

CASE 4172: Appli. of PENNZOIL  
UNITED, INC. FOR SPECIAL POOL  
RULES FOR EAST LOVINGTON-PENN.

TO AUGUST 6, 1969 EXAMINER HEARING

Case Number.

4172

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Application

Transcripts.

Small Exhibits

ETC.

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

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BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
August 19, 1970

EXAMINER HEARING

IN THE MATTER OF:

Case No. 4172, being reopened pursuant  
to the provisions of Order No. R-3816,  
which order established 80-acre spacing  
units for the Northeast Lovington-  
Pennsylvanian Pool, Lea County, New  
Mexico.

Case No. 4172  
(Reopened)

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

MR. HATCH: In the matter of Case No. 4172, being reopened pursuant to the provisions of Order No. R-3816, which order established 90-acre spacing units for the Northeast Lovington-Pennsylvanian Pool, Lea County, New Mexico. All interested parties may appear and show cause why the said pool should not be developed on 40-acre spacing units.

MR. DURRETT: Mr. Examiner, please, J. M. Durrett, representing the Applicant. I have one witness, Mr. Sinclair.

B. C. SINCLAIR,

the witness, having been first duly sworn upon his oath, according to law testified as follows:

(Six exhibits marked 1 through 6, respectively.)

DIRECT EXAMINATION

BY MR. DURRETT:

Q Mr. Sinclair, will you please state your name and position for the record?

A B. C. Sinclair, Petroleum Engineer with Pennzoil United, Incorporated, Midland, Texas.

Q Have you previously testified as an expert witness before this Commission and had your qualifications made a matter of record?

A Yes.

MR. DURRETT: Is the witness' qualifications acceptable?

MR. NUTTER: Yes. They are.

Q Mr. Sinclair, in Case 4172, this case is reopened from

a previous hearing. Will you please tell us what Pennzoil is seeking at this time?

A We are seeking continuance of the 80-acre spacing which was approved on a temporary basis about a year ago for the Northeast Lovington-Pennsylvanian Field in Lea County, New Mexico.

Q Alright, Sir. Will you please refer to your Exhibit No. 1 which is a structure map and point out to the Commission what that shows?

A Exhibit No. 1 is a structure map contoured on top of the Strawn porosity which is a member of the Penn formation. This plat also shows the locations of the wells in the area that have penetrated the Penn formation. The contours are on a 100 foot contour interval and they generally show the structure dipping to the Northeast in the field area. A probable oil water contact is shown on the Northeast side of the field at a sub sea depth of approximately 7,675 feet.

Q Now, Mr. Sinclair, I believe this plat that you have here shows a Northeast Lovington-Penn field. Down to the South it shows the East Lovington-Penn Field. At the time of the first hearing were we under the impression that those two fields were really the same pool?

A Those two fields were classified as a common field at the time of the first hearing. However, as a result of that hearing and action after that they were reclassified into two

separate fields and the field that we are concerned with today is the northernmost field of the Northeast Lovington-Penn field. We are not concerned with the East Lovington-Penn Field.

Q That East Lovington-Penn Field is still on forty, is it not?

A Yes. It is still on forty acre spacing.

Q Let's move to your Exhibit No. 2. What is that exhibit?

A Exhibit No. 2 is an isopach map showing the net effective thickness of the Strawn formation. This map shows the productive limits of the reservoir and I might point out that as indicated by the dry hole shown, the reservoir is fairly well defined in all directions except maybe to the Northeast.

Q So you have pretty good control here on your structure or your pay except for up in the Northeast?

A Yes. That is correct.

Q Let's move now to your Exhibit No. 3 which is your well data and point out the pertinent information on that to the Examiner.

A This exhibit just shows all the wells that have been drilled in the Northeast Lovington-Penn Field and gives individual data for each of these wells. The dry hole as well as the completed wells are shown. The information shown is the location, the completion date, the perforations, the initial treatment and

the initial potential of the wells. Their current production both oil and water is shown. The method of production is shown where they were flowing or pumping and the cumulative production as of June 1st, 1970 is shown for each well.

I might point out in connection with this exhibit that the ultimate recoveries of oil for the wells in this field will vary greatly. One well, the Getty Oil Company Montieith "A" No. 1 has already produced 904 barrels of oil while the Clinton Oil Company Montieith "C" No. 1 well has produced 2,262 barrels of oil and is already approaching the economic limit, so the recovery will vary greatly for these wells.

Q Let's move now to your Exhibit No. 4 which is your reservoir and fluid properties.

A Yes, Sir. This exhibit shows the average reservoir fluid properties for the reservoir. Those that are pertinent to our spacing hearing would be the porosity 8.5%. The permeability which varies somewhat throughout the vertical zone from 1 to 100 millidarcies. The original bottom hole pressure, 4,000 pounds. The oil gravity is quite high -- 44 degrees API. The reservoir energy is solution gas drive. We do have an oil water contact indicated but there is no evidence so far that we are getting any pressure support from water encroachment. The extent of the reservoir as is planimetered from the isopach map, 1,320 acres and I'd like to say that these properties are

favorable to draining areas in excess of forty acres. This exhibit also shows some reservoir calculations that I have made. The reservoir volume as planimetered from the isopach map is 29,821 acre feet and the estimated ultimate recovery of oil is 2,637,800 barrels. That is estimated from the decline curves. It also shows the original oil in place which is a volumetric calculation based on the reservoir volume determined from the isopach map and this is 9,493,400 barrels. The recovery factor which is determined by dividing the recoverable oil by the oil in place is 27.8% and the average drainage area for each well determined by dividing the areal extent of the reservoir by the number of producing wells was 132 acres per well.

I think it is evident that the current spacing is doing a good job of efficiently draining the reservoir. The 27.8% recovery factor is considerably higher than what is recognized as being normal recovery for a solution gas drive reservoir which is in the range of 17 to 20 percent. I think that we are doing an efficient job of draining the reservoir on the current spacing.

Q Now, am I correct that your figures here on Exhibit No. 4 show that you have more oil in place than we thought originally at the hearing -- at the first hearing?

A I am not sure about that, Mr. Durrett. I am not sure. The thing that they do show, which is a result of a separation



of the two fields, is that the average recovery per well would be considerably higher for the Northeast Lovington Field as the exhibit currently exists than it would have been for the field if they were combined.

Q So with the experience that we have it looks like we are getting better recovery?

A Yes.

Q Alright. Let's go to Exhibit No. 5 now which is your bottom hole data.

A Yes. This is very similar to the exhibit we presented earlier which presents bottom hole pressure data which in my opinion very closely approximates the information that you would obtain from an interferrance type test. The first two wells shown, the bottom hole pressures are the original bottom hole pressures for two of the wells in the field. These were the Getty Montieith "A" No. 1 and the Getty Montieith "B" No. 1 wells and their original pressures were 3,990 and 3,785, respectively, and these pressures were taken in August of 1952 in one case and March of 1953 in the other case, so they do represent very close to the original bottom hole pressure for the reservoir which we estimate was around 4,000 pounds.

The next four wells shown are also original bottom hole pressures for these wells. They were all drilled later in the life of the reservoir and in each case they show bottom hole pressures considerably less than the 4,000 pounds original

for the first two wells.

I have shown the distance from each of these wells to the nearest prior producer to indicate that the wells that existed before they were drilled were draining areas and draining all over distances considerably greater than the normal distance between wells drilled on eighty acre spacing. One well, the Pennzoil State "C" No. 1 had bottom hole pressure of 3,026 pounds initially. That was in January of 1969 and this is almost a thousand pounds below the original reservoir pressure and this well was 5,600 feet from the nearest producing well in the reservoir at that time indicating the oil had been drained in distance in excess of over 5,600 feet.

Finally, the last three wells shown there, these are recent bottom hole pressures taken on three Pennzoil wells in the field and, as you will note, the pressures are in very close agreement with 2,648, 2,569 and 2,600 pounds and the close agreement of these pressures indicates the reservoir is being efficiently and uniformly drained.

Q Now, those last three wells which you are talking about there, your Pennzoil wells, are up in the Northeast corner of the pool, is that correct?

A Yes. These wells are located in close proximity to one another. They are up in the Northeast -- on the Northeast side of the field and in a little cluster up there shown on the isopach map.

Q Let's move now to your next exhibit -- that would be Exhibit No. 6. Would you briefly summarize that for the Commission?

A Yes. The economics here are shown for forty acre and eighty acre spacing and a comparison is presented. Overall the economics are presented -- that I present today are better than the economics presented a year ago, primarily due to the separation of the two areas and the average recovery per well being better for the field as it currently exists.

We show estimated recovery for two wells on forty acre spacing of 303,000 barrels of oil and for eighty acre spacing, one well on eighty acre spacing, 264,000 barrels of oil. This results in gross revenue of a 1,290,000 dollars for forty acre spacing and 873,800 dollars for eighty acre spacing. After deducting royalty and severance tax leaves them total revenue of net revenue of 824,800 dollars as compared to 718,700 dollars. Then deducting expenses, the expense to drill, complete and equip the wells is shown to be 480,000 dollars for two wells on forty acre spacing versus 240,000 dollars for one well on eighty acre spacing.

The operating costs are shown to be 112,000 dollars for forty acre and 77,000 dollars on eighty acre spacing. That leaves a net profit of 232,800 dollars for two wells on forty acre spacing or 401,700 dollars for one well drilled on eighty acre spacing.

The profit investment ratio is shown to be .49 for forty acre and 1.67 for eighty acre spacing.

I might say that it is generally accepted that profit investment ratio of around 1.0 is what you need to justify investment of this type.

Q Now, your economics that you show here -- I believe you have a note on here, "this analysis does not consider the ten dry holes that have been drilled."

A That is correct. You have to recover enough profit from the ten producing wells to also pay out the ten dry holes before you would be in a profit situation for the field as a total.

Q Mr. Sinclair, in your opinion as a Pennzoil engineer, has the Northeast Lovington-Penn Pool been efficiently and economically drained and developed on eighty acre and will it continue to be so in the future.

A Yes.

Q You base that opinion upon the information that you have presented to the Commission here today?

A Yes. That is correct.

Q Am I correct that the other two operators in this field are Getty Oil Company and Clinton Oil Company?

A Yes. That is correct.

Q Have you contacted them concerning this hearing today?

A Yes. I have and they both stated that they would send telegrams or letters supporting our request for continuance of eighty acre spacing.

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

A Yes. They were.

MR. DURRETT: Commissioner, please, I move the introduction of Exhibits 1 through 6 and that will conclude my direct examination.

MR. NUTTER: 1 through 6 will be admitted in evidence.

Are there any questions of Mr. Sinclair?

CROSS- EXAMINATION

BY MR. NUTTER:

Q Mr. Sinclair, a year ago when we had this case up for hearing the Northeast Lovington and the East Lovington were all considered one pool, is that correct?

A Yes, Sir. That is correct.

Q And then the equivalent to your Exhibit No. 6 at that hearing showed less recovery per well?

A Yes, Sir.

Q And that was because you were including the wells down here in the East Lovington Pool in the computations at that time?

A Yes, Sir. That is correct. We were including them

and also I think the performance we have seen during the past year justifies increasing the estimated recovery from the wells in the northern area now too.

Q By including the wells in the southern portion you brought down the average recovery per well?

A Yes, Sir.

Q So by eliminating them this year you have got better recovery?

A Yes. That is true.

Q Now, your recovery is taken from Exhibit No. 4 in which you estimated total estimated recovery of 2,600,000 for the ten wells in the north would be based on decline curves only. Did you make any volumetric computation of the oil in place?

A Yes, Sir. I did and these estimates are also supported by volumetric calculations.

Q Using a recovery factor similar to what you have used here or what?

A Yes. Let me see what recovery factor I did use. I have some information on that right here handy.

Yes. I used recovery factors in my volumetric estimates of 20% and the recovery, for instance, for one well here, the Pennzoil "C" No. 2, was 211,000 barrels of oil based on volumetrics on a 20% recovery factor.

Q Actually the 27.8 that you indicated on Exhibit No.

4 frequently would be a little high for solution gas drive reservoirs, I believe?

A Yes, Sir. It would. This is an unusually good reservoir and I think it also indicates we are doing an efficient job of draining.

Q No evidence of no other kind of drive except this solution gas drive?

A No, Sir. We have no evidence of pressure support or pressure maintenance. We do see a little water production in the wells on the northeast side of the field -- nothing serious yet, but we anticipate that those wells will make more water as time goes on.

Q You think that the oil water contact will move southwest?

A Yes. It will move, but we don't think it will support the pressures.

MR. NUTTER: Any further questions of Mr. Sinclair? You may be excused.

You have anything further, Mr. Durrett?

MR. DURRETT: Nothing further, Mr. Examiner.

MR. NUTTER: Does anyone have anything to offer in this case?

MR. HATCH: The Commission has received a letter from Getty and a telegram from Clinton Oil Company supporting the applicant.

Page 14

MR. NUTTER: Thank you. There being nothing further  
in this case, we will take the case under advisement and call  
Case No. 4399.



STATE OF NEW MEXICO     )  
                                  ) ss.  
COUNTY OF BERNALILLO    )

I, Peter A. Lumia, Court Reporter, do hereby certify  
that the foregoing and attached Transcript of Hearing before  
the New Mexico Oil Conservation Commission was reported by me  
and that the same is a true and correct record of the said  
proceedings, to the best of my knowledge, skill and ability.

Peter A. Lumia  
Peter A. Lumia, C.S.R.

I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the hearing held on Nov. 4, 1972,  
heard by me on 8/19, 1972.

Peter A. Lumia, Examiner  
New Mexico Oil Conservation Commission

I N D E X

<u>WITNESS:</u>	<u>PAGE</u>
MR. B. C. SINCLAIR	
Direct Examination by Mr. Durrett	2
Cross Examination by Mr. Nutter	11

EXHIBITS

MARKED

OFFERED AND  
ADMITTED

Applicant's  
Exhibits 1  
through 6

2

11

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BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
August 6, 1969

EXAMINER HEARING

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IN THE MATTER OF: )  
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Application of Pennzoil United,  
Inc., for special pool rules,  
Lea County, New Mexico. )  
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Case No. 4172

BEFORE: Daniel S. Nutter.

TRANSCRIPT OF HEARING

I N D E XPageB. C. SINCLAIR

Direct Examination by Mr. Durrett

3

Cross Examination by Mr. Nutter

17

E X H I B I T SMarkedOffered and  
Admitted

Applicant's Exhibits Nos. 1 through 8

4

15

MR. NUTTER: The Hearing will come to order, please. We will call Case No. 4172.

MR. HATCH: Case No. 4172, continued from the July 23, 1969, Examiner Hearing. Application of Pennzoil United, Incorporated for special pool rules, Lea County, New Mexico.

MR. DURRETT: If the Examiner please, J. M. Durrett, appearing for the Applicant. I have one witness, Mr. Sinclair.

B. C. SINCLAIR

called as a witness, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. DURRETT:

Q Mr. Sinclair, will you please state your name and position for the record?

A My name is B. C. Sinclair, Petroleum Engineer, Pennzoil United, Incorporated, Midland, Texas.

Q Have you previously testified as an expert witness before this Commission?

A Yes, I have.

MR. DURRETT: Are the witness' qualifications acceptable?

MR. NUTTER: Yes, they are.

(Discussion held off the record.)

BY MR. DURRETT:

Q Mr. Sinclair, would you briefly state what Pennzoil is seeking by their Application in Case No. 4172?

A We are seeking promulgation of field rules for the Lovington East-Penn Field which established 80-acre spacing and proration units for the field with well locations within 150 feet of the center of Governmental quarter quarter section.

(Whereupon, Applicant's Exhibits Nos. 1 through 8 were marked for identification.)

BY MR. DURRETT:

Q All right. Let's refer to your Exhibit No. 1. Is that a plat of this area?

A Yes, sir, it is.

Q What does that show?

A Exhibit 1 is a structure map with the contours drawn on top of the Strawn porosity. Strawn is a member of the Pennsylvanian formation. The map also shows the location of all wells which have penetrated the Penn Reservoir in this field and immediate area.

I would like to point out also in connection

with this Exhibit that the discovery well for the field was the Getty State P No. 1 located in Section 32 which is near the center bottom of your map.

I would also like to cover some of the history of the field. The field was discovered in April of 1951 and development of the field has taken place in two stages. The first stage of development which ended in October of '54 resulted in the drilling of 7 producing wells and 8 dry holes. The second stage of development which began in August of 1967 and has continued to the present resulted in the drilling of 8 producing wells and 4 dry holes. Now, development of the Reservoir is still under way at the present time with Pennzoil at the present time drilling in State 21, No. 1 in Section 21 which is near the northeast edge of the field.

Q Let me just interrupt you for a moment here, Mr. Sinclair. The initial development back in the early '50's down here in Sections 31, 32, 33 and 4, 5 and 6, I presume?

A Yes, sir, that's correct.

Q And all of the production is in 7 producing wells. That would be the 5 wells or the 4 wells in the lower tier of the Sections, the well in Section 31, the

one in 32, and the one in 33?

A Right. No --

Q (Interrupting) That was the original pool --

A (Continuing) No, sir, that is not quite right.

The original 7 producers were the wells in Sections 4 and 5, the well in Section 32, the well in Section 31, and then the Getty-Montieth No. 1-A up in Section 20 and the Getty-Montieth -- a later exhibit will give you completion dates on these wells -- but the 7th well completed in the early stage of development was the Getty-Montieth "B" No. 1 in Section 19. So the south area was developed in the early stage and the north area was partially developed in the early stage of development.

Q There was a little bit of production up in the north end earlier?

A Yes, that's right. I will get into a little more detail on that in just a minute.

Q All right. I was probably just rushing things.

A There was one dry hole drilled in between these two stages of development. The total number of wells drilled to date is 15 producers and 11 dry holes.

I might point out that the wells along the extreme west side of the map all the way from the north end of



the map to the south end are not included in these totals. They are part of the Lovington field which I am not considering.

Q How many wells are Pennzoil operating in this --

A (Interrupting) We operate 4 producing wells and we drilled two dry holes -- one dry hole in the area.

Q Let's go to your Exhibit No. 2, Mr. Sinclair. What is that?

A This is another map which shows the location of the wells and shows the approximate productive limits of the Reservoir. It also shows the net pay thickness of each of the producing wells that have produced from the Reservoir. The net pay, for purposes of this map, was taken to be all pay that had a porosity of 5 percent or greater and that was above the oil-water contact. I might refer you back to Exhibit 1 to point out that we do show an oil-water contact at the amount of 7576 feet Sub-C.

Q That number again, sir?

A 7576 Sub-C depth. These two areas of development as we discussed earlier, the south area was developed during the early stage of development and the north area was partially developed and it has been more completely

developed in the last 3 years. There are several dry holes between the two areas that separate the areas and we believe that they are two separate producing reservoirs.

Q Is that all you have for that exhibit?

A That's all.

Q Let's move to the next exhibit which is No. 3.

That is your well data. Would you point out the pertinent things that that shows?

A Yes. This is a list, by operators, of all wells that have been drilled to the Penn Pay in the field. The information shown there is the location of the well, its completion date, the perforation, the initial treatment, the initial potential test, the current daily production of each well that is still producing, the method of production and cumulative oil production to July 1st, 1969.

Other than this statistical data, I would like to point out that the wells completed in this Reservoir will have a very wide range of primary recovery. For example, I call your attention to the Skelly State "O" No. 13 on the first page of the exhibit which recovered 17,040 barrels of oil before it was depleted and re-completed to the Paddock formation.

A similar well was the Getty State "U" No. 1

which recovered 19,647 barrels of oil before it was depleted and re-completed to the Paddock.

In contrast to this, look at the Getty-Montieth "A" No. 1 which has recovered 888,000 barrels -- 649,000 barrels of oil -- to 7/1/69 and is estimated to ultimately recover in excess of a million barrels of oil.

Q What does that indicate to you, if anything?

A It indicates that the reservoir is not a completely homogeneous reservoir, that there is some erratic development of the reservoir resulting in these large range of recoveries.

Q Moving now to your Exhibit No. 4, what is that exhibit?

A This is a plot of monthly oil production, the monthly gas-oil ratio and the number of producing wells in the East Lovington-Penn Field.

I would like to point out that the initial development resulted in a peak production back in the latter part of 1952 of 25,000 barrels of oil per month and 7 producing wells. From that time until the early part of 1967, the reservoir -- the wells in the reservoir -- experienced what we consider a normal decline. Then the second stage of development which began in 1967 resulted

the production increase as shown there which reached a peak of 30,000 barrels of oil per month in June of 1969. This was from 9 producing wells.

Q Let's move now to your Reservoir and Fluid Properties. That is No. 5. Would you point out the pertinent data on that?

A Yes, this is an exhibit representing the average reservoir and fluid properties for the East Lovington-Penn Reservoir and the pertinent things here are the porosity, 8.5 percent; the bottom-hole temperature, 155°F; the oil gravity, 44 degrees A.P.I.; the formation volume factor, 1.45 reservoir barrels per stock tank barrel; reservoir energy which appears to be strictly solution gas drive.

The significance of these fluid and rock properties is that they are in the range of properties that are conducive to movement, easy movement of fluid through the reservoir which is necessary for recovery -- for drainage by one well of large areas. The primary property that is affected by these properties is the oil viscosity which we feel would be very favorable for drainage of large areas.

Q These are average figures that you have here?

A Average figures for all of the wells that have produced.

Q Now, refer to the Log, if you would, which is Exhibit No. 6?

A We intend to show this as an example Log for the field. It is a gamma ray neutron log of Pennzoil State "C" No. 1 well. It shows the perforations in the Penn Pay which are from 11,403 to 11,484 feet. It also shows the tops of the various geological markers such as the Wolfcamp correlation point near the top of the log, the top of the Strawn formation and the top of the Atoka formation as shown on the log.

Q Let's go to No. 7 now, which is the bottom-hole pressure data.

A This Exhibit shows the original bottom-hole pressures that were recorded in several specific wells in the field. The first two shown are the Getty-Montieth "A" No. 1 and Getty-Montieth "B" No. 1. Both of these wells were drilled early in the life of the field and they recorded pressures of 3990 pounds in the case of the Montieth "A" and that was in August of 1952. The pressure in the Montieth "B" was 3785 pounds recorded in March of 1953. This data, these two pressures established

the original reservoir pressure at approximately 4000 pounds per square inch at a Sub-C depth of minus 7600 feet.

Q Mr. Sinclair, would you for the purposes of clarification refer back to your Exhibit No. 2 and tell us where those wells are located that you are speaking of?

A Right. The Montieith "A" is in the southwest corner of Section 20. The Getty-Montieith "B" No. 1 is in the northwest quarter of Section 19.

Q Okay.

A The next four wells shown were all drilled during the latter stage of development. Each well encountered bottom-hole pressure, original bottom-hole pressure before any production was taken from that well which was well below the original reservoir of 4000 pounds. For example, I would like to call your attention to the Pennzoil State "C" No. 1 which encountered an original pressure of 3026 pounds in January of 1969. This well is located in the northeast corner of Section 20. This well is 5600 feet from the Getty-Montieith "A" No. 1 in the SW/4 of Section 20 and this Getty-Montieith "A" No. 1 was the nearest prior producer to the State "C" No. 1 at the time the State "C" No. 1 was completed.

Q That is the well that has made almost a million

barrels?

A Yes, sir. This illustrates that the fluid had moved out of the State "C" No. 1 area caused by the drainage, by the Montieth "A" No. 1 well. It illustrates that fluid has moved well in excess of the 1870 feet which is the normal distance between wells for 80-acre spacing. This is not a bottom-hole interference test as such, but it accomplishes, we feel, the same purpose as interference tests conducted strictly to show interference.

Q So it is your opinion that this does show drainage between the wells or interference?

A Between two wells located 5600 feet apart.

Q Right. Let's move to your next exhibit which is No. 8.

A This exhibit presents comparative economics for a typical well drilled in the field for 80-acre versus 40-acre spacing. The estimated recovery for a well drilled on 80-acre spacing is shown to be 217,000 barrels of oil near the top of the Exhibit. This estimated recovery for an average well is the average of the estimated ultimate recovery for all of the 15 producing wells that have been drilled to date. In arriving at the estimated ultimate recovery, decline curves

were used, both bottom-hole pressure versus cumulative oil production and monthly oil production versus time in estimating cumulative production from these wells.

The newer wells which do not have enough production history, the estimate was made by volumetrical calculations.

The total revenue -- let me back up just a minute -- a slightly increased recovery for 40-acre spacing, this is a result from our thinking that two wells on an 80-acre tract will more efficiently drain the tract and we will see about a 15 percent increase in recovery from two wells on an 80-acre tract as opposed to one.

Total revenue show after royalty and severance tax is \$649,700 in the case of 40-acre spacing and \$564,000 in the case of 80-acre spacing. The estimated cost to drill, complete and equip a well in this reservoir is \$240,000. Two wells will be required for development on 40-acre spacing. The operating costs shown are \$112,000. for 40-acre spacing and \$77,000. for 80-acre spacing. Eleven year life under 80-acre spacing is estimated and an annual operating cost of \$7000. per well per year. This makes a total expense of \$592,000. for 40-acre spacing and \$317,000. for 80-acre spacing and leaves a net profit of \$57,700. under 40-acre spacing and \$247,000.



under 80-acre spacing. The profit to investment ratio is shown to be .12 for 40-acre and 1.03 in 80-acre spacing.

I might point out that a profit to investment ratio of .12 is not considered adequate to justify the investment of \$480,000. in the wells that would be required to develop this reservoir. I would also like to point out that in this economic consideration or this economic analysis, that dry holes have not been considered. No provision has been made to recoup this money spent on dry holes.

Q Mr. Sinclair, were Exhibits 1 through 8 prepared by you or under your supervision?

A Yes, they were.

MR. DURRETT: If the Examiner please, I move the introduction of Exhibits 1 through 8.

MR. NUTTER: Applicant's Exhibits Nos. 1 through 8 will be admitted in evidence.

(Whereupon, Applicant's Exhibits Nos. 1 through 8 were offered and admitted in evidence.)

BY MR. DURRETT:

Q Mr. Sinclair, in your opinion as a petroleum engineer, can the East Lovington-Pennsylvanian oil pool be efficiently and economically drained and developed

on 80-acre spacing?

A Yes, sir, it can.

Q Do you feel that well locations within 150 feet of the center of a Governmental quarter quarter section will adequately protect correlative rights?

A Yes, I do.

MR. DURRETT: Mr. Examiner, we have communications from Mr. H. Lee Harvard who is the Expiration Manager for the Southwest Production Corporation and from Mr. J. E. Pierce of Getty Oil Company. I believe the Commission has those. If not, I have a copy and I would like to present it to the Commission at this time.

MR. NUTTER: I don't see them in the case file.

MR. DURRETT: Let me just give you a copy of these. We would like to have these made a part of the record, if you would.

MR. NUTTER: We have a letter from Southwest Production Corporation and we have received the letter from Mr. Pierce from Getty Oil Company, so if you want your copies back, you can have them.

MR. HATCH: Let me also point out that the Commission has also received a communication from the Southern Petroleum Exploration Company.

MR. NUTTER: Thank you, Mr. Hatch.

MR. DURRETT: I believe that all of these communications support the Application, Mr. Examiner.

That will conclude our direct examination.

MR. NUTTER: Southwest says they support it. Getty says they are in favor of it. The telegram says they support Pennzoil. That telegram, as Mr. Hatch mentioned, is from Southern Petroleum Exploration.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Sinclair, turning first to your Exhibit No. 3 there, I think, under Pennzoil United?

A Yes, sir.

Q We have your Aztec State No. 1 and Aztec "C" State No. 1 and that other one is State "C" No. 2, I presume, isn't it?

A Yes, it is.

Q Now, what are the present pool limits as defined by the Commission, Mr. Sinclair, do you know?

A I have copies of all of the orders that have extended the field from its original boundaries.

Q Could you describe what the boundary of the pool is?

A It would take some --

Q (Interrupting) It appears that we have two pools and I think that you, in fact, stated that you thought these two areas were separate and distinct reservoirs?  
(Discussion held off the record.)

BY MR. NUTTER:

Q At any rate, what I do want to establish for sure is that we have defined this southern area down here as being in the East Lovington Pool?

A Yes, sir.

Q And we also have these producing wells up here in Section 19 and 20 as being in the pool, is that correct?

A Yes, sir, that's correct.

Q And there is an interval there of more than a mile separating the two producing areas and it does contain several dry holes?

A That's right.

Q Do you think it would be proper for the Commission to separate these pools and make a northern pool and a southern pool?

A As far as I know, there would be no detrimental effect to anyone there, Mr. Nutter. There is only one producing well in the southern area at this time.

Q And all of the pressure data that you offered

on Exhibit No. 7 relates to wells that are in Sections 18, 19 or 20 which would be in the northern area?

A Yes, sir.

Q So if the Commission were to separate the two areas into two pools, the data here doesn't offer any testimony. You don't offer any data as to drainage in the south or pressure declines or anything and the case would be limited to consideration of spacing for the northern area?

A That would be perfectly all right with Pennzoil.

Q That's where all the activity is right now?

A Right.

Q How many of these wells in the north are still producing or are they all still producing?

A All the wells that ever produced in the north area are still producing.

Q Now, all of the wells are located in such a manner that 80-acres could be dedicated to them, are they not?

A Yes, sir, they are.

Q Do the operators have 80 acres in the instance of each well or would it be necessary to communitize? We don't have ownership shown here.

A I can't answer that question for sure. I know that in the Pennzoil case we have 80 acres in each case. I believe that the other operators do too, but I cannot speak for sure about them. There are only two other operators, the Getty and Southwest.

Q Now, prior to the new development which started in 1967, how many wells were in the north? The Getty-Montieth 1-A was an old well --

A (Interrupting) Yes, sir, and the Getty Montieth B-1 or the 1-B was an old well in Section 19, the NW/4. All of the other wells, producing wells up in that area have been drilled since August of 1967.

MR. DURRETT: Mr. Examiner, I might just state at this time that Mr. Harvard is here from Southwest Production Corporation and he has just informed me that they do have 80 acres available to dedicate to their wells.

MR. NUTTER: I see.

(Discussion held off the record.)

BY MR. NUTTER:

Q Mr. Sinclair, did you make any type of a volumetrical calculation regarding this Getty-Montieth 1-A to see -- I think you show 35 feet of net pay here in

that well -- to see what volume of acreage or what area with this amount of pay would be necessary at the average rate of porosity of  $8\frac{1}{2}$  percent in order to produce almost a million barrels?

A No, sir, I did not. I could do that and furnish that information to you, if you like, sir.

Q Using the figures that are on your Exhibit No. 5 with the volume factors and so forth, what is the amount of recoverable oil under a 40 or under an 80 based on the volumetric calculations in these figures?

A I believe I can tell you in just a minute. Did you say under 40 acres?

Q 40 or 80, either one.

A Under 80 acres, using 35 feet of pay and 8.1 percent porosity --

Q (Interrupting) 35 feet of pay?

A Yes, sir, 35 feet of pay and 8.1 percent porosity and a 30 percent conic water saturation, the formation volume factor of 1.50, an 80-acre tract would recover 148,000 barrels of oil.

Q What recovery factor are you using?

A That is an 18 percent recovery factor. I think all of those were fairly close to the average properties

I presented except maybe the --

Q (Interrupting) Well, you have  $8\frac{1}{2}$  percent average porosity and 36 feet of average pay?

A Right.

Q And your volume factor changed from 1.45 to 1.50?

A These were the numbers I used on one well.

Q Apparently, even though you've got 30 percent conic water here, it is not being produced?

A No, sir. We are not recovering any water.

Q Relative pressure to the oil is such that the water is staying in there?

A Yes, sir, that is correct. I believe one well, the last well completed by Southwest Production Corporation made some water on the potential test. The well is in the process of being equipped for pumping now and we have not had any sustained production so we don't know what the water production might do on that well.

Q Here on your Exhibit No. 3, Mr. Sinclair, I notice that the highest well in the pool as far as perforated intervals is concerned, would be this Skelly State "C" No. 13 down in Section 31, but referring to the wells that are in the south -- no, that's in the south



end too. Let's see, in the north end, the highest well would probably be Southwest-Montieth State "A" No. 1. No, it would be the B-1. No, it will be the C-1 at 11,095 to 128.

A Are you talking about highest perforations?

Q Yes, perforated intervals?

A Yes.

Q Then the lowest would be your State 16, No. 1 whose perforated interval is 11,452 to 471. Now, are these zones correlative across the pool?

A Yes, they are. If you will look at Exhibit 1, the Sub-C depth at a correlative point in the Southwest-Montieth No. 1 "C" which you designated as the highest well is --

Q (Interrupting) That is the far western well there in Section 24, correct?

A Yes. Minus 7230.

Q Okay.

A And the Sub-C depth of the same correlative point in Pennzoil State 16, No. 1 up on the northeast side is the amount of 7592. We do have a good bit of dip in the northeast direction there.

Q But when you take a cross section across the

pool, these zones are correlative across the Section?

A Yes, sir.

Q Just dipping to the northeast?

A That's correct.

Q How has this water-oil contact at minus 7675 been established?

A This was from the three wells of Pennzoil around the section corner of Section 20. Each of these wells encountered from log calculations an increased water saturation at the bottom of the pay.

Q They were drilled considerably deeper than the perforated intervals in each case?

A Yes, sir, they were drilled well below the perforated interval in each case.

Q Drilled to 11,600-something and the perforated interval is 11,300 to 11,400?

A Yes, sir, that is correct.

MR. NUTTER: Are there any further questions of Mr. Sinclair?

You may be excused.

(Witness excused.)

MR. NUTTER: Have you already offered your exhibits, Mr. Durrett?

MR. DURRETT: I believe I did.

MR. NUTTER: Do you have anything further,

Mr. Durrett?


MR. DURRETT: No, sir, that's all.

MR. NUTTER: Does anyone have anything they wish  
to offer in Case No. 4172?

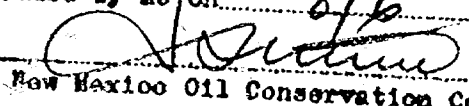
We will take the case under advisement.

STATE OF NEW MEXICO )  
COUNTY OF SANTA FE ) SS.

I, RICHARD L. NYE, Court Reporter, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

  
COURT REPORTER

My Commission expires April 8, 1971.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 4172 heard by me on 8/6 1969.  
  
Examiner  
New Mexico Oil Conservation Commission



dearnley-meier reporting service, inc.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS  
1120 SIMAS BLDG. • P. O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO

BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
July 23, 1969

EXAMINER HEARING

69 AUG 27 AM 8 19

IN THE MATTER OF:

Application of Pennzoil United,  
Incorporated for special pool  
rules, Lea County, New Mexico.

Case No. 4172

BEFORE: Elvis A. Utz, Examiner

TRANSCRIPT OF HEARING

MR. HATCH: I have one continuance. Where do you get the other one?

MR. UTZ: I picked one up on you, George. 4172.

MR. HATCH: Case 4172. Application of Pennzoil United, Incorporated for special pool rules, Lea County, New Mexico. The Applicant requested this case be continued to August 6, 1968.

MR. UTZ: Case 4172 will be continued to August 6th Examiner Hearing.

STATE OF NEW MEXICO )  
 ) SS.  
 COUNTY OF SANTA FE )

I, RICHARD L. NYE, Court Reporter, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

Richard L. Nye  
 COURT REPORTER

My Commission expires April 8, 1971.

I do hereby certify that the foregoing is  
 a complete record of the proceedings in  
 the hearing held on July 22, 1969  
 held by me on July 22, 1969  
Richard L. Nye, Examiner  
 New Mexico Oil Conservation Commission



# Telegram

(415).

LA146 SSM407

L RWA026 RC 1 EXTRA PDB=ROSWELL NMEX 5 414P MDT= 1969 AUG 5 PM 4 53  
NEW MEXICO CONSERVATION COMMISSION=  
STATE LAND OFFICE BLDG SANTA FE NMEX=

RELATIVE TO CASE NUMBER 4172, EXAMINER HEARING AUGUST 6,  
1969, PLEASE BE ADVISED THAT SOUTHERN PETROLEUM  
EXPLORATION INC SUPPORTS PENNZOIL UNITED INC IN THEIR  
APPLICATION FOR SPECIAL RULES FOR THE EAST  
LOVINGTON-PENNSYLVANIA POOL INCLUDING A PROVISION FOR 80  
ACRE OIL PRORATION UNITS  
SOUTHERN PETROLEUM EXPLORATION INC BY B C HICKS





EXECUTIVE OFFICE  
BIRMINGHAM, ALABAMA

# Southwest Production Corporation

MAILED 10  
AUG 11 AM 8 21

RECEIVED  
NEW MEXICO OIL CONSERVATION COMMISSION  
AUG 11 1969

P. O. Box 936  
Roswell, New Mexico 88201  
August 1, 1969

*PM*

Mr. A. L. Porter, Jr., Secretary-Director  
New Mexico Oil Conservation Commission  
State Land Office Building  
Santa Fe, New Mexico 87501

Re: Case 4172, Docket No. 22-69  
Application of Pennzoil United, Inc.  
For Special Pool Rules. East  
Lovington Penn Pool, Lea County,  
New Mexico

Gentlemen:

Southwest Production Corporation is the owner and operator of four wells in the East Lovington Penn Pool of Lea County, New Mexico. These wells are described below:

- (a) Montieth State #1, located in the SW $\frac{1}{4}$ NW $\frac{1}{4}$  of Section 19, T16S-R37E, N.M.P.M.
- (b) Montieth "A" State #1, located in the NE $\frac{1}{4}$ SW $\frac{1}{4}$  of Section 19, T16S-R37E, N.M.P.M.
- (c) Montieth "B" State #1, located in the NE $\frac{1}{4}$ SE $\frac{1}{4}$  of Section 19, T16S-R37E, N.M.P.M.
- (d) Montieth "C" State #1, located in the NE $\frac{1}{4}$ C $\frac{1}{4}$  of Section 24, T16S-R30E, N.M.P.M.

Southwest Production Corporation believes that the East Lovington Penn Oil Pool can be efficiently and economically developed with eighty-acre spacing. We, therefore, support the application by Pennzoil United, Inc. for special rules establishing 80-acre spacing and ask that the Commission enter its order establishing rules and regulations to that effect. In our opinion, this order would prevent waste and would protect correlative rights in the East Lovington Penn Pool.

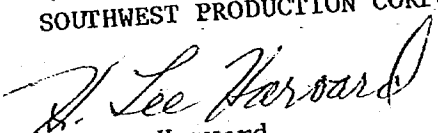
Mr. A. L. Porter, Jr., Secretary-Director  
New Mexico Oil Conservation Commission  
State Land Office Building  
Santa Fe, New Mexico 87501

Page - 2 -  
August 1, 1969

We respectfully request the reading of this letter into the records  
of the subject case.

Very truly yours,

SOUTHWEST PRODUCTION CORPORATION

  
H. Lee Harvard  
Exploration Manager

HLH/eg

cc: Pennzoil United, Inc.  
Western Division  
Wall Towers West  
P. O. Box 1828  
Midland, Texas 79701  
Attention: Mr. B. C. Sinclair

Docket No. 22-69

DOCKET: EXAMINER HEARING - WEDNESDAY - AUGUST 6, 1969

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,  
STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

The following cases will be heard before Daniel S. Nutter, Examiner, or  
Elvis A. Utz, Alternate Examiner:

- CASE 4179: Application of Petroleum Corporation of Texas for an exception to Order No. R-3221, as amended, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-3221, as amended, which order prohibits the disposal of water produced in conjunction with the production of oil on the surface of the ground in Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico. Said exception would be for applicant's Flint "B" Federal Well No. 1 located in Unit M of Section 14, Township 17 South, Range 30 East, Grayburg-Jackson Pool, Eddy County, New Mexico. Applicant seeks authority to dispose of salt water produced by said well in an unlined surface pit located in said Unit M.
- CASE 4180: Application of Union Oil Company of California for an exception to Order No. R-3221, as amended, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-3221, as amended, which order prohibits the disposal of water produced in conjunction with the production of oil on the surface of the ground in Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico. Said exception would be for applicant's Federal "E" and Federal "F" leases in Section 31, Township 18 South, Range 31 East, Shugart Field, Eddy County, New Mexico. Applicant seeks authority to dispose of salt water produced by wells on said leases in unlined surface pits on the subject leases.
- CASE 4167: (Continued from the July 9, 1969 Examiner Hearing)  
Application of Charles B. Read for a dual completion and salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete his Hobbs "Y" Well No. 1 located in Unit J of Section 29, Township 12 South, Range 34 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the East Hightower-Pennsylvanian Pool and the disposal of produced salt water through the intermediate casing-production casing annulus into the San Andres, Glorieta, Yeso, and Abo formations in the open-hole interval from approximately 4195 feet to 7720 feet.

- CASE 4181: Application of J. M. Huber Corporation for a dual completion and salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete its Stoltz Federal Well No. 1 located in Unit J of Section 12, Township 15 South, Range 34 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Morton-Wolfcamp Pool and the disposal of produced salt water through the 8 5/8 X 4 1/2-inch casing-casing annulus into the San Andres, Tubb, Abo, and possibly other formations in the open-hole interval from approximately 4330 feet to 9750 feet.
- CASE 4182: Application of Franklin, Aston & Fair, Inc. for an exception to Order No. R-3221, as amended, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-3221, as amended, which order prohibits the disposal of water produced in conjunction with the production of oil on the surface of the ground in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico. Said exception would be for certain of applicant's Loco Hills Field wells located in Units I and P of Section 20, Township 17 South, Range 30 East, Unit A of Section 17 and Unit F of Section 4, Township 18 South, Range 30 East, and Unit O of Section 36, Township 17 South, Range 29 East, Eddy County, New Mexico. Disposal would be into unlined surface pits in the vicinity of said wells.
- CASE 4183: Application of Pan American Petroleum Corporation for a unit agreement, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Cedar Point Unit Area comprising 5,120 acres, more or less, of State and Federal lands in Township 15 South, Range 30 East, Chaves County, New Mexico.
- ← CASE 4172: (Continued from the July 23, 1969. Examiner Hearing)  
Application of Pennzoil United, Inc. for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the East Lovington-Pennsylvanian Pool, Lea County, New Mexico, including a provision for 80-acre oil proration units.
- CASE 4184: Application of Pennzoil United, Inc. for the creation of a new oil pool, promulgation of special rules therefor, and a non-standard oil well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Pennsylvanian oil pool for its Gallagher "8" State Well No. 1 located in the NW/4 NW/4 of Section 8, Township 17 South, Range 34 East, Lea County, New Mexico, and for the promulgation

(Case 4184 continued)

of special rules therefor including a provision for 160-acre proration units and well locations in either the Northwest or Southeast quarter of a quarter section. Applicant further seeks an exception to said proposed rules to re-enter its Monsanto Gallagher State Well No. 1 located 660 feet from the South and West lines of said Section 8 and to recomplete said well in the subject pool.

CASE 4185: Application of Pennzoil United, Inc., for the creation of a new oil pool and special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Wolfcamp oil pool for its Sinclair "6" State Well No. 1 located 660 feet from the South line and 760 feet from the East line of Section 6, Township 17 South, Range 34 East, Lea County, New Mexico, and for the promulgation of special rules therefor including a provision for 160-acre proration units and well locations in either the Northwest or Southeast quarter of a quarter section.

CASE 4186: Application of Tenneco Oil Company for compulsory pooling and an unorthodox gas well location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Basin-Dakota Gas Pool underlying the North half of Section 11, Township 29 North, Range 13 West, San Juan County, New Mexico, said acreage to be dedicated to a well to be drilled at an unorthodox gas well location 2250 feet from the North line and 660 feet from the East line of said Section 11. 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 4187: Application of Aztec Oil & Gas Company for the amendment of Administrative Order NWU-341 and Commission Order No. R-2046, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Administrative Order NWU-341 and Commission Order No. R-2046, which orders established, respectively and among other units, certain non-standard gas proration units for the Blanco Mesaverde and Basin-Dakota Pools in Sections 7, 8, 9, 10, 11, 12, 18, and 19, Township 32 North, Range 8 West, San Juan County, New Mexico. Applicant seeks to amend said orders in such a manner as to establish eight co-extensive Mesaverde and Dakota gas proration units in Sections 7, 8, 9, 10, 11, 12, and 18, said units to average 318.89 acres each.

Examiner Hearing - August 6, 1969

Docket No. 22-69

-4-

CASE 4188: Application of Coastal States Gas Producing Company for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Lower San Andres formation in the open-hole interval from approximately 5025 feet to 5125 feet in its Santa Fe State Well No. 2 located in Unit F of Section 33, Township 9 South, Range 37 East, West Sawyer-San Andres Pool, Lea County, New Mexico.

CASE 4189: Application of Cayman Corporation for an unorthodox oil well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to the well location requirements for the High Plains-Pennsylvanian Pool as promulgated by Rule 4 of Order No. R-2874, to permit the drilling of a well at an unorthodox location in the center of the SE/4 NE/4 of Section 15, Township 14 South, Range 34 East, Lea County, New Mexico.

# Getty Oil Company

Mid-Continent Division J. E. Pierce, West Texas District Production Manager

P.O. Box 1231, Midland, Texas 79701

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JUL

1969

July 29, 1969

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

Re: Special Pool Rules  
(Case 4172-Hearing Cont. to  
August 6, 1969), East  
Lovington-Pennsylvanian Pool  
Lea County, New Mexico

Gentlemen:

Please be advised that Getty Oil Company supports Pennzoil United, Inc. in their application for special pool rules for the East Lovington Penn. Pool.

Getty, as an operator of wells in the subject pool, is in favor of establishing the 80-acre spacing that will provide for efficient and economical development of this Pennsylvanian oil pool.

Very truly yours,

*J E Pierce*

HGV:nr

Contract the East Lovington Pool  
Pool by deletion of the following  
Described acreage:

Township 16 South, Range 37 East

Section 16: SW $\frac{1}{4}$

17: SE $\frac{1}{4}$

18: SE $\frac{1}{4}$

19: All

20: NE $\frac{1}{4}$  & S $\frac{1}{2}$

21: NW $\frac{1}{4}$

& W $\frac{1}{2}$  SE $\frac{1}{4}$

29: All

31: ~~All~~ N $\frac{1}{2}$  N $\frac{1}{2}$ , SW $\frac{1}{4}$  NW $\frac{1}{4}$ , SW $\frac{1}{4}$

32: ~~All~~ N $\frac{1}{2}$  and N $\frac{1}{2}$  S $\frac{1}{2}$

33: ~~SW $\frac{1}{4}$~~  N $\frac{1}{2}$  SW $\frac{1}{4}$  and SE $\frac{1}{4}$  SW $\frac{1}{4}$

Township 17 South, Range 37 East

Section 4: NE $\frac{1}{4}$ , E $\frac{1}{2}$  NW $\frac{1}{4}$ , & SW $\frac{1}{4}$  NW $\frac{1}{4}$

Section 5: S $\frac{1}{2}$  N $\frac{1}{2}$



Create the Northeast Lovington-Penn-  
sylvanian Pool comprising the  
following described acreage:

~~Township 16 South, Range 36 East~~  
Section 16  
Section 17  
Section 18

Township 16 South, Range 36 East  
Section 24: SE/4

Township 16 South Range 37 East  
Section 16: SW/4  
17: SE/4  
18: SE/4  
~~24: SE/4~~  
19: All  
20: NE/4 and S/2  
21: NW/4

Vertical limits: Penn Form.  
approve 80-acre pool rules for this  
new pool if well locs ~~in the~~ within 150'  
of the center of either 40.

Give Pool an 80-acre proportional  
factor of 1.67

Docket No. 19-20

DOCKET: REGULAR HEARING - WEDNESDAY - AUGUST 19, 1970

OIL CONSERVATION COMMISSION - 9 A.M. - MORGAN HALL, STATE LAND OFFICE  
BUILDING, SANTA FE, NEW MEXICO

- ALLOWABLE:
- (1) Consideration of the oil allowable for September and October, 1970;
  - (2) Consideration of the allowable production of gas for September, 1970 from fifteen prorated pools in Lea, Eddy, Roosevelt and Chaves Counties, New Mexico. Consideration of the allowable production of gas from nine prorated pools in San Juan, Rio Arriba and Sandoval Counties, New Mexico, September, 1970.

THE FOLLOWING CASES WILL BE HEARD BEFORE DANIEL S. NOTTER, EXAMINER, OR ELVIS A. UTZ, ALTERNATE EXAMINER, IN THE OIL CONSERVATION COMMISSION CONFERENCE ROOM ON THE SECOND FLOOR OF SAID BUILDING AT 9:30 a.m.

CASE 4414: Southeastern New Mexico nomenclature case calling for an order for the creation and extension of certain pools in Lea, Chaves, and Eddy Counties, New Mexico:

- (a) Create a new pool in Lea County, New Mexico, classified as a gas pool for Morrow production and designated as the Townsend-Morrow Gas Pool. The discovery well is the Avance Oil & Gas Company State ETA No. 2 located in Unit 1 of Section 8, Township 16 South, Range 35 East, NMPM. Said pool would comprise:

TOWNSHIP 16 SOUTH, RANGE 35 EAST, NMPM  
SECTION 8: SE/4

- (b) Extend the Allison-Pennsylvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 9 SOUTH, RANGE 36 EAST, NMPM  
SECTION 12: S/2

- (c) Extend the Baum-Upper Pennsylvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 13 SOUTH, RANGE 32 EAST, NMPM  
SECTION 36: NW/4

- (d) Extend the Drinkard Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 36 EAST, NMPM  
SECTION 24: E/2 NE/4

- (e) Extend the EK Yates-Seven Rivers-Queen Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 34 EAST, NMPM  
SECTION 19: SE/4  
SECTION 20: SW/4

- (f) Extend the Hobbs-Blinebry Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 38 EAST, NMPM  
SECTION 19: S/2

- (g) Extend the Indian Basin-Upper Pennsylvanian Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 22 SOUTH, RANGE 23 EAST, NMPM  
SECTION 21: N/2 and N/2 N/2 N/2 S/2

- (h) Extend the Paduca-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 25 SOUTH, RANGE 31 EAST, NMPM  
SECTION 1: W/2  
SECTION 12: W/2

- (i) Extend the Springs-Upper Pennsylvanian Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 25 EAST, NMPM  
SECTION 3: Lots 1, 2, 7, 8, 9, 10,  
15 and 16

- (j) Extend the Sulimar-Queen Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 15 SOUTH, RANGE 29 EAST, NMPM  
SECTION 26: SW/4 NE/4

(k) Extend the Tres Papalotes-Pennsylvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 14 SOUTH, RANGE 34 EAST, NMPM  
SECTION 33: NW/4

(l) Extend the Northwest Vacuum-Wolfcamp Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 34 EAST, NMPM  
SECTION 5: SW/4

CASE 4413: In the matter of the hearing called by the Oil Conservation Commission upon its own motion to permit Stanley Leonard Jones dba Francisca Corporation and all other interested parties to appear and show cause why the Francisca Corporation Beeman Well No. 1 located 1980 feet from the South and West lines of Section 2, Township 24 South, Range 28 East, Eddy County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.

CASE 4172: (Reopened)

In the matter of Case No. 4172 being reopened pursuant to the provisions of Order No. R-3816, which order established 80-acre spacing units for the Northeast Lovington-Pennsylvanian Pool, Lea County, New Mexico. All interested parties may appear and show cause why the said pool should not be developed on 40-acre spacing units.

CASE 4399: Application of Pan American Petroleum Corporation for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle in the wellbore production from the Blinbry, Tubb, and Drinkard Oil Pools in its Southland Royalty "A" Well No. 8 located in Unit O of Section 4, Township 21 South, Range 37 East, Lea County, New Mexico.

CASE 4400: Application of David C. Collier for an exception to Order No. R-3221, as amended, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-3221, as amended, which order prohibits the disposal of water produced in conjunction with the production of oil on the surface of the ground in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico. Said exception would be for applicant's Southern Federal Lease in Units A, C, E, G, I, K, and M of Section 30, Township 19 South, Range 31 East, North Hackberry Yates-Seven Rivers Pool, Eddy County, New Mexico.

August 19, 1970 - Regular Hearing  
-4-

Docket No. 19-70

- CASE 4401: Application of Read and Stevens, Inc. for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Queen, San Andres, Glorieta, and Delaware formations in the open-hole interval between the 8 5/8 inch casing shoe at 3998 feet and the top of the cement at 6109 feet in its Getty State "B.G." Well No. 1 located in Unit K of Section 12, Township 19 South, Range 34 East, Quail-Queen Pool, Lea County, New Mexico.
- CASE 4402: Application of Reserve Oil and Gas Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the Cooper-Jal Unit Area comprising 2581 acres, more or less, of Federal and fee lands in Township 24 South, Ranges 36 and 37 East, Lea County, New Mexico.
- CASE 4403: Application of Reserve Oil and Gas Company for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by water injection through 26 wells into the Lower Seven-Rivers and Queen formations underlying its Cooper-Jal Unit Area, Langlie-Mattix Pool, Lea County, New Mexico.
- CASE 4404: Application of Reserve Oil and Gas Company for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by water injection through 23 wells into the Tansill, Yates, and Upper and Middle Seven-Rivers formations underlying its Cooper-Jal Unit Area, Jalmat Pool, Lea County, New Mexico.
- CASE 4405: Application of Reserve Oil and Gas Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the South Langlie-Jal Unit Area comprising 1080 acres, more or less, of fee lands in Township 25 South, Range 37 East, Lea County, New Mexico.
- CASE 4406: Application of Reserve Oil and Gas Company for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by water injection through 13 wells into the Seven Rivers and Queen formations underlying its South Langlie-Jal Unit Area, Langlie-Mattix Oil Pool, Lea County, New Mexico.
- CASE 4407: Application of Tenneco Oil Company for an unorthodox oil well location, McKinley County, New Mexico. Applicant, in the above-styled cause, seeks approval for an unorthodox Dakota oil well location 1980 feet from the South and East lines of Section 13, Township 17 North, Range 9 West, Hospah Field, McKinley County, New Mexico, said location being closer than 330 feet to an inner boundary line.

- CASE 4408:** Application of Keohane and Westall for an exception to Order No. R-3221, as amended, Eddy County, New Mexico. Applicants, in the above-styled cause, seek an exception to Order No. R-3221, as amended, which order prohibits the disposal of water produced in conjunction with the production of oil on the surface of the ground in Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico. Said exception would be for applicants' State Well No. 1, located in Unit D of Section 2, Township 19 South, Range 31 East, Shugart Pool, Eddy County, New Mexico.
- CASE 4409:** Application of Anadarko Production Company for two waterflood expansions, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the expansion of its Federal Q Waterflood Project by the conversion to water injection of three additional wells in Units J, L, and P of Section 3, Township 17 South, Range 30 East, Square Lake Pool, Eddy County, New Mexico. Applicant further seeks the expansion of the Stallworth Oil and Gas Company Parke Waterflood Project by the conversion to water injection of one additional well in Unit H of said Section 3.
- CASE 4410:** Application of Major, Giebel & Forster for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests underlying the SE/4 of Section 28, Township 25 South, Range 37 East, Crosby-Devonian Pool, Lea County, New Mexico, said acreage to be dedicated to a well to be drilled in said quarter section. Also, to be considered will be the cost 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 4411:** Application of Continental Oil Company for an exception to Rule 104 C I, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Rule 104 C I of the Commission Rules and Regulations to permit the completion within 660 feet of another producing well in the same formation of its State H-35 Well No. 10 located 2030 feet from the North line and 1780 feet from the East line of Section 35, Township 17 South, Range 34 East, Vacuum Pool, Lea County, New Mexico.
- CASE 4412:** Application of Continental Oil Company for a pressure maintenance project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a pressure maintenance project by the injection of water into the Yates and Seven Rivers formations through two wells on its McCallister "A" lease in Section 24, Township 26 South, Range 36 East, Scarborough Yates-Seven Rivers Pool, Lea County, New Mexico.



## OIL CONSERVATION COMMISSION

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

GOVERNOR  
DAVID F. CARGO  
CHAIRMAN

LAND COMMISSIONER  
ALEX J. ARMijo  
MEMBER

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

August 14, 1969

Mr. James Durrett  
Rhodes, McCallister & Durrett  
Attorneys at Law  
500 Oak N. E.  
Albuquerque, New Mexico 87106

Re: Case No. 4172  
Order No. R-3816  
Applicant: Pennzoil United, Inc.

DOCKET MAILED

Dear Sir:

Date 8-6-70

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

Very truly yours,

*A. L. Porter, Jr.*

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. 4172  
Order No. R-3816  
NOMENCLATURE

APPLICATION OF PENNZOIL UNITED, INC.,  
FOR SPECIAL POOL RULES, LEA COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on August 6, 1969,  
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 14th day of August, 1969, 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, Pennzoil United, Inc., seeks the  
promulgation of special rules and regulations for the East  
Lovington-Pennsylvanian Pool, Lea County, New Mexico, including  
a provision for 80-acre oil proration units.

(3) That the reservoir information presently available  
indicates that the horizontal limits of the East Lovington-  
Pennsylvanian Pool, as presently designated, encompass more  
than one separate common source of supply.

(4) That the horizontal limits of the East Lovington-  
Pennsylvanian Pool should, in order to prevent waste and protect



-2-

CASE No. 4172

Order No. R-3816

correlative rights, be contracted by deleting the following-described lands in Lea County, New Mexico:

TOWNSHIP 16 SOUTH, RANGE 37 EAST, NMPM

Section 16: SW/4  
Section 17: SE/4  
Section 18: SE/4  
Section 19: All  
Section 20: NE/4 and S/2  
Section 21: NW/4  
Section 29: All  
Section 31: N/2 N/2, SW/4 NW/4, SW/4,  
and W/2 SE/4  
Section 32: N/2 and N/2 S/2  
Section 33: N/2 SW/4 and SE/4 SW/4

TOWNSHIP 17 SOUTH, RANGE 37 EAST, NMPM

Section 4: NE/4, E/2 NW/4, and SW/4 NW/4  
Section 5: S/2 N/2

(5) That in order to prevent waste and protect correlative rights, a new pool in Lea County, New Mexico, classified as an oil pool for Pennsylvanian production should be created and designated the Northeast Lovington-Pennsylvanian Pool, with vertical limits comprising the Pennsylvanian formation and horizontal limits comprising the following-described lands in Lea County, New Mexico:

TOWNSHIP 16 SOUTH, RANGE 36 EAST, NMPM

Section 24: SE/4

TOWNSHIP 16 SOUTH, RANGE 37 EAST, NMPM

Section 16: SW/4  
Section 17: SE/4  
Section 18: SE/4  
Section 19: All  
Section 20: NE/4 and S/2  
Section 21: NW/4

(6) That in order to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the augmentation of risk arising from the drilling of an excessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, temporary special rules and regulations

-3-

CASE No. 4172  
Order No. R-3816

providing for 80-acre spacing units should be promulgated for the Northeast Lovington-Pennsylvanian Pool.

(7) That the temporary special rules and regulations should provide for limited well locations in order to assure orderly development of the pool and protect correlative rights.

(8) That the temporary special rules and regulations should be established for a one-year period in order to allow the operators in the subject pool to gather reservoir information to establish the area that can be efficiently and economically drained and developed by one well.

(9) That this case should be reopened at an examiner hearing in August, 1970, at which time the operators in the subject pool should be prepared to appear and show cause why the Northeast Lovington-Pennsylvanian Pool should not be developed on 40-acre spacing units.

IT IS THEREFORE ORDERED:

(1) That, effective September 1, 1969, the horizontal limits of the East Lovington-Pennsylvanian Pool, Lea County, New Mexico, are hereby contracted by the deletion therefrom of the following-described lands:

TOWNSHIP 16 SOUTH, RANGE 37 EAST, NMPM

Section 16: SW/4  
Section 17: SE/4  
Section 18: SE/4  
Section 19: All  
Section 20: NE/4 and S/2  
Section 21: NW/4  
Section 29: All  
Section 31: N/2 N/2, SW/4 NW/4, SW/4,  
and W/2 SE/4  
Section 32: N/2 and N/2 S/2  
Section 33: N/2 SW/4 and SE/4 SW/4

TOWNSHIP 17 SOUTH, RANGE 37 EAST, NMPM

Section 4: NE/4, E/2 NW/4, and SW/4 NW/4  
Section 5: S/2 N/2

(2) That, effective September 1, 1969, a new pool in Lea County, New Mexico, classified as an oil pool for Pennsylvanian

-4-

CASE No. 4172  
Order No. R-3816

production, is hereby created and designated the Northeast Lovington-Pennsylvanian Pool, with vertical limits comprising the Pennsylvanian formation and horizontal limits comprising the following-described lands:

TOWNSHIP 16 SOUTH, RANGE 36 EAST, NMPM  
Section 24: SE/4

TOWNSHIP 16 SOUTH, RANGE 37 EAST, NMPM  
Section 16: SW/4  
Section 17: SE/4  
Section 18: SE/4  
Section 19: All  
Section 20: NE/4 and S/2  
Section 21: NW/4

(3) That effective September 1, 1969, temporary Special Rules and Regulations for the Northeast Lovington-Pennsylvanian Pool, Lea County, New Mexico, are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS  
FOR THE  
NORTHEAST LOVINGTON-PENNSYLVANIAN POOL

RULE 1. Each well completed or recompleted in the Northeast Lovington-Pennsylvanian Pool or in the Pennsylvanian formation within one mile thereof, and not nearer to or within the limits of another designated Pennsylvanian oil pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.

RULE 2. Each well shall be located on a standard unit containing 80 acres, more or less, consisting of the N/2, S/2, E/2, or W/2 of a governmental quarter section; provided, however, that nothing contained herein shall be construed as prohibiting the drilling of a well on each of the quarter-quarter sections in the unit.

RULE 3. The Secretary-Director of the Commission may grant an exception to the requirements of Rule 2 without notice and hearing with an application has been filed for a non-standard unit comprising a governmental quarter-quarter section or lot, or the unorthodox size or shape of the tract is due to a variation in the legal subdivision of the United States Public Land Surveys. All operators offsetting the proposed non-standard unit shall be

-5-

CASE No. 4172

Order No. R-3816

notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the formation of the non-standard unit within 30 days after the Secretary-Director has received the application.

RULE 4. Each well shall be located within 150 feet of the center of a governmental quarter-quarter section or lot.

RULE 5. The Secretary-Director may grant an exception to the requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the proposed location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all operators offsetting the proposed location or if no objection to the unorthodox location has been entered within 20 days after the Secretary-Director has received the application.

RULE 6. A standard proration unit (79 through 81 acres) shall be assigned an 80-acre proportional factor of 6.67 for allowable purposes, and in the event there is more than one well on an 80-acre proration unit, the operator may produce the allowable assigned to the unit from the wells on the unit in any proportion.

The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 80 acres.

IT IS FURTHER ORDERED:

(1) That the locations of all wells presently drilling to or completed in the Northeast Lovington-Pennsylvanian Pool or in the Pennsylvanian formation within one mile thereof are hereby approved; that the operator of any well having an unorthodox location shall notify the Hobbs District Office of the Commission in writing of the name and location of the well on or before September 1, 1969.

-6-

CASE No. 4172

Order No. R-3816

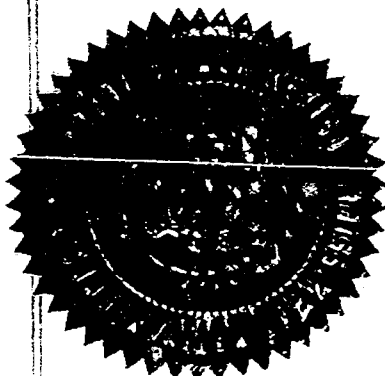
(2) That, pursuant to Paragraph A. of Section 65-3-14.5, NMSA 1953, contained in Chapter 271, Laws of 1969, existing wells in the Northeast Lovington-Pennsylvanian Pool shall have dedicated thereto 80 acres in accordance with the foregoing pool rules; or, pursuant to Paragraph C. of said Section 65-3-14.5, existing wells may have non-standard spacing or proration units established by the Commission and dedicated thereto.

Failure to file new Forms C-102 with the Commission dedicating 80 acres to a well or to obtain a non-standard unit approved by the Commission within 60 days from the effective date of this order shall subject the well to cancellation of allowable. Until said Form C-102 has been filed or until a non-standard unit has been approved, and subject to said 60-day limitation, each well presently drilling to or completed in the Northeast Lovington-Pennsylvanian Pool or in the Pennsylvanian formation within one mile thereof shall receive no more than one-half of a standard allowable for the pool.

(3) That this case shall be reopened at an examiner hearing in August, 1970, at which time the operators in the subject pool may appear and show cause why the Northeast Lovington-Pennsylvanian Pool should not be developed on 40-acre spacing units.

(4) 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

*David F. Cargo*  
DAVID F. CARGO, Chairman

*Alex J. Armiijo*  
ALEX J. ARMIJO, Member

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

esr/

**WU**  
western union

**Telegram**

(1125)  
1970 AUG 17 AM 10 32

KA029 SSF093  
K WZB024 JH PDB 2 EXT RA=WICHITA KANS 17 1042A CDT=

A L PORTER JR=

NEW MEXICO OIL CONSERVATION COMM STATE LAND OFFICE  
BLDG SANTA FENMEX=

CLINTON OIL CO FAVORS 80 ACREA SPACING IN NORTHEAST  
LOVINGTON (STRAWN) POOL AS REQUESTED BY APPLICANT IN

CASE #4172=

VIRGIL KRUTSINGER MGR PRORATION CLINTON OIL CO.==

*[Signature]*

#80 #4172•

WU 1201 (K 5-69)

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HAND DELIVERED

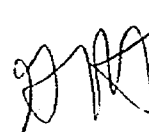
70 AUG 17 AM 1

# Getty Oil Company

P.O. Box 1231, Midland, Texas 79701

Mid-Continent Division J. E. Pierce, West Texas District Production Manager

August 17, 1970



'70 AUG 18 PM 12 57

Re: Examiner Hearing  
August 19, 1970,  
Rules Review (Case 4172)  
Northeast Lovington-  
Penn. Pool

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

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

Gentlemen:

Getty Oil Company, as an operator in the Northeast Lovington-Penn Pool, hereby concurs with Pennzoil Company that the temporary rules providing for 80 acre spacing in the Northeast Lovington-Pennsylvanian Pool, Lea County, New Mexico, by Order R-3816, should be made permanent.

Yours very truly,



WCS:rt

Getty Oil Company

Mid-Continent Division J. E. Pierce, West Texas District Production Manager

P.O. Box 1231, Midland, Texas 79701

August 17, 1970

Re: Examiner Hearing  
August 19, 1970,  
Rules Review (Case 4172)  
Northeast Lovington-  
Penn. Pool

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

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

Gentlemen:

Getty Oil Company, as an operator in the Northeast  
Lovington-Penn Pool, hereby concurs with Pennzoil Company  
that the temporary rules providing for 80 acre spacing in  
the Northeast Lovington-Pennsylvanian Pool, Lea County,  
New Mexico, by Order R-3816, should be made permanent.

Yours very truly,

Original signed by  
J. E. Pierce

WCS:rt

70 AUG 18 PM 12 57



July 23, 1969; Jim Durrett

Pennzoil United, Inc.

Special Reuser  
E. Livingston Penn  
Oil Pool

80-acre spacing

150' of center of  $\frac{1}{4} \times \frac{1}{4}$

(R-96 denied 80-ac spacing)  
10/15/51

DOCKET: EXAMINER HEARING - WEDNESDAY - JULY 23, 1969

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,  
STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

The following cases will be heard before Elvis A. Utz, Examiner, or Daniel S. Nutter, Alternate Examiner:

CASE 4160: (Continued and Readvertised)

Application of Roger C. Hanks for pool redelineation, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks the redelineation of certain pool boundaries to include the deletion of the NW/4 and NE/4 of Sections 28 and 29, respectively, from the South Prairie-Cisco Pool and the extension of the Middle Allison-Pennsylvanian Pool to include all of Section 29, the SE/4 of Section 30, the N/2 of Section 32, and the N/2 of Section 33, all in Township 8 South, Range 36 East, Roosevelt County, New Mexico.

CASE 4172: (This case will be continued to August 6, 1969)

Application of Pennzoil United, Inc. for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the East Lovington-Pennsylvanian Pool, Lea County, New Mexico, including a provision for 80-acre oil proration units.

CASE 4173: Application of Amerada Hess Corporation for special pool rules and pool extension, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the Hobbs-Drinkard Pool, Lea County, New Mexico, including a provision for 80-acre oil proration units. Applicant further requests that said pool be extended to include the following-described acreage:

TOWNSHIP 18 SOUTH, RANGE 38 EAST

Section 28: SW/4  
Section 29: S/2  
Section 32: All  
Section 33: W/2

TOWNSHIP 19 SOUTH, RANGE 38 EAST

Section 4: NW/4  
Section 5: N/2

CASE 4174: Application of Amerada Hess Corporation for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its Amerada Petroleum Corporation State "A" Well No. 5, located in the NE/4 NE/4 of Section 32, Township 18 South, Range 38 East, Lea County, New Mexico, to produce oil from the Hobbs-Blinbry and Hobbs-Drinkard Pools through parallel strings of tubing.

CASE 4175: Application of International Minerals & Chemical Corporation for the amendment of Order No. R-111-A, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-111-A to include the following-described lands in the Potash-Oil Area defined by said order:

TOWNSHIP 23 SOUTH, RANGE 30 EAST

Section 8: S/2 & S/2 NW/4

Section 9: S/2 SW/4, NW/4 SW/4, S/2 SE/4

Section 10: SE/4

Sections 11 thru 15: All

Sections 24 and 25: All

Section 26: E/2

TOWNSHIP 23 SOUTH, RANGE 31 EAST

Section 7: S/2, NW/4, S/2 NE/4,  
and NW/4 NE/4

Section 18: All

CASE 4176: In the matter of the hearing called by the Oil Conservation Commission on its own motion to consider excepting from the provisions of Order No. R-3221, as amended, certain wells in Eddy County, New Mexico. The Commission will consider excepting all wells producing from the Corral Canyon-Delaware Pool, Eddy County, New Mexico, from the provisions of Order (3) of Commission Order No. R-3221, as amended, which prohibits the disposal of water produced in conjunction with the production of oil or gas, or both, on the surface of the ground in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico.

CASE 4177: Application of Roger C. Hanks for special pool rules, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the West Milnesand-Pennsylvanian Pool, Roosevelt County, New Mexico, including a provision for 160-acre spacing and proration units and the assignment of 80-acre allowables.

Examiner Hearing - July 23, 1969

Docket No. 21-69

-3-

CASE 4178: Application of Aztec Oil & Gas Company for two non-standard gas proration units, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks the rededication of certain acreage and the establishment of the following non-standard gas proration units in Township 29 North, Range 9 West, Aztec-Pictured Cliffs Gas Pool, San Juan County, New Mexico:

A 146.27-acre non-standard unit comprising the SW/4 of Section 30 and the N/2 NW/4 of Section 31, to be dedicated to its Cain Well No. 16, located in Unit N of said Section 30 if said well is recompleted in the Pictured Cliffs formation or to a new well which may be drilled on the same location.

A 147.61-acre non-standard unit comprising the S/2 NW/4 and the SW/4 of Section 31 to be dedicated to its Cain Well No. 4, located in Unit N of said Section 31.



# OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

**P. O. BOX 2088 - SANTA FE**

07101

GOVERNOR  
DAVID F. CARGO  
CHAIRMAN

LAND COMMISSIONER  
ALEX J. ARMIJO  
MEMBER

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

August 21, 1970

Mr. James M. Durrett  
Attorney at Law  
Post Office Box 3001  
1814 San Mateo NE  
Albuquerque, New Mexico 87106

Re: Case No. 4172  
Order No. R-3816-A  
Applicant:  
Pennzoil United

**Dear Sir:**

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

Very truly yours,

G. L. Carter, Jr.

**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. 4172  
Order No. R-3816-A

APPLICATION OF PENNZOIL UNITED, INC.,  
FOR SPECIAL POOL RULES, LEA COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:30 a.m. on August 19, 1970,  
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 21st day of August, 1970, 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 by Order No. R-3816, dated August 14, 1969, tem-  
porary Special Rules and Regulations were promulgated for the  
Northeast Lovington-Pennsylvanian Pool, Lea County, New Mexico,  
establishing 80-acre spacing units for a period of one year.

(3) That pursuant to the provisions of Order No. R-3816,  
this case was reopened to allow the operators in the subject pool  
to appear and show cause why the Northeast Lovington-Pennsylvanian  
Pool should not be developed on 40-acre spacing units.

(4) That the evidence establishes that one well in the  
Northeast Lovington-Pennsylvanian Pool can efficiently and  
economically drain and develop 80 acres.

-1-

CASE No. 4172  
Order No. R-3816-A

(5) That the Special Rules and Regulations promulgated by Order No. R-3816 have afforded and will afford to the owner of each property in the pool the opportunity to produce his just and equitable share of the oil in the pool.

(6) That in order to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the augmentation of risk arising from the drilling of an excessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, the Special Rules and Regulations promulgated by Order No. R-3816 should be continued in full force and effect until further order of the Commission.

IT IS THEREFORE ORDERED:

(1) That the Special Rules and Regulations governing the Northeast Lovington-Pennsylvanian Pool, Lea County, New Mexico, promulgated by Order No. R-3816, are hereby continued in full force and effect until further order of the Commission.

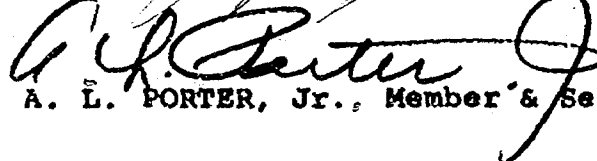
(2) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

  
DAVID F. CARGO, Chairman

  
ALEX J. ARMIJO, Member

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



INDIVIDUAL WELL DATA  
LOVINGTON, NORTHEAST PENN. FIELD  
LEA COUNTY, NEW MEXICO

Operator Well Name and No.	Location Section-Tract	Completion Date	Perforations	Initial Treatment	24-Hour Potential Oil-Wtr.	Current Daily Production Oil-Wtr.	Method of Production	Cum. Oil Production @ 6-1-70
<b>Clinton Oil Company</b>								
Montieth State #1	19-E	8-67	11,287-33'	3,000 gals.	626 - 0	52 - 0	Flow	93,092
Montieth State "A" #1	19-K	4-68	11,210-24'	2,000 gals.	819 - 0	56 - 0	Flow	114,975
Montieth State "B" #1	19-I	1-69	11,127-182'	1,000 gals.	240 - 0	2 - 0	Pump	9,519
Montieth State "C" #1	24-I	7-69	11,095-123'	2,000 gals.	130 - 62	2 - 0	Pump	2,262
<b>Getty Oil Company</b>								
Montieth "A" #1	20-M	8-52	11,256-280'	6,000 gals.	754 - 0	33 - Tr.	Pump	904,551
Montieth "B" #1	19-C	3-53	11,296-330'	6,000 gals.	481 - 0	20 - Tr.	Pump	312,565
Montieth "C" #1	20-E	5-53	Dry Hole					
Montieth "D" #1	18-N	12-68	Dry Hole					
<b>Pennzoil United, Inc.</b>								
Aztec State #1	18-J	4-68	11,336-386'	10,000 gals.	224 - 0	51 - Tr.	Pump	40,459
State "C" #1	20-A	1-69	11,403-484'	2,000 gals.	430 - 0	248 - 20	Flow	131,112
State "C" #2	17-P	6-69	11,437-454'	1,000 gals.	553 - 0	263 - 5	Flow	100,915
State "16" #1	16-M	5-69	11,452-471'	1,000 gals.	612 - 0	552 - 19	Flow	92,302
State "17" #1	17-E	3-69	Dry Hole					
State "21" #1	21-D	8-69	Dry Hole					
<b>Cities Service Oil Co.</b>								
State "AF" #1	30-A	1-53	Dry Hole					
State "CK" #1	19-G	5-69	Dry Hole					

BEFORE EXAMINER NUTTERS  
OIL CONSERVATION COMMISSION  
EXHIBIT NO. 112  
CASE NO. 112  
*Approved*

EXHIBIT 3



INDIVIDUAL WELL DATA  
 LOVINGTON NORTHEAST PENN FIELD  
 LEA COUNTY, NEW MEXICO

<u>Operator</u> <u>Well Name and No.</u>	<u>Location</u> <u>Section-Tract</u>	<u>Completion</u> <u>Date</u>	<u>Perforations</u>	<u>Initial</u> <u>Treatment</u>	<u>24 Hour</u> <u>Potential</u> <u>Oil-Wtr.</u>	<u>Current</u> <u>Daily</u> <u>Production</u> <u>Oil-Wtr.</u>	<u>Method</u> <u>of</u> <u>Production</u>	<u>Cum. Oil</u> <u>Production</u> <u>@ 6-1-70</u>
<u>Gulf Oil Corporation</u>								
Lea State "8V" #1	29-C	10-54	Dry Hole					
<u>Mobil Oil Corporation</u>								
Shipp #1	22-J	10-53	Dry Hole					
<u>Standard Oil Co. of Texas</u>								
State "8" 1527	15-L	9-50	Dry Hole					
<u>Western Natural Gas Company</u>								
Jacobs State #1	19-P	2-53	Dry Hole					

By: B. C. Sinclair  
 Date: 8-17-70

AVERAGE RESERVOIR AND FLUID PROPERTIES  
LOVINGTON NORTHEAST PENN FIELD  
LEA COUNTY, NEW MEXICO

BEFORE EXAMINER NUTTER  
OIL CONSERVATION COMMISSION  
CASE NO. 92172 EXHIBIT NO. 4

Depth	11,300
Net Pay	23 feet
Porosity	8.5%
Permeability	1-100 md.
Connate Water	30%
Bottom Hole Pressure, Original	4000 psig
Bubble Point Pressure	3000 psig
Bottom Hole Temperature	155° F
Oil Gravity	44° API
Formation Volume Factor	1.45 RB/STB
Reservoir Energy	Solution-Gas Drive
Areal Extent	1320 acres

RESERVOIR CALCULATIONS

Reservoir Volume (Planimetered from Isopach map)  
= 29,821 ac.-ft.

Ultimate Recovery (Estimated from decline curves)  
= 2,637,800 barrels oil

Original Oil in Place  
=  $\frac{(7758)(29,821)(.085)(1-.30)}{1.45}$   
= 9,493,400 barrels oil

Recovery Factor  
=  $\frac{2,637,800}{9,493,400} \times 100$   
= 27.8%

Average Drainage Area =  $\frac{1320}{10} = 132$  acres per well

NORMAL RECOVERY FACTOR FOR SOLUTION-GAS DRIVE RESERVOIR: 17-20%

By: B. C. Sinclair  
Date: 8-17-70

*10 wells  
in this*

EXHIBIT 4

BEFORE EXAMINER NUTTER  
OIL CONSERVATION COMMISSION  
PENNY EXHIBIT NO. 5  
CASE NO. 4172 *Cremona*  
BOTTOM HOLE PRESSURE DATA  
LOVINGTON NORTHEAST PENN CASE NO.  
LEA COUNTY, NEW MEXICO

Operator - Well Name

Getty - Montieith "A" #1

Getty - Montieith "B" #1

Clinton - Montieith State #1

Pennzoil - Aztec State #1

Clinton - Montieith State "B" #1

Pennzoil - State "C" #1

Pennzoil - State "C" #1

Pennzoil - State "C" #2

Pennzoil - State "16" #1

Original  
BHP &  
Date

3990  
8-52

3785  
3-53

2877  
7-67

2739  
1-68

2174  
1-69

3026  
1-69

2648  
8-70

2569  
8-70

2600  
8-70

Distance  
To Nearest  
Prior Producer

1600'

3150'

2000'

5600'

ORIGINAL RESERVOIR PRESSURE: 4000 PSIG @ - 7600'

NORMAL DISTANCE BETWEEN WELLS FOR 80 ACRE SPACING: 1870'

CLOSE AGREEMENT OF BHP'S INDICATES UNIFORM AND EFFICIENT DRAINAGE OF RESERVOIR.

By: B. C. Sinclair

Date: 8-17-70

EXHIBIT 5

ECONOMICS FOR  
LOVINGTON NORTHEAST PENN. FIELD  
LEA COUNTY, NEW MEXICO

BEFORE EXAMINER NUTTER  
OIL CONSERVATION COMMISSION  
PENNZ EXHIBIT NO. 6  
CASE NO. 4172 (reopened)

	40-Acre Spacing	80-Acre Spacing
<u>Revenue</u>		
40 acre - 303,000 barrels oil @ \$3.31	\$1,002,900	
80 acre - 264,000 barrels oil @ \$3.31		\$873,800
Less Royalty @ 12.5%	\$125,400	\$109,200
Less Severance Tax @ 6%	\$52,700	\$45,900
Total Revenue	\$824,800	\$718,700
<u>Expense</u>		
Drilling, Completion, Pumping Equipment	\$480,000	\$240,000
<u>Operating Cost</u>		
40 acre - 8 years @ \$7,000 (2 wells)	\$112,000	
80 acre - 11 years @ \$7,000		\$77,000
Total Expense	\$592,000	\$317,000
Net Profit	\$232,800	\$401,700
Profit to Investment Ratio	0.49	1.67

Note: This analysis does not consider the ten dry holes that have been drilled.

By: B. C. Sinclair

Date: 8-17-70

EXHIBIT 6

INDIVIDUAL WELL DATA  
LOVINGTON EAST PENN FIELD  
LEA COUNTY, NEW MEXICO

Operator Well Name and No.	Location Sec.-Tract	Completion Date	Perforations	Initial Treatment	24-Hour Potential Oil-Wtr.	Current Daily Production Oil-Wtr.	Method of Production	Cum. Oil Production @ 7-1-69	Remarks
<b>Getty Oil Company</b>									
Batton No. 1	5-B	3-52	11,028-054'	6,000 gals.	668 - 0	0 - 0	-	58,751	Re-comp. to Paddock 11-54
Montieth "A" No. 1	20-M	8-52	11,256-280'	6,000 gals.	754 - 0	46 - Tr.	Pump	888,649	
Montieth "B" No. 1	19-C	3-53	11,296-330'	6,000 gals.	481 - 0	22 - Tr.	Pump	305,572	
State "P" No. 1	32-P	4-51	11,080-150'	6,000 gals.	767 - 0	23 - 5	Pump	406,948	Pf. 10,712-752' on 3-3-69.
State "U" No. 1	4-D	9-51	11,048- ?	5,000 gals.	447 - 0	0 - 0	-	19,647	Acidized w/8,750 gallons
State "V" No. 1	5-D	6-52	10,890-11,000'	None	392 - 0	0 - 0	-	60,297	Re-comp. to Paddock 8-56
Mayers No. 1	33-L	4-53	Dry Hole in Penn						Re-comp. to Paddock 7-55
Montieth "C" No. 1	20-E	5-53	Dry Hole						
Montieth "D" No. 1	18-N	12-68	Dry Hole						
<b>Pennzoil United, Inc.</b>									
Aztec State No. 1	18-J	4-68	11,336-386'	10,000 gals.	224 - 0	38 - Tr.	Pump	28,761	
State "C" No. 1	20-A	1-69	11,403-484'	2,000 gals.	430 - 0	296 - 0	Flow	52,898	
State "C" No. 2	17-P	6-69	11,437-454'	1,000 gals.	553 - 0	300 - 0	Flow	0	
State "16" No. 1	16-M	5-69	11,452-471'	1,000 gals.	612 - 0	384 - 0	Flow	11,523	
State "17" No. 1	17-E	3-69	Dry Hole						
State "21" No. 1	21-D	Dripping							
<b>Skelly Oil Company</b>									
State "O" No. 13	31-F	1-53	10,930-968'	3,500 gals.	318 - 0	0 - 0	-	17,040	Re-comp. to Paddock 11-55
Caylor No. 5	6-A	6-53	Dry Hole in Penn						
<b>Southwest Production Corp.</b>									
Montieth State No. 1	19-E	8-67	11,287-331'	3,000 gals.	626 - 0	70 - 0	Flow	72,870	
Montieth State "A" No. 1	19-K	4-68	11,210-244'	2,000 gals.	819 - 0	109 - 0	Flow	91,082	
Montieth State "B" No. 1	19-I	1-69	11,127-182'	1,000 gals.	240 - 0	25 - 0	Pump	5,698	
Montieth State "C" No. 1	24-I	7-69	11,095-128'	2,000 gals.	130 - 62	S.I.	Pump	CO. NO. 4112	
Total -								2,019,736	

11095-128

BEFORE EXAMINED NUTTER  
72,870 CONSERVATION COMMISSION  
91,082 EXHIBIT NO. 3  
5,698  
CO. NO. 4112

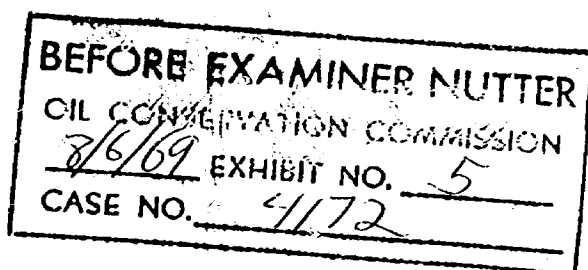
INDIVIDUAL WELL DATA  
LOVINGTON EAST PENN FIELD  
LEA COUNTY, NEW MEXICO

<u>Operator</u> <u>Well Name and No.</u>	<u>Location</u> <u>Sec.-Tract</u>	<u>Completion</u> <u>Date</u>	<u>Perforations</u>	<u>Initial</u> <u>Treatment</u>	<u>24-Hour</u> <u>Potential</u> <u>Oil-Wtr.</u>	<u>Current</u> <u>Daily</u> <u>Production</u> <u>Oil-Wtr.</u>	<u>Method</u> <u>of</u> <u>Production</u>	<u>Cum. Oil</u> <u>Production</u> <u>@ 7-1-69</u>	<u>Remarks</u>
<u>Cities Service Oil Co.</u>									
State "AF" No. 1	30-A	1-53	Dry Hole						
State "CK" No. 1	19-G	5-69	Dry Hole						
<u>Gulf Oil Corporation</u>									
Lea State "BV" No. 1	29-C	10-54	Dry Hole						
<u>Mobil Oil Corporation</u>									
Shipp No. 1	22-J	10-53	Dry Hole						
<u>Shell Oil Company</u>									
Home Stake Royalty Corp. No. 1	28-M	8-53	Dry Hole						
<u>Standard Oil Co. of Texas</u>									
State "B" 1527	15-L	9-60	Dry Hole						
<u>Texas Crude Oil Co.</u>									
State No. 1-31	31-A	9-68	Dry Hole						
<u>Western Natural Gas Company</u>									
Jacobs State No. 1	19-P	2-53	Dry Hole						

AVERAGE RESERVOIR AND FLUID PROPERTIES  
LOVINGTON EAST PENN FIELD  
LEA COUNTY, NEW MEXICO

Depth	11,300 feet
Net Pay	36 feet
Porosity	8.5 %
Permeability	1 - 100 md.
Connate Water	30 %
Bottom Hole Pressure, Original	4000 psig
Bubble Point Pressure	3000 psig
Bottom Hole Temperature	155 °F
Oil Gravity	44 °API
Formation Volume Factor	1.45 RB/STB
Reservoir Energy	Solution-gas Drive

80 vol calc 35' 8.1 por 30% wti 1.50 B  
148,000 18% recovery factor.



By: B. C. Sinclair  
Date: 7-31-69  
EX. 5  
CASE 4172

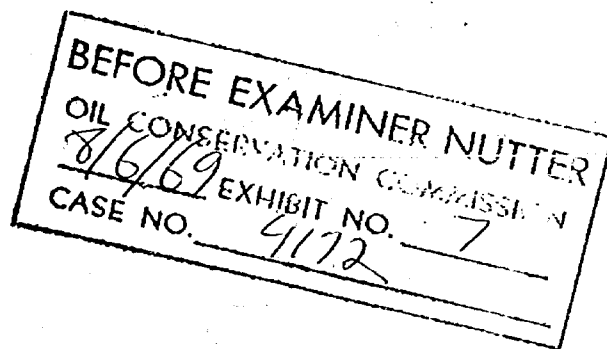
BOTTOM HOLE PRESSURE DATA  
LOVINGTON EAST PENN FIELD  
LEA COUNTY, NEW MEXICO

<u>Operator - Well Name</u>	<u>Original BHP &amp; Date</u>	<u>Distance To Nearest Prior Producer</u>
Getty - Montieth "A" No. 1 M-20	3990 8-52	
Getty - Montieth "B" No. 1 C-19	3785 3-53	

ORIGINAL RESERVOIR PRESSURE: 4000 PSIG @ - 7600'

Southwest - Montieth State No. 1 E-19	2877 7-67	1600'
Pennzoil - Aztec State No. 1 J-18	2739 1-68	3150'
Southwest - Montieth State "B" No. 1 1-19	2174 1-69	2000'
Pennzoil - State "C" No. 1 A-20	3026 1-69	5600'

Normal distance between wells for 80 acre spacing: 1870'



By: B. C. Sinclair  
Date: 7-31-69

EX. 7  
CASE 4172



ECONOMICS FOR  
LOVINGTON EAST PENN FIELD  
LEA COUNTY, NEW MEXICO

	40-Acre Spacing	80-Acre Spacing
<u>Revenue For Average Well</u>		
40 acre - 250,000 barrels oil @ \$3.16	\$ 790,000	\$ 685,700
80 acre - 217,000 barrels oil @ \$3.16	98,800	85,700
Less Royalty @ 12.5%	41,500	36,000
Less Severance Tax @ 6%	649,700	564,000
Total Revenue		\$ 240,000
<u>Expense</u>	\$ 480,000	
Drilling, Completion, Pumping Equipment		
Operating Cost	112,000	77,000
40 acre - 8 years @ \$7,000 (2 wells)	592,000	317,000
80 acre - 11 years @ \$7,000	57,700	247,000
Total Expense	0.12	1.03
Net Profit		
Profit to Investment Ratio		

Note: This analysis does not consider the eleven dry holes  
that have been drilled.

BEFORE EXAMINER NUTTER  
OIL CONSERVATION COMMISSION  
8/6/69 EXHIBIT NO. 8  
CASE NO. 4172

By: B. C. Sinclair  
Date: 7-31-69

EX. 8  
CASE 4172

RHODES, McCALLISTER & DURRETT  
ATTORNEYS AT LAW

JERRY P. RHODES  
ORVILLE C. McCALLISTER, JR.  
J. M. DURRETT, JR.

500 OAK, N E  
(CORNER ROMA AND INTERSTATE 25)  
ALBUQUERQUE, NEW MEXICO 87106  
TELEPHONE 243-9744  
July 7, 1969

Case 4172  
JMD

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

Re: Case No. 4172


Gentlemen:

The above case has been docketed for the July 23, 1969 examiner hearing. The applicant, Pennzoil United, Inc. has two other cases docketed for the first examiner hearing in August and would like to present all three cases at the same hearing.

We, therefore, respectfully request that the above case be continued to the first examiner hearing in August.

Very truly yours,

Rhodes, McCallister & Durrett

By   
J. M. Durrett, Jr.

JMD:dn

DOCKET MAILED

Date 7-24-69

RHODES, McCALLISTER & DURRETT  
ATTORNEYS AT LAW

JERRY P. RHODES  
ORVILLE C. McCALLISTER, JR.  
J. M. DURRETT, JR.

MAIN OFFICE

29 JUL 3 AM 11 07

500 OAK, N E  
(CORNER ROMA AND INTERSTATE 25)  
ALBUQUERQUE, NEW MEXICO 87106  
TELEPHONE 243-9744

July 2, 1969

*Case 4172*

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

Attention: Mr. A. I. Porter, Jr.  
Secretary-Director

Gentlemen:

I enclose an Application on behalf of  
Pennzoil United, Inc. requesting special rules and  
regulations for the East Lovington Pennsylvanian Oil  
Pool.

Will you please docket this application  
for the July 23, 1969 examiner hearing.

Very truly yours,

Rhodes, McCallister & Durrett

By

*J. M. Durrett, Jr.*  
J. M. Durrett, Jr.

JMD:dn

encl.

DOCKET MAILED

Date 7-11-69

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

Application of

PENNZOIL UNITED, INC.,

for Promulgation of Special Pool Rules

Case No. *4172*

A P P L I C A T I O N

Comes now the applicant, Pennzoil United, Inc. by  
and through its attorneys, Rhodes, McCallister & Durrett, and  
respectfully states:

I.

The applicant is the owner and operator of the  
following described wells:

- (a) Aztec State Well No. 1 located 1980 feet from the South line and 1980 feet from the East line of Section 18, Township 16 South, Range 37 East, N.M.P.M., Lea County, New Mexico.
- (b) State "C" Well No. 1, located 660 feet from the North line and 660 feet from the East line of Section 20, Township 16 South, Range 37 East, N.M.P.M., Lea County, New Mexico.
- (c) State "C" Well No. 2, located 660 feet from the South line and 660 feet from the East line of Section 17, Township 16 South, Range 37 East, N.M.P.M., Lea County, New Mexico.
- (d) State "16" Well No. 1, located 660 feet from the South line and 660 feet from the West line of Section 16, Township 16 South, Range 37 East, N.M.P.M., Lea County, New Mexico.

II.

All of the above described wells are producing from the East Lovington Pennsylvanian Oil Pool.

III.

The East Lovington Pennsylvanian Oil Pool can be efficiently and economically developed with eighty acre spacing.

IV.

Well locations within 150 feet of the center of a governmental quarter quarter section will prevent waste and protect correlative rights in the subject pool.

V.

The promulgation of special rules and regulations governing the subject pool establishing eighty acre spacing and proration units and well locations within 150 feet of the center of a governmental quarter quarter section will prevent waste and protect correlative rights.

WHEREFORE, the applicant requests the Commission to enter its order promulgating special rules and regulations governing the East Lovington Pennsylvanian Oil Pool establishing therein eighty acres spacing and proration units and well locations within 150 feet of the center of a governmental quarter quarter section.

Rhodes, McCallister & Durrett

By

  
J. M. Durrett, Jr.

DRAFT

GMH/CSI

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. 4172

Order No. R-3816-A

APPLICATION OF PENNZOIL UNITED, INC.,  
FOR SPECIAL POOL RULES, LEA COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:30 a.m. on August 19, 1970,  
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this            day of August, 1970, 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 by Order No. R-3816, dated August 14, 1969, temporary Special Rules and Regulations were promulgated for the Northeast Lovington-Pennsylvanian Pool, Lea County, New Mexico, establishing 80-acre spacing units for a period of one year.
- (3) That pursuant to the provisions of Order No. R-3816, this case was reopened to allow the operators in the subject pool to appear and show cause why the Northeast Lovington-Pennsylvanian Pool should not be developed on 40-acre spacing units.
- (4) That the evidence establishes that one well in the Northeast Lovington-Pennsylvanian Pool can efficiently and economically drain and develop 80 acres.

(5) That the Special Rules and Regulations promulgated by Order No. R-3816 have afforded and will afford to the owner of each property in the pool the opportunity to produce his just and equitable share of the oil in the pool.

(6) That in order to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the augmentation of risk arising from the drilling of an excessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, the Special Rules and Regulations promulgated by Order No. R-3816 should be continued in full force and effect until further order of the Commission.

IT IS THEREFORE ORDERED:

(1) That the Special Rules and Regulations governing the Northeast Lovington-Pennsylvanian Pool, Lea County, New Mexico, promulgated by Order No. R-3816, are hereby continued in full force and effect until further order of the Commission.

(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.

DRAFT

GMH/esr

August 11, 1969

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. 4172

Order No. R- 3816

NOMENCLATURE

APPLICATION OF PENNZOIL UNITED, INC.,  
FOR SPECIAL POOL RULES, LEA COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on August 6, 1969,  
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this        day of August, 1969, 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, Pennzoil United, Inc., seeks the  
promulgation of special rules and regulations for the East  
Lovington-Pennsylvanian Pool, Lea County, New Mexico, including  
a provision for 80-acre oil proration units.

(3) That the reservoir information presently available  
indicates that the horizontal limits of the East Lovington-  
Pennsylvanian Pool, as presently designated, encompass more than one  
~~a~~ separate common source of supply.

(4) That the horizontal limits of the East Lovington-  
Pennsylvanian Pool should, in order to prevent waste and protect  
correlative rights, be contracted by deleting the following-  
described lands in Lea County, New Mexico:



Section 16: SW/4

Section 17: SE/4

Section 18: SE/4

Section 19: All

Section 20: NE/4 and S/2

Section 29: <sup>NA/4</sup> All

Section 31: ~~All~~ N/4 N/2, SW/4 NW/4, SW/4, and NW/4 SE/4

Section 32: ~~All~~ N/2 and N/2 S/2-

Section 33: ~~SW 1/4~~ SW 1/4 and SE 1/4 SW 1/4

Section 4: NE/4, E/2 NW/4, and SW/4 NW/4

Section 4: NE/4, E/2 NW/4, and SW/4 NW/4

Section 5: S/2 N/2

(5) That in order to prevent waste and protect correlative rights, a new pool in Lea County, New Mexico, classified as an oil pool for Pennsylvanian production should be created and designated the Northeast Lovington-Pennsylvanian Pool, with vertical limits comprising the Pennsylvanian formation and horizontal limits comprising the following-described lands in Lea County, New Mexico:

Section 24: SE/4

Section 24: SE/4

Section 16: SW/4

Section 16: SW/4

Section 17: SE/4

Section 18: SE/4

~~CONFIDENTIAL~~

Section 19: All

Section 20: NE/4 and S/2

Section 21. NJ / 4

(6) That in order to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the augmentation of risk arising from the drilling of an excessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, temporary special rules and regulations providing for 80-acre spacing units should be promulgated for the Northeast Lovington-Pennsylvanian Pool.

(7)(45) That the temporary special rules and regulations should provide for limited well locations in order to assure orderly development of the pool and protect correlative rights.

(8)(55) That the temporary special rules and regulations should be established for a one-year period in order to allow the operators in the subject pool to gather reservoir information to establish the area that can be efficiently and economically drained and developed by one well.

(9)(65) That this case should be reopened at an examiner hearing in ~~July~~ <sup>August</sup>, 1970, at which time the operators in the subject pool should be prepared to appear and show cause why the ~~East~~ <sup>northeast</sup> Lovington-Pennsylvanian Pool should not be developed on 40-acre spacing units.

IT IS THEREFORE ORDERED:

(1) That, effective <sup>1969</sup> ~~September 1~~, 1969, the horizontal limits of the East Lovington-Pennsylvanian Pool, Lea County, New Mexico, are hereby contracted by the deletion therefrom of the following-described lands:

TOWNSHIP 16 SOUTH, RANGE 37 EAST, NMPM

Section 16: SW/4

Section 17: SE/4

Section 18: SE/4

Section 19: All

Section 20: NE/4 and S/2

Section 29: All

Section 31: ~~All~~ N/2 N/2, SW/4 NW/4, SW/4, and W/2 SE/4

Section 32: ~~All~~ N/2 and N/2 S/2

Section 33: ~~SW/4~~ N/2 SW/4 and SE/4 SW/4

TOWNSHIP 17 SOUTH, RANGE 37 EAST, NMPM

Section 4: NE/4, E/2 NW/4, and SW/4 NW/4

Section 5: S/2 N/2

RULE 3. The Secretary-Director of the Commission may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit comprising a governmental quarter-quarter section or lot, or the unorthodox size or shape of the tract is due to a variation in the legal subdivision of the United States Public Land Surveys. All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the formation of the non-standard unit within 30 days after the Secretary-Director has received the application.

RULE 4. *Each well shall be located within 150 feet of the center of a governmental quarter-quarter section or lot.*

RULE 5. The Secretary-Director may grant an exception to the requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the proposed location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all operators offsetting the proposed location or if no objection to the unorthodox location has been entered within 20 days after the Secretary-Director has received the application.

RULE 6. A standard proration unit (79 through 81 acres) shall be assigned an 80-acre proportional factor of 6.67 for

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CASE No. 4172

allowable purposes, and in the event there is more than one well on an 80-acre proration unit, the operator may produce the allowable assigned to the unit from the wells on the unit in any proportion.

The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 80 acres.

IT IS FURTHER ORDERED:

(1) That the locations of all wells presently drilling to or completed in the ~~East~~ <sup>Northeast</sup> Lovington-Pennsylvanian Pool or in the Pennsylvanian formation within one mile thereof are hereby approved; that the operator of any well having an unorthodox location shall notify the Hobbs District Office of the Commission in writing of the name and location of the well on or before September 1, 1969.

(2) That, pursuant to Paragraph A. of Section 65-3-14.5, NMSA 1953, contained in Chapter 271, Laws of 1969, existing wells in the ~~East~~ <sup>Northeast</sup> Lovington-Pennsylvanian Pool shall have dedicated thereto 80 acres in accordance with the foregoing pool rules; or, pursuant to Paragraph C. of said Section 65-3-14.5, existing wells may have non-standard spacing or proration units established by the Commission and dedicated thereto.

Failure to file new Forms C-102 with the Commission dedicating 80 acres to a well or to obtain a non-standard unit approved by the Commission within 60 days from the <sup>effective</sup> date of this order shall subject the well to cancellation of allowable. Until said Form C-102 has been filed or until a non-standard unit has been approved, and subject to said 60-day limitation, each well presently drilling to or completed in the ~~East~~ <sup>Northeast</sup> Lovington-Pennsylvanian Pool or in the Pennsylvanian formation within one

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-5-

CASE No. 4172

mile thereof shall receive no more than one half of a standard allowable for the pool.

(3) That this case shall be reopened at an examiner hearing in August, 1970, at which time the operators in the subject pool may appear and show cause why the <sup>North</sup> East Lovington-Pennsylvanian Pool should not be developed on 40-acre spacing units.

(4) 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 4173: Application of AMERADA  
HESS CORP. FOR SPECIAL POOL RULES  
FOR HOBBS-DRINKARD POOL.