
104 South Pecos  
Midland, Texas 79701

Attention: Mr. J. R. Stimmel

Gentlemen:

Warren Petroleum Company, a Division of Gulf Oil Corporation, has important gas connections in the Vada-Penn Oil Pool, which gas is processed through four of Warren's gasoline plants in the area.

Our field studies, based on gas volumes being taken from the Vada-Penn during the fourth quarter of 1971 and plant capacities, indicate that we could take an additional twenty percent or equivalent of 18,000 MCFD gas volume from the Vada-Penn Pool in Lea County, New Mexico.

Very truly yours,

Original signed by  
C. W. MILLER  
C. W. Miller  
Vice President

CWM:B

bcc: Mr. Wm. V. Kastler ✓  
GOC - U.S.  
Box 1150  
Midland, Texas 79701

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

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

CASE No. 4670  
Order No. R-4278

APPLICATION OF BTA OIL PRODUCERS  
FOR A SPECIAL GAS-OIL RATIO LIMITATION,  
VADA-PENNSYLVANIAN POOL, LEA COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on March 1, 1972,  
at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 15th day of March, 1972, the Commission, a  
quorum being present, having considered the testimony, the record,  
and the recommendations of the Examiner, and being fully advised  
in the premises,

FINDS:

(1) That due public notice having been given as required by  
law, the Commission has jurisdiction of this cause and the subject  
matter thereof.

(2) That the applicant, BTA Oil Producers, seeks, as an  
exception to Rule 506 of the Commission Rules and Regulations,  
a limiting gas-oil ratio of 10,000 cubic feet of gas per barrel  
of oil in the Vada-Pennsylvanian Pool, Lea County, New Mexico.

(3) That the reservoir characteristics of the subject pool  
presently available justify the establishment of a gas-oil ratio  
limitation of 10,000 cubic feet of gas per barrel of liquid  
hydrocarbons.

(4) That an additional volume of 10,800 MCF per day of  
casinghead gas production is anticipated to be produced from

the Vada-Pennsylvanian Pool at a gas-oil ratio of 10,000 cubic feet of gas per barrel of oil.

(5) That the anticipated volume of additional casinghead gas may be produced from the Vada-Pennsylvanian Pool without waste.

(6) That in order to afford to the owner of each property in the Vada-Pennsylvanian Pool the opportunity to produce his just and equitable share of the oil and gas in the subject pool and for this purpose to use his just and equitable share of the reservoir energy, a limiting gas-oil ratio of 10,000 cubic feet of gas per barrel of liquid hydrocarbons should be established for the subject pool.

(7) That approval of the subject application will prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That, effective March 1, 1972, the limiting gas-oil ratio in the Vada-Pennsylvanian Pool, Lea County, New Mexico, shall be 10,000 cubic feet of gas for each barrel of oil produced.

(2) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

BRUCE KING, Chairman

ALEX J. ARMIJO, Member

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

S E A L

esr/

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

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

CASE No. 4670  
Order No. R-4278

APPLICATION OF BTA OIL PRODUCERS  
FOR A SPECIAL GAS-OIL RATIO LIMITATION,  
VADA-PENNSYLVANIAN POOL, LEA COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on March 1, 1972,  
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(1) That due public notice having been given as required by  
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(2) That the applicant, BTA Oil Producers, seeks, as an  
exception to Rule 506 of the Commission Rules and Regulations,  
a limiting gas-oil ratio of 10,000 cubic feet of gas per barrel  
of oil in the Vada-Pennsylvanian Pool, Lea County, New Mexico.

(3) That the reservoir characteristics of the subject pool  
presently available justify the establishment of a gas-oil ratio  
limitation of 10,000 cubic feet of gas per barrel of liquid  
hydrocarbons.

(4) That an additional volume of 10,800 MCF per day of  
casinghead gas production is anticipated to be produced from

the Vada-Pennsylvanian Pool at a gas-oil ratio of 10,000 cubic feet of gas per barrel of oil.

(5) That the anticipated volume of additional casinghead gas may be produced from the Vada-Pennsylvanian Pool without waste.

(6) That in order to afford to the owner of each property in the Vada-Pennsylvanian Pool the opportunity to produce his just and equitable share of the oil and gas in the subject pool and for this purpose to use his just and equitable share of the reservoir energy, a limiting gas-oil ratio of 10,000 cubic feet of gas per barrel of liquid hydrocarbons should be established for the subject pool.

(7) That approval of the subject application will prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That, effective March 1, 1972, the limiting gas-oil ratio in the Vada-Pennsylvanian Pool, Lea County, New Mexico, shall be 10,000 cubic feet of gas for each barrel of oil produced.

(2) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

BRUCE KING, Chairman

ALEX J. ARMIJO, Member

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

S E A L

esr/

VADA PENN POOL  
LEA COUNTY NEW MEXICO  
PRODUCTION HISTORY

	OIL MBBLS	WATER MBBLS	GAS MMCF	MONTHLY GOR	CUMULATIVE OIL - MBBLS
<u>1955</u>					
Dec.	4				4
<u>1956</u>					
Jan.	5				8
Feb.	5				13
Mar.	6				19
Apr.	7	8			25
May	7				32
June	7				39
July	10	10			49
Aug.	10	11			60
Sep.	13	1			72
Oct.	20	7			92
Nov.	24	7			116
Dec.	25	18			141
<u>1957</u>					
Jan.	24	25			165
Feb.	33	25			198
Mar.	38	29			236
Apr.	37	30			273
May	37	30			310
June	30	29			340
July	33	22			373
Aug.	32	29			405
Sep.	32	21			437
Oct.	35	23			472
Nov.	32	25			504
Dec.	33	20			537
<u>1958</u>					
Jan.	32				569
Feb.	25				595
Mar.	27				621
Apr.	24				646
May	24				670
June	18				688
July	21				709
Aug.	21				729
Sep.	20				749
Oct.	22				772
Nov.	22				793
Dec.	21				814
<u>1959</u>					
Jan.	17	21	17	977	831
Feb.	15	24	15	983	846
Mar.	15	19	16	1,071	861
Apr.	16	31	17	1,045	877
May	17	24	16	974	894
June	15	29	16	1,103	909
July	16	18	16	1,013	925
Aug.	14	26	14	950	939
Sep.	14	22	15	1,084	952
Oct.	13	23	20	1,514	965
Nov.	11	6	16	1,428	976
Dec.	12	21	13	1,097	988

BEFORE EXAMINER UTZ	
OIL CONSERVATION COMMISSION	
BTA EXHIBIT NO. <u>3-A</u>	
CASE NO.	<u>4670</u>
Submitted by	_____
Hearing Date	_____

CASE NO 4670  
EXHIBIT NO 3A

	OIL MBBLS	WATER MBBLS	GAS MMCF	MONTHLY GOR	CUMULATIVE OIL - MBBLS
<u>1960</u>					
Jan.	12	19	14	1,146	1,001
Feb.	7	16	10	1,307	1,008
Mar.	5	13	9	1,782	1,013
Apr.	4	19	6	1,314	1,018
May	2	22	3	1,696	1,019
June	2	22	4	2,028	1,021
July	2	24	5	2,250	1,024
Aug.	2	23	5	2,569	1,026
Sep.	1	16	1	8,559	1,026
Oct.	0	0	0		1,026
Nov.	1	8	3	3,048	1,027
Dec.	1	13	2	2,983	1,027
<u>1961</u>					
Jan.	1	4	2	1,899	1,028
Feb.	1	3	1	1,649	1,029
Mar.	1	4	4	2,867	1,030
Apr.	1	3	4	2,902	1,032
May	1	3	3	3,647	1,033
June	1	3	4	3,572	1,034
July	1	3	3	3,640	1,035
Aug.	1	4	3	3,199	1,036
Sep.	1	4	3	3,330	1,037
Oct.	1	2	2	2,795	1,038
Nov.	1	4	1	1,279	1,038
Dec.	1	4	1	444	1,039
<u>1962</u>					
Jan.	1	3	2	1,057	1,041
Feb.	1	27	1	971	1,042
Mar.	1	30	1	1,376	1,042
Apr.		7	2	17,755	1,043
May	1	39	3	3,746	1,043
June	1	30	1	124	1,045
July	1	26	1	1,035	1,045
Aug.	1	30	1	689	1,046
Sep.	1	30	2	2,069	1,047
Oct.	1	31	2	1,847	1,048
Nov.	1	22	2	1,958	1,049
Dec.	1	20	1	2,805	1,049
<u>1963</u>					
Jan.	0	0	0		1,049
Feb.	1	20	1	1,714	1,050
Mar.	1	25	1	1,289	1,050
Apr.	1	28	1	1,215	1,051
May	1	29	1	1,656	1,052
June	1	29	1	1,677	1,052
July	1	28	1	1,738	1,053
Aug.	1	27	1	1,610	1,053
Sep.	1	25	1	1,489	1,054
Oct.	1	15	1	2,182	1,054
Nov.	5	8	4	961	1,059
Dec.	5	1	4	850	1,063

	OIL MBBLS	WATER MBBLS	GAS MMCF	MONTHLY GOR	CUMULATIVE OIL - MBBLS
<u>1964</u>					
Jan.	4	1	4	850	1,068
Feb.	4	1	4	850	1,072
Mar.	6	1	5	850	1,078
Apr.	5	1	4	850	1,083
May	6	1	5	850	1,088
June	5	1	4	834	1,094
July	5	1	5	850	1,099
Aug.	6	1	5	850	1,105
Sep.	5	1	5	996	1,110
Oct.	10	11	12	1,244	1,120
Nov.	8	7	10	1,239	1,128
Dec.	9	12	11	1,179	1,137
<u>1965</u>					
Jan.	8	12	9	1,159	1,146
Feb.	8	11	10	1,206	1,154
Mar.	8	10	11	1,253	1,162
Apr.	8	11	10	1,224	1,170
May	9	39	10	1,198	1,179
June	9	38	10	1,122	1,188
July	10	39	10	1,061	1,198
Aug.	13	51	8	637	1,210
Sep.	9	37	6	633	1,220
Oct.	15	56	7	431	1,235
Nov.	13	49	10	729	1,248
Dec.	13	49	9	733	1,261
<u>1966</u>					
Jan.	13	52	10	769	1,274
Feb.	10	48	8	800	1,284
Mar.	15	48	13	867	1,298
Apr.	13	54	11	846	1,312
May	14	53	11	786	1,325
June	14	68	10	714	1,340
July	19	90	13	684	1,359
Aug.	20	72	15	750	1,379
Sep.	28	94	20	714	1,407
Oct.	32	92	26	813	1,439
Nov.	25	76	20	800	1,464
Dec.	29	87	22	759	1,493
<u>1967</u>					
Jan.	28	90	28	1,000	1,521
Feb.	28	88	31	1,107	1,550
Mar.	36	76	28	778	1,586
Apr.	33	90	30	909	1,619
May	45	117	28	622	1,663
June	48	101	39	813	1,711
July	54	105	45	833	1,765
Aug.	70	153	39	557	1,835
Sep.	75	130	64	853	1,910
Oct.	88	125	71	807	1,998
Nov.	91	134	65	714	2,089
Dec.	107	177	74	692	2,196



	OIL MBBLS	WATER MBBLS	GAS MMCF	MONTHLY GOR	CUMULATIVE OIL - MBBLS
<u>1968</u>					
Jan.	130	305	93	715	2,326
Feb.	147	416	117	796	2,473
Mar.	179	450	138	771	2,651
Apr.	224	555	183	817	2,876
May	286	799	230	804	3,162
June	303	796	280	924	3,465
July	371	867	348	770	3,836
Aug.	452	905	441	976	4,288
Sep.	482	864	444	921	4,770
Oct.	540	875	521	965	5,310
Nov.	533	854	555	1,041	5,843
Dec.	529	843	602	1,138	6,372
<u>1969</u>					
Jan.	664	1,931	777	1,170	7,036
Feb.	589	1,157	732	1,243	7,625
Mar.	701	1,399	765	1,091	8,326
Apr.	642	1,003	844	1,315	8,968
May	730	1,248	953	1,305	9,698
June	728	1,341	1,053	1,446	10,426
July	847	1,723	1,173	1,385	11,273
Aug.	874	2,030	1,257	1,438	12,147
Sep.	874	2,067	1,265	1,447	13,021
Oct.	923	2,058	1,323	1,433	13,944
Nov.	890	1,949	1,207	1,356	14,834
Dec.	929	2,100	1,273	1,370	15,763
<u>1970</u>					
Jan.	981	1,986	1,329	1,355	16,744
Feb.	945	1,907	1,344	1,422	17,689
Mar.	1,053	2,056	1,551	1,473	18,742
Apr.	1,009	2,072	1,619	1,605	19,751
May	1,088	1,993	1,843	1,694	20,839
June	1,046	1,965	1,961	1,875	21,885
July	1,081	1,920	2,044	1,891	22,966
Aug.	1,062	1,679	2,042	1,923	24,028
Sep.	981	1,503	2,000	2,039	25,009
Oct.	987	1,463	1,980	2,006	25,996
Nov.	932	1,216	1,937	2,078	26,928
Dec.	894	1,260	2,171	2,428	27,822
<u>1971</u>					
Jan.	822	1,190	2,150	2,616	28,644
Feb.	732	1,067	2,063	2,818	29,376
Mar.	799	960	2,451	3,068	30,175
Apr.	748	947	2,607	3,485	30,923
May	749	940	2,746	3,666	31,672
June	685	981	2,714	3,962	32,357
July	627	1,049	2,631	4,196	32,984
Aug.	566	1,069	2,450	4,329	33,550
Sep.	510	1,045	2,244	4,400	34,060
Oct.	500	1,054	2,223	4,446	34,560
Nov.	439	989	2,045	4,658	34,999
Dec.	426	977	1,943	4,561	35,425

30  $\overline{) 64,760}$   
180  
143  
120  
230  
210  
200  
190  
20

64,76<sup>MMCF</sup> = 64,760<sup>MMCF</sup>

BEFORE EXAMINER UTZ  
OIL CONSERVATION COMMISSION

BTA EXHIBIT NO. 3-B

CASE NO. 4670

Submitted by

Hearing Date

COMPANY & WELL

VADA PENN POOL  
LEA COUNTY, NEW MEXICO  
BHP AND PRODUCTION HISTORY

	DATE	LOCATION S-T-R	BHP @ -5500'	CUMULATIVE OIL PRODUCTION BBL.
Sunray #1-F	12/10/55	1-10-33	3,623	
Sunray #2-F	4/9/56	1-10-33	3,583	18,778
Sunray #1-I	7/5/56	36-9-33	3,577	39,045
Aztec #1-LW	9/1/56	2-10-33	3,520	59,788
Tenneco "Lane Unit" #1	11/22/56	1-10-33	3,366	116,105
BTA Simmons #1	11/27/56	31-9-34	3,495	118,160
Cities Service #1-AY	1/28/57	1-10-33	3,378	165,129
Sunray Hobbs #1	7/2/57	36-9-33	3,200	407,000
Cosden Federal D#1	11/17/60	29-8-36	3,019	619,000
Union Pruitt #1-21	6/1/63	21-9-34	3,454	1,026,303
Sunray State #1-AO	11/11/63	16-10-34	3,300	1,028,901
Sunray State #1-AP	6/26/64	17-10-34	3,205	1,068,366
Midwest State #1-B	7/3/64	11-10-33	3,041	1,099,000
Midwest Skelly State #1	8/3/65	10-10-33	2,802	1,172,401
Cactus #1 Atlantic State	8/22/65	32-9-34	3,161	1,184,943
Sunray State #1-"AW"	12/7/65	20-10-34	2,949	1,222,856
Read & Stevens Gross #1	9/23/66	15-10-33	3,075	1,302,343

CASE NO 4670  
EXHIBIT NO 3B

COMPANY & WELL	DATE	LOCATION S-T-R	BHP @ -5500'	CUMULATIVE OIL PRODUCTION BBL.
Enfield #1 Medlin	10/8/66	28-9-34	2,932	1,381,643
Midwest #1 Pruitt	10/18/66	20-9-34	3,121	1,413,760
Monsanto Lane State #1-Y	1/14/67	30-10-34	2,861	1,472,800
DelApache #1 Pruitt	1/27/67	20-9-34	2,933	1,495,993
BTA #2 Max	1/28/67	30-9-34	2,911	1,498,921
Midwest #2 Pruitt	4/6/67	17-9-34	2,896	1,593,310
Read & Stevens Skelly State #1	5/11/67	10-10-33	2,905	1,679,000
Midwest #1-A Pruitt	5/28/67	17-9-34	2,514	1,638,000
Midwest #2-A Pruitt	7/24/67	17-9-34	2,834	1,739,675
Midwest I #1 (Humble AM #1)	7/29/67	11-10-33	2,831	1,742,000
Ralph Lowe State D #1	8/10/67	16-9-34	2,750	1,770,000
Read & Stevens Apache #1	8/10/67	3-10-33	2,960	1,770,000
BTA Vada A #1	10/7/67	21-9-34	2,764	1,884,677
Midwest State J #1	10/14/67	11-10-33	2,144	1,930,000
Midwest State K #1	10/21/67	2-10-33	2,698	1,940,000
BTA Lane A #1	10/21/67	21-9-34	2,915	1,940,000
BTA Vada B #2	11/13/67	20-9-34	2,567	2,010,000
Midwest Skelly State #2	11/15/67	10-10-33	1,732	2,010,000
BTA Vada C #3	11/26/67	21-9-34	2,624	2,060,000

COMPANY & WELL	DATE	LOCATION S-T-R	BHP @ -5500'	CUMULATIVE OIL PRODUCTION BBL.
BTA Anderson A #1	12/6/67	6-10-34	2,827	2,070,000
Midwest #1-C Pruitt	12/10/67	20-9-34	2,355	2,080,000
BTA Max #1	12/11/67	30-9-34	3,035	2,080,000
DTA Lane C #4	12/14/67	6-10-34	2,868	2,090,000
Superior Hutcherson #1	12/20/67	27-9-34	2,818	2,110,000
BTA Vada D #4	12/26/67	28-9-34	2,693	2,170,000
BTA Price A #1	1/16/68	15/9/34	2,861	2,405,000
Midwest State L #1	1/18/68	2-10-33	2,662	2,414,000
BTA Lane C #5	1/28/68	6-10-34	2,908	2,463,000
BTA Anderson A #3	1/28/68	6-10-34	2,874	2,463,000
BTA Max #2	1/28/68	30-9-34	2,918	2,463,000
BTA Pecan #1	1/29/68	31/8/36	2,257	2,468,000
Del Apache Vada State #1	1/30/68	16-9-34	2,792	2,473,000
Trobaugh Wood #1	2/4/68	29-9-34	2,687	2,498,000
BTA Mar #1	2/29/68	5-10-34	3,750	2,651,000
BTA Enfield #1	3/6/68	28-9-34	2,534	2,696,000
BTA Hanson #1	3/7/68	1-10-33	2,419	2,703,000
Midwest State K #2	3/9/68	2-10-33	2,797	2,719,000
Midwest Hutcherson #1	3/13/68	9-9-34	2,678	2,748,000
Midwest State L #2	3/17/68	2-10-33	2,706	2,779,999

COMPANY & WELL	DATE	LOCATION S-T-R	BHP @ -5500'	CUMULATIVE OIL PRODUCTION BBL.
Midwest Howard Cook #1	3/17/68	31-9-34	2,766	2,779,000
BTA Somico #1	3/18/68	20-10-34	2,389	2,786,000
Trobaugh Wood #2	3/20/68	29-9-34	2,643	2,801,000
BTA Newkirk #1	3/22/68	29-9-34	2,616	2,816,000
BTA Watson #1	3/24/68	9-9-34	2,877	2,831,000
Anini Hutcherson #1	4/21/68	28-9-34	2,820	3,076,000
Southland Royalty #2 Vada-State	4/29/68	32-9-34	2,916	3,152,000
Union Pruitt #1-21	5/7/68	21-9-34	2,540	3,230,000
Tenneco Mounsey #1	5/10/68	14-9-34	2,744	3,260,000
BTA Somico #2	5/17/68	20-10-34	2,447	3,328,000
Southland Royalty #3 Vada-State	5/20/68	32-9-34	3,008	3,357,000
BTA Mar #2	5/27/68	5-10-34	2,470	3,425,000
Midwest Tankersley #2	6/2/68	30-9-34	2,665	3,490,000
BTA Payne #1	6/6/68	33-9-34	3,042	3,540,000
Champlin State 18 #2	6/19/68	18-10-34	2,366	3,700,000
Superior Pruitt Com #1	7/8/68	22-9-34	2,294	3,901,000
Champlin State 18 #3	7/22/68	18-10-34	2,220	4,015,000
Southland Royalty Vada State #4	8/5/68	32-9-34	2,562	4,366,000
O'Neill O'Neill State M #1	8/19/68	19-10-34	2,367	4,583,000
Midwest D. V. Cook #2	8/23/68	31-9-34	2,257	4,646,000
Union Newman-Federal #1	8/24/68	29-9-34	2,267	4,661,000

COMPANY & WELL	DATE	LOCATION S-T-R	BHP @ -5500'	CUMULATIVE OIL PRODUCTION BBL.
Midwest Federal C #1	9/26/68	31-9-34	2,329	5,238,000
BTA Simmons #1	9/30/68	31-9-34	2,222	5,310,000
BTA Feather #1	11/30/68	1-9-35	2,700	6,372,000
Monsanto MGF State A #1	1/14/69	30-10-34	1,840	7,302,000
Monsanto State L #2	1/22/69	19-10-34	1,757	7,454,000
BTA Harris A #3	2/14/69	6-9-36	2,326	7,975,000
BTA Sunray #3	2/17/69	36-9-33	2,100	8,051,000
BTA Allyn #1	2/27/69	9-9-36	2,385	8,302,000
Tenneco Bate Fed Com #1	3/9/69	11-9-34	2,262	8,512,000
Ralph Lowe Speight #1	3/30/69	7-9-35	2,441	8,947,000
Midwest Federal D #2	4/4/69	25-9-34	2,170	9,065,000
Tom Brown Holt State #1	4/6/69	4-10-34	3,562	9,114,000
BTA Intex #1	4-9-69	8-9-35	2,468	9,187,000
Superior Govt. B Com #1	4/20/69	5-9-35	2,459	9,456,000
BTA Brad #1	4/21/69	4-9-36	2,458	9,480,000
BTA Hanagan #1	4/21/69	8-9-36	2,261	9,480,000
Hanks Cabot State #1	4/28/69	32-8-36	2,009	9,650,000
Superior Pruitt C #1	4/29/68	15-9-34	1,923	9,675,000
MGF Payne #1	4/30/69	33-9-34	2,556	9,698,000
BTA Northcott Fed. #3	5/4/69	5-9-36	2,100	9,792,000

COMPANY & WELL	DATE	LOCATION S-T-R	BHP @ 100'	CUMULATIVE OIL PRODUCTION BBL.
BTA Bond #5	5/15/69	4-9-36	2,100	9,815,000
BTA Rogers #1	6/1/69	6-9-35	2,436	10,426,000
BTA Barnes #1	6/2/69	7-9-36	2,252	10,482,000
Midwest Ainsworth A #1	6/9/69	26-9-33	2,196	10,690,000
Read & Stevens Federal B #1	6/11/69	30-8-36	2,068	10,737,000
Ralph Lowe Barnes #1	6/14/69	7-9-35	2,346	10,822,000
BTA Vada C #3	7/3/69	21-9-34	1,444	11,357,000
BTA Cap #1	7/13/69	2-9-35	2,353	11,639,000
Ralph Lowe Barnes #2	7/14/69	7-9-35	2,259	11,667,000
BTA Cities #1	8/7/69	10-9-35	2,337	12,341,000
Superior Pyron Com #1	8/28/69	11-9-34	1,934	12,937,000
Midwest Rives #1	9/12/69	4-9-34	1,957	13,390,000
Coquina Alcorn Fed #1	9/20/69	26-8-35	2,204	13,637,000
Midwest Cross A #1	9/25/69	35-9-33	1,916	13,791,000
BTA Max #1	10/15/69	30-9-34	892	14,375,000
BTA Curtis #1	10/26/69	23-9-35	2,415	14,692,000
Midwest Fed E Com #1	10/29/69	25-9-34	2,177	14,778,000
BTA Northcott #3	11/17/69	5-9-36	1,698	15,358,000
Midwest Ainsworth #2	12/2/69	35-9-33	2,324	15,828,000
Superior Levinson #1	12/11/69	22-9-34	2,210	16,111,000
Coquina Federal 3 #1	12/13/69	3-9-35	2,141	16,175,000

COMPANY & WELL	DATE	LOCATION S-T-R	BHP @ -5500'	CUMULATIVE OIL PRODUCTION BBL.
BTA Hugo #2	12/14/69	15-9-35	2,404	16,206,000
BTA Pacific #1	1/13/70	10-9-35	2,020	17,154,000
BTA Will #2	1/13/70	34-8-35	2,037	17,154,000
BTA Hooper #1	1/14/70	28-9-34	897	17,185,000
BTA Sunray B #1	2/6/70	36-9-33	1,416	17,911,000
BTA Vada D #4	2/19/70	28-9-34	866	18,392,000
Midwest New Mex U State #2	2/20/70	3-10-33	2,782	18,429,000
Lone Star New Mex 55 Fed #1	2/21/70	27-8-36	1,703	18,466,000
BTA Bond #4	3/26/70	4-9-36	1,350	19,574,000
BTA Humble State #1	4/14/70	16-9-35	1,839	20,255,000
Midwest Ainsworth B #1	4/15/70	26-9-33	2,009	20,291,000
BTA Will #3	4/22/70	34-8-35	1,354	20,543,000
BTA Lane A #1	4/25/70	21-9-34	1,139	20,651,000
BTA Somico #1	4/29/70	10-10-34	649	20,679,000
Midwest Fed H #1	4/29/70	18-9-35	2,011	20,679,000
BTA Sam #1	5/29/70	9-9-35	1,627	21,825,000
Tenneco Sawyer State Com #1	5/30/70	16-9-36	1,695	21,859,000
Midwest Fed I #1	6/23/70	18-9-35	2,220	22,713,000
BTA Payne #1	6/25/70	3-9-34	1,065	22,785,000
King Resources Sheridan A #1	7/14/70	24-9-33	2,370	23,442,000
BTA Olin #1	7/21/70	33-8-35	1,443	23,680,000

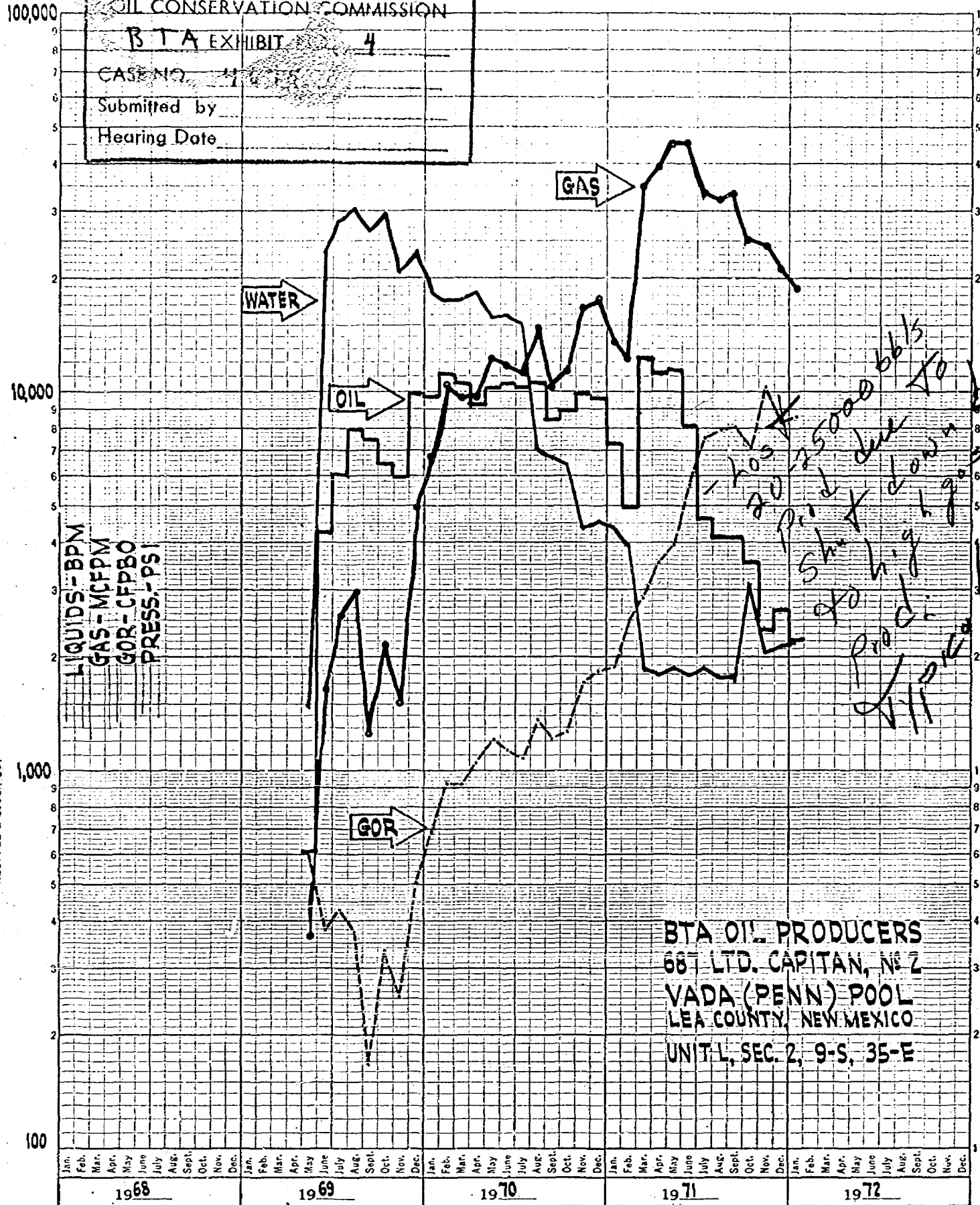


COMPANY & WELL	DATE	LOCATION S-T-R	BHP @ -5500'	CUMULATIVE OIL PRODUCTION BBL.
BTA Battles #1	7/23/70	7-9-36	1,387	23,748,000
BTA Farms #1	7/26/70	30-8-36	1,348	23,850,000
Bt. Meta #1	8/30/70	3-9-34	3,068	24,988,000
BTA Starman #1	10/29/70	4-9-35	1,518	25,966,000
BTA Hanagan #1	11/11/70	8-9-36	1,142	27,258,000
BTA Pecan #1	1/2/71	31-8-36	1,208	28,692,000
BTA Bond #4	1/6/71	4-9-36	886	28,788,000
Del Apache Atlantic St #1	1/7/71	36-8-34	1,565	28,812,000
Del Apache Midwest Fed #1	1/15/71	5-9-34	2,388	29,004,000
BTA O'Neill #1	2/9/71	36-8-35	1,170	29,637,000
BTA Northcott #2	3/8/71	5-9-36	968	30,367,000
BTA Ray #2	4/8/71	15-9-35	967	31,123,000
BTA Pecan #1	4/22/71	31/8/36	1,056	31,473,000
BTA Davis #1	4/27/71	9-9-36	773	31,598,000
BTA Sam #1	5/19/71	9-9-35	913	32,090,000
BTA Humble State #1	5/20/71	16-9-35	915	32,112,000
BTA Bond #6	6/11/71	4-9-36	844	32,588,000
BTA Allyn #1	6/16/71	9-9-36	783	32,693,000
Coquina Webb Fed #1	6/17/71	3-9-35	1,141	32,714,000
BTA Evans #1	6/21/71	4-9-34	1,762	32,798,000

<u>COMPANY &amp; WELL</u>	<u>DATE</u>	<u>LOCATION S-T-R</u>	<u>BHP @ -5500'</u>	<u>CUMULATIVE OIL PRODUCTION BBL.</u>
Del Apache Sunoco Fed #1	6/26/71	5-9-34	2,464	32,903,000
BTA Atem #1	7/12/71	3-9-34	1,668	33,200,000
Del Apache Keohane #1	7/13/71	7-9-34	2,537	33,218,000
Western States Lewis Com #1	9/9/71	35-8-34	1,441	34,213,000
Midwest Pruitt B #2	11/16/71	18-9-34	2,404	35,223,000
BTA Hutch #1	12/6/71	10-9-34	2,892	35,509,000

BEFORE EXAMINER *DTZ & Tamet*  
 OIL CONSERVATION COMMISSION  
 BTA EXHIBIT *4*  
 CASE NO. *4670*  
 Submitted by \_\_\_\_\_  
 Hearing Date \_\_\_\_\_

KE 5 YEARS BY MONTHS 46 6690  
 X 3 LOG CYCLES  
 MADE IN U.S.A.  
 KEUFFEL & ESSER CO.



CASE NO 4670  
 EXHIBIT NO 4

Vada Penn Pool  
 Lea County, New Mexico  
 BTA 687 Capitan #2  
 Unit L, Section 2, 9S35E

	<u>Oil-Bbls</u>	<u>Cum Oil Bbls</u>	<u>Gas-MCF</u>	<u>GOR</u>	<u>Wtr-Bbls</u>	<u>BHP</u>	<u>Date of BHP</u>
<u>1969</u>							
May	609	609	366	601	1,470		
June	4,280	4,889	1,623	379	23,200		
July	6,017	10,906	2,580	429	28,200		
Aug.	7,958	18,864	2,980	374	29,800		
Sep.	7,500	26,364	1,250	167	26,900		
Oct.	6,447	32,811	2,159	335	29,760		
Nov.	5,946	38,757	1,501	252	20,930		
Dec.	9,884	48,641	4,995	505	23,400		
TOTAL	48,641		17,454		183,660		
<u>1970</u>							
Jan.	9,771	58,412	6,753	691	18,200		
Feb.	11,057	69,469	10,354	936	17,500		
Mar.	10,542	80,011	9,749	925	17,500		
Apr.	9,216	89,227	9,756	1,59	18,306		
May	10,124	99,351	12,177	1,203	15,848		
June	10,538	109,889	11,984	1,137	15,848		
July	10,332	120,221	11,199	1,084	15,232		
Aug.	10,726	130,947	14,863	1,386	7,099		
Sep.	8,422	139,369	10,166	1,207	6,641		
Oct.	8,912	148,281	11,346	1,273	6,412		
Nov.	9,938	158,219	16,948	1,705	4,380		
Dec.	9,606	167,825	17,574	1,829	4,526		
TOTAL	119,184		142,869		147,792		
<u>1971</u>							
Jan.	7,237	175,062	13,623	1,882	4,380		
Feb.	4,959	180,021	12,382	2,497	3,942		
Mar.	12,403	192,424	34,996	2,822	1,860		
Apr.	11,162	203,586	39,476	3,537	1,800		
May	11,386	214,972	45,155	3,966	1,860		
June	8,035	223,007	45,466	5,658	1,800		
July	4,621	227,628	33,543	7,259	1,860		
Aug.	4,124	231,752	32,392	7,855	1,798		

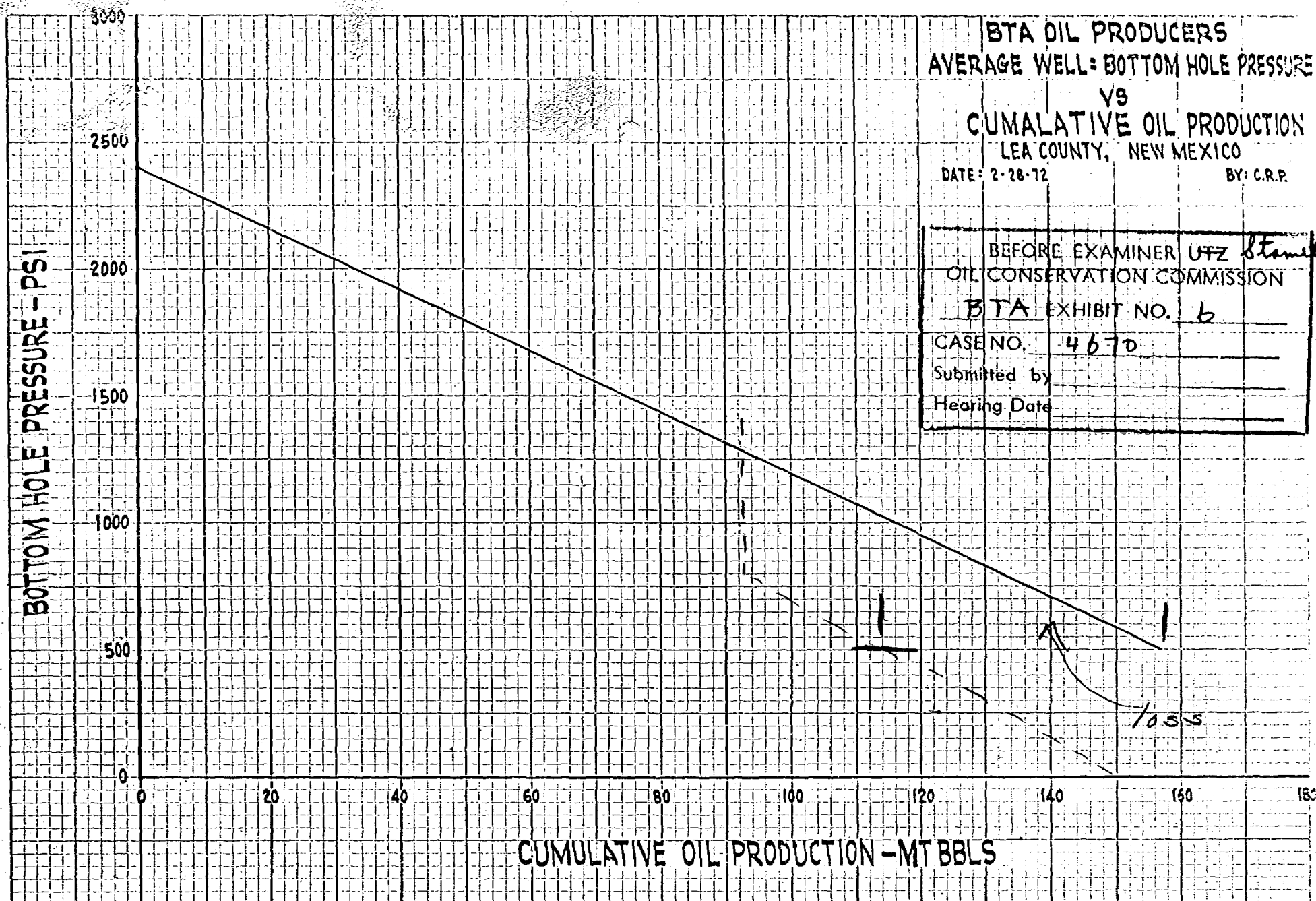
BEFORE EXAMINER UTZ  
 OIL CONSERVATION COMMISSION  
BTA EXHIBIT NO. 5  
 CASE NO. 4670  
 Submitted by \_\_\_\_\_  
 Hearing Date \_\_\_\_\_

**CASE NO 4670**  
**EXHIBIT NO 5**

Vada Penn Pool  
Lea County, New Mexico  
BTA 687 Capitan #2  
Unit L, Section 2, 9S35E

Page 2

	<u>Oil-Bbls</u>	<u>Cum Oil Bbls</u>	<u>Gas-MCF</u>	<u>GOR</u>	<u>Wtr-Bbls</u>	<u>BHP</u>	<u>Date of BHP</u>
<u>1971 (continued)</u>							
Sep.	4,168	235,920	33,530	8,045	1,740		
Oct.	3,560	239,480	25,383	7,130	3,100		
Nov.	2,341	241,821	24,103	10,296	1,560		
Dec.	2,656	244,477	22,001	8,284	1,612		
TOTAL	76,652		362,050		27,312		
<u>1972</u>							
Jan.	2,209	246,686	18,975	8,590	1,674		



**CASE NO 4670**  
**EXHIBIT NO 6**

46 0860 5 X 5 TO 1/2 INCH  
 7 X 10 INCHES  
 KEUFFEL & ESSER CO.  
 MADE IN U.S.A.

RECEIVED FEB 24 1972

# Warren Petroleum Company

A DIVISION OF GULF OIL CORPORATION

P. O. Box 1589

Tulsa, Oklahoma 74102

February 23, 1972

BTA Oil Producers  
104 South Pecos  
Midland, Texas 79701

Attention: Mr. J. R. Stimmel

Gentlemen:

Warren Petroleum Company, a Division of Gulf Oil Corporation, has important gas connections in the Vada-Penn Oil Pool, which gas is processed through four of Warren's gasoline plants in the area.

Our field studies, based on gas volumes being taken from the Vada-Penn during the fourth quarter of 1971 and plant capacities, indicate that we could take an additional twenty percent or equivalent of 18,000 MCFD gas volume from the Vada-Penn Pool in Lea County, New Mexico.

Very truly yours,

*C. W. Miller*  
C. W. Miller  
Vice President

CWM:B

BEFORE EXAMINER <i>UTZ Slam</i>	
OIL CONSERVATION COMMISSION	
BTA	EXHIBIT NO. <u>7</u>
CASE NO.	<u>4670</u>
Submitted by	_____
Hearing Date	_____

**CASE NO 4670**  
**EXHIBIT NO 7**



CITIES SERVICE OIL COMPANY

RECEIVED

FEB 28 1972

MIDLAND OFFICE

Cities Service Building  
Box 300  
Tulsa, Oklahoma 74102

February 24, 1972

Mr. Roger C. Hanks  
2100 Wilco Building  
P. O. Box 584  
Midland, Texas 79701

Re: Low Pressure Gas Gathering System  
Bluitt Gas Processing Plant  
Roosevelt County, New Mexico

Dear Mr. Hanks:

Pursuant to your inquiry regarding our low pressure gas gathering capabilities at the subject plant, we would like to make the following statement:

Cities Service Oil Company has the capacity to gather and compress the casinghead gas from the leases in the Vada-Penn Field, which are connected to the subject plant, up to a maximum limiting gas-oil ratio of 10,000 cubic feet of gas per barrel of oil. This is based upon the existing top oil allowable of 358 BOPD as authorized by the New Mexico Oil Conservation Commission and upon the past production performance of each of these leases.

If we may be of further assistance, please advise.

Sincerely yours,

*W. J. Templeton*  
W. J. Templeton  
Region II Manager

WJT:THR:ds

cc: Messrs. C. R. Byrd - Tulsa Office  
Thomas H. Rinehart - Tulsa Office  
D. F. Southard - Tulsa Office  
Jerry Brown - Bluitt Plant

BEFORE EXAMINER UTZ	
OIL CONSERVATION COMMISSION	
BTA	EXHIBIT NO. 8
CASE NO.	4170
Submitted by	
Hearing Date	

CASE NO 4670  
EXHIBIT NO 8



JASON W. KELLAHIN  
ROBERT E. FOX

KELLAHIN AND FOX  
ATTORNEYS AT LAW  
54 1/2 EAST SAN FRANCISCO STREET  
POST OFFICE BOX 1769  
SANTA FE, NEW MEXICO 87501

RECEIVED  
FEB-2 1972  
OIL CONSERVATION 982-4315  
SANTA FE, NEW MEXICO 87501

February 1, 1972

*Case 4670*

Oil Conservation Commission  
of New Mexico  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Re: Application of Paul M. Mershon, Jr. and  
Vincent Shryack  
Application of BTA Oil Producers

Gentlemen:

Enclosed please find originals and two copies  
each of the above-described applications.

Yours very truly,

*Jason W. Kellahin*  
Jason W. Kellahin

JWK:abs

Enclosures: as stated

DOCKET FILED

Date 2-18-72

RECEIVED

FEB-2 1972

OIL CONSERVATION COMM.  
LEA CO.

BEFORE THE  
OIL CONSERVATION COMMISSION OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF  
BTA OIL PRODUCERS FOR ADOPTION OF A  
GAS/OIL RATIO FOR THE VADA-PENNSYLVANIAN  
POOL, LEA COUNTY, NEW MEXICO, AND FOR  
AMENDMENT OF COMMISSION ORDER R-3179-A.

*Case 4670*

A P P L I C A T I O N

Comes now BTA Oil Producers and applies to the Oil Conservation Commission of New Mexico for an order providing for a limiting gas/oil ratio of 10,000 cubic feet of gas to one barrel of oil for production of oil from the Vada-Pennsylvanian Pool, Lea County, New Mexico and in support thereof would show the Commission:

1. Applicant is the owner of properties located within the limits of the Vada-Pennsylvanian Pool as defined by the Commission and is operating said properties under the present limiting gas/oil ratio of 2,000 to 1.
2. Gas produced with oil from the Vada-Pennsylvanian Pool is presently being marketed and there is a market available in the event gas production from this pool is increased as a result of the amendment of Commission orders regarding the gas/oil ratio for the pool.
3. The pool can be operated efficiently and economically with a limiting gas/oil ratio of 10,000 to 1, and the adoption of such a limiting ratio will result in the ultimate recovery of oil that would not otherwise be recovered and waste will not occur.

4. Order No. R-3179-A, being the special rules and regulations for the Vada-Pennsylvanian Pool, should be amended to provide for a limiting gas/oil ratio of 10,000 to 1 and in all other respects should remain as the present rules.

WHEREFORE applicant prays that this matter be set for hearing before the Commission or the Commission's duly appointed examiner, and that after notice and hearing as required by law the Commission enter its order amending the pool rules for the Vada-Pennsylvanian Pool, being Order No. R-3179-A, to include a provision for a limiting gas/oil ratio of 10,000 to 1, and for such other and further orders as may be proper in the premises.

Respectfully submitted,

BTA OIL PRODUCERS

By Jason W. Kellahin  
Kellahin & Fox  
P. O. Box 1769  
Santa Fe, New Mexico

Attorneys for the Applicant

DRAFT

GMH/esr  
3-9-72

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

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

RECORDS CENTER

CASE No. 4670

Order No. R- 4278

APPLICATION OF BTA OIL PRODUCERS  
FOR A SPECIAL GAS-OIL RATIO LIMITATION,  
VADA-PENNSYLVANIAN POOL, LEA COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on March 1, 1972,  
at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this        day of March, 1972, the Commission, a  
quorum being present, having considered the testimony, the record,  
and the recommendations of the Examiner, and being fully advised  
in the premises,

FINDS:

(1) That due public notice having been given as required by  
law, the Commission has jurisdiction of this cause and the subject  
matter thereof.

(2) That the applicant, BTA Oil Producers, seeks, as an  
exception to Rule 506 of the Commission Rules and Regulations,  
a limiting gas-oil ratio of 10,000 cubic feet of gas per barrel  
of oil in the Vada-Pennsylvanian Pool, Lea County, New Mexico.

(3) That the reservoir characteristics of the subject pool  
presently available justify the establishment of a gas-oil ratio  
limitation of 10,000 cubic feet of gas per barrel of liquid  
hydrocarbons.

(4) That an additional volume of 10,800 MCF per day of  
casinghead gas production is anticipated to be produced from

the Vada-Pennsylvanian Pool at a gas-oil ratio of 10,000 cubic feet of gas per barrel of oil.

(5) ~~That an additional volume of casinghead gas~~ *That the anticipated volume of additional casinghead*  
~~10,000 MCF per day~~ *10,000* may be produced from the Vada-Pennsylvanian Pool without waste.

(6) That in order to afford to the owner of each property in the Vada-Pennsylvanian Pool the opportunity to produce his just and equitable share of the oil and gas in the subject pool and for this purpose to use his just and equitable share of the reservoir energy, a limiting gas-oil ratio of 10,000 cubic feet of gas per barrel of liquid hydrocarbons should be established for the subject pool.

(7) That approval of the subject application will prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That, effective March 1, 1972, the limiting gas-oil ratio in the Vada-Pennsylvanian Pool, Lea County, New Mexico, shall be 10,000 cubic feet of gas for each barrel of oil produced.

(2) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

CASE 4671: Application of V. F.  
VASICEK AND J.M. FULLINWIDER,  
FOR COMPULSORY POOLING, LEA CO.

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