

CASE 5099: Appli. of PENNZOIL
FOR POOL CREATION, RULES AND AN
UNORTHODOX GAS WELL LOCATION.

CASE No.

5099

Application,

Transcripts,

Small Exhibits

ETC.

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
February 5, 1975

EXAMINER HEARING

IN THE MATTER OF:

Case 5099 being reopened pursuant
to the provisions of Order No.
R-4683, which order established
temporary special pool rules for
the South Carlsbad-Wolfcamp Gas
Pool, Eddy County, New Mexico,
including a provision for 320-
acre spacing units.

CASE NO. 5099

BEFORE: Richard L. Stamets, Examiner

For the New Mexico Oil
Conservation Commission:

Thomas Derryberry, Esq.
Legal Counsel for the
Commission
State Land Office Building
Santa Fe, New Mexico

For the Applicant:
(Pennzoil)

Thomas Kellahin, Esq.
KELLAHIN & FOX
500 Don Gaspar
Santa Fe, New Mexico

MR. STAMETS: Case 5099.

MR. DERRYBERRY: Case 5099. In the matter of Case 5099 being reopened pursuant to the provisions of Order No. R-4683, which order established temporary special pool rules for the South Carlsbad-Wolfcamp Gas Pool, Eddy County, New Mexico, including a provision for 320-acre spacing units.

MR. STAMETS: We call for appearances in this case?

MR. KELLAHIN: Tom Kellahin of Kellahin and Fox, Santa Fe, New Mexico, appearing on behalf of Pennzoil Company, the original Applicant in this case.

Mr. J. C. Raney, a Petroleum Engineer with Pennzoil Company has requested that I submit for your consideration the following typed statement? May I just submit it to you and you can read it at your leisure, or would you like me to read it into the record?

MR. STAMETS: Just give a copy to the Reporter, Tom.

(Whereupon, a discussion was held off the record.)

MR. STAMETS: The record should include the record of this statement that has been submitted by Mr. Kellahin.

(Whereupon, the following was taken from the
aforementioned statement:

Case No. 5099, Rule Review, South Carlsbad-
Wolfcamp Unit 1, Section 23, T-22-S, R-26-E, Eddy County,
New Mexico.

The subject well was drilled to total depth of
11,775'. The proposed completion intervals of Pennsylvanian
age were found to be non-productive. The well was plugged
back to 9,802' and completed in the Wolfcamp zone at
9,602' to 9,628' for a CAOF of 11.2 MMCFPD. The well has
produced approximately 250 MMCF of gas and 6,100 barrels
of condensate. The well has produced a total of 7-1/2
months and at the current time the well will produce about
250 MCFPD while being shut-in every other day. The Moore
Com #1 is the only well completed in the South Carlsbad-
Wolfcamp Gas Pool Structure. The offset wells which have
been drilled in the sections to the north, east and
south have not encountered commercial quantities of the
Wolfcamp interval. Because of the performance of this well
and the cost of drilling additional wells, it would not be
economically feasible to drill additional wells in this
pool, and it is our opinion this well bore will sufficiently
drain the 320 acres that is currently assigned. Contraction

of the field rules to 160-acre spacing will create inequities of the ownership.

Pennzoil Company respectfully requests the temporary special field rules be extended one additional year. The granting of this extension will not violate anyone's correlative rights, it will not create the waste of hydrocarbon reserves, but it will prevent the drilling of uneconomical wells in this reservoir. J. C. Raney.)

MR. STAMETS: The record should further show that there were no appearances of witnesses in this case and no sworn testimony in this case.

Mr. Kellahin, do you have anything you wish to add?

MR. KELLAHIN: No, sir.

MR. STAMETS: If there is nothing further, we will take Case 5099 under advisement.

CASE 5099

Page 5

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.

Richard L. Nye
COURT REPORTER

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 5099 heard by me on 7-5-25, 1925.
Richard L. Nye, Examiner
New Mexico Oil Conservation Commission

THE NYE REPORTING SERVICE
STATE-WIDE DEPOSITION NOTARIES
225 JOHNSON STREET
SANTA FE, NEW MEXICO 87501
TEL. (505) 982-0386

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
OIL CONSERVATION COMMISSION CONFERENCE ROOM
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO
Wednesday, November 14, 1973

IN THE MATTER OF:

Application of Pennzoil Company
for a pool creation, special
pool rules and an unorthodox
gas well location, Eddy County,
New Mexico.

Case No. 5099

BEFORE: DANIEL S. NUTTER
Examiner

TRANSCRIPT OF EXAMINER HEARING

1 MR. NUTTER: Call Case 5099.

2 MR. DERRYBERRY: Case 5099, application of Pennzoil
3 Company for a pool creation, special pool rules and
4 an unorthodox gas well location, Eddy County, New
5 Mexico.

6 MR. KELLAHIN: Jason Kellahin and Tom Kellahin
7 representing the applicant. I have one witness I'd
8 like to have sworn.

9 MR. DERRYBERRY: Are there any other appearances?

10 J. C. RANEY,

11 a Witness, having been first duly sworn according to law,
12 upon his oath testified as follows:

13 DIRECT EXAMINATION

14 BY MR. KELLAHIN:

15 Q Would you state your name, please?

16 A J. C. Raney.

17 Q By whom are you employed and in what position, Mr. Raney?

18 A I'm employed by Pennzoil Company in Midland, Texas
19 as a Petroleum Engineer.

20 Q And have you testified before the Oil Conservation
21 Commission and made your qualifications a matter of
22 record?

23 A I have.

24 MR. KELLAHIN: Are the witness' qualifications
25 acceptable?

1 MR. NUTTER: Yes, sir. They are.

2 Q Mr. Raney, are you familiar with the application of
3 Pennzoil Company in Case 5099?

4 A Yes.

5 Q What's proposed by the Applicant in this case?

6 A We propose that the well, the Moore Com Number 1 that
7 is located 2310 feet from the south line, 660 from the
8 east line of Section 23, Township 22 South, Range 26
9 East, we are asking for temporary field rules for
10 320 acre spacing for a Wolfcamp Zone completion.

11 Q Are you also asking for an unorthodox well location?

12 A That would be, yes.

13 Q Now, would you give briefly a history of this well and
14 how it happened to be drilled at the site it's located
15 at?

16 A Okay. The Moore Com Number 1 was drilled as a
17 Pennsylvanian Age prospect, these being the Canyon,
18 Strawn, Atoka and Morrow. All of the zones of the
19 Pennsylvanian Age were found to be non-productive of
20 hydrocarbon.

21 The well was subsequently plugged back with
22 5-1/2 inch casing being set at 9802 feet.

23 Q Now, it would have been an orthodox well location for
24 a well of the Pennsylvanian Age or older; would it not?

25 A Yes. The Moore Com Number 1 was completed from the

1 Wolfcamp zone at 9605 to 9628 for a calculated
2 absolute open-flow of 11.206 million cubic feet of
3 gas with a gas-liquid ratio of 10,298 cubic feet per
4 barrel on 10-23-73.

5 The initial shut-in bottomhole pressure was
6 5178 after being shut-in for 111 hours. On the
7 Four-Point Test the flowing bottomhole pressure ranged
8 from 5,094 psi at a rate of 899 mcf per day to 4592 psi
9 at a rate of 3.336 million per day.

10 One note in connection with this, the shut-in
11 tubing pressure after being flowed for approximately
12 six hours on the Four-Point Test, the shut-in tubing
13 pressure returned to within 30 pounds of the 111-hour
14 shut-in tubing pressure within a quarter hour after the
15 well was shut-in.

16 Q Does that indicate that the formation has a high
17 permeability?

18 A It indicates good deliverability and good permeability.
19 We did not run a build-up analysis or a drill stem
20 test on this interval to make any calculations as far
21 as permeability, but all indications are that it does have
22 good permeability.

23 Q You have not yet, you say, run a pressure build-up
24 test?

25 A No, sir.

1 Q Do you have a connection for the well yet?

2 A No, sir. We are negotiating for a contract with El
3 Paso Natural Gas and Transwestern Pipeline Company
4 at this time. We are within three-quarters of a
5 mile of a pipeline connection.

6 Q Now, referring to what has been marked as Exhibit Number
7 1, would you identify that Exhibit, please?

8 A Yes. Exhibit Number 1 is a ASTM Distillation Analysis
9 of the liquid produced during the Four-Point Test. The
10 purpose of this exhibit is for the identification of the
11 liquid to show that it is a condensate and not a black
12 oil as indicated on the gravity and the color o. the
13 condensate.

14 Q It shows a 56.2 degree API?

15 A 56.2 at 60 degrees Fahrenheit and a very light
16 straw-colored liquid.

17 Q Now, refer to what has been marked as Exhibit Number 1-A.
18 Would you identify that Exhibit?

19 A Yes. Exhibit Number 1-A is a Gas Analysis by Transwestern
20 Pipeline Company to determine the composition of the
21 gas and the calculated BTU content of the gas which
22 is 1199.3 and also to determine whether or not the gas
23 would be considered sour which it is not.

24 It has three-hundredths of a grain per hundred
25 cubic feet of hydrogen Sulfide and four-hundredths of

1 a grain of sulfur per hundred cubic feet.

2 Q Now, referring to what has been marked as Exhibit 2,
3 would you identify that Exhibit and discuss it?

4 A Exhibit Number 2 is a Base Map showing the location of
5 the well in Section 23. As previously stated, this
6 was drilled as a Pennsylvanian Age prospect and would
7 have been a standard location.

8 The area marked by the red line and hatched lines,
9 these are the interpretation of the, or the Wolfcamp
10 porosity as we talked long and hard about whether or
11 not we were in the Wolfcamp or in the Canyon interval;
12 and just from the depth correlation we are approximately,
13 in the perforated interval we are approximately 300 to
14 400 feet higher than the Sinclair Hackberry Hills Well
15 located in the Section to the West.

16 The interval that we are producing or have
17 completed in the Moore Com Number 1 is not present in
18 the offset wells, and the construction of these red
19 lines with the hatched marks is strictly interpretation.

20 In this particular interval in this area, it is
21 very hard to correlate the top of the Pennsylvanian
22 zone; and it's strictly interpretation in correlation
23 there on the part of the geologist.

24 Q Now, that Sinclair Hackberry Hills Well is completed
25 in the Canyon; is it not?

1 A Yes, sir.

2 Q Are there any other Canyon Wells in the vicinity?

3 A Not within the immediate vicinity. There are some
4 further to the South and East.

5 Q They are some distance away, though?

6 A Yes, sir.

7 Q Are there any Wolfcamp wells in the area?

8 A No, sir. There is one Wolfcamp well up in the Northeast
9 part of this map. They show it as a Belco Union Mead.
10 This is approximately five to six miles Northeast.

11 Q And would you consider that as being in the same
12 Wolfcamp pool?

13 A No. It wouldn't be.

14 Q Now, referring to what has been marked as Exhibit Number
15 3, would you identify that Exhibit, please?

16 A Yes. Exhibit Number 3 is a Compensated Neutron Formation
17 Density Log, and this is to show the productive
18 interval. This is just a part of the log, and Exhibit 3-A
19 is a strip of the dual lateral log showing the same
20 interval.

21 This, the Exhibit 3, was used to show the porosity
22 through the productive interval; and as noted on
23 Exhibit 3, it shows the perforated interval marked with
24 two lines.

25 It's perforated from 9605 to 9628. It has a

1 relatively good porosity, calculated the porosity from
2 this and other logs to be 9.4 percent.

3 The dual lateral log on Exhibit 3-A, this was just
4 an attempt to show that there was fair to good
5 permeability with the difference in the invasion; but
6 during the drilling of this interval, we had some
7 problems with the well.

8 The well kicked on us pretty hard. It was a
9 control blow-out and where the blow is into the wellbore
10 or stedic and not back into the formation, the
11 determination or indication of permeability is a
12 rather difficult thing to determine with logs.

13 We are not very confident of the permeability
14 indication on these logs. We feel that it's much better
15 than was exhibited on this Exhibit 3-A. All I wanted
16 to show is that there was a difference in the
17 invasion from the slide line, that is, the shallow
18 investigations; and the other line is the deep
19 investigation, and it does show that there is some
20 invasion.

21 Q Now, in your opinion, does this reflect, though, that
22 there is fair to good permeability?

23 A Yes. With the other factors which we have observed
24 during the completion and drilling of this well.

25 Q Now, in order to determine more information about the

1 permeability, would it be necessary to test the well
2 to some length?

3 A Yes, and with some bottomhole pressure build-up data
4 to make the total calculations.

5 Q That would take some time; would it not?

6 A Yes.

7 Q Refer to Exhibit Number 4 and please identify it.

8 A Exhibit Number 4 is the completion data that I submitted
9 to the Oil Conservation Commission office in Artesia,
10 and this is Form C-105. This is just a well completion
11 data Form C-122 and is Multi-Point Back Pressure data
12 showing the absolute openflow.

13 One point on this C-122, it should be noted that the
14 gas-liquid hydrocarbon ratio when West Texas Engineering
15 made this out, they omitted a decimal. That should
16 be 10,298 cubic feet or 10.298 mcf per barrel.

17 The pressures that are shown on this Exhibit or
18 Form C-122, these are shut-in tubing pressures and
19 are dead-weight pressures.

20 The next one is the graphical determination of the
21 calculated absolute openflow, and the rest of this
22 first part of this exhibit is just the calculations
23 made. We have the drill stem test summary; and these
24 do not, these drill stem tests do not refer to the
25 Wolfcamp interval. These are all in the Morrow interval,

1 and the last part of it is the Inclination Report. This
2 is submitted for information.

3 Q Now, referring to what has been marked as Exhibit Number
4 5, would you identify that Exhibit?

5 A Exhibit Number 5 is a comparison of economics of drilling
6 a well on 160-acre spacing versus 320-acre spacing.

7 The next to the bottom line is the profit ratio, and the
8 next one up, the payout. These two things weigh very
9 heavily on whether or not a well will be drilled.

10 The reserves that were used and determined in
11 these economics or the reserves were based on reservoir
12 data obtained from logs and the bottomhole pressures
13 that were measured.

14 The price for the gas is based on a Permian Basin
15 area rate of 35 cents per mcf. The only thing that is
16 very, or the least confident number we have is the
17 recovery factors used; and these, we are not confident
18 in these numbers because our experience is very minor
19 in the Wolfcamp zone; and I used on 320-acre spacing,
20 I used a recovery factor of 30 percent. On 160-acres
21 I gave it a little bit more recovery factor of 35 percent.

22 But based on these economics, it would not be
23 economically attractive to drill a well on 160-acre
24 spacing at this time with what we know from it.

25 Q Now, referring to what has been marked as Exhibit Number 6,

1 would you identify that Exhibit?

2 A Exhibit Number 6 is New Mexico Oil Conservation Commission
3 Form C-123. It's the request for the creation of a
4 new pool, and it shows the location of the proration
5 unit.

6 It's the East half of Section 23 of Township 22
7 South and Range 26 East. We are suggesting a name
8 in line with the other pools out there of South
9 Carlsbad Wolfcamp Pool.

10 Q Now, referring to what has been marked as Exhibit
11 Number 7, would you discuss that Exhibit?

12 A Yes. This is a summary of the reservoir properties and
13 this is presented for information purposes. These are
14 the numbers that I used in determining the reserves for
15 my economic comparison; and this is also what I'll use
16 for my reserves to turn in to the company.

17 The bottomhole pressure is relatively high,
18 and I was concerned about, it was reported after this,
19 we measured the bottomhole pressure later on after the
20 Four-Point; and they reported from the field of about
21 a 40-point drawdown; but we got it into the office,
22 and it was only a 15 pound drawdown.

23 This was only, this was approximately half the
24 shut-in time. So the pressure builds up real fast, and it
25 is a real high bottomhole pressure. There is an estimated

1 liquid-gas ratio of 30 barrels per million. This is
2 what I used to determine the recovery of liquid from
3 this well.

4 The last item, the indicated permeability, this
5 is strictly interpretation, I see, from logs; but this
6 is from the pressure data, also.

7 Q All right. The bottomhole pressure would be somewhat
8 higher than you would normally anticipate for the
9 depth involved here?

10 A Yes, plus back to what I was talking about, a 15-pound
11 drawdown. I calculated this yesterday. This is .29
12 percent change which is the accuracy of the instruments
13 used is not near that great. So it could be an
14 instrument reading, or it could have been a 15-pound
15 drawdown; but we had only been shut-in approximately
16 fifty-five hours. So it hadn't built up.

17 I don't know what the final build-up would be. We
18 did not run a build-up because the well was only
19 stimulated with 300 gallons of acid and came on real
20 good.

21 Q Now, referring to what has been marked as Exhibit Number
22 8, would you identify that Exhibit?

23 A This is the list of offset operators and/or working
24 interest owners; and this is presented for information.
25 The half section to the West of this well is undrilled,

1 and this shows the operators and their address.

2 Q Now, Mr. Raney, in your opinion, will one well efficiently
3 and economically drain and develop 320 acres in this
4 Wolfcamp Pool?

5 A At this time we believe this particular well can drain
6 320 acres. We feel that it's necessary at this time
7 because of the economics and unknown producing
8 capabilities of this well because of economics and
9 prevention of waste that we not drill with any closer
10 spacing than 320 acres.

11 Q Would a temporary order for a period of one year
12 in your opinion prevent the drilling of unnecessary
13 wells?

14 A I would.

15 Q And would that prevent waste?

16 A Yes.

17 Q Would a year give you sufficient time in which to
18 fully evaluate this reservoir and determine whether the
19 spacing should remain on 320 acres or be reduced back
20 to 160?

21 A It should give us sufficient time to evaluate it.
22 At that time we would be in a position to make a
23 recommendation for permanent field rules.

24 Q Were Exhibits 1 through 8 including 1 and 1-A and 3 and
25 3-A prepared by you or under your supervision?

1 A Yes.

2 MR. KELLAHIN: At this time I'd like to offer
3 the Exhibits into evidence.

4 MR. NUTTER: Pennzoil Exhibits 1 through 8 will be
5 admitted into evidence.

6 MR. KELLAHIN: That concludes our case, Mr. Nutter.

7 CROSS-EXAMINATION

8 BY MR. NUTTER:

9 Q Mr. Raney, North of this well Gulf is drilling their
10 H. Olive Com. Is that well deep enough that they have
11 penetrated the Wolfcamp?

12 A Not to my knowledge, and I attempted to find out
13 yesterday morning. They were in a position of losing
14 the lease, and this is what encouraged them to go ahead
15 and drill.

16 They drilled the well to the South, their Gulf
17 Spencer Number 1; and we had an interest in that well.
18 It was a dry hole from top to bottom; but as far as I
19 know, that well has not encountered the Wolfcamp yet.
20 It has not been going very long.

21 Q With your interpreted red lines there, they got a
22 producer at Wolfcamp maybe?

23 A We hope they do. This would maybe after a year go ahead
24 and allow us to maybe drill on 160 spacing but --

25 Q Now, you've got a very substantial bottomhole pressure

1 in this well?

2 A Yes.

3 Q And you have used a recovery factor of 30 percent and
4 35 percent? Did you determine what your abandonment
5 pressure would be in arriving at this, or did you
6 just arrive at your recovery factor first?

7 A No. The recovery factor of 30 percent is, in this
8 particular area not only in the Wolfcamp but in other
9 zones, is probably a real average number; and we found
10 that on some of our first wells that we drilled in
11 there. They were using as high as 80 percent. Normally
12 in a gas reservoir you use as high as 80 percent.

13 We are going back in all of our Morrow and Canyon
14 zones. We are going back to as little as 20 percent.
15 So this is the least number.

16 Q Why is this recovery so low in this area?

17 A Evidently because of the relatively low permeability
18 in the Morrow. Now, this 30 percent may be way low;
19 and on 320 it would be a hassle to get a well drilled
20 for \$1.31 profit ratio; but maybe after six months to
21 a year, then we can see from the curves which we plot
22 PHP over Z over cumulative that we are going to get
23 over 30 percent; but our best well in the Morrow started
24 out with a recovery factor of 50 percent.

25 We have enough history on the well now that I can

1 see it's going to be 27 percent.

2 Q Is that right?

3 A Yes. And the numbers of anything above about the
4 most 35 percent are just reaching way out there.
5 Maybe the permeability is good enough to begin with.

6 Q Now, on your decline curves you can see a 27 percent
7 recovery factory. That's taking it down to what
8 pressure?

9 A 75 pounds.

10 Q You have high pipeline pressures?

11 A Yes. The El Paso line pressure is approximately 100 to
12 around 150 pounds lower than Transwestern's, but
13 Transwestern has promised they would lower their
14 pressures.

15 Q What is Transwestern running?

16 A Approximately 700 pounds. You go further South, and we
17 have a well down there at about 85 pounds pressure; but
18 they have the same problem as everyone else does. It's
19 money. I have seen wells where you lower the line
20 pressure and you don't get anymore rate out of it.

21 Q Well, isn't it normal, though, to expect that probably
22 later on down the road these pipelines are putting
23 pressure facilities in and dropping these pressures?

24 A Yes. This is what we are hoping to do.

25 Q Then your recovery factors would be higher probably?

1 A Yes, but I don't think they are going to get out of the
2 30 percent range, the Morrow especially. In the Texas
3 Panhandle Morrow, I use 30 percent and that goes way
4 back about twelve or thirteen years when I was working
5 in the Panhandle for Mobil.

6 I believe it's even harder to work with and
7 Southern New Mexico --

8 Q Is this well contracted with Southwestern?

9 A No.

10 Q They ran a test on it?

11 A They ran the gas analysis on it. We had the Four-Point
12 Test run at some of the pipelines' request and against
13 my will. I did not want to test it. I think it not
14 only wasted money to pay somebody to go out and test it
15 but a waste of gas.

16 We tested it to a minimum amount of time. I will
17 say it will go back to a fairly low rate because of our
18 contention that you do leave lots of liquids and lots
19 of liquid carbons if you do pull them hard.

20 Q You do have lots of liquids in this one relatively
21 speaking?

22 A We are looking for a wait of, we are about a half
23 million a day off, but no more probably now.

24 We will start off, this is a well in my area of
25 supervision. It will start off with a million-and-a-half

1 a day. We will hold the low at a low rate.

2 Q Is it under contract?

3 A No. We are negotiating a contract, and we have been
4 waiting on a new FPC ruling of 4091 rather than
5 sixty-day temporary provision. We are hoping we will
6 get a 180-day provision on it.

7 This is not very good economically to hold a well
8 back, but in the long-run we feel it is worth it to us
9 to hold it back and not leave a bunch change of relative
10 permeability.

11 Q Do you have any idea when the well will be connected?

12 A We are hoping within three weeks to a month. I think
13 El Paso has staked the line, and also Transwestern has
14 staked one in there. They have got to come from the
15 wells of the Graces. Transwestern has the Go-Pogo 2
16 hooked up, and El Paso has the Grace-Atlantic.

17 Q So in other words, there is a pipeline within a mile,
18 either company?

19 A Yes. It would be, well, let's see. It would be about
20 three-quarters of a mile across there.

21 MR. NUTTER: Are there any further questions of
22 Mr. Raney? He may be excused. Does anyone have anything
23 further to offer in this case? Mr. Kellahin?

24 MR. KELLAHIN: That's all we have.
25

MR. NUTTER: Anyone else? If not, we will take
the case under advisement.

* * * * *

C E R T I F I C A T E

I, JANET RUSSELL, a Court Reporter, in and for the
County of Bernalillo, State of New Mexico, 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.

Janet Russell
COURT REPORTER

11/14 5099
23
Hutton

dearnley, meier & associates

209 SIMMS BLDG., P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

I N D E X

WITNESS:

PAGE

J.C.RANEY

Direct Examination by Mr. Kellahin

2

Cross-Examination by Mr. Nutter

14

E X H I B I T S

Applicant's Exhibits 1, 1-A, 2, 3, 3-A,
4, 5, 6, 7, & 8

14



OIL CONSERVATION COMMISSION

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

February 11, 1975

I. R. TRUJILLO
CHAIRMAN

LAND COMMISSIONER
PHIL R. LUCERO
MEMBER

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

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

Re: CASE NO. 5099
ORDER NO. R-4683-A

Applicant:

Pennzoil

Dear Sir:

c

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

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC x
Artesia OCC x
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. 5099 (REOPENED)
Order No. R-4683-A

IN THE MATTER OF CASE 5099 BEING REOPENED
PURSUANT TO THE PROVISIONS OF ORDER NO.
R-4683, WHICH ORDER ESTABLISHED TEMPORARY
SPECIAL POOL RULES FOR THE SOUTH CARLSBAD-
WOLFCAMP GAS POOL, EDDY COUNTY, NEW MEXICO,
INCLUDING A PROVISION FOR 320-ACRE SPACING
UNITS.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on February 5, 1975, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 11th day of February, 1975, 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-4683, dated November 30, 1973, temporary special rules and regulations were promulgated for the South Carlsbad-Wolfcamp Gas Pool, Eddy County, New Mexico, establishing temporary 320-acre spacing units.

(3) That pursuant to the provisions of Order No. R-4683, this case was reopened to allow the operators in the subject pool to appear and show cause why the South Carlsbad-Wolfcamp Gas Pool should not be developed on 160-acre spacing units.

(4) That although a statement was submitted in support of continuance of the special pool rules in said pool, no operator appeared and presented testimony relative to drainage, recoverable reserves, or to otherwise show why the South Carlsbad-Wolfcamp Gas Pool should not be developed on 160-acre spacing units.

-2-

Case No. 5099 (Reopened)
Order No. R-4683-A

(5) That the Temporary Special Rules and Regulations for the South Carlsbad-Wolfcamp Gas Pool should be rescinded and said pool should be governed by the Statewide Rules for gas pools in the State, effective April 1, 1975.

IT IS THEREFORE ORDERED:

(1) That effective April 1, 1975, the Temporary Special Rules and Regulations for the South Carlsbad-Wolfcamp Gas Pool, promulgated by Order No. R-4683, dated November 30, 1973, are hereby rescinded and the pool is placed under the Statewide Rules for gas pools in the State.


(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

I. R. TRUJILLO, Chairman


PHIL R. LUCERO, Member


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

S E A L

dr/

Docket No. 4-75

Dockets Nos. 5-75 and 6-75 are tentatively set for hearing on February 19 and March 5, 1975. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - FEBRUARY 5, 1975

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

The following cases will be heard before Richard L. Stamets, Examiner, or Daniel S. Nutter, Alternate Examiner:

CASE 5406: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Oil Exploration, Inc., General Casualty Company of America and all other interested parties to appear and show cause why the Irwin Well No. 1, located in Unit D of Section 29, Township 21 North, Range 36 East, Union County, New Mexico, and the Irwin "A" Well located in Unit D of Section 29, Township 21 North, Range 36 East, Union County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.

CASE 5407: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Kelly Bell, Travelers Indemnity Co. and all other interested parties to appear and show cause why the Kelly Bell Laroe Well No. 1 located in Unit D of Section 19, Township 27 North, Range 22 East, Colfax County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.

CASE 5408: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit W. E. Medlock and Reliance Insurance Company and all other interested parties to appear and show cause why the Queen Ridge No. 1 Well located in Unit M of Section 36, Township 10 South, Range 26 East, Chaves County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.

CASE 5380: (Continued & Readvertised)

Application of Amoco Production Company for a non-standard gas proration unit, an unorthodox gas well location, and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a non-standard gas proration unit comprising the S/2 NE/4, SE/4 NW/4, E/2 SW/4, and SE/4 of Section 33, Township 20 South, Range 37 East, Eumont Gas Pool, Lea County, New Mexico, to be simultaneously dedicated to its Gillully "B" Well No. 3, located in Unit N, and its Gillully "B" Well No. 15 to be drilled at an unorthodox location 1980 feet from the North line and 660 feet from the East line of said Section 33.

CASE 5399: (Continued from the January 8, 1975, Examiner Hearing)

Application of Coastline Petroleum Company, Inc., for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of undesignated Gallup and Basin-Dakota gas production in the wellbore of its Schalk 94 Well No. 1, located in Unit A of Section 26, Township 32 North, Range 8 West, San Juan County, New Mexico.

CASE 4899: (Reopened)

In the matter of Case 4899 being reopened pursuant to the provisions of Order No. R-4477, which order established temporary special pool rules for the Cedar Canyon-Morrow Gas Pool, including a provision for 640-acre spacing units. All interested parties may appear and show cause why said pool should not be developed on 320-acre spacing units.

CASE 4900: (Reopened)

In the matter of Case 4900 being reopened pursuant to the provisions of Order No. R-4478, which order established temporary special pool rules for the West Jal-Fusselman Gas Pool, Lea County, New Mexico, including a provision for 640-acre spacing units. All interested parties may appear and show cause why said pool should not be developed on 320-acre spacing units.

CASE 5099: (Reopened)

In the matter of Case 5099 being reopened pursuant to the provisions of Order No. R-4683, which order established temporary special pool rules for the South Carlsbad-Wolfcamp Gas Pool, Eddy County, New Mexico, including a provision for 320-acre spacing units. All interested parties may appear and show cause why said pool should not be developed on 160-acre spacing units.

CASE 5409: Application of Atlantic Richfield Company for a non-standard gas proration unit, an unorthodox gas well location, and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 320-acre non-standard gas proration unit comprising the SE/4 of Section 12 and the NE/4 of Section 13, both in Township 24 South, Range 36 East, Jalmat Gas Pool, Lea County, New Mexico, to be simultaneously dedicated to its George W. Toby WN Wells Nos. 4, 1, and 1-A, located, respectively, in Units A and H of said Section 12 and in Unit A of said Section 13.

CASE 5410: Application of Texas Pacific Oil Co., Inc. for two unorthodox gas well locations, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox locations of its Berry Well No. 1, to be located 990 feet from the South and West lines of Section 23, and its Hnulik Well No. 1, located 1315 feet from the North line and 660 feet from the West line of Section 26, both in Township 17 South, Range 26 East, Kennedy Farms-Morrow Gas Pool, Eddy County, New Mexico, the W/2 of said Section 23 and the N/2 of said Section 26 to be dedicated, respectively, to said wells.

- CASE 5411: Application of David C. Collier for an unorthodox oil well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of his Kersey Well No. 1-Y, to be drilled 1980 feet from the South line and 2330 feet from the West line of Section 33, Township 18 South, Range 28 East, Artesia Pool, Eddy County, New Mexico.
- CASE 5412: Application of Phillips Petroleum Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of its Eaves Unit Area, comprising 3,496 acres, more or less, of State lands in Township 21 South, Range 33 East, Lea County, New Mexico.
- CASE 5413: Application of Anadarko Production Company for three unorthodox injection well locations and amendment of Order No. R-4907, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the relocation at unorthodox locations of three of its injection wells in its Artesia State Unit Waterflood Project, all in Township 18 South, Range 27 East, Eddy County, New Mexico, as follows: Well No. 6-2 to 1530 feet from the South line and 1310 feet from the West line of Section 13; Well No. 7-1 to 10 feet from the North line and 2580 feet from the East line of Section 23; and Well No. 10-1 to 1310 feet from the South line and 1435 feet from the East line of Section 14. Applicant further seeks the amendment of Order No. R-4907 to permit administrative approval of unorthodox producing and injection well locations to within 200 feet of the outer unit boundary.
- CASE 5414: Application of Continental Oil Company for an unorthodox gas well location and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a non-standard 360-acre gas proration unit comprising the SE/4 and E/2 SW/4 of Section 28 and the N/2 NE/4 and NE/4 NW/4 of Section 33, both in Township 20 South, Range 37 East, Eumont Gas Pool, Lea County, New Mexico, to be simultaneously dedicated to its Meyer B-28 A Com Acct. 2 Wells Nos. 2 and 3, located, respectively, in Unit O of said Section 28 and in Unit B of said Section 33.
- CASE 5404: Southeastern Nomenclature case calling for the creation, abolishment, and extension of certain pools in Lea and Chaves Counties, New Mexico:
- (a) CREATE A new pool in Lea County, New Mexico, classified as an oil pool for Abo production and designated as the South Brunson-Abo Pool. The discovery well is the Cities Service Oil Company State P Well No. 4 located in Unit M of Section 32, Township 22 South, Range 38 East, NMPM. Said pool would comprise:

TOWNSHIP 22 SOUTH, RANGE 38 EAST, NMPM
SECTION 32: SW/4

(b) CREATE A new pool in Lea County, New Mexico, classified as an oil pool for Bone Spring production and designated as the EK-Bone Springs Pool. The discovery well is the Hilliard Oil & Gas, Inc. McElvain Federal Well No. 1 located in Unit J of Section 30, Township 18 South, Range 34 East, NMPM. Said pool would comprise:

TOWNSHIP 18 SOUTH, RANGE 34 EAST, NMPM
SECTION 30: SE/4

(c) CREATE A new pool in Lea County, New Mexico, classified as an oil pool for Wolfcamp production and designated as the Rock Lake-Wolfcamp Pool. The discovery well is the Amoco Production Company Rock Lake Unit Well No. 1 located in Unit L of Section 28, Township 22 South, Range 35 East, NMPM. Said pool would comprise:

TOWNSHIP 22 SOUTH, RANGE 35 EAST, NMPM
SECTION 28: SW/4

(d) ABOLISH the Warren-Blinebry Gas Pool in Lea County, New Mexico, described as:

TOWNSHIP 20 SOUTH, RANGE 38 EAST, NMPM
SECTION 27: SW/4
SECTION 28: E/2

(e) EXTEND the Blinebry Oil and Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 38 EAST, NMPM
SECTION 27: SW/4
SECTION 28: E/2

(f) EXTEND the Arkansas Junction-San Andres Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 36 EAST, NMPM
SECTION 24: SE/4

TOWNSHIP 18 SOUTH, RANGE 37 EAST, NMPM
SECTION 19: S/2

(g) EXTEND the Buffalo Valley-Pennsylvanian Gas Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 15 SOUTH, RANGE 27 EAST, NMPM
SECTION 24: S/2
SECTION 25: All

(h) EXTEND the Double L-Queen Associated Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 15 SOUTH, RANGE 30 EAST, NMPM
SECTION 7: NE/4
SECTION 8: All
SECTION 9: W/2

(i) EXTEND the Goodwin-Drinkard Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 37 EAST, NMPM
SECTION 19: SE/4
SECTION 30: NE/4

(j) EXTEND the Osudo-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 35 EAST, NMPM
SECTION 8: W/2
SECTION 17: N/2

(k) EXTEND the Vada-Pennsylvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 9 SOUTH, RANGE 33 EAST, NMPM
SECTION 12: NW/4

(l) EXTEND the Warren-Tubb Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 38 EAST, NMPM
SECTION 27: SE/4

CASE 5405: Northwest Nomenclature case calling for the creation and extension of certain pools in San Juan, Sandoval, and Rio Arriba Counties, New Mexico:

(a) CREATE A new pool in San Juan County, New Mexico, classified as a gas pool for Chacra production and designated as the Bloomfield-Chacra Pool. The discovery well is the El Paso Natural Gas Company Hubbell Well No. 9 located in Unit P of Section 18, Township 29 North, Range 10 West, NMPM. Said pool would comprise:

TOWNSHIP 29 NORTH, RANGE 10 WEST, NMPM
SECTION 7: SW/4
SECTION 18: A11
SECTION 19: A11
SECTION 20: NW/4

TOWNSHIP 29 NORTH, RANGE 11 WEST, NMPM
SECTION 4: SW/4
SECTION 5: SE/4
SECTION 9: N/2 & SE/4
SECTION 10: S/2
SECTION 11: S/2
SECTION 12: W/2 & SE/4
SECTION 13: A11
SECTION 14: E/2
SECTION 23: E/2
SECTION 24: A11
SECTION 26: E/2

(b) CREATE A new pool in San Juan County, New Mexico, classified as a gas pool for Pictured Cliffs production and designated as the Ojo-Pictured Cliffs Pool. The discovery well is the Dugan Production Corporation Pet. Inc. Well No. 2 located in Unit A of Section 36, Township 28 North, Range 15 West, NMPM. Said pool would comprise:

TOWNSHIP 28 NORTH, RANGE 15 WEST, NMPM
SECTION 25: S/2
SECTION 26: SE/4
SECTION 35: NE/4
SECTION 36: N/2

(c) CREATE A new pool in Sandoval County, New Mexico, classified as an oil pool for Menefee production and designated as the Rusty-Menefee Oil Pool. The discovery well is the Chace Oil Company Rusty Federal Well No. 1 located in Unit P of Section 11, Township 22 North, Range 7 West, NMPM. Said pool would comprise:

TOWNSHIP 22 NORTH, RANGE 7 WEST, NMPM
SECTION 11: SE/4

(d) EXTEND the vertical limits of the Dufers Point Dakota Oil Pool to include the Gallup formation, rename the pool, and extend the horizontal limits of the Dufers Point Gallup-Dakota Oil Pool, as renamed, to include therein:

TOWNSHIP 24 NORTH, RANGE 8 WEST, NMPM
SECTION 2: N/2 & SE/4
SECTION 11: NE/4
SECTION 12: W/2

TOWNSHIP 25 NORTH, RANGE 8 WEST, NMPM
SECTION 20: SE/4
SECTION 27: SW/4
SECTION 28: S/2
SECTION 29: E/2
SECTION 34: N/2
SECTION 35: W/2

(e) EXTEND the Aztec-Fruitland Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 29 NORTH, RANGE 10 WEST, NMPM
SECTION 7: SE/4
SECTION 8: S/2 & NE/4
SECTION 9: N/2
SECTION 17: NW/4
SECTION 18: A11
SECTION 19: A11
SECTION 32: SE/4

(f) EXTEND the North Aztec-Fruitland Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 30 NORTH, RANGE 11 WEST, NMPM
SECTION 13: N/2

(g) EXTEND the Ballard-Pictured Cliffs Pool in Rio Arriba, San Juan, and Sandoval Counties, New Mexico, to include therein:

TOWNSHIP 24 NORTH, RANGE 6 WEST, NMPM
SECTION 21: SW/4

(h) EXTEND the Blanco-Mesaverde Pool in San Juan and Rio Arriba Counties, New Mexico, to include therein:

TOWNSHIP 25 NORTH, RANGE 4 WEST, NMPM
SECTION 3: W/2

(i) EXTEND the East Blanco-Pictured Cliffs Pool in Rio Arriba County, New Mexico, to include therein:

TOWNSHIP 30 NORTH, RANGE 4 WEST, NMPM
SECTION 23: All

(j) EXTEND the South Blanco-Pictured Cliffs Pool in Rio Arriba, San Juan and Sandoval Counties, New Mexico, to include therein:

TOWNSHIP 23 NORTH, RANGE 1 WEST, NMPM
SECTION 17: NW/4

TOWNSHIP 24 NORTH, RANGE 3 WEST, NMPM
SECTION 25: SW/4

TOWNSHIP 25 NORTH, RANGE 5 WEST, NMPM
SECTION 19: SW/4

(k) EXTEND the Cuervo-Mesaverde Oil Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 24 NORTH, RANGE 8 WEST, NMPM
SECTION 27: SW/4 NW/4

(l) EXTEND the Devils Fork-Mesaverde Oil Pool in Rio Arriba County, New Mexico, to include therein:

TOWNSHIP 24 NORTH, RANGE 6 WEST, NMPM
SECTION 16: SW/4 NW/4 & NW/4 SE/4

(m) EXTEND the Flora Vista-Mesaverde Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 30 NORTH, RANGE 12 WEST, NMPM
SECTION 35: E/2

(n) EXTEND the Fulcher Kutz-Pictured Cliffs Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 28 NORTH, RANGE 11 WEST, NMPM
SECTION 25: NW/4

(o) EXTEND the Gobernador-Pictured Cliffs Pool in Rio Arriba County, New Mexico, to include therein:

TOWNSHIP 29 NORTH, RANGE 4 WEST, NMPM
SECTION 19: N/2
SECTION 20: NW/4

(p) EXTEND the Gonzales-Mesaverde Pool in Rio Arriba County, New Mexico, to include therein:

TOWNSHIP 25 NORTH, RANGE 6 WEST, NMPM
SECTION 12: NE/4
SECTION 1: SE/4

(q) EXTEND the Kutz-Fruitland Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 28 NORTH, RANGE 10 WEST, NMPM
SECTION 27: NW/4
SECTION 28: N/2
SECTION 29: N/2
SECTION 30: N/2

(r) EXTEND the West Lindrith-Gallup Dakota Oil Pool in Rio Arriba, County, New Mexico, to include therein:

TOWNSHIP 25 NORTH, RANGE 4 WEST, NMPM
SECTION 35: SW/4

(s) EXTEND the Otero-Chacra Pool in Rio Arriba County, New Mexico, to include therein:

TOWNSHIP 25 NORTH, RANGE 5 WEST, NMPM
SECTION 19: SW/4

TOWNSHIP 26 NORTH, RANGE 6 WEST, NMPM
SECTION 21: SE/4
SECTION 22: S/2

TOWNSHIP 26 NORTH, RANGE 7 WEST, NMPM
SECTION 23: SE/4
SECTION 24: SW/4

(t) EXTEND the Tapacito Pictured Cliffs Pool in Rio Arriba County, New Mexico, to include therein:

TOWNSHIP 25 NORTH, RANGE 3 WEST, NMPM
SECTION 9: SE/4

TOWNSHIP 27 NORTH, RANGE 4 WEST, NMPM
SECTION 21: S/2
SECTION 22: SW/4
SECTION 24: S/2
SECTION 26: NE/4

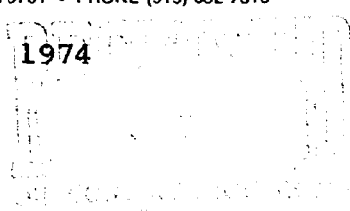
TOWNSHIP 28 NORTH, RANGE 5 WEST, NMPM
SECTION 31: S/2

Case 5099



POST OFFICE DRAWER 1828 • MIDLAND, TEXAS 79701 • PHONE (915) 682-7316

January 15, 1974



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

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

Re: Pennzoil's Moore Com No. 1
Pipeline Connection Notice

Gentlemen:

In compliance with New Mexico Oil Conservation Commission Order No. R-4683, you are hereby notified that the subject well was connected to El Paso Natural Gas Company's pipeline at 1:30 P. M. Mountain Daylight Time on January 14, 1974.

Yours very truly,

J. C. Raney
Petroleum Engineer
Pennzoil Company

JCR:lc

cc: Oil Conservation Commission
Drawer DD
Artesia, New Mexico 88210

Team Note

Oil Conservation Commission

DOCKET MAILED

Date

1-24-74

CO-OWNERS - MOORE COM NO. 1:

Oil Development Company of Texas
900 Polk
Amarillo, Texas 79171

Gulf Oil Corporation
P. O. Box 1150
Midland, Texas 79701

Cities Service Oil Company
800 Vaughn Building
Midland, Texas 79701

Read & Stevens, Inc.
P. O. Box 2126
Roswell, New Mexico 88201

S. P. Yates
Yates Building
207 South 4th
Artesia, New Mexico 88210

Martin Yates III
Yates Building
207 S. 4th
Artesia, New Mexico 88210

Malco Products Company
P. O. Box 1898
Roswell, New Mexico 88201

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. 5009
Order No. 8-1683

APPLICATION OF PENNZOIL COMPANY
FOR A POOL CREATION, SPECIAL POOL
RULES AND AN UNORTHODOX GAS WELL
LOCATION, EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on November 14, 1973, at Santa Fe, New Mexico, before Examiner Daniel S. Mutter.

NOW, on this 30th day of November, 1973, 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 Company, seeks the creation of a new gas pool for Wolfcamp production in Eddy County, New Mexico, and the promulgation of special rules and regulations governing said pool, including a provision for 320-acre spacing units.

(3) That the Moore Com Well No. 1 located at an unorthodox Wolfcamp location 2310 feet from the South line and 660 feet from the East line of Section 23, Township 22 South, Range 26 East, NMPN, Eddy County, New Mexico, having its top perforations at 9605 feet, has discovered a separate common source of supply which should be designated the South Carlisbad-Wolfcamp Gas Pool; that the vertical limits of said pool should be the Wolfcamp formation and that the horizontal limits of said pool should be the E/2 of said Section 23.

(4) That in order to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the super saturation of gas 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 320-acre spacing units should be promulgated for the South Carlisbad-Wolfcamp Gas Pool.

(5) That the temporary special rules and regulations should provide for limited well locations in order to assure orderly development of the

-2-

CASE NO. 5099
Order No. R-4683

pool and protect cooperative rights.

(6) That special rules and regulations should be established for a temporary period to expire one year from the date that a pipeline connection is first obtained for a well in the pool; that during this temporary period all operators in the subject pool should gather all available information relative to drainage and recoverable reserves.

(7) That this case should be reopened at an examiner hearing one year from the date that a pipeline connection is first obtained for a well in the South Carlsbad-Wolfcamp Gas Pool, at which time the operators in the subject pool should appear and show cause why the South Carlsbad-Wolfcamp Gas Pool should not be developed by leasehold spacing units.

(8) That the first operator to obtain a pipeline connection for a well in the South Carlsbad-Wolfcamp Gas Pool should notify the Commission in writing of such fact, and that the Commission should thereupon issue a supplemental order designating an exact date for reopening this case.

IT IS THEREFORE ORDERED:

(1) That a new pool in Eddy County, New Mexico, classified as a gas pool for Wolfcamp production, is hereby created and designated the South Carlsbad-Wolfcamp Gas Pool, with vertical limits comprising the Wolfcamp formation and horizontal limits comprising the following-described area:

EDDY COUNTY, NEW MEXICO
TOWNSHIP 22 SOUTH, RANGE 26 EAST, NMPM
Section 23: E/2

(2) That temporary Special Rules and Regulations for the South Carlsbad-Wolfcamp Gas Pool, Eddy County, New Mexico, are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS
FOR THE
SOUTH CARLSBAD-WOLF CAMP GAS POOL

RULE 1. Each well completed or considered in the South Carlsbad-Wolfcamp Gas Pool is in the Wolfcamp formation within one mile thereof, and not nearer to or within the limits of another designated Wolfcamp gas 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 (2) acres, or less, consisting of a governmental land section.

RULE 3. The Engineering Division 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 and the

unorthodox size or shape of the unit is necessitated by a variation in the legal subdivision of the United States Public Land Surveys, or the following facts exist and the following provisions are complied with:

- (a) The non-standard unit consists of quarter-quarter sections or lots that are contiguous by a common bordering side.
- (b) The non-standard unit lies wholly within a governmental half section and contains less acreage than a standard unit.
- (c) The applicant presents written consent in the form of waivers from all offset operators and from all operators owning interests in the half section in which the non-standard unit is situated and which acreage is not included in said non-standard unit.
- (d) In lieu of paragraph (c) of this rule, the applicant may furnish proof of the fact that all of the aforesaid operators were notified by registered or certified mail of his intent to form such non-standard unit. The Secretary-Director may approve the application if no such operator has entered an objection to the formation of such non-standard unit within 30 days after the Secretary-Director has received the application.

RULE 4. Each well shall be located no nearer than 660 feet to the nearest side boundary nor nearer than 1980 feet to the nearest end boundary nor nearer 330 feet to any governmental quarter-quarter section line.

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 operation 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 operators offsetting the operation unit or if no objection to the unorthodox location has been entered within 20 days after the Secretary-Director has received the application.

IT IS FURTHER ORDERED:

(1) That the locations of all wells presently drilling or to be completed in the South Central Oil Field are to be in the Western formation within one mile thereof as hereby approved; that the operator of any well having an unorthodox location shall notify the Artesia District Office of the Commission in writing of the well and location of the well on or before December 20, 1973.

CASE NO. 5099
Order No. R-4683

(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 South Carlsbad-Wolfcamp Gas Pool shall have dedicated thereto 320 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 promotion units established by the Commission and dedicated thereto.

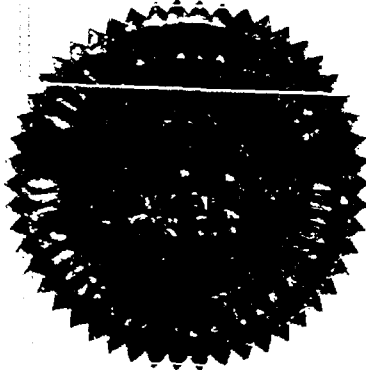
Failure to file new Forms C-192 with the Commission dedicating 320 acres to a well or to obtain a non-standard unit approved by the Commission within 60 days from the date of this order shall subject the well to cancellation of allowable. Until said Form C-192 has been filed or until a non-standard unit has been approved, and subject to said 60-day limitation, each well presently drilling to or completed in the South Carlsbad-Wolfcamp Gas Pool or in the Wolfcamp 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 one year from the date that a pipeline connection is first obtained for a well in the South Carlsbad-Wolfcamp Gas Pool, at which time the operators in the subject pool may appear and show cause why the South Carlsbad-Wolfcamp Gas Pool should not be developed on 160-acre spacing units.

(4) That the first operator to obtain a pipeline connection for a well in the South Carlsbad-Wolfcamp Gas Pool shall notify the Commission in writing of such fact, and that the Commission will thereupon issue a supplemental order designating an exact date for reopening this case.

(5) 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

[Signature]
I. R. TRINIDAD, Chairman

[Signature]
A. L. FORTER, JR., Secretary

S N A 6

10/



OIL CONSERVATION COMMISSION

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

I. R. TRUJILLO
CHAIRMAN

**LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER**

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

December 3, 1973

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

Re: CASE NO. 5099
ORDER NO. R-4683
Applicant:
Pennzoil Company

Dear Sir:

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

Very truly yours,

A. L. Porter, Jr.

A. L. PORTER, Jr.
Secretary-Director

ALP/ir

Copy of order also sent to:

| | |
|-------------|-------------------|
| Hobbs OCC | <u>x</u> |
| Artesia OCC | <u>x</u> |
| Aztec OCC | <u> </u> |

Other _____

Case 5099

Use R-4405 as guide

Create the 5 Clad - Walfcamp
Gas Pool with vertical
limits comprising the
Walfcamp formation
and horizontal limits
the E/2 of 23, 225, 26 E

320

///

DOCKET: EXAMINER HEARING - WEDNESDAY - NOVEMBER 14, 1973

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 Richard L. Stamets, Alternate Examiner:

CASE 5044: (Continued from the October 3, 1973, Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Sycor Newton, Peru Milling Company, R. E. Deming and Aetna Life and Casualty Company and all other interested parties to appear and show cause why the State L 6350 Well No. 1 located in Unit M of Section 10, Township 23 South, Range 11 West, Luna County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.

CASE 5098: Application of R. J. Zonne for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a Morrow gas pool for his Federal Well No. 1 located in Unit G of Section 20, Township 22 South, Range 32 East, Lea County, New Mexico, and the promulgation of special rules therefor, including a provision for 640-acre spacing.

CASE 4849: (Reopened)

In the matter of Case No. 4849 being reopened pursuant to the provisions of Order No. R-4436 which order established temporary special rules for the Humble City-Atoka Pool, Lea County, New Mexico, including a provision for 80-acre spacing. All interested parties may appear and show cause why said pool rules should remain in effect.

CASE 5099: Application of Pennzoil Company for a pool creation, special pool rules and an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a Wolfcamp gas pool for its Moore Com Well No. 1 located at an unorthodox Wolfcamp location 2310 feet from the South line and 660 feet from the East line of Section 23, Township 22 South, Range 26 East, Eddy County, New Mexico, and the promulgation of special pool rules therefor, including a provision for 320-acre spacing.

CASE 5100: Application of Estill Production Corporation for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests underlying the W/2 of Section 21, Township 18 South, Range 33 East, South Corbin-Morrow Gas Pool, Lea County, New Mexico, to be dedicated to a well to be drilled at a standard location for said unit. Also to be considered will be the cost of drilling and completing said well and the allocation of such costs, as well as actual operating costs and charges for supervision. Also to be considered is the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

- CASE 5101: Application of Southern Union Production Company for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for an unorthodox gas well location for its McKittrick-Federal Well No. 1 at a point 2390 feet from the North line and 830 feet from the East line of Section 14, Township 22 South, Range 24 East, Eddy County, New Mexico, the E/2 of said Section 14 to be dedicated to the well.
- CASE 5102: Application of Anne Burnett Tandy dba Windfohr Oil Company for two waterflood projects, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute two waterflood projects by the injection of water into the Grayburg and San Andres formations through 6 wells on its Jackson "B" Lease and through 3 wells on its Gissler "B" Lease, located in Sections 1 and 11, respectively, Township 17 South, Range 30 East, Square Lake Pool, Eddy County, New Mexico.
- CASE 5103: Application of David Fasken for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for an unorthodox gas well location at a point 1000 feet from the North and West lines of Section 32, Township 20 South, Range 25 East, Indian Hills-Morrow Gas Pool, Eddy County, New Mexico.
- CASE 5104: Application of El Paso Natural Gas Company for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Rocky Arroyo "C" Well No. 1 located in Unit F of Section 8, Township 22 South, Range 22 East, Rocky Arroyo Field, Eddy County, New Mexico, in such a manner as to produce gas from the Canyon formation and gas from the Morrow formation through the casing-tubing annulus and through the tubing, respectively.
- CASE 5105: Application of Stallworth Oil and Gas for an unorthodox oil well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for an unorthodox oil well location at a point 760 feet from the North line and 860 feet from the West line of Section 11, Township 9 South, Range 33 East, Vada-Pennsylvanian Pool, Lea County, New Mexico, as an exception to the provisions of Rule 4 of Order No. R-3179-A.
- CASE 5106: Application of Read & Stevens, Inc. for an unorthodox gas well location, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for an unorthodox gas well location for its Harris Federal Well No. 2 at a point 990 feet from the North line and 2310 feet from the West line of Section 24, Township 15 South, Range 27 East, Buffalo Valley-Pennsylvanian Gas Pool, Chaves County, New Mexico, as an exception to Rule 2 of Order No. R-1670-H the N/2 of said Section 24 to be dedicated to said well.

CASE 5107: Southeastern nomenclature case calling for the extension of certain pools in Lea County, New Mexico.

(a) Extend the Antelope Ridge-Atoka Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 24 SOUTH, RANGE 34 EAST, NMPM
Section 2: S/2

(b) Extend the Blinebry Oil Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 22 SOUTH, RANGE 36 EAST, NMPM
Section 1: SE/4
Section 12: NE/4

(c) Extend the Blinebry Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 22 SOUTH, RANGE 36 EAST, NMPM
Section 1: SE/4
Section 12: NE/4

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

TOWNSHIP 21 SOUTH, RANGE 37 EAST, NMPM
Section 12: SW/4

(e) Extend the South Eunice-San Andres Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 22 SOUTH, RANGE 37 EAST, NMPM
Section 2: SE/4

(f) Extend the Flying "M"-San Andres Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 9 SOUTH, RANGE 33 EAST, NMPM
Section 7: SE/4
Section 8: SW/4
Section 17: N/2 NW/4

(g) Extend the West Garrett-Devonian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 16 SOUTH, RANGE 38 EAST, NMPM
Section 31: SE/4

Examiner Hearing - Wednesday - November 14, 1973

Docket No. 32-73

-4-

(h) Extend the High Plains-Pennsylvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 14 SOUTH, RANGE 34 EAST, NMPM
Section 26: NW/4

CASE 5114: Application of Texaco Inc. and Perry R. Bass for compulsory pooling and an unorthodox location, Lea County, New Mexico. Applicants, in the above-styled cause, seek an order pooling all mineral interests underlying the W/2 of Section 32, Township 20 South, Range 33 East, South Salt Lake-Morrow Gas Pool, Lea County, New Mexico, to be dedicated to the well currently being drilled by Amini Oil Company at an unorthodox location for said 320-acre unit at a point 990 feet from the South line and 1980 feet from the West line of said Section 32.

JASON W. KELLAHIN
ROBERT E. FOX
W. THOMAS KELLAHIN

KELLAHIN AND FOX
ATTORNEYS AT LAW
500 DON GASPAR AVENUE
POST OFFICE BOX 1769
SANTA FE, NEW MEXICO 87501

TELEPHONE 982-4315
AREA CODE 505

October 19, 1973

Copy 5699

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

ATTENTION: Ida Rodriguez

Dear Ida:

Enclosed please find the original and two
copies of the Application for Pennzoil Company,
for approval of an unorthodox well location and
adoption of pool rules, Eddy County, New Mexico.

Yours very truly,

Jason W. Kellahin
Jason W. Kellahin

JWK:ks

Enclosure

Date *11-1-73*

CASE #5099
RULE REVIEW
SOUTH CARLSBAD WOLFCAMP
UNIT 1, SECTION 23, T-22-S, R-26-E
EDDY COUNTY, NEW MEXICO

The subject well was drilled to total depth of 11,775'. The proposed completion intervals of Pennsylvanian age were found to be non-productive. The well was plugged back to 9,802' and completed in the Wolfcamp zone at 9,602' to 9,628' for a CAOF of 11.2 MMCFPD. The well has produced approximately 250 MMCF of gas and 6,100 barrels of condensate. The well has produced a total of 7-1/2 months and at the current time the well will produce about 250 MCFPD while being shut-in every other day. The Moore Com #1 is the only well completed in the South Carlsbad Wolfcamp Gas Pool Structure. The offset wells which have been drilled in the sections to the north, east and south have not encountered commercial quantities of the Wolfcamp interval. Because of the performance of this well and the cost of drilling additional wells, it would not be economically feasible to drill additional wells in this pool and it is our opinion this well bore will sufficiently drain the 320 acres that is currently assigned. Contraction of the field rules to 160 acre spacing will create inequities of the ownership.

Pennzoil Company respectfully request the temporary special field rules be extended one additional year. The granting of this extension will not violate anyone's correlative rights, it will not create the waste of hydrocarbon reserves, but it will prevent the drilling of uneconomical wells in this reservoir.


J. C. Raney

S. J. THWESTERN LABORATORIES
FORT WORTH DALLAS HOUSTON MIDLAND BEAUMONT TEXARKANA
CONSULTING, ANALYTICAL CHEMISTS
AND TESTING ENGINEERS

Midland, Texas 10-24-73 File No. C-1902-GD

Report of tests on Distillate
To Pennzoil United, Inc. Date Rec'd. 10-24-73
Received from Pennzoil United, Inc.
Identification Marks Moore Comm. No. 1

A.S.T.M. DISTILLATION

| <u>Percent Distilled</u> | <u>Temp. ° F.</u> |
|--------------------------|-------------------|
| I.B.P. ----- | 88 |
| 5 ----- | 132 |
| 10 ----- | 158 |
| 20 ----- | 201 |
| 30 ----- | 234 |
| 40 ----- | 277 |
| 50 ----- | 331 |
| 60 ----- | 408 |
| 70 ----- | 486 |
| 80 ----- | 591 |
| 90 ----- | 682 |
| 95 ----- | --- |
| | 682 (End point) |

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
Pennzoil EXHIBIT NO. 1
CASE NO. 5099

Percent Recovery ---- 91.5
Percent Residue ----- 4.0
Percent Loss ----- 4.5

Gravity ----- 56.2° API @ 60° F
Color ----- Very Lt. Straw/Slight cloud

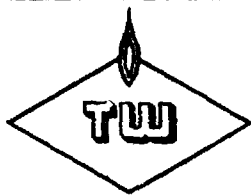
Copies: 4cc Pennzoil United, Inc.
1cc West Texas Engineering Service, Inc.

SOUTHWESTERN LABORATORIES

Jack H. Barton

Lab. No. 19832

Our letters and reports are for the exclusive use of the clients to whom they are addressed. The use of our names must receive our prior written approval. Our letters and reports apply only to the samples tested and are not necessarily indicative of the qualities of identical or similar products.



GAS QUALITY TEST REPORT

COMPANY SELLER PENNZOIL STA. NO. _____
FIELD OR LOCATION So. CARLSBAD CONTRACT NO. _____
SOURCE OR RESERVOIR WOLF CAMP TEST DATE 10/23/73
WELL OR STATION NAME MOORE COM. #1 LAB 4
MIDLAND

| COMPOUND COMPONENTS | COMPONENT SPECIFIC GRAVITY | COMPONENT MOL FRACTION | LIQUEFIABLE HYDROCARBONS | COMPONENT G. P. M. | MOL FRACTION | G. P. M. CONTENT |
|----------------------|----------------------------|------------------------|---------------------------------|--------------------|--------------|------------------|
| NITROGEN | .9672 | .0069 | PROPANE | 27.514 | . | 1.2106 |
| CARBON DIOXIDE | 1.5194 | .0012 | ISO-BUTANE | 32.698 | . | .2223 |
| HELIUM | .1382 | .0001 | N-BUTANE | 31.510 | . | .3498 |
| OXYGEN | 1.1048 | .0030 | LPG - - - - - | | | 1.7827 |
| HYDROGEN SULFIDE | 1.1766 | . | ISO-PENTANE | 36.582 | . | .0988 |
| WATER VAPOR | .6220 | . | N-PENTANE | 36.213 | . | .0797 |
| HYDROCARBON DILUENTS | | (.0112) | HEXANES | 41.111 | . | .0411 |
| METHANE | .5539 | .8046 | HEPTANES + | 46.126 | . | .0231 |
| ETHANE | 1.0382 | .1159 | NATURAL GASOLINE - - - - - | | | .2427 |
| PROPANE | 1.5225 | .0440 | TOTAL LIQUEFIABLE GPM | | | 2.0254 |
| ISO-BUTANE | 2.0067 | .0068 | WATER VAPOR CONTENT: | | | |
| N-BUTANE | 2.0067 | .0111 | Gas Mixture Static Pressure PSI | | | |
| ISO-PENTANE | 2.4910 | .0027 | Hydrocarbon Dew Point °F | | | |
| N-PENTANE | 2.4910 | .0022 | Water Vapor Dew Point °F | | | |
| HEXANES | 2.9753 | .0010 | Lbs Water Vapor per MMCF | | | |
| HEPTANES + | 3.4596 | .0005 | Conversion Constant | | | |
| | | | Water Vapor Volume fraction | | | |
| | | | Moisture recorder reading | | | |
| | | | Make or type | | | |

COMPOSITION - - - - - 1.0000

MIXTURE SPECIFIC GRAVITY:

Calculated From Analysis .6976
Determined by Test Instrument 700
Instrument Make or Type PANALOG

MIXTURE HEATING VALUE:
(Btu/cf at 14.73 Psia, 60°F, Sat.)

Calculated From Analysis 1199.3
Determined by Calorimeter _____
Calorimeter Verified () _____

SULFUR CONTENT:

H₂S - Hydrogen Sulfide, Gr./100 cf .03
RSH - Mercaptans " -
RSR - Sulfides " .01
RSSR - Residuals " -
Total Sulfur, Gr./100 cf .04
H₂S Grains to fraction conversion X .001572
H₂S Volume Fraction _____

Critical Pressure 670.4 Critical Temperature 392.1

REMARKS 4 POINT TEST ANALYSISMEASUREMENT
AREA ROSWELLGAS
ANALYST ALSTON

| | |
|------------------------|--|
| NO. OF COPIES RECEIVED | |
| DISTRIBUTION | |
| SANTA FE | |
| FILE | |
| U.S.G.S. | |
| LAND OFFICE | |
| OPERATOR | |

BEFORE EXAMINER NUTTER

OIL CONSERVATION COMMISSION

Pennzoil **EXHIBIT NO. 4**

NEW MEXICO OIL CONSERVATION COMMISSION

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5099

Form C-105
Revised 1-1-65

5a. Indicate Type of Lease
State ☐ Fee ☒

5. State Oil & Gas Lease No.

| | | | | | | | |
|--|--------------------------------|---|--|--|--|---|---|
| 1a. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> DRY <input type="checkbox"/> OTHER <input type="checkbox"/> | | | | | | 7. Unit Agreement Name | |
| b. TYPE OF COMPLETION NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> OTHER <input type="checkbox"/> | | | | | | 8. Farm or Lease Name Moore Com. | |
| 2. Name of Operator Pennzoil Company | | | | | | 9. Well No. 1 | |
| 3. Address of Operator P. O. Drawer 1828 - Midland, Texas 79701 | | | | | | 10. Field and Pool, or Wildcat Undesignated | |
| 4. Location of Well UNIT LETTER I LOCATED 2310 FEET FROM THE South LINE AND 660 FEET FROM THE East LINE OF SEC. 23 TWP. 22-S RGE. 26-E N.M.M. | | | | | | 12. County Eddy | |
| 15. Date Spudded 6-7-73 | | 16. Date T.D. Reached 10-3-73 | | 17. Date Compl. (Ready to Prod.) 10-23-73 | | 18. Elevations (DI, RKB, RT, GR, etc.) 3178' G.L. | |
| 19. Elev. Casinghead 3179' | | 20. Total Depth 11,775' | | 21. Plug Back T.D. 9,802' | | 22. If Multiple Compl., How Many - | |
| 23. Intervals Drilled By Rotary Tools | | | | | | 24. Producing Interval(s), of this completion - Top, Bottom, Name Wolfcamp 9605 - 9628' | |
| 25. Was Directional Survey Made No | | | | | | 26. Type Electric and Other Logs Run Compensated Neutron Density, D.L.L. & M.L.L. | |
| 27. Was Well Cored None | | | | | | 28. CASING RECORD (Report all strings set in well) | |
| CASING SIZE | | WEIGHT LB./FY. | | DEPTH SET | | HOLE SIZE | |
| 20" | | 94 | | 375' | | 26" | |
| 13 3/8" | | 48# & 54.50 | | 1,924' | | 17 1/2" | |
| 9 5/8" | | 36 & 40# | | 5,407' | | 12 1/4" | |
| 5 1/2" | | 17 | | 9,802' | | 8 3/4" | |
| CEMENTING RECORD | | AMOUNT PULLED | | | | | |
| 964 sx Circ. | | 0 | | | | | |
| 2,150 sx Circ. | | 0 | | | | | |
| 1,390 sx T/C @ 2,090' | | 0 | | | | | |
| 1,350 sx | | | | | | | |
| 29. LINER RECORD | | | | 30. TUBING RECORD | | | |
| SIZE | TOP | BOTTOM | SACKS CEMENT | SCREEN | SIZE | DEPTH SET | PACKER SET |
| NONE | | | | | 2 3/8" | 9,512' | 9,512' |
| 31. Perforation Record (Interval, size and number) 9605-9628' - 23 holes - 0.21" | | | | 32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC. DEPTH INTERVAL 9605-9628' AMOUNT AND KIND MATERIAL USED 300 gals acetic acid | | | |
| 33. PRODUCTION Date First Production 10-16-73 Production Method (Flowing, gas lift, pumping - Size and type pump) Flowing Well Status (Prod. or Shut-in) Shut-in | | | | | | | |
| Date of Test 10-23-73 | Hours Tested 4 hours | Choke Size Various | Prodn. For Test Period SEE ATTACHED FORM C-122 | Oil - BBL. SEE ATTACHED FORM C-122 | Gas - MCF SEE ATTACHED FORM C-122 | Water - BBL. SEE ATTACHED FORM C-122 | Gas-Oil Ratio SEE ATTACHED FORM C-122 |
| Flow Tubing Press. | Casing Pressure | Calculated 24-Hour Rate | Oil - BBL. SEE ATTACHED FORM C-122 | Gas - MCF SEE ATTACHED FORM C-122 | Water - BBL. SEE ATTACHED FORM C-122 | Oil Gravity - API (Corr.) SEE ATTACHED FORM C-122 | |
| 34. Disposition of Gas (Sobd, used for fuel, vented, etc.) Vented during test | | | | | | Test Witnessed By J. N. Casparsis | |
| 35. List of Attachments Form C-122 - DST Data - Logs - Deviation Record | | | | | | | |
| 36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief. | | | | | | | |
| SIGNED <i>J. Chaney</i> | | | | TITLE Petroleum Engineer | | DATE 11-12-73 | |

This form is to be filed with the appropriate District Office of the Commission not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 30 through 34 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

INSTRUCTIONS

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

| Southeastern New Mexico | | Northwestern New Mexico | |
|-------------------------|-----------------------|-------------------------|-------------------|
| T. Anhy | T. Canyon 9900 | T. Ojo Alamo | T. Penn. "B" |
| T. Salt | T. Strawn 10,110 | T. Kirtland-Fruitland | T. Penn. "C" |
| B. Salt | T. Atoka 10,465 | T. Pictured Cliffs | T. Penn. "D" |
| T. Yates | T. Miss | T. Cliff House | T. Leadville |
| T. 7 Rivers | T. Devonian | T. Menefee | T. Madison |
| T. Queen | T. Silurian | T. Point Lookout | T. Elbert |
| T. Grayburg | T. Montoya | T. Mancos | T. McCracken |
| T. San Andres | T. Simpson | T. Gallup | T. Ignacio Qtzite |
| T. Glorieta | T. McKee | Base Greenhorn | T. Granite |
| T. Paddock | T. Ellenburger | T. Dakota | T. |
| T. Blinberry | T. Gr. Wash | T. Morrison | T. |
| T. Tubb | T. Granite | T. Todilto | T. |
| T. Drinkard | T. Delaware Sand 1954 | T. Entrada | T. |
| T. Abo 8330 | T. Bone Springs 5240 | T. Wingate | T. |
| T. Wolfcamp 8720 | T. Morrow 11175 | T. Chinle | T. |
| T. Penn. 9900 | T. Morrow "B" 11290 | T. Permian | T. |
| T. Cisco (Bough C) | T. Morrow "C" 11545 | T. Penn. "A" | T. |
| | B/Capitan 1954 | | |

FORMATION RECORD (Attach additional sheets if necessary)

| From | To | Thickness in Feet | Formation | From | To | Thickness in Feet | Formation |
|--------|--------|-------------------|--------------|------|----|-------------------|-----------|
| 0 | 1,954 | 1,954 | Capitan | | | | |
| 1,954 | 5,240 | 3,286 | Delaware | | | | |
| 5,240 | 8,330 | 3,090 | Bone Springs | | | | |
| 8,330 | 8,720 | 390 | Abo | | | | |
| 8,720 | 9,900 | 1,180 | Wolfcamp | | | | |
| 9,900 | 10,110 | 210 | Canyon | | | | |
| 10,110 | 10,465 | 355 | Strawn | | | | |
| 10,465 | 11,175 | 710 | Atoka | | | | |
| 11,175 | 11,704 | 529 | Morrow | | | | |
| 11,704 | T.D. | 71 | Barnett | | | | |

**NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL**

Form C-122
Revised 9-1-65

| | | | | | |
|---|-------------|------------------------------------|----------------------------|-------------------------------------|--------------------------|
| Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special | | | | Test Date 10-23-73 | |
| Company Pennzoil Company | | | Connection None | | |
| Pool Undesignated (Wolfcamp) | | | Formation Wolfcamp | | Unit I |
| Completion Date 10-23-73 | | Total Depth 11775 | | Plug Back TD 9753 | Elevation 3178 Gr. |
| Farm or Lease Name Moore Comm | | | Well No. 1 | | |
| Cas. Size 5 1/2" | Wt. 17.5 | d 4.892" | Set At 9802' | Perforations From 9605' 9628' To | |
| Tub. Size 2 3/8 EUE | Wt. 4.7 | d 1.995 | Set At 9544 | Perforations From To | |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single | | | | Packer Set At 9544 | |
| Producing Thru Tubing | | Reservoir Temp. °F 138° @ 9617' | | Mean Annual Temp. °F 60 | |
| Baro. Press. - P _a 13.2 | | State New Mexico | | County Eddy | |
| L 9617 | H 9617 | Gg 700 | % CO ₂ .0012 | % N ₂ .0069 | % H ₂ S 0% |
| Prover Meter Run X | | | Taps | | |

| FLOW DATA | | | | | | TUBING DATA | | CASING DATA | | Duration of Flow |
|-----------|------------------|-----|--------------|-----------------|----------------------|-------------|-----------------|-------------|-----------------|------------------|
| NO. | Prover Line Size | X | Orifice Size | Press. p.s.i.g. | Diff. h _w | Temp. °F | Press. p.s.i.g. | Temp. °F | Press. p.s.i.g. | |
| SI | | | | | | | 3674 | 73° | | |
| 1. | 6.0 | 2.0 | 224 | 6" | 60° | 3570 | 75° | | | 1 Hour |
| 2. | 6.0 | 2.0 | 227 | 15" | 83° | 3503 | 76° | | | 1 Hour |
| 3. | 6.0 | 2.0 | 227 | 33.5" | 72° | 3369 | 78° | | | 1 Hour |
| 4. | 6.0 | 2.0 | 234 | 80" | 55° | 3073 | 80° | | | 1 Hour |
| 5. | | | | | | | | | | |

| RATE OF FLOW CALCULATIONS | | | | | | | |
|---------------------------|-----------------------|------------------|-------------------------|-----------------------|-------------------|-----------------------------|----------------------|
| NO. | Coefficient (24 Hour) | $\sqrt{h_w P_m}$ | Pressure P _m | Flow Temp. Factor Ft. | Gravity Factor Fg | Super Compress. Factor, Fpv | Rate of Flow Q, Mscf |
| 1 | 19.16 | 37.723 | 237.2 | 1.000 | 1.195 | 1.029 | 889 |
| 2 | 19.16 | 60.025 | 240.2 | .9786 | 1.195 | 1.024 | 1377 |
| 3 | 19.16 | 89.703 | 240.2 | .9887 | 1.195 | 1.027 | 2085 |
| 4 | 19.16 | 140.627 | 247.2 | 1.0048 | 1.195 | 1.031 | 3336 |
| 5 | | | | | | | |

| NO. | P _r | Temp. °R | T _r | Z | Gas Liquid Hydrocarbon Ratio | A.P.I. Gravity of Liquid Hydrocarbons | Specific Gravity Separator Gas | Specific Gravity Flowing Fluid | Critical Pressure | Critical Temperature |
|-----|----------------|----------|----------------|------|------------------------------|---------------------------------------|--------------------------------|--------------------------------|-------------------|----------------------|
| 1 | .36 | 520 | 1.33 | .945 | 10298 | 56.3 | .700 | XXXXXX | 668 | 392 |
| 2 | .36 | 543 | 1.39 | .953 | 10298 | 56.3 | .700 | XXXXXX | 668 | 392 |
| 3 | .36 | 532 | 1.36 | .949 | 10298 | 56.3 | .700 | XXXXXX | 668 | 392 |
| 4 | .37 | 515 | 1.31 | .940 | 10298 | 56.3 | .700 | XXXXXX | 668 | 392 |
| 5 | | | | | | | | | | |

| NO. | P _r ² | P _w | P _w ² | P _r ² - P _w ² |
|-----|-----------------------------|----------------|-----------------------------|---|
| 1 | 3687.2 | 3533.6 | 12486 | 1109 |
| 2 | 3687.2 | 3469.0 | 12034 | 1561 |
| 3 | 3687.2 | 3333.7 | 11114 | 2481 |
| 4 | 3687.2 | 3090.0 | 9548 | 4047 |
| 5 | | | | |

$$(1) \frac{P_r^2}{P_r^2 - P_w^2} = \frac{3687.2}{4047} = 1.3595$$

$$AOF = Q \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 11206$$

$$(2) \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 3.359$$

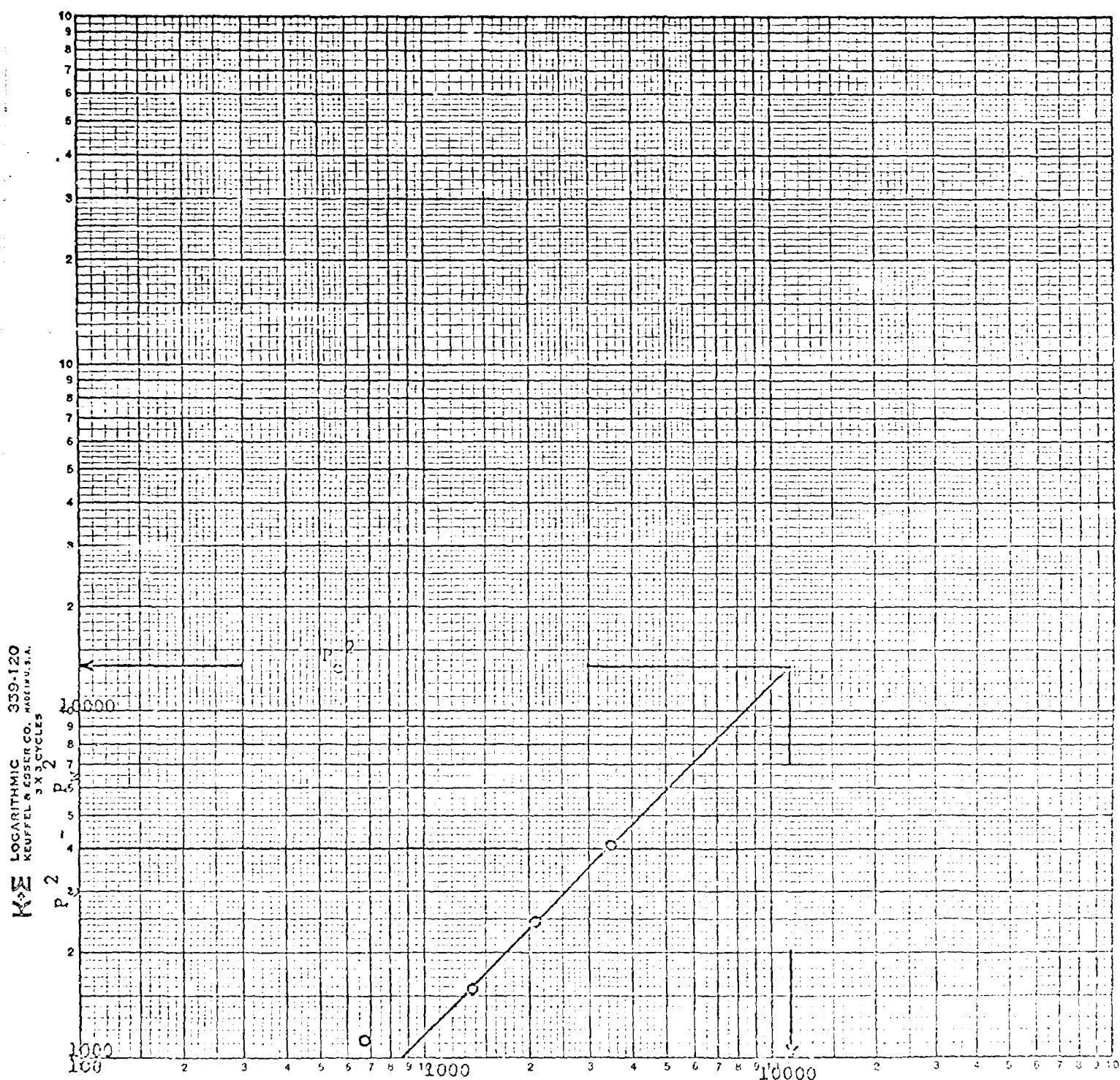
| | | | | | | |
|--------------------|-------|---------------|------------------|-----|----------|------|
| Absolute Open Flow | 11206 | Mscf @ 15.025 | Angle of Slope @ | 45° | Slope, n | 1.00 |
|--------------------|-------|---------------|------------------|-----|----------|------|

Remarks: Sub surface pressure recorded with Amerada type BPG-3 recording pressure gauge.

| | | | |
|----------------------------|---------------------------|----------------|-------------|
| Approved By: J.N. Casparis | Conducted By: H.L. Hagler | Calculated By: | Checked By: |
|----------------------------|---------------------------|----------------|-------------|

COMPANY
LEASE
WELL NO.
FIELD
COUNTY
DATE

PENNZOIL COMPANY
MOORE COMM
1
UNDESIGNATED (WOLFCAMP)
EDDY, NEW MEXICO
October 23, 1973



Q in MCF/Day.

$\theta = 45^\circ$

$n = 1.00$

Absolute Open Flow = 11206 MCF/Day

WORK SHEET FOR STEPWISE CALCULATION

~~XXXXXXXXXX~~
(SURFACE)

~~XXXXXXXXXX~~
PRESSURE
(P_c & P_w)

RATE NO. 1

Form C-122-F
Adopted 9-1-63

COMPANY Pennzoil Company LEASE Moore Comm WELL NO. 1 DATE 10-23-73

LOCATION: Unit I Section 23 Township 22S Range 26E

L 9617 H 9617 L/H 1.00 G .964 % CO₂ .0012 % N₂ .0069 % H₂S .04

d _____ F_r _____ Q_m _____ M^2_{cfd} (L/H) ($F_r Q_m$)² _____ P_{cr} 660 T_{cr} 477
TABLE IX & X TABLE IX & X

| LINE | ITEM | SOURCE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|------|---------------------|------------------|---------|---------|---------|---------|---------|---|---|---|---|----|
| 1 | H | | 9617 | 4636 | | 0 | | | | | | |
| 2 | GH | | 9271 | 4469 | | 0 | | | | | | |
| 3 | 37.5GH | | 347655 | 167563 | | 0 | | | | | | |
| 4 | P_c or P_n | | 5107.2 | 4330.7 | 4325.8 | 3544.9 | 3531.0 | | | | | |
| 5 | P_r | | 7.74 | 6.56 | 6.55 | 5.37 | 5.35 | | | | | |
| 6 | T | | 598 | 567 | 567 | 535 | 535 | | | | | |
| 7 | T_r | | 1.25 | 1.19 | 1.19 | 1.12 | 1.12 | | | | | |
| 8 | Z | | .956 | .845 | .845 | .716 | .714 | | | | | |
| 9 | P/Z P/Z | 4=8 | 5342.25 | 5125.25 | 5119.35 | 4951.03 | 4945.50 | | | | | |
| 10 | P/TZ | 9=5 | 8.934 | 9.047 | 9.037 | 9.354 | 9.244 | | | | | |
| 11 | $(P/TZ)^2/1000$ | $(10)^2/1000$ | | | | | | | | | | |
| 12 | $L/H(F_r Q_m)^2$ | | | | | | | | | | | |
| 13 | | $I_1 + I_2$ | | | | | | | | | | |
| 14 | I_n | $I_0 = I_3$ | 111.938 | 110.533 | 110.659 | 108.058 | 108.179 | | | | | |
| 15 | $M = P_n - P_{n-1}$ | | | 776 | 781 | 781 | 795 | | | | | |
| 16 | $N = I_n + I_{n-1}$ | | | 223.875 | 222.471 | 222.596 | 218.717 | | | | | |
| 17 | $M \times N$ | $I_5 \times I_6$ | | | 173750 | | 173880 | | | | | |
| 18 | $\sum (M \times N)$ | $\sum I_7$ | | | 173750 | | 347630 | | | | | |

$$\Delta P = \frac{3(347655)}{111.938 + 4(110.659) + 108.179} = \frac{1042965}{662.753} = 1573.6$$

$$P = 5107.2 - 1573.6 = 3533.6$$

One copy to be filed in District Office (Work copy acceptable)

WORK SHEET FOR STEPWISE CALCULATION

XXXXXXXXXXXX
(SURFACE)

XXXXXXXXXX
PRESSURE
(P_c & P_w)
RATE NO. 2

Form C-122-E
Adopted 9-1-65

COMPANY Pennzoil Company LEASE Moore Comm WELL NO. 1 DATE 10-23-73

LOCATION: Unit I Section 23 Township 22S Range 26E

L 9617 H 9617 L/H 1.00 G .964 % CO₂ .0012 % N₂ .0069 % H₂S .04

d _____ F_r _____ Q_m _____ M²cfd (L/H) (F_rQ_m)² _____ P_{cr} 660 T_{cr} 177
TABLE 12 & 13 TABLE 12 & 13

| LINE | ITEM | SOURCE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|------|--|-------------------------|---------|---------|---------|---------|---------|---|---|---|---|----|
| 1 | H | | 9617 | 4636 | | 0 | | | | | | |
| 2 | GH | | 9271 | 4469 | | 0 | | | | | | |
| 3 | 37.5GH | | 347655 | 167563 | | 0 | | | | | | |
| 4 | P _c or P _n | | 5031.2 | 4258.2 | 4254.5 | 3478.2 | 3566.8 | | | | | |
| 5 | P _r | | 7.62 | 6.45 | 6.45 | 5.27 | 5.25 | | | | | |
| 6 | T | | 598 | 568 | 568 | 538 | 538 | | | | | |
| 7 | T _r | | 1.25 | 1.19 | 1.19 | 1.13 | 1.13 | | | | | |
| 8 | Z | | .946 | .835 | .835 | .706 | .704 | | | | | |
| 9 | P/Z P/Z | 4-5 | 5813.39 | 5099.66 | 5095.28 | 4926.70 | 4924.51 | | | | | |
| 10 | P/TZ | 9-6 | 8.894 | 8.978 | 8.971 | 9.157 | 9.153 | | | | | |
| 11 | (P/TZ) ² /1000 | (10) ² /1000 | | | | | | | | | | |
| 12 | L/H(F _r Q _m) ² | | | | | | | | | | | |
| 13 | | 11+12 | | | | | | | | | | |
| 14 | I _n | 10-13 | 112.440 | 111.380 | 111.476 | 109.201 | 109.249 | | | | | |
| 15 | M=P _n -P _{n-1} | | | 773 | 777 | 776 | 787 | | | | | |
| 16 | N=I _n +I _{n-1} | | | | 173908 | | 173667 | | | | | |
| 17 | M x N | 15x16 | | | 173908 | | 347575 | | | | | |
| 18 | Σ(M x N) | Σ17 | | | | | | | | | | |

Delta P= $\frac{3(347655)}{112.440 + 109.249} = \frac{1042965}{221.689} = 1562.2$ P= $5031.2 - 1562.2 = 3469.0$
Copy to be filed in District Office (Work copy acceptable)

WORK SHEET FOR STEPWISE CALCULATION

XXXXXXXXXXXX

(SURFACE)

PRESSURE
RATE NO. $\{P_c \& P_w\}$

Form C-122-E
Adopted 2-1-65

COMPANY Pennzoil Company LEASE Moore Comm WELL NO. 1 DATE 10-23-73

LOCATION: Unit I Section 23 Township 22S Range 26E

L 9617 H 9617 L/H 1.00 G .964 % CO₂ .0012 % N₂ .0069 % H₂S .04

d _____ F_r _____ Q_m _____ M²cfd (L/H) (F_rQ_m)² _____ P_{cr} 660 T_{cr} 477
TABLE IX B X TABLE IX B X

| LINE | ITEM | SOURCE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|------|--|------------------------|---------|---------|---------|---------|---------|---|---|---|---|----|
| 1 | H | | 9617 | 4636 | | 0 | | | | | | |
| 2 | GH | | 9271 | 4469 | | 0 | | | | | | |
| 3 | 37.5GH | | 347655 | 167563 | | 0 | | | | | | |
| 4 | P _c or P _n | | 4884.2 | 4117.5 | 4113.9 | 3343.4 | 3331.9 | | | | | |
| 5 | P _r | | 7.40 | 6.24 | 6.23 | 5.07 | 5.05 | | | | | |
| 6 | T | | 598 | 568 | 568 | 538 | 538 | | | | | |
| 7 | T _r | | 1.25 | 1.19 | 1.19 | 1.13 | 1.13 | | | | | |
| 8 | Z | | .926 | .814 | .813 | .684 | .683 | | | | | |
| 9 | P/Z P/Z | 4=8 | 5274.51 | 5058.47 | 5060.14 | 4888.12 | 4878.47 | | | | | |
| 10 | P/TZ | 9=6 | 8.820 | 8.906 | 8.909 | 9.086 | 9.068 | | | | | |
| 11 | (P/TZ) ² /1000 | (9) ² /1000 | | | | | | | | | | |
| 12 | L/H(F _r Q _m) ² | | | | | | | | | | | |
| 13 | | 11=12 | | | | | | | | | | |
| 14 | I _n | 10=13 | 113.375 | 112.287 | 112.250 | 110.063 | 110.280 | | | | | |
| 15 | M=P _n -P _{n-1} | | | 767 | 770 | 770 | 782 | | | | | |
| 16 | M=I _n +I _{n-1} | | | 226.751 | 225.662 | 225.625 | 222.312 | | | | | |
| 17 | M x H | 15x16 | | | 73760 | | 173848 | | | | | |
| 18 | Σ(MxH) | Σ17 | | | 173760 | | 347608 | | | | | |

Delta P = $\frac{3(347655)}{1042965} = 1550.5$

P = 4884.2 - 1550.5 = 3333.7

One copy to be filed in District Office (Work copy acceptable)

WORK SHEET FOR STEPWISE CALCULATION ~~XXXXXXXXXX~~ PRESSURE ~~XXXXXXXXXX~~
(SURFACE) (P_c & P_w)

Form C-122-E
Adopted 2-1-65

RATE NO. 4

COMPANY Pennzoil Company LEASE Moore Comm WELL NO. 1 DATE 10-23-73

LOCATION: Unit I Section 23 Township 22S Range 26E

L 9617 H 9617 L/H 1.00 G .964 % CO₂ .0012 % N₂ .0069 % H₂S .04

d _____ F_r _____ Q_m _____ M^2_{cld} (L/H) ($F_r Q_m$)² _____ P_{cr} 660 T_{cr} 477
TABLE IX & X TABLE IX & X

| LINE | ITEM | SOURCE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|------|---------------------|---------------|---------|---------|---------|---------|---|---|---|---|---|----|
| 1 | H | | 9617 | 4636 | 0 | | | | | | | |
| 2 | GH | | 9271 | 4469 | 0 | | | | | | | |
| 3 | 37.5GH | | 347655 | 167563 | 0 | | | | | | | |
| 4 | P_c or P_n | | 4605.2 | 3851.4 | 3096.0 | 3087.5 | | | | | | |
| 5 | P_r | | 6.98 | 5.84 | 4.69 | 4.68 | | | | | | |
| 6 | T | | 598 | 569 | 540 | 540 | | | | | | |
| 7 | T_r | | 1.25 | 1.19 | 1.13 | 1.13 | | | | | | |
| 8 | Z | | .888 | .779 | .645 | .644 | | | | | | |
| 9 | P/Z P/Z | 4-8 | 5186.03 | 4944.10 | 4801.53 | 4794.33 | | | | | | |
| 10 | P/TZ | 9-6 | 8.672 | 8.689 | 8.892 | 8.878 | | | | | | |
| 11 | $(P/TZ)^2/1000$ | $(10)^2/1000$ | | | | | | | | | | |
| 12 | $L/H(F_r Q_m)^2$ | | | | | | | | | | | |
| 13 | | $I_1 + I_2$ | | | | | | | | | | |
| 14 | I_n | 10-13 | 115.310 | 115.087 | 112.464 | 112.633 | | | | | | |
| 15 | $M = P_n - P_{n-1}$ | | | 753 | 754 | 764 | | | | | | |
| 16 | $N = I_n + I_{n-1}$ | | | 230.619 | 230.396 | 227.551 | | | | | | |
| 17 | $M \times N$ | 15-16 | | 173656 | | 173849 | | | | | | |
| 18 | $\sum (M \times N)$ | $\sum 17$ | | 173656 | | 347505 | | | | | | |

Delta P = $\frac{3(347655)}{115.310 + 115.087 + 112.633} = \frac{1042965}{688.291} = 1515.2$ P = 4605.2 - 1515.2 = 3090.0
One copy to be filed in District Office (Work copy acceptable)

MOORE COM. NO. 1
2310' FSL & 660' FEL
SEC. 23, T-22-S, R-26-E
EDDY COUNTY, NEW MEXICO

DRILL STEM TEST SUMMARY:

#1 11,302' - 11,400' 15" pre-flow, very weak blow, 90" I.S.I., 90" flow, very weak blow increasing to weak blow, 3 hour final shut-in period. Pre-flow pressure 752 psi, I.S.I. pressure 1705 psi, final flowing pressure 720 psi, final shut-in pressure 2371 psi. Hydrostatic in = 6383# - Hydrostatic out = 6402#. Drill pipe recovery: 1500' of fresh water cushion and 40' of drilling mud. Sample chamber recovery: 600 psig pressure, and 2.7 cubic feet of gas

#2 11,403 - 11,540' 15" pre-flow, very weak increasing to weak blow, 90" I.S.I., 90" flow period, very weak increasing to a weak blow, 3 hour final shut-in. Pre-flow pressure 153 psig. Initial shut-in pressure 1117 psig, final flow pressure 150 psig, final shut-in pressure 1947 psig. Initial hydrostatic pressure 6591 psig - Final hydrostatic pressure 6609 psig. Drill pipe recovery: 60' drilling mud - Sample chamber: 0 psig and no recovery

*These DST's
are in
the narrow*

INCLINATION REPORT

OPERATOR PENNZOIL ADDRESS P. O. DRAWER 1828, Midland, Texas 79701
 LEASE MOORE WELL NO. 1 FIELD South Carlsbad
 LOCATION Section 23, T22S, R26-E

| Depth | Angle (Inclination 'degrees) | Displacement | Displacement Accumulated |
|-------|---------------------------------|--------------|-----------------------------|
| 355 | 1/4 | 1.56 | 1.56 |
| 490 | 1-3/4 | 4.12 | 4.68 |
| 516 | 1-3/4 | .79 | 6.47 |
| 610 | .2 | 3.28 | 9.75 |
| 670 | .2 | 2.09 | 11.84 |
| 742 | 1-3/4 | 2.20 | 14.04 |
| 795 | .2 | 1.85 | 15.89 |
| 866 | 2-1/2 | 3.10 | 18.99 |
| 888 | 2-3/4 | 1.06 | 20.05 |
| 960 | .2 | 2.51 | 22.56 |
| 990 | .2 | 1.05 | 23.61 |
| 1065 | 2-3/4 | 3.60 | 27.21 |
| 1118 | 2-3/4 | 2.54 | 29.75 |
| 1221 | 2-1/2 | 4.49 | 32.24 |
| 1245 | 2-3/4 | 1.15 | 33.49 |
| 1275 | 2-1/2 | 1.31 | 34.70 |
| 1331 | 2-1/4 | 2.20 | 36.90 |
| 1361 | 1-3/4 | .92 | 37.82 |
| 1403 | 1-3/4 | 1.28 | 39.10 |
| 1452 | 1-3/4 | 1.49 | 40.59 |
| 1483 | 1-3/4 | .95 | 41.54 |
| 1550 | 1-3/4 | 2.04 | 43.58 |
| 1600 | 1-3/4 | 1.53 | 45.11 |
| 1670 | 2-1/2 | 3.05 | 48.16 |
| 1700 | 2-1/4 | 1.18 | 49.34 |
| 1765 | 2-3/4 | 3.17 | 52.51 |
| 1797 | 2-3/4 | 1.49 | 54.00 |
| 1860 | 2-3/4 | 3.02 | 57.02 |
| 1891 | 2-3/4 | 1.49 | 58.51 |
| 1963 | .2 | 2.61 | 61.12 |
| 2150 | 1-1/2 | 4.90 | 66.02 |

(OVER)

I hereby certify that the above data as set forth is true and correct to the best of my knowledge and belief.

Cactus Drilling Company

By: [Signature]
 Title: Vice President

Affidavit:

Before me, the undersigned authority, appeared _____ known to me to be the person whose name is subscribed herebelow, who, on making deposition, under oath states that he is acting for and in behalf of the operator of the well identified above, and that to the best of his knowledge and belief such well was not intentionally deviated from the true vertical whatsoever.

[Signature]
 (Affiant's Signature)

Sworn and subscribed to in my presence on this the 12th day of _____

November 19 73

[Signature]
 Notary Public in and for the County
 of Eca, State of New Mexico

Seal

Midland

Texas

PENNZOIL COMPANY
MOORE COM. NO. 1
COMPARATIVE ECONOMICS

160 ACRE Vs. 320 ACRE
PER WELL

SPACING

35% recovery factor

30% recovery factor

Reserves (Gross)

160 Acre

320 Acre

Gas:
Condensate:

1,400 MMCF
42,000 Bbls.

2,400 MMCF
72,000 Bbls.

Investment
Operating Cost
Life
Royalty Interest

\$292,000
\$38,400
8 years
18.75 %

\$292,000
\$48,000
10 years
18.75 %

Payout
Profit Ratio, \$/\$
Rate of Return, %

2.74 years
0.51
13.07

1.77 years
1.31
6.35

Based on these economics, it would not be economically attractive to drill on 160 acre spacing.

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
Pennzoil EXHIBIT NO. 5
CASE NO. 5099

REQUEST FOR THE EXTENSION OF AN EXISTING POOL

OR

THE CREATION OF A NEW POOL

TO: The Oil Conservation Commission
State of New Mexico

Date November 12, 1973

The Pennzoil Company
Name of Operator

Moore Com.
Name of Lease

1 Located 2310 feet from the South line and 660 feet
Well No.
from the East line of 23 22-S 26-E
Section Township Range

is outside the boundaries of any pool producing from the same formation. On the basis of the information submitted here-
with on form C-105, we hereby request that the
pool be extended to include the following described area

or that a new pool be created to include the following described area East half of Section 23,
Township 22-South, Range 26 East, Eddy County, New Mexico

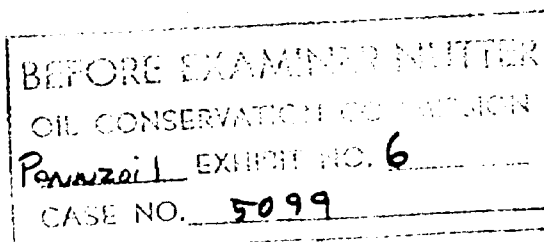
Suggested name: South Carlsbad Wolfcamp Pool

Pennzoil Company
Operator

Name of Producing Formation: Wolfcamp

J. C. Raney
J. C. Raney

Representative Petroleum Engineer



PENNZOIL COMPANY
MOORE COM. NO. 1
RESERVOIR PROPERTIES

| | |
|--------------------------------------|----------------|
| Depth (Pay) | 9,605 feet |
| Net Pay | 23 feet |
| Porosity | 9.4 % |
| Water Saturation | 16 % |
| Bottom Hole Pressure (111 hour S.I.) | 5,178 psig |
| Bottom Hole Temperature | 138° F |
| Gas Formation Volume Factor | 313.2 SCF/RCF |
| Separator Gas Gravity | 0.700 |
| Estimated Liquid Gas Ratio | 30 Barrel/MMCF |
| Condensate Gravity | 56.3° @ 60° F |
| Indicated Permeability (Logs) | Fair to good |

BEFORE EXAMINER INITIALS
OIL CONSERVATION COMMISSION
Pennzoil EXHIBIT NO. 7
CASE NO. 5099

PENNZOIL COMPANY
MOORE COM. NO. 1
LIST OF OFFSET OPERATORS AND/OR WORKING INTEREST OWNERS

Texas Oil & Gas Corporation
P. O. Drawer 591
Midland, Texas 79701

Michael P. & Corinne Grace II
P. O. Box 1418
Carlsbad, New Mexico 88220

Gulf Oil Corporation, U.S.
P. O. Box 1150
Midland, Texas 79701

| | |
|------------------------|----------------------|
| BEFORE EXAMINED MUTTER | |
| OIL CONSERVATION | |
| <i>Pennzoil</i> | EXHIBIT NO. <u>8</u> |
| CASE NO. | <u>5099</u> |

BEFORE THE
OIL CONSERVATION COMMISSION OF NEW MEXICO

IN THE MATTER OF THE APPLICATION
OF PENNZOIL COMPANY FOR APPROVAL
OF AN UNORTHODOX WELL LOCATION
AND ADOPTION OF POOL RULES, EDDY
COUNTY, NEW MEXICO

A P P L I C A T I O N

COMES NOW Pennzoil Company and applies to the Oil Conservation Commission of New Mexico for approval of an unorthodox well location for its Moore Com Well No. 1, completed in the Wolfcamp formation, and for the adoption of temporary pool rules, Eddy County, New Mexico, and in support thereof would show the Commission:

1. The Moore Com Well No. 1 is located 2310 feet from the South line, and 660 feet from the East line of Section 23, Township 22 South, Range 26 East, N.M.P.M. The well was projected as a Morrow test, at an orthodox well location for the Morrow pool. Dry in the Morrow, the well has been completed in an undesignated Wolfcamp pool. The well location would be unorthodox for a Wolfcamp producer.

2. Applicant further applies to the Commission for the creation of a new pool for Wolfcamp production, and for the adoption of temporary pool rules for a period of one year, including a provision for 320 acre spacing and proration units, and would show the Commission it is probable that one well will efficiently drain and develop not less than 320 acres in the Wolfcamp formation in this undesignated pool. A temporary order for a period of one year will enable applicant to determine the area one well will drain, and should result in the prevention of waste, and the protection of correlative rights.

WHEREFORE applicant prays that this application be set for hearing before the Commission or the Commission's duly appointed examiner, and that after notice and hearing as required by law, the Commission enter its order approving the unorthodox well location and the adoption of pool rules as requested.

Respectfully submitted,

PENNZOIL COMPANY

BY

Jason W. Kellahin

KELLAHIN & FOX

P. O. Box 1769

Santa Fe, New Mexico 87501

ATTORNEYS FOR APPLICANT

DRAFT

jr

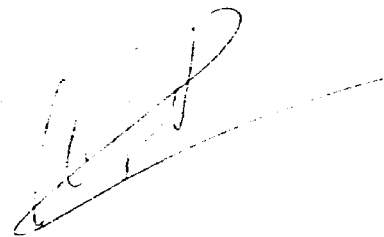
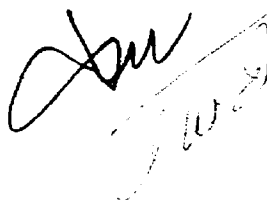
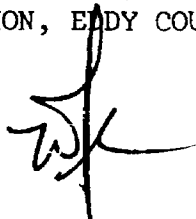
BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

CASE NO. 5099

Order No. R- 4683

APPLICATION OF PENNZOIL COMPANY
FOR A POOL CREATION, SPECIAL POOL
RULES AND AN UNORTHODOX GAS WELL
LOCATION, EDDY COUNTY, NEW MEXICO.



ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on November 14, 19 73,
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this day of November, 19 73, 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 Company, seeks the creation of a
new gas pool for Wolfcamp production in Eddy County, New Mexico, and the
promulgation of special rules and regulations governing said pool, including
a provision for 320-acre spacing units.

(3) That the Moore Com Well No. 1 located at an unorthodox Wolfcamp location 2310 feet from the South line and 660 feet from the East line of Section 23, Township 22 South, Range 26 East, NMPM, Eddy County, New Mexico, having its top perforations at 9605 feet, has discovered a separate common source of supply which should be designated the South Carlsbad-Wolfcamp Gas Pool; that the vertical limits of said pool should be the Wolfcamp formation and that the horizontal limits of said pool should be the E/2 of said Section 23.

(4) 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 320-acre spacing units should be promulgated for the South Carlsbad-Wolfcamp Gas Pool.

(5) 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.

(6) That special rules and regulations should be established for a temporary period to expire one year from the date that a pipeline connection is first obtained for a well in the pool; that during this temporary period all operators in the subject pool should gather all available information relative to drainage and recoverable reserves.

(7) That this case should be reopened at an examiner hearing one year from the date that a pipeline connection is first obtained for a well in the South Carlsbad-Wolfcamp Gas Pool, at which time the operators in the subject pool should appear and show cause why the South Carlsbad-Wolfcamp Gas Pool should not be developed on 160-acre spacing units.

(8) That the first operator to obtain a pipeline connection for a well in the South Carlsbad-Wolfcamp Gas Pool should notify the Commission in writing of such fact, and that the Commission should thereupon issue a supplemental order designating an exact date for reopening this case.

IT IS THEREFORE ORDERED:

(1) That a new pool in Eddy County, New Mexico, classified as a gas pool for Wolfcamp production, is hereby created and designated the South Carlsbad-Wolfcamp Gas Pool, with vertical limits comprising the Wolfcamp formation and horizontal limits comprising the following-described area:

EDDY COUNTY, NEW MEXICO
TOWNSHIP 22 SOUTH, RANGE 26 EAST, NMPM
Section 23: E/2

(2) That temporary Special Rules and Regulations for the South Carlsbad-Wolfcamp Gas Pool, Eddy County, New Mexico, are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS
FOR THE

SOUTH CARLSBAD-WOLFCAMP GAS POOL

RULE 1. Each well completed or recompleted in the South Carlsbad-Wolfcamp Gas Pool or in the Wolfcamp formation within one mile thereof, and not nearer to or within the limits of another designated Wolfcamp gas 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 ³²⁰~~640~~ acres, more or less, consisting of a governmental ^{half} section.

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 and the unorthodox size or shape of the unit is necessitated by a variation in the legal subdivision of the United States Public Land Surveys, or the following facts exist and the following provisions are complied with:

- (a) The non-standard unit consists of quarter-quarter sections or lots that are contiguous by a common bordering side.
- (b) The non-standard unit lies wholly within a governmental ^{half} section and contains less acreage than a standard unit.
- (c) The applicant presents written consent in the form of waivers from all offset operators and from all operators owning interests in the ^{half} section in which the non-standard

unit is situated and which acreage is not included in said non-standard unit.

- (d) In lieu of paragraph (c) of this rule, the applicant may furnish proof of the fact that all of the aforesaid operators were notified by registered or certified mail of his intent to form such non-standard unit. The Secretary-Director may approve the application if no such operator has entered an objection to the formation of such non-standard unit within 30 days after the Secretary-Director has received the application.

660 feet to the nearest side boundary not nearer than
RULE 4. Each well shall be located no nearer than ~~1650 feet to the~~
~~outer boundary of the section and no nearer than~~ 330 feet to any govern-
mental quarter-quarter section line.

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 proration 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 operators offsetting the proration unit or if no objection to the unorthodox location has been entered within 20 days after the Secretary-Director has received the application.

IT IS FURTHER ORDERED:

- (1) That the locations of all wells presently drilling to or completed in the South Carlsbad-Wolfcamp Gas Pool or in the Wolfcamp formation within one mile thereof are hereby approved; that the operator of any well having an unorthodox location shall notify the Artesia District Office of the Commission in writing of the name and location of the well on or before December 20, 1973.

1480 feet to the nearest end boundary not nearer

-5-
CASE NO. 5099
Order No. R-

(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 South Carlsbad-Wolfcamp Gas Pool shall have dedicated thereto 320 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 320 acres to a well or to obtain a non-standard unit approved by the Commission within 60 days from the 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 South Carlsbad-Wolfcamp Gas Pool or in the Wolfcamp 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 one year from the date that a pipeline connection is first obtained for a well in the South Carlsbad-Wolfcamp Gas Pool, at which time the operators in the subject pool may appear and show cause why the South Carlsbad-Wolfcamp Gas Pool should not be developed on 160-acre spacing units.

(4) That the first operator to obtain a pipeline connection for a well in the South Carlsbad-Wolfcamp Gas Pool shall notify the Commission in writing of such fact, and that the Commission will thereupon issue a supplemental order designating an exact date for reopening this case.

(5) 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

dr/

ju

RLS

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:

[Signature]

[Signature]

CASE NO. 5099 (REOPENED)

Order No. R- 4683-A

[Signature]

IN THE MATTER OF CASE 5099 BEING REOPENED
PURSUANT TO THE PROVISIONS OF ORDER NO.
R-4683, WHICH ORDER ESTABLISHED TEMPORARY
SPECIAL POOL RULES FOR THE SOUTH CARLSBAD-
WOLFCAMP GAS POOL, EDDY COUNTY, NEW MEXICO,
INCLUDING A PROVISION FOR 320-ACRE SPACING
UNITS.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on February 5, 1975
at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this _____ day of February, 1975, 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-4683, dated November 30, 1973,
temporary special rules and regulations were promulgated for
the South Carlsbad-Wolfcamp Gas Pool, Eddy County, New Mexico,
establishing temporary 320-acre spacing units.

(3) That pursuant to the provisions of Order No. R-4683, this case was reopened to allow the operators in the subject pool to appear and show cause why the South Carlsbad-Wolfcamp Gas Pool should not be developed on 160-acre spacing units.

(4) That although a statement was submitted in support of continuance of the special pool rules in said pool, no operator appeared, and presented testimony relative to drainage, recoverable reserves, or to otherwise show why the South Carlsbad-Wolfcamp Gas Pool should not be developed on 160-acre spacing units.

(5) That the Temporary Special Rules and Regulations for ~~South Carlsbad-Wolfcamp~~ the ~~West Jal Fusselman~~ Gas Pool should be rescinded and said pool should be governed by the Statewide Rules for gas pools in the State, effective ~~February~~ ^{April} 1, 1975.

IT IS THEREFORE ORDERED: April 1,

(1) That effective ~~March~~ ^{April} 1, 1975, the ~~South Carlsbad-~~ Temporary Special Rules and Regulations for the ~~West Jal~~ ^{South Carlsbad-} ~~Wolfcamp~~ Fusselman Gas Pool, promulgated by Order No. R-~~4478~~ ⁴⁶⁸³, dated ~~February 14~~ ^{November 30}, 1973, are hereby rescinded and the pool is placed under the Statewide Rules for gas pools in the State.

(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.