

CASE 364: Ameruda application for tempo-
rary exception to Para. (b) 2 of Rule 506

Case No.

364

Application, Transcript,
Small Exhibits, Etc.

Deluxe lessons

well no & loc	Oil	Water	eng gas
1 A Mothers	10,540	0	8070
1 BTM	810	7290	12,899
2 Candler	5615	8423	21,457
1 Chambers	1901	3850	7257
2 BTD	6955	0	10,624
3 BTD	8115	0	11,913

12899
618,00
12,281
763 oil
1700 water

4280
14,300

(5) That the American Petroleum Corp. has been utilizing the gas being produced from the 2 gas wells together with ^{associated} gas produced by oil wells in the Bagley Pennsylvania Pool and the Bagley Illinois - Devonian pool in a high pressure gas system which is used for the following purposes.

(a) ~~Gas lift operations for 4 wells in the Bagley Illinois - Devonian pool, Bagley - Penna~~

(a) Gas lift operations to 6 wells in the Bagley - Illinois - Devonian pool

(b) Gas lift operations to 4 wells in the Bagley Pennsylvania Pool

(c) Gas lift operations to 2 wells in the Hightower Pool

(d) ~~Lease use and sale to drilling~~ ops operating in the East Coprock Pool approximately

(6) That information available to the Commission indicates that approximately 104,300 MCF gas is produced into the high pressure gas system ^{by oil wells in the} and of this amount approximately 72,250 MCF gas is being produced by the 2 gas wells in the Hightower Penna Pool.

3 (cont) That one of the gas wells is the Amerade
Pet. Corp. no 1, B.C. Ranch, NWSW Sec. 26 -
T 12S, R 33C, Lea County while the
second gas well is the Gulf Oil Corp,
no 1, State NM I, SESE, Sec 22, T-12S -
R-33C, Lea County

(4) That Gulf Oil Corp has entered
into a contract with Amerade
Pet. Corp for the sale of gas from
its NM I, no 1, said gas to enter
Amerade Pet. Corp. high pressure
gas system.

(5) That
(6) That information available to the
Commission indicates that approximately
104,300 MCF per month is produced
by oil wells in the Boylston area into
the high pressure gas system while
approximately 72,250 MCF per month
is produced by the gas wells of
the Hightower area into the high
pressure system.

(7) That in the event the gas oil
ratio limitation ^{of 2000 CF} is ^{is} enforced the
production of gas from each
well would be reduced to approximately
9,000 MCF ^{per month} or a total of 18,000 MCF
per month.

(3) That exception to Rule 506 of
the Commission's Rules & Regulations
as applicable to the Hefelmann
Pennsylvania Pool would
be conducive to waste.

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

CASE NO. 364
ORDER NO. R-158

THE APPLICATION OF AMERADA PETROLEUM
CORPORATION FOR AN ORDER GRANTING TEM-
PORARY EXCEPTION TO PARAGRAPH (B) OF
RULE 506 OF THE NEW MEXICO OIL CONSERVA-
TION COMMISSION'S RULES AND REGULATIONS,
THE EXCEPTION RELATING TO THE PRODUCTION OF
OIL AND GAS IN THE HIGHTOWER PERMO-PENNSYLVANIAN
POOL, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:00 a.m. April 15, 1952, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 20th day of May, 1952, the Commission, a quorum being present, having considered the testimony adduced at said hearing, 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 by virtue of Order No. R-17 A the Commission defined and described the Hightower Permo-Pennsylvanian Pool and classified it as an oil pool; that under the provisions of Rule 506 (d) the Hightower Permo-Pennsylvanian Pool has a gas-oil ratio limitation of 2,000 cubic feet of gas per barrel of oil produced.

(3) That the granting of a temporary exception to Paragraph (d) of Rule 506 of the Commission's Rules and Regulations would not be in the interest of conservation and would tend to promote waste of reservoir energy, resulting in underground waste.

IT IS THEREFORE ORDERED:

(1) That the application of Amerada Petroleum Corporation be and the same hereby is denied.

-2-
Case No. 364
Order No. R458

(2) That operators in the Hightower Permo-Pennsylvanian Pool shall produce gas wells in compliance with Rule 506 of the Commission's Rules and Regulations.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

Edwin L. Mechem

EDWIN L. MECHEM, Chairman

Guy Shepard

GUY SHEPARD, Member

R. R. Spurrer

R. R. SPURRIER, Secretary

SEAL



PETROLEUM AND ITS PRODUCTS

GULF OIL CORPORATION

P. O. DRAWER 1290 · FORT WORTH 1, TEXAS

F. J. ADAMS
VICE-PRESIDENT

June 17, 1952

FORT WORTH
PRODUCTION DIVISION

New Mexico Oil Conservation Commission
Santa Fe, New Mexico

Re: Case No. 364
Order No. R-158

Gentlemen:

Gulf Oil Corporation acknowledges receipt of Order No. R-158, concerning Case 364, the application of Amerada Petroleum Corporation for an order granting temporary exception to Rule 506 (b) of the New Mexico Oil Conservation Commission's Rules and Regulations, as related to oil and gas production in the Hightower Permo-Pennsylvanian Pool, Lea County, New Mexico.

We respectfully wish to advise that action has been taken to comply with the provisions of Order R-158 and thereby limit production from Gulf's N.M.I.-State No. 1 in accordance with O.C.C. Rule 506.

Yours very truly,


F. J. ADAMS

OIL CONSERVATION COMMISSION

P. O. BOX 871
SANTA FE, NEW MEXICO

April 28, 1952

C
O
P
Y

Mr. Don Walker,
Production Department
Gulf Oil Corporation
Box 1290
Ft. Worth, Texas

Dear Mr. Walker:

RE: CCC Case 364

At the request of Mr. McPherson of your Hobbs office, we are sending you a copy of the transcript of proceedings from the April 15, 1952, hearing in Case 364.

As we have only two official copies in our files, we will appreciate it if you will have a copy made for your use so that this copy may be returned to us as soon as possible.

Very truly yours,

W. B. Macey,
Chief Engineer

WBM:nr

1210 10 00-4010 01-0010 00-0000

OIL CONSERVATION COMMISSION

P. O. BOX 871
SANTA FE, NEW MEXICO

April 2, 1952

Mr. Booth Kellough
Amarada Petroleum Corporation
Box 2040
Tulsa, Oklahoma

Dear Sir:

You will note from the attached docket that your application for temporary exception to Oil Conservation Commission Rule 506 has been designated as Case 364 and scheduled for hearing April 15, 1952.

Under the continuations set for the same date, you will find your Case 249, as well as other continuations relative to 80-acre spacing cases.

Very truly yours,

W. B. Macey
Chief Engineer

WBM:mr

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BEFORE THE
OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO

(Cont'd from February hearing.) Only paragraph (i), as follows, was carried over for further testimony:
" ... to create a new pool in Lea County to be designated Hightower-Pennsylvanian for Pennsylvanian production to include all of Sections 22, 23, 26, and 27, T. ~~25S-R~~ ~~4E~~.

No. 341

12 33

TRANSCRIPT OF HEARING

March 20, 1952

E. E. GREESON
ADA DEARNLEY
COURT REPORTERS
BOX 1303
PHONES 5-9422 AND 5-9346
ALBUQUERQUE, NEW MEXICO

OIL CONSERVATION COMMISSION
MAR 25 1952

(Mr. Graham reads notice of publication.)

MR. KELLOUGH: My name is Booth Kellough. I represent Amerada Petroleum Corporation. I would like to make a little statement to the Commission in connection with this case 341. That case comes on for hearing upon the motion of the Commission to designate as an oil pool the Hightower-Devonian pool. Since the bringing in of the Amerada BTB No. 2 well as an oil well. I beg your pardon, I meant Hightower-Pennsylvanian. It was continued from the last hearing so that we could make a further study as to whether or not it was the same reservoir in which the gas wells of the Amerada and the Gulf were producing. It appears now, in the opinion of our engineers and geologists, it is the same reservoir. And Amerada is now producing, and also Gulf is now producing, each, a gas well as an exception to Rule 404 so as to use the gas for gas-lift to gas-lift oil wells in the Pennsylvanian and also Bagley pools. If this is designated as an oil pool, being the same one in which -- the same reservoir in which -- these gas wells are located, then Rule 506 would be applicable to limit the amount of gas, to the extent that we would be unable to maintain and continue our gas-lift program. So what we would like to request of the Commission is that in the order designating this Hightower-Pennsylvanian oil pool that it be made subject to the existing exceptions under Rule 404, which authorizes the gas to be used for gas-lift purposes, and further, it be made

subject to an exception to Rule 506, which is the limiting gas rule, temporarily or until such time as we can work out some other arrangement, if it possible, to operate those gas wells.

Now, Mr. Christie is here, and if the Commission desires any testimony, why we will be glad to present it. But our request is that the order which designates the oil pool make such exception so that we can continue to operate those gas wells for gas-lift purposes. If not -- I might say this. It will result in no waste of gas. As a matter of fact, the gas now being utilized is being utilized to produce the oil wells, and it would result in we would probably have to shut down one or more of the oil wells until we could work out some other arrangement. So, during the interim, we would like this exception to be made.

MR. GRAHAM: If the Commission please, I would like to make a slight correction in the township and range as read in the notice in that case. That should be sections 22, 23, 26 and 27, T. 12S-R.33E.

MR. SPURRIER: You don't ask for a definite date on your continuance. Perhaps you should put on a little testimony to show what you intend to do.

MR. KELLOUGH: All right.

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

DIRECT EXAMINATION

BY MR. KELLOUGH:

Q Will you please state your name?

A R. S. Christie.

Q And where do you live, Mr. Christie?

A Tulsa, Oklahoma.

Q By whom are you employed?

A Amerada Petroleum Corporation.

Q In what capacity?

A Petroleum engineer.

Q You have previously testified before this Commission in the capacity of an expert witness and petroleum engineer?

A Yes, sir.

MR. KELLOUGH: Are the qualifications acceptable?

MR. SPURRIER: They are.

Q Do you have a map which shows the gas wells involved in this matter?

A Yes, sir, I do.

Q I am laying this map before the Commission (marked Exhibit 1). Mr. Christie, will you just very briefly state what that map shows and identify the wells involved.

A The map shows the Bagley field, and also the Hightower field, which is on the south end of the map, north end of the map. The wells circles in red are two gas wells that are producing from the Pennsylvanian formation; namely, Amerada

Petroleum Corporation Roach No. 1.

Q That is located where?

A Located in the NWSW of Sec. 26, T. 12S-R. 33E. The second well circled in red is the Gulf Oil Corporation's State NMI No. 1, which is located in the SESE of Sec. 22, T. 12S-R.33E.

Q Does that map also show the Hightower-Pennsylvanian oil wells?

A Yes, sir, it does. The only oil well completed in the Pennsylvanian is the Amerada BTB No. 2, which is located in SENW of Sec. 26, T. 12S-R. 33E.

Q Is it your opinion these are producing from the same reservoir?

A Yes, sir, it is.

Q Mr. Christie, do you have a map which shows the presently-existing gas system which is now in operation under exception to Rule 404?

A Yes, sir.

MR. KELLOUGH: I now lay before the Commission Exhibit No. 2.

Q Would you please explain what that is?

A Exhibit No. 2 shows the existing gas system in the Bagley and Hightower fields. The system is shown in three different colors. The green color is the gas line from the two gas wells located in the Hightower-Pennsylvanian field. The yellow color shows the wells that are on gas-lift through this system. The colors in red are the wells that are producing gas from oil

wells into the system. There are at the present time five oil wells in the Bagley field that have sufficient separator pressure to get into our gas system, which is about 650 to 700 lbs. In addition to the gas being used for gas-lift from the gas wells, it is also being used for drilling fuel, and not only furnishes the gas to the drilling wells in the Bagley and Hightower fields, but also to wells drilling in the East Caprock field, which is approximately six to seven miles west of the Hightower field.

Q Mr. Christie, Rule 506 (b) 2 reads as follows: "Any unit containing a well or wells producing from a reservoir which contains both oil and gas shall be permitted to produce only that volume of gas equivalent to the applicable limiting gas-oil ratio multiplied by the top unit allowable currently assigned to the pool." That limiting gas-oil ratio under the regulation is 2,000 cu. ft. of gas for each barrel of oil produced. Under the application of the rule which I read to you, Mr. Christie, would Amerada be able to produce enough gas to satisfy and meet the requirements of this gas system which you have just described?

A No, they would not. During the month of February we used a total of 112,412 MCF for gas-lift. Approximately 50 per cent of that came from the oil wells that had sufficient separator pressure to put the gas into the gas system. The other 50 per cent was make-up gas from the two gas wells in the Hightower-Pennsylvanian field. To be specific, the Amerada Roach well

produced 49,013 MCF for the month of February. And the Gulf NMI No. 1 produced 22,258 MCF. Now, of course, not all of that gas -- it looks, it is identical with and goes into the system and part is probably used for gas-lift and part for drilling fuel. Based on the rules, those two wells would be reduced to approximately 318,000 cu. ft. per day, and that would be inadequate as far as make-up gas for the gas-lift system.

Q Will you explain to the Commission the exception which you are requesting?

A We would like to be able to produce these two gas wells until such time as we have been able to work out a program for artificially lifting the various wells in the two sands, namely, Bagley and Hightower fields. We are making a study of putting in a compressor to compress the casinghead gas and re-cycle it for use as gas-lift gas, as against putting in pumping equipment. And, of course, that entails quite a study because we have to determine our source of gas and the supply and the number of wells that will eventually go onto gas-lift and so forth.

Q What would be the result if the Commission did not permit this exception which you are requesting?

A Well, we have 10 wells on gas-lift. The total oil lifted by gas-lift for the month of February was 38,490 barrels, along with considerable volumes of water. Since about 50 per cent of the gas was furnished by the two gas wells, if they were penalized according to the rules, we would necessarily

have to temporarily, at least, shut down part of our oil wells until we could work out some kind of program to lift the oil some other way.

MR. KELLOUGH: That is all, Mr. Christie. The Gulf has a well involved in the same pool.

MR. CAMPBELL: If the Commission please, Jack M. Campbell, Roswell, appearing for Gulf Oil Corporation. Gulf has a well in the SESE of Sec. 22, T. 12S-R. 33E, now producing gas under an order of the Commission authorizing an exception to the rules for the sale of this gas to Amerada for gas-lift purposes issued by the Commission prior to the discovery of this oil well in the Hightower-Pennsylvanian. The Gulf wishes to concur in the application of Amerada; that the order designating the new pool authorize the continued production of gas from the Gulf NMI No. 1 under the present order until such time as Amerada is able to make available gas for its use for gas-lift purposes in the Hightower-Pennsylvanian and the Bagley-Pennsylvanian wells. They are now gas-lifting with gas from these wells under order of the Commission.

MR. KELLOUGH: For the record, I would like to formally offer into evidence the exhibits identified by Mr. Christie.

MR. SPURRIER: Without objection, they will be received.

BY MR. WHITE:

Q How long would the wells be shut down if the exception were not granted?

A (By Mr. Christie) Of course, that would be hard to tell

because of the situation in regard to obtaining material. If we had to put in a compressor system, I doubt if we could get delivery of a compressor within 60-90 days perhaps. If we had to buy pumping equipment, I don't know how long it would take to get that. This equipment just isn't available in some cases.

Q As I understand your testimony, you want the Commission to allow you to continue to produce the gas wells until a program could be worked out whereby you could adopt an artificial lift; that is, I was trying to find out how long this exception would have to be granted.

A We haven't gotten into the program that far to determine when this equipment would be available if we had to buy it. Of course, it will be necessary to buy several compressors, and install gathering lines and to equip the wells with pumps.

Q That would take at least 90 days?

A I don't know. We haven't investigated how long it would take. Of course, from an economic standpoint, it would be much better to employ gas-lift. It is the cheaper equipment and would cost less to operate and would save in the use of steel. It would take less steel for a gas-lift system than for a pumping system.

Q What are prospects for regular marketing of this gas?

A Well, I understand that there is a gas company that is

making contracts for gas up through that area. Now, when they will have their lines laid and take gas, I don't know.

MR. SPURRIER: Mr. Christie, would six months time be satisfactory for a continuance to Amerada?

A I think we could have something very definite within six months.

MR. SPURRIER: Well, let's continue the case for six months to the September hearing so we will have it continued to a definite date. At that time we will expect Amerada to produce more evidence.

A I will assure the Commission we will do everything in our power to get some system worked out, because we don't want to use this gas any more than anybody else does against the present rules. We think the rules are there for a purpose, and we want to abide by them. But this is an emergency and we will work it out as fast as we can.

MR. PORTER: Mr. Spurrier, it came to my mind a correction should be made probably here. The attorney stated when the order is written creating a new pool, certain exceptions be made. I don't believe the necessity for a new pool will exist since admittedly this well is already in the Hightower-Pennsylvanian pool.

MR. KELLOUGH: That being the case, I would like to take this opportunity to request the Commission for an exception to Rule 506 (b) 2 in order to conform to the testimony presented.

MR. SPURRIER: The Commission will write an order to

grant that exception to the September hearing. Any further questions of the witness? If not, the witness may be excused.

* * * *

MR. SPURRIER: Amerada's request wasn't in the call, Mr. Kellough. Therefore, we cannot give you relief, and it will be necessary for you to apply for relief.

MR. KELLOUGH: I understand, Mr. Spurrier, upon discussing the matter with Mr. White. I propose to file application with the Commission for exception to Rule 506, and ask it be advertised and set down at the next hearing; at which time, if there is no objection, we may re-offer in evidence the testimony given here today, and if it is, we will relitigate the matter.

MR. SPURRIER: ~~Very well.~~ RECORD

MR. WHITE: I think the record should show the Commission instead of granting a temporary order until September has taken the case under advisement. I believe Mr. Porter is going to check to find out whether that pool is an oil or gas pool. That would depend a lot on how you make application.

MR. KELLOUGH: It would affect whether the Commission would make an order dismissing the oil pool and creating a gas pool.

MR. PORTER: I believe it is an oil pool.

MR. KELLOUGH: In any event, in order to keep the record straight, we will file separate applications for exception to

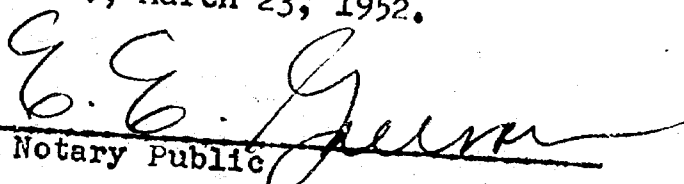
Rule 506, and ask it be set down for notice and hearing at the next regular session.

MR. SPURRIER: Case 341 will be taken under advisement.

STATE OF NEW MEXICO
COUNTY OF BERNALILLO ss

I HEREBY CERTIFY That the foregoing transcript is a true record of the matters therein contained.

DONE at Albuquerque, N. M., March 23, 1952.


Notary Public

My Commission Expires: 3-4-52

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

TRANSCRIPT OF PROCEEDINGS
CASE NO. 364

April 15, 1952

ADA DEARNLEY & ASSOCIATES
COURT REPORTERS
ROOM 12, CROMWELL BLDG.
PHONES 7-8645 AND 5-8546
ALBUQUERQUE, NEW MEXICO

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

April 15, 1952

In the Matter of:

Amerada application for temporary
exception to Paragraph (b) 2 of
Rule 506 as related to production
of both oil and gas from the High-
tower-Permo-Pennsylvanian pool,
Lea County, New Mexico.

Case No. 364

(Notice of Publication read by Mr. Graham.)

MR. KELLOUGH: Mr. Kellough, Tulsa, Oklahoma, repre-
senting Amerada Petroleum Corporation in this matter.

The Commission will recall that some months ago when
all parties thought that Hightower-Permo-Pennsylvanian pool was
a gas pool the Amerada and the Gulf both asked for and obtained
exception to Rule 404 so as to permit them to use gas for gas-
lift purposes. Since that time an oil well was drilled into
this reservoir and it now appears that the gas and the oil are
all being produced from the same reservoir. That then raised
the question of whether or not automatically Rule 506 applied
which would limit the amount of gas that could be produced to a
ratio of two thousand to one since the gas and oil was from the
same reservoir.

Last month when the matter came on for hearing upon

ADA DEARNLEY & ASSOCIATES
COURT REPORTERS
ROOM 12, CROWWELL BLDG.
PHONES 7-9648 AND 8-9848
ALBUQUERQUE, NEW MEXICO

the motion by the Commission to classify the Hightower-Pennsylvanian pool Amerada then made an application for an exception to Rule 506 and asked that the previous exception to 404 be continued. At that time, if you recall, testimony was presented. At the conclusion of the testimony it then appeared that the notice was insufficiently defective so Amerada then filed another formal application for an exception to Rule 506 asking for a temporary period only that we be permitted to produce enough gas to satisfy the gas lift requirements until such time as other arrangements could be made.

We wish to make clear now that as far as Amerada is concerned we fully and wholeheartedly endorse the propriety and advisability of Rule 404 and Rule 506. We think they are good rules. We have no quarrel with the rule at all. However, we also think that exceptions to those rules should not be lightly granted. However, in the case we have here an emergency exists. We started the gas-lift proceedings and the gas-lift operations are necessary to produce these oil wells and we are asking for this temporary relief until some other arrangements can be made. In other words, we don't think you should kill the patient to cure a cold, or build a thousand dollar fence to keep in a fifty dollar horse, although I did that for a dog.

I would like to now re-offer formally, re-offer all the testimony which was presented at the prior hearing in support of our application to get an exception to Rule 506, and also

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PHONES 7-9645 AND 8-9846
ALBUQUERQUE, NEW MEXICO

present some additional information to the Commission which has transpired since the case was here last month.

R. S. CHRISTIE,

having been first duly sworn, testified as follows:

DIRECT EXAMINATION

By MR. KELLOUGH:

Q You are Mr. R. S. Christie, petroleum engineer for Amerada Petroleum Corporation?

A Yes, sir.

Q You recall the testimony which you gave last month?

A Yes, sir.

Q And do you now wish to adopt and reaffirm that testimony?

A I do.

Q Do you have anything further that you wish to add in connection with this application?

A I have the latest information on the amount of gas produced for the month of March. During the month of March there was a total of 42,481,000 cubic feet of gas produced from Amerada's "B", "C" Roach No. 1, which was used for gas-lift and for fuel purposes. The Gulf NMI No. 1 produced 29,746,000 and was used for the same purposes. During the month we were lifting oil by gas lift to 12 wells. The total amount of oil lifted by gas lift for the month of March was 39,380 barrels. At the last hearing I reported we were making a study to determine the feasibility of

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PHONES 7-9645 AND 5-9546
ALBUQUERQUE, NEW MEXICO

installing compressors and compressing the gas from the Pennsylvanian wells as against installing pumping equipment. We can now report that it appears to be more economical to install compressors and use gas that is being produced from Pennsylvanian wells for gas lift. We are in the process of ordering that equipment and we have been advised by the equipment manufacturers that the minimum time for the first unit would be four months from one manufacturer and six months from the other. So that we estimate that we will require at least six months period for this exception.

Q Then how much time are you asking for this temporary exception to Rule 506?

A Six months.

Q Do you have any further information that you wish to convey to the Commission?

A We are continually drilling wells to the Pennsylvanian formation and undoubtedly will bring in some wells that will have sufficient pressure to buck our gas lift system, so that as those wells are completed that gas will be supplemented from our gas wells in the Pennsylvanian and as time goes on that gas from our gas wells should be less and less.

Q Amerada and Gulf own all the leases in this Hightower-Pennsylvanian pool, do they not?

A Yes, sir, all that have been developed.

Q Has there been any objection to this application on

ADA DEARNLEY & ASSOCIATES
COURT REPORTERS
ROOM 12, CROMWELL BLDG.
PHONES 7-9845 AND 5-9846
ALBUQUERQUE, NEW MEXICO

behalf of the Gulf?

A No, sir.

MR. CAMPBELL: I would like to ask one question. Mr. Christie, in addition to the gas that you need from your well for gas-lift and fuel purposes do you also need the gas which you are now purchasing from Gulf's NMI No. 1 for the same purposes?

A Yes, we do.

MR. CAMPBELL: That is all.

MR. WHITE: Any potential market for this gas in this area?

A Not at the present time.

MR. WHITE: Is there as to the future?

A We have been advised that there is a pipe line company planning a line into that area and there have been several gas line companies that have requested the possibilities of gas line plant in that general area. But they are still in the paper state.

MR. WHITE: That is all.

MR. SPURRIER: Any further questions?

MR. MACEY: You have a line running over to the East Caprock Devonian field to operate drilling rigs, do you not?

A Yes, we do.

MR. WHITE: How much gas goes down that line, do you have any idea?

A Unfortunately, I haven't those figures available. I

could supply them to you, however.

MR. WHITE: How many cubic feet of gas do you anticipate using to lift one barrel of oil?

A At the present time we are using 3941 cubic feet.

MR. MACEY: That is a barrel of oil but you are producing a lot of water with your oil.

A No, that is the average input GOR. Yes, sir.

MR. MACEY: You don't know how much water you produce with that oil?

A Yes, we are producing from the Bagley Siluro Devonian pool an average of 19,131 barrels of water for the month of March, which is all being lifted by gas or practically all of it. The average water production in the Hightower pool is 82 per cent which amounted to 37,238 barrels in the month of February. That is all being lifted by gas lift.

MR. MACEY: Your total amount of gas which you have from the two gas wells, the Roach and the Gulf NMI, is supplemented by other high pressure gas up in the field, is that correct?

A In the past, yes, sir.

MR. MACEY: Does it all go into one system, is it all a continuous system?

A It all goes into one system, yes. At the last hearing we submitted a plat showing the gas-lift system.

MR. MACEY: Mr. Christie, how much pressure does it take to put gas down a line to those drilling rigs? How far is

that away over to the west?

A About five to six miles.

MR. MACEY: How much pressure would you think that you would have in that line?

A We carry about 750 to 800 pounds on that line and what pressure gets at the other end I can't tell you.

MR. MACEY: How long would it take you to supply those figures on the amount of gas going to the drilling rigs?

A I can get it to you just as soon as I get back to Tulsa.

MR. MACEY: That is all I have.

By MR. KELLOUGH:

Q Is that gas commingled from the other gas from the oil wells in the line?

A Yes, it is.

Q Do you also, have you submitted to the Commission the amount of oil that is being gas lifted?

A Yes, sir.

Q Have you already furnished them those figures?

A Yes, sir.

MR. SPURMER: Any further questions? If not, the witness may be excused.

MR. MACEY: Let me ask him one more. Do you have any estimate of how much pressure it will take to go down that line to the gas wells? What I am getting at, could you possibly use

gas from the Pennsylvanian wells to utilize those drilling rigs by re-rigging your line system?

A Well, yes, we could. As a matter of fact a large percentage of the gas that is used in the gas wells is used for the two oil wells down in the Hightower pool so that there is not too much gas goes up into the Bagley Field.

MR. MACEY: That is all.

MR. GRAHAM: If we denied this request what effect would it have on your production?

A We would lose temporarily, until we could get some equipment in there, approximately 39,000 barrels a month.

MR. KELLOUGH: Would you have to shut in the wells?

A That is not correct. Strike that. We would lose the amount it takes to, the amount that the gas is used from the gas wells. Of course the gas taken from the Pennsylvanian we could still go ahead and use.

MR. GRAHAM: It would be a material drop?

A Yes, it would.

MR. MACEY: How much gas could you produce if you were cut back to 2,000 ratio limit based on current allowable on the two gas wells?

A 318,000 cubic feet per well on the present allowable.

MR. MACEY: That is per day?

A Yes, sir. Actually the true volumetric displacement of the gas wells would be much higher even than that under the

rules. It would be 318,000.

MR. MACEY: That is all.

MR. SPURRIER: Any other questions? If not, the witness may be excused.

MR. KELLOUGH: That is all we have.

MR. SPURRIER: Any further comment in the case?

(Witness excused.)

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO)

I HEREBY CERTIFY that the foregoing and attached transcript of hearing in Case No. 364 before the Oil Conservation Commission, State of New Mexico, at Santa Fe, on April 15, 1952, is a true and correct record of the same to the best of my knowledge, skill and ability.

DATED at Albuquerque, New Mexico, this 21st day of April, 1952.

Ada Dearnley
REPORTER

ADA DEARNLEY & ASSOCIATES
COURT REPORTERS
ROOM 12, CROMWELL BLDG.
PHONES 7-9848 AND 8-9846
ALBUQUERQUE, NEW MEXICO



PETROLEUM AND ITS PRODUCTS

GULF OIL CORPORATION

P. O. DRAWER 1290 · FORT WORTH 1, TEXAS

May 1, 1952

FORT WORTH
PRODUCTION DIVISION

B. E. THOMPSON
DIVISION PRODUCTION
SUPERVISOR

D. B. COURVILLE

R. J. HOLLEY
ASST. DIVISION PRODUCTION
SUPERVISORS

M. I. TAYLOR
DIVISION PETROLEUM ENGINEER

L. J. GILNAGH
ASST. TO DIVISION PRODUCTION
SUPERVISOR

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

Attention: Mr. W. B. Macey
Chief Engineer

Re: OCC Case 364

Gentlemen:

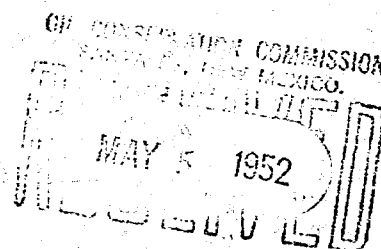
Returned herewith is your copy of the transcript of proceedings from the April 15, 1952, hearing in Case 364, which you were kind enough to send us for our use.

We wish to thank you for your cooperation in furnishing subject transcript and as you suggested we have had a copy made for our future use.

Yours very truly,

B. E. Thompson
B. E. THOMPSON

JDW:crs



BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION)
 OF AMERADA PETROLEUM CORPORATION)
 FOR AN EXCEPTION TO RULE 506 (b) 2,)
 RELATING TO THE PRODUCTION OF BOTH)
 OIL AND GAS FROM THE HIGHTOWER-)
 PENNSYLVANIA POOL, LEA COUNTY,)
 NEW MEXICO.)

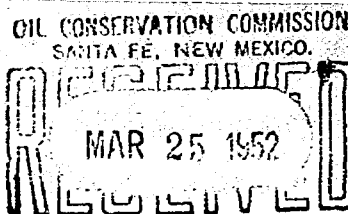
CASE NO. 364
344

APPLICATION FOR EXCEPTION.

Comes now Amerada Petroleum Corporation and alleges and states:

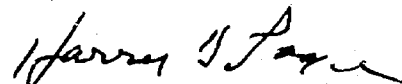
1. That Amerada Petroleum Corporation has heretofore drilled a gas well in the Hightower-Pennsylvania Pool, Lea County, New Mexico, known as the Birdie C. Roach No. 1 Well, located in the center of the NW/4 of SW/4 of Section 26, Township 12 South, Range 33 East, and has also drilled an oil well in said pool known as the B.T.B. No. 2 Well, located in the center of the SE/4 of NW/4 of Section 26, Township 12 South, Range 33 East.
2. That the Gulf Oil Corporation has heretofore drilled in said pool a gas well known as State NMMI No. 1 Well, located in the center of the SE/4 of SE/4 of Section 22, Township 12 South, of Range 33 East.
3. It now appears that said oil wells and said gas wells are now completed in the same reservoir.
4. That under Rule 506 (b) 2, gas production from the Birdie C. Roach No. 1 Well will be limited to the extent that there will not be sufficient gas available for gas lift operations necessary to operate oil wells in the Hightower field and in the nearby Bagley field.
5. That in order to prevent waste, applicant should be granted a temporary exception to Rule 506 (b) 2, in order to produce gas from the Birdie C. Roach No. 1 Well in quantities sufficient for gas lift operations until such time as other arrangements can be made.

WHEREFORE, applicant respectfully requests the Commission to set this application for hearing and that due and proper notice be given as required by law and that at the conclusion of said hearing, the Commission enter its order granting applicant an exception to Rule 506 (b) 2, authorizing the production




of gas from the Birdie C. Roach No. 1 Well, referred to above, in sufficient quantities to carry on gas lift operations for the purpose of lifting oil produced from other wells in the Hightower field and the Bagley field until such time as other arrangements can be made.

DATED, this 24th day of March, 1952.



Harry D. Page



Booth Kellough

ATTORNEYS FOR AMERADA PETROLEUM
CORPORATION.

Copy: 5-15-52

Date Finalized: 5-19-52
J.R.

OK WBM

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION FOR THE PURPOSE OF CON-
SIDERING:

CASE NO. 364
ORDER NO. R-158

THE APPLICATION OF AMERADA PETROLEUM
CORPORATION FOR AN ORDER GRANTING TEM-
PORARY EXCEPTION TO PARAGRAPH (D) OF
RULE 506 OF THE NEW MEXICO OIL CONSERVA-
TION COMMISSION'S RULES AND REGULATIONS,
THE EXCEPTION RELATING TO THE PRODUCTION OF OIL
AND GAS IN THE HIGHTOWER PERMO-PENNSYLVANIAN
POOL, LRA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:00 a.m. April 15, 1952, at Santa
Fe, New Mexico, before the Oil Conservation Commission of New Mexico, herein-
after referred to as the "Commission."

NOW, on this day of May, 1952, the Commission, a quorum being
present, having considered the testimony adduced at said hearing, 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 by virtue of Order No. R-17 A the Commission defined and de-
scribed the Hightower Permo-Pennsylvanian ^{Pool} and classified it as an oil pool;
that under the provisions of Rule 506 (d) the Hightower Permo-Pennsylvanian
Pool has a gas - oil ratio limitation of 2,000 cubic feet of gas per barrel of
oil produced.

(3) That the granting of a temporary exception to Paragraph (d) of
Rule 506 of the Commission's Rules and Regulations would not be in the interest
of conservation and would tend to promote waste of reservoir energy, resulting
in underground waste.

IT IS THEREFORE ORDERED:

(1) That the application of Amerada Petroleum Corporation be and the
same hereby is denied.

(2) That operators in the Hightower Permian-Pennsylvanian Pool shall produce gas wells in compliance with Rule 106 of the Commission's Rules and Regulations.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

Edwin L. Mechem, Chairman

Guy Shepard, Member

R. R. Spurrier, Secretary

S E A L

CASE FILE

NO. 363

IS
MISSING