

CASE 4647: Application of APACHE
CORP. FOR CREATION OF NEW POOL
AND SPECIAL POOL RULES.

Case Number
4647

Application

Transcripts

Small Exhibits

ETC.

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4 | EXAMINER HEARING

Case No. 4647

TRANSCRIPT OF HEARING

1 MR. NUTTER: Call now Case 4647.

2 MR. CARR: Case 4647 reopened, in the matter of Case
3 4647 being reopened pursuant to the provisions of Order Number
4 R-4246, which order established special rules and regulations
5 for the Venado-Mesaverde Oil Pool, Sandoval County, New Mexico,
6 including a provision for 80-acre proration units.

7 MR. NUTTER: I believe we were advised that there
8 would be no appearance in Case 4647. However, we will check
9 on that and call this case later today.

10 *****

11 MR. NUTTER: We will again call Case 4647.

12 MR. CARR: Case 4647 reopened, in the matter of Case
13 4647 being reopened pursuant to the provisions of Order Number
14 R-4246, which order established special rules and regulations
15 for the Venado-Mesaverde Oil Pool, Sandoval County, New Mexico,
16 including a provision for 80-acre proration units.

17 MR. NUTTER: The Commission has received communication
18 from the operator in this pool that no appearance would be made
19 today and that they have no objection to the pool reverting to
20 the state-wide rules and regulations. The Examiner will so
21 recommend.

22 With that, the hearing is adjourned.
23
24
25

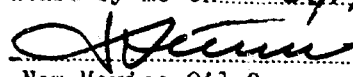
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1 STATE OF NEW MEXICO)
2) ss
3 COUNTY OF BERNALILLO)

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

10 
11 COURT REPORTER

22 I do hereby certify that the foregoing is
23 a complete record of the proceedings in
24 the Examiner hearing of Case No. 4647
25 heard by me on 2/14, 1973.

Examiner
New Mexico Oil Conservation Commission

dearnley-meier reporting service, inc.

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BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO
January 19, 1972

EXAMINER HEARING

IN THE MATTER OF:

Application of Apache Corporation)
for the creation of a new pool)
and special pool rules,)
Sandoval County, New Mexico)

Case 4647

BEFORE: Daniel S. Nutter,
Alternate Examiner.

TRANSCRIPT OF HEARING

1 MR. NUTTER: Case 4647.

2 MR. HATCH: Application of Apache Exploration Company.

3 They are applying for 80 acre oil spacing for the Menafee
4 Point Lookout area.

5 TOM SPRINKEL

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

8 DIRECT EXAMINATION

9 BY MR. HINKLE

10 Q State your name and residence and by whom you are employed.

11 A Tom Sprinkel. I reside at 50201 South 90th Avenue, Tulsa,
12 Oklahoma.

13 Q You are employed by Apache Exploration Company?

14 A Yes.

15 Q What is your position with Apache?

16 A Currently, District Engineer for the Rocky Mountain area.

17 Q Will you spell your last name?

18 A Sprinkle.

19 Q Are you a graduate petroleum engineer?

20 A Yes.

21 Q Have you previously testified before the Commission?

22 A No, I haven't.

23 Q State briefly your educational background and experience
24 as a petroleum engineer.

25 A I was graduated from the University of Texas in 1963 with

1 a petroleum business degree in petroleum management; was
2 graduated from the University of Texas in 1965 with a
3 petroleum engineering bachelor's degree; was employed by
4 Sun Oil Company, 1965, and worked as a production engineer
5 to the period of one year; was then employed by Texas
6 Petroleum Research Committee, Research Committee of the
7 Texas Railroad Commission.

8 I was at the same time pursuing a master's degree in
9 petroleum engineering at the University of Texas.

10 I was awarded a master's degree in petroleum engineer-
11 ing in January, 1968.

12 I was then employed by Shell Oil Company, Midland,
13 Texas, as a reservoir engineer.

14 I joined Apache Corporation in April, 1970 as a
15 reservoir engineer.

16 I am currently employed as district engineer for that
17 same firm.

18 Q Are you familiar with Apache's operations in the area that
19 this Application covers?

20 A Yes, sir.

21 Q Have you made a study of the wells that have been drilled
22 in this area, and are you familiar with the logs on the
23 wells and all of the information available?

24 A Yes, sir.

25 Q Would the witness' qualifications be acceptable?

1 MR. NUTTER: Yes, they are.

2 Q (By Mr. Hinkle) Are you familiar with the Application of
3 Apache in this case?

4 A Yes, I am.

5 Q What is Apache seeking to accomplish?

6 A We are applying for an 80 acre oil spacing for the Menafee
7 Point Lookout sand production that we have encountered by
8 recent wild cat and development drilling.

9 Q For special pool rules; is that right?

10 A Yes.

11 Q On a temporary basis?

12 A That would be correct.

13 Q Are you asking for any particular location that the special
14 rules provide for well locations?

15 A We are requesting the well locations in the northwest or
16 the southeast of the quarter section with an eight acre
17 drilling unit being specified as either a vertical or
18 horizontal unit at the time of Application.

19 Q Have you prepared or has there been prepared under your
20 direction certain exhibits for introduction in this case?

21 A Yes, I have.

22 Q Refer to Exhibit No. 1, you got that?

23 A Right.

24 Q Explain what that is and what it shows.

25 A Exhibit 1 is basically a structure contour map on the Green

1 Horn shale.

2 In addition, the current Application area and wells
3 that Apache is involved with in the Menafée section are
4 shown, being more specifically Section 7 and Section 8 of
5 Range 5 West, Township 22 North, Sandoval County, New
6 Mexico.

7 The objective sand in this area was first indicated to
8 be productive in the Warren Littleton No. 1 well, being in
9 the northwest of the northwest of Section 8, Range 5 West,
10 Township 22 North.

11 Apache has since offset that location to the southwest
12 with its Jicarilla No. 17 well.

13 This well encountered some 20 feet of gross sand
14 development in the Mesaverde group, or the Menafée section.

15 The lower interval of which we have specified as Point
16 Lookout.

17 In addition, Apache has just committed the southeast
18 offset to the Jicarilla 17, being the Jicarilla 18.

19 This well also encountered productive Point Lookout
20 sand production.

21 The well is currently testing at about 120 barrels a
22 day on the extrapolated four-hour test rate.

23 Q You mean your No. 2 well or the first well?

24 A The No. 2 well.

25 Q No. 2 well. Okay.

1 A The first well, as indicated, is indicated initially on the
2 range of 200 barrels per day productivity.

3 The best test after completion, at its installation
4 of pumping equipment was about 140 barrels per day.

5 This has since fallen off to about 40 barrels per day
6 with about two barrels of water, with natural completion
7 at this point.

8 We feel that the formation may be damaged to this
9 point, and are currently investigating for remedial or
10 stimulation efforts.

11 It still appears that the well could have a
12 productivity of some 200 barrels a day.

13 It is indeed damaged.

14 Q What are the contours based on on this Exhibit No. 1?

15 A The structure contours are on the Green Horn shale section
16 which curves in the Warren Littleton well at a depth of
17 about 6,150 feet.

18 Q In other words, your completion depth of that was the
19 completion depth of your No. 1 and No. 2 wells?

20 A The Warren Littleton No. 1 well and the Jicarilla Apache
21 17 well both were drilled to the Gallup Formation as an
22 initial objective to some 55 and 5600 feet.

23 Both wells were plugged back to the Point Lookout
24 interval for completion at approximately 4,000 to 4,200
25 feet.

1 Q Is there anything further you wish to say about this
2 Exhibit No. 1?

3 A We have indicated on the basic map some of the stratograph-
4 ic intervals in the log section depicted on either side,
5 starting on the right side, the Warren Littleton well goes
6 from about 1,300 foot log depth down to some 3,500 feet,
7 and then continues on the left hand side down to the total
8 depth log, to some 6,610 in that particular well.

9 The structure in the Green Horn indicates the
10 structure is going up dipping to the southwest.

11 Q Now, I will refer to Exhibit No. 2, and explain what this
12 shows.

13 A Exhibit 2 is the cross-section two wells in the immediate
14 Application area.

15 It includes the Jicarilla 17 and 18 Apache wells as
16 well as the Warren Littleton No. 1.

17 In addition, it includes the Warren well located in
18 the extreme corner southeast corner of Section 16, Range 5
19 West, Township 22 North, and also the Woods Petroleum dry
20 hole located in the southwest corner of Section 11, same
21 range and township.

22 The Menafee Point Lookout is completely stratographic.

23 The interval has been found in wells extending east and
24 west several townships on either side of this current
25 activity.

1 The width of this development seems to be pretty small
2 in that dry holes or wells that have penetrated the
3 Menafée to the north or south of an east west development
4 line have not encountered the sand interval at all.

5 The wide range look at it or potential development
6 look would be to check on Exhibit 1 again at the well
7 located in Section 29 of Township 22 North.

8 That would be Range 3 west.

9 That well is producing from the Mesaverde group.

10 In addition, they have completed a second well to the
11 southwest of offset, I believe.

12 After stimulation, it is producing some 400 barrels a
13 day, but this could at some point tie in with this whole
14 total play that we are seeing in Range 5 West.

15 Q With the information you have available have you made a
16 study of the reserve estimates of this area?

17 A Yes, I have.

18 Q Refer to Exhibit 3 and explain what this shows.

19 A Exhibit 3 is a reserve data sheet.

20 It is confined to the Jicarilla 17 well.

21 You can see we have indicated about 137 barrels being
22 a test, and it has been the best test on that well today.

23 Gas production is small. The GOR is some 343 cubic
24 feet per barrel on that particular day.

25 This volume of gas is about sufficient on normal

1 operating conditions to pull the artificial lift equipment.

2 In addition, at the bottom we indicate the pay
3 interval in this well was 1,374 to 1,390.

4 There was a perforated interval, original pressure
5 from the drill stem east would be--the average is indicated
6 to be 106° fahrenheit.

7 We would consider this a solution gas drive reservoir
8 development in this well.

9 Additionally, I indicated the volumetric parameters
10 that would go into a reserve calculation at this point.
11 Water saturation is indicated to be 58 per cent over the
12 gross interval.

13 Porosity would average about 21 per cent.

14 The formation of volume factor in age of the oil is
15 indicated to be quite low, as indicated by the initial GOR
16 production, with the relatively low pressure and low gas
17 in solution, and the fact that we probably, or will never
18 benefit much from the gravity drainage. We estimate a
19 recovery factor of 10 per cent for an average net pay in
20 the well drainage area of 12', and in 40 acres we showed a
21 recoverable reserve of 28,560 stock tank barrels.

22 In the next column we would indicate reserves.

23 Q Under 40 acres?

24 A For 80 acres, which would be 57,120 stock tank barrels.

25 Q In your opinion, will one well, with the information that

1 you have available, will one well effectively drain 80
2 acres of oil?

3 A Yes.

4 Q Do you contemplate or does Apache contemplate any addition-
5 al development during the next year?

6 A We are, of course, evaluating the wells that have been
7 completed, and would anticipate with the information we
8 have right now to offset the Jicarilla 17 to its northwest
9 location within the next thirty days.

10 Apache has 100 per cent ownership in that immediate
11 area on checkerboarded 160's.

12 So additional development acreage is available for
13 Apache and for other operators.

14 Western Petroleum Company in particular, who has the
15 checkerboarded 160's opposite Apache. Within the immediate
16 four section area.

17 Q You do feel then that there is a possibility of quite a
18 little additional development during the next year?

19 A Yes, I do. Going back to the original statement that has a
20 stratigraphic play and indicated that it is probably a
21 narrow channel fill or a short phase sand development.

22 It is going to be a matter of drilling to find the
23 root of this channel and to find wells that have good sand
24 development and have some continuity.

25 Q Have you made a study of the economics involved in the

1 development of this area on 40 and 80 acres?

2 A Yes, I have.

3 Q Refer to Exhibit 4 and explain what this shows.

4 A This is a well evaluation indicating economics for a well
5 drilled for the Menafee Point Lookout sand objective.

6 We have indicated a cost of \$96,000.00, completed,
7 including the artificial lift equipment indicated. Estima-
8 ted reserves for the 40 acres vs. 80 acres, also the break
9 down of the net revenue per barrel of oil to the working
10 interest owners.

11 This results in a price of \$2.47 per gross barrel to
12 Apache or whoever might be operating.

13 On this basis, then the value of the reserves for 40
14 acres compared to 80 acres is \$70,543.00 vs. \$141,086.00.

15 Q Consequently, based on the information which you presently
16 have developed for this area on 40 acres would not pay of
17 that 40 acres would not pay off; is that your conclusion?

18 A That would be correct.

19 Q Have you received any objection from any of the offset
20 operators as to establishing special rules for this area,
21 80 acre basis?

22 A No, we have heard of no objection, and Western Drilling
23 Company, I believe, is the correct name, sir.

24 Q Refer to Exhibit 5 and read that to the Commissioner.
25

1 A Exhibit 5 is a letter of support from Tenneco Oil Company.

2 January 18, 1972

3 State of New Mexico
4 Oil Conservation Commission
5 P. O. Box 2088
6 Santa Fe, New Mexico

7 Attention: Mr. A. L. Porter

8 Re: Application of Apache Corporation, Case No. 4647, Creation
9 of a new pool and special pool rules, Sandoval County,
10 New Mexico.

11 Gentlemen:

12 Tenneco Oil Company has an operator in the subject area and
13 wishes to support the Application by Apache Corporation with
14 reference to the creation of a new pool and the establishment
15 of special field rules calling for eighty acre spacing units
16 with lease to be drilled in the northwest or southeast quarter-
17 quarter section.

18 Very truly yours,

19 TENNECO OIL COMPANY

20 /s/ R. A. Williford
21 District Production Manager
22
23
24
25

1 Q Do you have any recommendations to make to the Commission
2 with respect to the establishment of this special pool
3 rule?

4 A I would recommend that the Commission grant the 80 acre
5 spacing units, being vertical or horizontal units for the
6 conservation and economic preservation of economic waste
7 at this point, sir.

8 Q The well location in the northeast and southwest quarter of
9 each quarter section?

10 A Yes.

11 Q In your opinion, will the adoption of temporary special
12 rules be in the interests of conservation, prevention of
13 waste?

14 A Yes, I think so.

15 Q Also will tend to protect correlative rights?

16 A Yes.

17 Q We would like to offer in evidence Exhibits 1 through 5.

18 MR. NUTTER: Apache Exhibits 1 through 5 will be
19 admitted in evidence.

20 CROSS-EXAMINATION

21 BY MR. NUTTER

22 Q Mr. Sprinkle, is it?

23 A Yes.

24 Q You are requesting that there be temporary pool rules for
25 what, a period of one year?

1 A One year will be satisfactory, yes.

2 Q Now, the first well that was drilled in the area, Mr.
3 Sprinkle, was the Warren well; is this correct?

4 A I believe the Plymouth well southwest about a two-mile
5 offset was the first well in the area that indicated
6 potential.

7 Six cores--it was a Gallup test, but the Point
8 Lookout two intervals as designated, there was a drill stem
9 tested with recovery of 320' of oil, cut mud, and 270' of
10 water.

11 Q But it was not completed in the Mesaverde?

12 A No, it wasn't.

13 Q Okay. Now, was it then--the next well in the immediate
14 area was the Warren well; correct?

15 A Timing wise, the Woods Warren well, the southeast offsets
16 were 1129.

17 The Warren Land on No. 1 in Section 16 would have been
18 the earlier well.

19 Q But, it didn't show any potential in the Mesaverde, did it,
20 so it was plugged?

21 A That is correct. It showed very limited development. The
22 zone was tested, and, well, it wasn't tested, but indicated
23 to be wet on the logs.

24 Q This Warren Littleton well, was it ever completed, the
25 Mesaverde?

- 1 A Yes, it is completed at the Mesaverde at this time.
- 2 Q What is the perforated interval, do you know? I guess on
- 3 your cross section it looks like it has got some little
- 4 perforations in there?
- 5 A Yes. In the interval indicated on the left was the drill
- 6 stem tested interval. Then the perforated.
- 7 Q Perforated roughly from 45 to 4090, something like that?
- 8 A Right.
- 9 Q Do you know what that well currently makes in the Mesaverde
- 10 or from the Mesaverde?
- 11 A What the well, to give a little more background potential,
- 12 of 75 barrels of oil and 200 barrels of water per day.
- 13 Q When was that potential, please?
- 14 A This would have been, I believe it was in about August,
- 15 before the potential test was finally run.
- 16 Q In August, '71?
- 17 A Right.
- 18 Q That was 75 barrels of--well, how much water?
- 19 A 200 barrels of water per day.
- 20 This was after a 35,000 gallon fract'd treatment.
- 21 Q Okay. Then the next well that was drilled was your 1-7; is
- 22 that correct?
- 23 A Yes, that is correct.
- 24 Q And what is the date of the potential on your 1-7?
- 25 A This would be January the 4th, 1972.

- 1 Q What is the potential test on it, please?
- 2 A It was 137 barrels of oil and 347 Mcf gas.
- 3 Q How about water?
- 4 A No water production.
- 5 Q Zero water?
- 6 A Well, it is currently making two barrels of water a day.
- 7 Q What is it currently making in oil?
- 8 A 42 barrels of oil.
- 9 Q This is the well that you stated you found had some kind of
10 a mud cake or something in the Formation that you wanted to
11 clear up?
- 12 A Yes.
- 13 Q And to try to remedy?
- 14 A It indicated there may be some damage there.
15 The Warren Littleton No. 1, as I indicated, is
16 completed in the Point Lookout.
17 For the Lower Menafée and core-relationwise this would
18 be the Point Lookout 2, or B, as you might refer to it, vs.
19 the Point Lookout 1 or A zone, that might be called, in the
20 Jicarilla 17 that is producing.
21 They would be within the same stratigraphic interval,
22 but it is not necessarily the same as indicated on the logs.
- 23 Q You well, is it in No. 1?
- 24 A Yes. We would like to refer to it as the Point Lookout 1.
- 25 Q This is the No. 2?

- 1 A Right.
- 2 Q In other words, the correlative interval to your well on
- 3 the cross section there, would this interval be 4,000 to
- 4 4,030, something like that?
- 5 A Yes, that interval in the Warren Littleton No. 1 indicated
- 6 high water saturation of 30 to 100 per cent and was not
- 7 tested in that well.
- 8 Q Even though it is higher?
- 9 A Right.
- 10 Q Now, you mentioned that your second well, which is in the
- 11 northwest of the southwest of 8, is now complete and testing
- 12 about how much a day?
- 13 A About 120 barrels a day on a four-hour test extrapolation.
- 14 I have no indication at this time that it produced any
- 15 water on that test.
- 16 Q Is it flowing to your pumps?
- 17 A This is a swab test.
- 18 Q Swab test?
- 19 A We anticipate it will not flow initially.
- 20 Q I think you stated that your probable next location would
- 21 be in the northwest of the northeast of 7?
- 22 A Yes, that would be correct.
- 23 Q What is your recommended vertical limit here, Mr. Sprinkle?
- 24 A Well, this would pertain to the lower Menafee or Point
- 25 Lookout, as we are referring to it, for example in the

1 Apache Jicarilla 1-7 this would be the interval below about
2 3,950' in that well.

3 On the Warren well it would be an interval of about
4 3,975.

5 Q Well, actually if we come back up on the log of that well
6 to about 3,360, or something like that, where you have got
7 the top of the Cliffhouse indicated, that is the top of the
8 Mesaverde?

9 A Right.

10 Q The Mesaverde would go down to the mixed case shale at
11 4,300?

12 A Yes, sir.

13 Q Would there be any problem in just declaring the entire
14 Mesaverde to be the Formation for this pool?

15 A I don't see any problems at this time.

16 Q There is no forecast produced from these upper zones at the
17 present time?

18 A No, sir.

19 Q No conflict as to another pool here?

20 A Right. For the temporary request, I think this would be
21 satisfactory.

22 Q Just declare it to be the Mesaverde Formation?

23 A Yes.

24 MR. NUTTER: Any further questions of Mr. Sprinkle,
25 questions? Mr. Kendrick?

1 MR. KENDRICK: A. R. Kendrick.

2 Do you have any pressure data from either of your two wells
3 showing what the original or the encountered reservoir pressure
4 was at the time you drilled your wells?

5 THE WITNESS: Yes, sir. The intervals were drill stem
6 tested initially and the pressure indicated on Exhibit 3 was an
7 average of 1,370 pounds of the drill stem test shut-in pressures.

8 MR. KENDRICK: That is an average of drill stem test
9 pressures on one well or on both wells, or what?

10 THE WITNESS: Both wells. They both encountered
11 comparable pressures.

12 MR. KENDRICK: Do you have any permeability value or
13 analysis calculated or measured in cores from either of these
14 holes?

15 THE WITNESS: There is no core permeability data
16 available yet.

17 The evaluation of the drill stem data on the Jicarilla 1-7
18 would calculate at, would indicate about 19 milidarces permeabil-
19 ity.

20 The Jicarilla 1-8 was poured in the Point Lookout One equiv-
21 alent zone.

22 This core was indicated to be extremely tight and indicated
23 no shows at all, and the core has not been analyzed for plug
24 sample at this time.

25 MR. KENDRICK: Have you submitted on miscellaneous

1 notices through the U. S. G. S. results of your drill stem test
2 on these two holes?

3 THE WITNESS: Yes, I believe the data has been sub-
4 mitted at least on the Jicarilla 1-7.

5 MR. KENDRICK: If not, will you submit that information
6 on the miscellaneous notices in the normal channels through the
7 U. S. G. S. so we will receive copies of that?

8 THE WITNESS: Yes, it will be included, I am sure.

9 MR. NUTTER: Any further questions of the witness?

10 MR. ARNOLD: You have been referring to the Jicarilla
11 1-7; that is the same as the No. 1 here?

12 THE WITNESS: Yes, sir.

13 MR. ARNOLD: Take that 7 out, call it No. 1 Hare; this
14 is the official name; is that right?

15 THE WITNESS: Well, I don't believe so. There is a
16 No. 1-8 now also.

17 MR. ARNOLD: I noticed you had it on an Exhibit No. 1,
18 the Apache No. 1 Hare at the bottom on the log.

19 I presume we are talking about the same thing?

20 THE WITNESS: Yes, that is correct.

21 MR. ARNOLD: Did you recommend pool boundaries at
22 horizontal limits?

23 THE WITNESS: We haven't really defined the possible
24 productive limits of cores, and I think a reasonable state, under
25 the State-wide rule of tolerance, one million, around the

1 currently developed area would be satisfactory.

2 MR. ARNOLD: You mean you are recommending that the
3 Pool just be established to cover the acreage dedicated to the
4 wells already there?

5 THE WITNESS: Well, we would request at least a full
6 section consisting of the east half of 75, west 22 north, and
7 the west half of 85 west, 22 north, and one million tolerance
8 around that area would be satisfactory.

9 MR. ARNOLD: Do you have any particular reason for
10 recommending northwest southwest locations?

11 THE WITNESS: The wells were down at least two of them
12 before much consideration was given to that, I believe, and the
13 Warren initial location in that area has essentially dictated
14 the location for the ensuing wells.

15 I think that this is a satisfactory pattern and would
16 promote the development activity and protect the correlative
17 rights.

18 MR. ARNOLD: Do you propose flexible spacing so you
19 could locate in either of the 40 acre tracts of an 80?

20 THE WITNESS: No, I would reiterate on our Application
21 basis that the location as applied for.

22 MR. ARNOLD: That is all.

23 MR. KENDRICK: Let me ask--what footage from the
24 boundaries of the 40 acre tract are you recommending the state-
25 wide 330 net--would you like the wells located more nearly at

dearnley-meier reporting service, inc.

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1 the center of a 40 acre tract?

2 THE WITNESS: We are requesting the center of the

3 tract in quarter section with 150' tolerance radius within that

4 40, so it would be the center of the 40 unless it were the 150

5 tolerance.

6 MR. NUTTER: The witness may be excused.

7 You have offered your exhibits.

8 MR. HINKLE: Yes, I offered them.

9 MR. NUTTER: Does anyone have anything they wish to

10 offer in Case 4647?

11 We will take the case under advisement.

12 This letter goes within the exhibit.

13 Call the next case, 4650.

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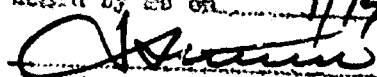
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1 STATE OF NEW MEXICO)
2) SS.
3 COUNTY OF BERNALILLO)

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

10 
11 CERTIFIED SHORTHAND REPORTER

22 I do hereby certify that the foregoing is
23 a complete record of the proceedings in
24 the Deposition Hearing of Case No. 4447
25 heard by me on 1/19 1923.
 Business
New Mexico Oil Conservation Commission

dearnley-meier reporting service, inc.

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

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25			

CLARENCE E. HINKLE
W. E. BONDURANT, JR.
LEWIS C. COX, JR.
PAUL W. EATON, JR.
CONRAD E. COFFIELD
HAROLD L. HENSLEY, JR.
STUART D. SHANOR
C. D. MARTIN
PAUL J. KELLY, JR.

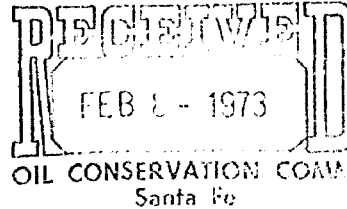
LAW OFFICES
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600 HINKLE BUILDING
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TELEPHONE (505) 622-6810

MIDLAND, TEXAS OFFICE
521 MIDLAND TOWER
(915) 683-4691

February 7, 1973



Oil Conservation Commission
Box 2088
Santa Fe, New Mexico 87501

Gentlemen:

File

There appears on the examiner's docket for February 14 Case No. 4647 which is to be reopened pursuant to the provisions of Order R-4246 and all interested parties may appear and show cause why the Venado-Mesaverde Oil Pool in Sandoval County should not be developed on 40 acre spacing units.

Order R-4246 was issued pursuant to the application of Apache Corporation for special pool rules for the above pool, including a provision for 80 acre spacing and proration units. Apache Corporation has advised us that they have only completed two wells in the pool and neither one has held up satisfactorily and for that reason it does not look as though further development is warranted. Apache has requested that we advise you that they will not enter an appearance at the hearing on February 14 and have no objection to doing away with the special pool rules and coming under the applicable rules for 40 acre spacing and proration units.

Yours sincerely,

HINKLE, BONDURANT, COX & EATON

By *Clarence E. Hinkle*

CEH:cs

cc: Apache Corporation



OIL CONSERVATION COMMISSION

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

**GOVERNOR
BRUCE KING
CHAIRMAN**

**LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER**

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

February 21, 1973

Mr. Clarence Hinkle
Hinkle, Bondurant, Cox & Eaton
Attorneys at Law
Post Office Box 10
Roswell, New Mexico 88201

Re: Case No. 4647
Order No. R-4246-A
Applicant:
Apache Corporation

Dear Sir:

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

Very truly yours,

A. L. Foster, Jr.

A. L. PORTER, Jr.
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC _____ x
Artesia OCC _____
Aztec OCC _____ x

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. 4647
Order No. R-4246-A

IN THE MATTER OF CASE 4647 BEING
REOPENED PURSUANT TO THE PROVISIONS
OF ORDER NO. R-4246, WHICH ORDER
ESTABLISHED SPECIAL RULES AND REGULA-
TIONS FOR THE VENADO-MESAVERDE OIL POOL,
SANDOVAL COUNTY, NEW MEXICO, INCLUDING
A PROVISION FOR 80-ACRE PRORATION UNITS.

ORDER OF THE COMMISSION

BY THE COMMISSION:

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

NOW, on this 21st day of February, 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 by Order No. R-4246, dated January 27, 1972,
temporary Special Rules and Regulations were promulgated for
the Venado-Mesaverde Oil Pool, Sandoval County, New Mexico,
establishing 80-acre spacing units for a period of one year.

(3) That pursuant to the provisions of Order No. R-4246,
this case was reopened to allow the operators in the subject
pool to appear and show cause why the Venado-Mesaverde Oil Pool
should not be developed on 40-acre spacing units.

(4) That no operator in the subject pool appeared to show
cause why the Venado-Mesaverde Oil Pool should not be developed
on 40-acre spacing units.

(5) That it is not known at this time whether additional
wells will be completed in the subject pool.

-2-

Case No. 4647
Order No. R-4246-A

(6) That the operators in the subject pool have not established that one well can efficiently and economically drain and develop 80 acres.

(7) That the Special Rules and Regulations promulgated by Order No. R-4246 should be abolished.

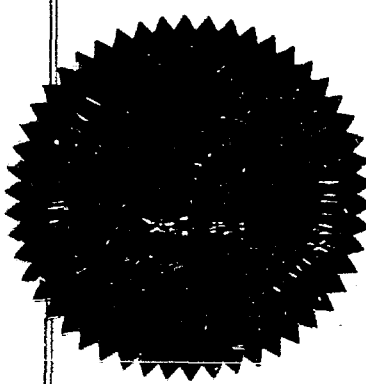
IT IS THEREFORE ORDERED:

(1) That the Special Rules and Regulations governing the Venado-Mesaverde Oil Pool, Sandoval County, New Mexico, promulgated by Order No. R-4246, are hereby abolished.

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

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION



Bruce King
BRUCE KING, Chairman

Alex J. ArmiJO
ALEX J. ARMIJO, Member

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

S E A L

dr/

DOCKET: EXAMINER HEARING - WEDNESDAY - FEBRUARY 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:

- ALLOWABLE: (1) Consideration of the allowable production of gas for March, 1973 from seventeen prorated pools in Lea, Eddy, Roosevelt and Chaves Counties, New Mexico;
- (2) Consideration of the allowable production of gas from nine prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico for March, 1973.

CASE 4903: Application of Newmont Oil Company for an unorthodox location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill a producing oil well at an unorthodox location 990 feet from the South line and 1310 feet from the East line of Section 3, Township 18 South, Range 29 East, Loco Hills Pool, Eddy County, New Mexico.

CASE 4904: Application of Texas Pacific Oil Company, Inc. for two non-standard gas proration units, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the two following non-standard gas proration units in Township 23 South, Range 36 East, Jalmat Gas Pool, Lea County, New Mexico:

A 120-acre unit comprising the W/2 SW/4 and NE/4 SW/4 of Section 4 to be dedicated to the State "A" Well No. 18 located in Unit M of said Section 4;

A 320-acre unit comprising the SE/4 SW/4 of Section 4 and the NW/4, S/2 NE/4, and NE/4 NE/4 of Section 9 to be simultaneously dedicated to the State "A" Well No. 111 located in Unit N of Section 4, Well No. 41 located in Unit A of Section 9, and Well No. 100 located in Unit H of Section 9.

CASE 4905: Application of John H. Hendrix for two dual completions, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete his Cossatot "B" Wells Nos. 2 and 3 located in Units M and N, respectively, of Section 12, Township 22 South, Range 37 East, Lea County, New Mexico, in such a manner as to produce oil from the Drinkard and Wantz-Granite Wash Pools through parallel strings of tubing.

CASE 4647 (Reopened):

In the matter of Case 4647 being reopened pursuant to the provisions of Order No. R-4246, which order established special rules and regulations for the Venado-Mesaverde Oil Pool, Sandoval County, New Mexico,

(Case 4647 continued from page 1)

including a provision for 80-acre proration units. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing units.

CASE 4497 (Reopened):

In the matter of Case 4497 being reopened pursuant to the provisions of Order No. R-4102-A which order established temporary special rules and regulations for the Twin Lakes-Devonian Pool, Chaves County, New Mexico. All interested persons may appear and show cause why the gas-liquid ratio of 4000 to one should not be reduced and why the special rules and regulations should not be discontinued.

CASE 4853: (Continued from the December 19, 1972 Examiner Hearing)

Application of El Paso Natural Gas Company for amendment of gas well testing procedures, San Juan Basin, New Mexico. Applicant, in the above-styled cause, seeks the amendment of the gas well testing procedures for the San Juan Basin, New Mexico, promulgated by Order No. R-333-F, as amended, to remove the requirement for annual deliverability and shut-in pressure tests for marginal wells.

Applicant further requests the Commission to consider:

1. Other means of avoiding or minimizing the loss of pipeline availability attributable to the period wells in prorated pools are shut in in order to conduct the annually required deliverability and shut-in pressure tests;
2. Exempting wells in non-prorated pools from the annual deliverability and shut-in pressure requirements; and,
3. Exempting all wells in the San Juan Basin from the requirement for annual shut-in pressure tests as provided in the General Rules and Regulations.



OIL CONSERVATION COMMISSION

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

January 27, 1972

GOVERNOR
BRUCE KING
CHAIRMAN
LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER
STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY - DIRECTOR

Mr. Clarence Hinkle
Hinkle, Bondurant, Cox & Eaton
Attorneys at Law
Post Office Box 10
Roswell, New Mexico 88201

Re: Case No. 4647
Order No. R-4246
Applicant:
Apache Corporation

DOCKET MAILED

Dear Sir:

Date 2-1-73

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

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC x
Artesia OCC
Aztec OCC x

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. 4647
Order No. R-4246

NOMENCLATURE

APPLICATION OF APACHE CORPORATION
FOR THE CREATION OF A NEW POOL
AND SPECIAL POOL RULES, SANDOVAL
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on January 19, 1972, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 27th day of January, 1972, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

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

(2) That the applicant, Apache Corporation, seeks the creation of a new oil pool for Mesaverde production in Sandoval County, New Mexico, and the promulgation of special rules and regulations governing said pool, including a provision for 80-acre spacing units.

(3) That the Jicarilla Apache Well No. 1-7, located in the SE/4 NE/4 of Section 7, Township 22 North, Range 5 West, NMPM, Sandoval County, New Mexico, having its top perforations at 3974 feet, has discovered a separate common source of supply which should be designated the Venado-Mesaverde Oil Pool; that the vertical limits of said pool should be the

-2-

CASE NO. 4647

Order No. R-4246

Mesaverde formation; that the horizontal limits of said pool should be the SW/4 of Section 5, SE/4 of Section 6, E/2 of Section 7, and the W/2 of Section 8, Township 22 North, Range 5 West.

(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 80-acre spacing units should be promulgated for the Venado-Mesaverde Oil 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 the temporary special rules and regulations should be established for a one-year period in order to allow the operators in the subject pool to gather reservoir information to establish the area that can be efficiently and economically drained and developed by one well.

(7) That this case should be reopened at an examiner hearing in February, 1973, at which time the operators in the subject pool should be prepared to appear and show cause why the Venado-Mesaverde Oil Pool should not be developed on 40-acre spacing units.

IT IS THEREFORE ORDERED:

(1) That a new pool in Sandoval County, New Mexico, classified as an oil pool for Mesaverde production, is hereby created and designated the Venado-Mesaverde Oil Pool, with vertical limits comprising the Mesaverde formation, and horizontal limits comprising the SW/4 of Section 5, SE/4 of Section 6, E/2 of Section 7, and the W/2 of Section 8, Township 22 North, Range 5 West, NMPM, Sandoval County, New Mexico.

(2) That temporary Special Rules and Regulations for the Venado-Mesaverde Oil Pool, Sandoval County, New Mexico, are hereby promulgated as follows:

-3-
CASE NO. 4647
Order No. R-4246

SPECIAL RULES AND REGULATIONS
FOR THE
VENADO-MESAVERDE OIL POOL

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

RULE 2. Each well shall be located on a standard unit containing 80 acres, more or less, consisting of the N/2, S/2, E/2, or W/2 of a governmental quarter section.

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

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

RULE 5. The Secretary-Director may grant an exception to the footage requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the proposed location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of

-4-

CASE NO. 4647
Order No. R-4246

written waivers from all operators offsetting the proposed location or if no objection to the unorthodox location has been entered within 20 days after the Secretary-Director has received the application.

RULE 6. A standard proration unit (79 through 81 acres) shall be assigned an 80-acre proportional factor of 2.0 for allowable purposes, and in the event there is more than one well on an 80-acre proration unit, the operator may produce the allowable assigned to the unit from the wells on the unit in any proportion.

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

IT IS FURTHER ORDERED:

(1) That the locations of all wells presently drilling to or completed in the Venado-Mesaverde Oil Pool or in the Mesaverde formation within one mile thereof are hereby approved, that the operator of any well having an unorthodox location shall notify the Aztec District Office of the Commission in writing of the name and location of the well on or before February 15, 1972.

(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 Venado-Mesaverde Oil Pool shall have dedicated thereto 80 acres in accordance with the foregoing pool rules; or, pursuant to Paragraph C. of said Section 65-3-14.5, existing wells may have non-standard spacing or proration units established by the Commission and dedicated thereto.

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

-5-

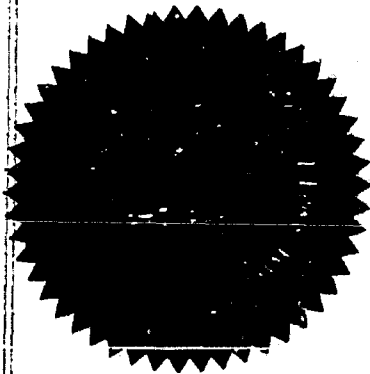
CASE NO. 4647
Order No. R-4246

(3) That this case shall be reopened at an examiner hearing in February, 1973, at which time the operators in the subject pool may appear and show cause why the Venado-Mesaverde Oil Pool should not be developed on 40-acre spacing units.

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

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION



Bruce King
BRUCE KING, Chairman

Alex J. Armijo
ALEX J. ARMIJO, Member

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

S E A L

dr/

TENNECO OIL COMPANY *A Tenneco Company*
SUITE 1200 • LINCOLN TOWER BUILDING • DENVER, COLORADO 80203



January 18, 1972

State of New Mexico
Oil Conservation Commission
Post Office Box 2088
Santa Fe, New Mexico 87501

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

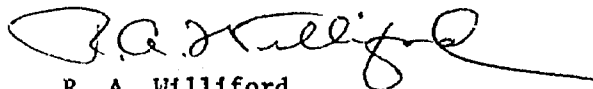
Re: Application of Apache Corporation
Case No. 4647 - Creation of a New
Pool and Special Field Rules:
Sandoval County, New Mexico

Gentlemen:

Tenneco Oil Company, as an Operator in the subject area, wishes to support the Application by Apache Corporation with reference to the creation of a New Pool and the establishment of special Field Rules calling for 80 acre spacing units with wells to be drilled in the northwest or southeast quarter-quarter sections.

Yours very truly,

TENNECO OIL COMPANY


R. A. Williford
District Production Manager

ADR/jel

EXHIBIT NO. 5
CASE NO. 4647

Docket No. 2-72

DOCKET; EXAMINER HEARING - WEDNESDAY - JANUARY 19, 1972

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

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

- ALLOWABLE: (1) Consideration of the allowable production of gas for February, 1972, from fifteen prorated pools in Lea, Eddy, Roosevelt and Chaves Counties, New Mexico;
- (2) Consideration of the allowable production of gas from nine prorated pools in San Juan, Rio Arriba and Sandoval Counties, New Mexico, for February, 1972.

CASE 4645: Application of Acoma Oil Corporation for down-hole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle production from the Drinkard Pool and Wantz-Abo Pool in the well-bore of its S. J. Sarkeys A Well No. 1, a triple completion, located in Unit A of Section 26, Township 21 South, Range 37 East, Lea County, New Mexico.

CASE 4648: Application of Aztec Oil & Gas Company for an unorthodox well location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the off-pattern unorthodox location for its Vasaly Federal Well No. 1-Y to be located 790 feet from the North line and 1795 feet from the West line of Section 31, Township 32 North, Range 11 West, Blanco-Mesaverde Pool, San Juan County, New Mexico.

CASE 4625: (Continued from the December 15, 1971, Examiner Hearing) Application of Texaco Inc. for downhole commingling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle production from the Paduca-Morrow and Paduca-Wolfcamp Gas Pools in the well-bore of its Cotton Draw Unit Well No. 65 located in Unit G of Section 2, Township 25 South, Range 31 East, Eddy County, New Mexico.

CASE 4642: (Continued from the January 5, 1972, Examiner Hearing) Application of Fluid Power Pump Company for special pool rules and a pressure maintenance project, Sandoval County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special rules for the Media-Entrada Pool, including a provision for 160-acre spacing and proration units. Applicant further seeks authority to

(Case 4642 continued)

institute a pressure maintenance project in said pool by the injection of water into the Entrad formation through various wells located in Sections 10, 11, 22, and 23 of Township 19 North, Range 3, West, Sandoval County, New Mexico, and the promulgation of rules for said project including a procedure whereby additional injection or production wells at orthodox or unorthodox locations may be approved administratively.

CASE 4646: Application of Manning Gas and Oil Company for down-hole commingling and a non-standard proration unit, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle production from undesignated Gallup and Dakota oil pools in the well-bore of its Apache Well No. 100 to be drilled 435 feet from the North line and 475 feet from the East line of Section 3, Township 24 North, Range 4 West, Rio Arriba County, New Mexico. Applicant further seeks a procedure whereby similar approval may be granted administratively for other wells to be drilled in the area of the above-described well. Applicant further seeks approval for a non-standard 32-acre proration unit comprising all of Lot 1 to be dedicated to the above-described Well No. 100.

CASE 4647: Application of Apache Corporation for the creation of a new pool and special pool rules, Sandoval County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new pool for the production of oil from the Mesaverde formation for its Jicarilla Apache Well No. 1-7 located in the SE/4 NE/4 of Section 7, Township 22 North, Range 5 West, Sandoval County, New Mexico. Applicant further seeks the promulgation of special rules for said pool including provisions for 80-acre spacing units with wells to be drilled in the north-west or southeast quarter-quarter sections.

CASE 4650: Application of Walter W. Krug dba Wallen Production Company for an exception to Order No. R-111-A and for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to the potash-oil area casing and cementing rules as set forth in Commission Order No. R-111-A for his Wallen Federal Well No. 2 located 990 feet from the North line and 1650 feet from the West line of Section 20, Township 20 South, Range 34 East, North Lynch Yates-Seven Rivers Pool, Lea County, New Mexico. Applicant proposes to drill and complete said well in such a manner that upon completion, the well would be equipped with a 7-inch production casing to the top of the pay and a 4 1/2-inch liner through the pay, with cement to the surface. Applicant further seeks the promulgation of special pool rules for similar casing and cementing, of all wells drilled in the above-described pool.

CASE 4649: Application of the Oil Conservation Commission on its own motion for the amendment of the gas well testing procedures promulgated by Order No. R-333-F for Northwest New Mexico. The Commission proposes to amend Chapter I of said Order No. R-333-F in such a manner as to provide that most annual deliverability and shut-in pressure tests required by said order be filed within 60 days following the completion of the test and to provide for notice to the Commission of any re-scheduling of shut-in pressure tests. The Commission further proposes to amend the ninth paragraph of Chapter II, Section 2 of said order to permit shutting in gas wells for the required shut-in test other than immediately following the 7-day deliverability flow test and to permit measuring the shut-in test pressure during the 8th to 15th day of shut-in of the well rather than on the 8th day as presently required.

CASE 4637: (Continued from the December 15, 1971, Examiner Hearing)
In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Luttrell Oil Company and all other interested persons to appear and show cause why the following-described wells in New Mexico should not be plugged and abandoned in accordance with a Commission-approved plugging program:

Luttrell Oil Company State Well No. 1 -
Unit M, Section 28, Township 2 South,
Range 26 East, De Baca County;

Luttrell Oil Company Corn Well No. 1 -
Unit A, Section 5, Township 8 South,
Range 24 East, Chaves County.

CASE 4651: Southeastern New Mexico nomenclature case calling for an order for the creation and extension of certain pools in Lea and Roosevelt Counties, New Mexico.

(a) Create a new pool in Roosevelt County, New Mexico, classified as a gas pool for San Andres production and designated as the Baker-San Andres Gas Pool. The discovery well is the Cactus Drilling Corporation of Texas Kewanee State No. 2 located in Unit G of Section 9, Township 7 South, Range 35 East, NMPM. Said pool would comprise:

TOWNSHIP 7 SOUTH, RANGE 35 EAST, NMPM
SECTION 9: NE/4

(Case 4651 continued)

(b) Extend the Bluitt-San Andres Associated Pool in Roosevelt County, New Mexico, to include therein:

TOWNSHIP 8 SOUTH, RANGE 37 EAST, NMPM
SECTION 15: All

(c) Extend the Littman-San Andres Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 38 EAST, NMPM
SECTION 20: SE/4

(d) Extend the West Sawyer-San Andres Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 9 SOUTH, RANGE 37 EAST, NMPM
SECTION 27: SW/4

(e) Extend the North Vacuum-Abo Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 35 EAST, NMPM
SECTION 18: W/2

(f) Extend the Vada-Pennsylvanian Pool in Lea and Roosevelt Counties, New Mexico, to include therein:

TOWNSHIP 8 SOUTH, RANGE 34 EAST, NMPM
SECTION 36: NW/4

TOWNSHIP 9 SOUTH, RANGE 34 EAST, NMPM
SECTION 17: NW/4
SECTION 18: N/2

Oil & Gas Division
RESERVE DEPT

Jair 1-7

Jicarilla

Apache Exploration

SE/4 NE/4 7 22 N- SW

Sandoval

New Mexico

Rocky Mountain - Tulsa

1-4-72

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Pump 13 X 74"

47

RESERVE ESTIMATE SUMMARY

PROVED (THIS WELL)	HBLS	MMCF	EST. BY
	57120		
PROVED (OTHER WELLS)	HBLS	MMCF	EST. BY
	40 Acres	80 Acres	
	Menefee-Pt. Lookout		
	3974-3990		
	Sandstone		
	1370		
	106		
	None		
	None		
	Solution Gas Drive		
	16	16	
	21 ✓	21	
	58 ✓	58	
	1.15 ✓	1.15	
	10 ✓	10	
	12 ✓	12	
	40 ✓	80	
	480 ✓	960	
Recoverable	59.5	59.5	
Recoverable	28560	57120	
	Negligible	Negligible	

*Calc done
19 m h
from
data
DST*

Formation water resistivity = .12 @ 106° F.

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
EXHIBIT NO. 3
CASE NO. 4647

WELL EVALUATION
JAIR 1-7
SANDOVAL COUNTY, NEW MEXICO
SE NE 7-22N-5W

COMPLETED WELL COST	\$96,000
Estimated Reserves	
40 Acres	28,560 Bbls.
80 Acres	57,120 Bbls.

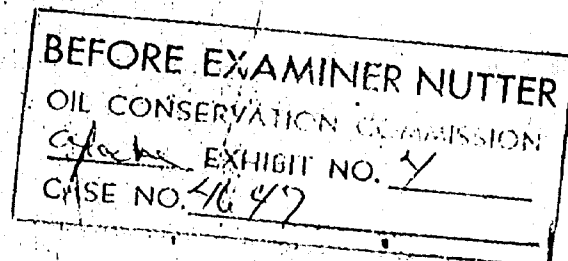
*VALUE OF OIL PER BARREL

Price/ Bbl.	\$3.31
Less Trucking	<u>.20</u>
Net Price/ Bbl.	\$3.11
Less DOC/ Bbl.	<u>.25</u>
Price/ Bbl. after DOC	\$2.86
Less Royalty	<u>.39</u>
Net Revenue/ Gross Bbl.	<u>\$2.47</u>

VALUE OF RESERVES

40 Acres	\$70,543
80 Acres	\$141,086

*Does not consider production tax and present value of income.



CLARENCE E. HINKLE
W. E. BONDURANT, JR.
LEWIS C. COX, JR.
PAUL W. EATON, JR.
CONRAD E. COFFIELD
HAROLD L. HENSLEY, JR.
STUART D. SHANOR
C. O. MARTIN
PAUL J. KELLY, JR.

LAW OFFICES
HINKLE, BONDURANT, COX & EATON
600 HINKLE BUILDING
POST OFFICE BOX 10
ROSWELL, NEW MEXICO 88201

TELEPHONE (505) 622-6510

MIDLAND, TEXAS OFFICE
521 MIDLAND TOWER
(915) MU 3-4691

December 27, 1971

Case 4647

RECEIVED

DEC 28 1971

OIL CONSERVATION COMM.
SANTA FE

Oil Conservation Commission
Box 2088
Santa Fe, New Mexico 87501

Gentlemen:

We enclose in triplicate Application of Apache Corporation for the promulgation of special field rules for its No. 1-7 well in Section 7, Township 22 North, Range 5 West.

We would like to have this matter set down for hearing at the first examiner's hearing possible.

Yours very truly,

HINKLE, BONDURANT, COX & EATON

By *Clarence E. Hinkle*

CEH:cs
Enc.

DOCKET MAILED

Date 1-6-72

BEFORE THE OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

RECEIVED
DEC 28 1971
OIL CONSERVATION COMMISSION
OIL CONSERVATION COMMISSION
SANTA FE

APPLICATION OF APACHE CORPORATION
FOR THE PROMULGATION OF SPECIAL
FIELD RULES ON A TEMPORARY BASIS
DUE TO THE COMPLETION OF THE
APACHE CORPORATION JICARILLA
APACHE INDIAN RESERVATION WELL
NO. 1-7 (JAIR #1-7) LOCATED IN
THE SE $\frac{1}{4}$ NE $\frac{1}{4}$ SECTION 7, TOWNSHIP
22 NORTH, RANGE 5 WEST, SANDOVAL
COUNTY, NEW MEXICO PRODUCING FROM
THE POINT LOOKOUT SAND AT A DEPTH
OF APPROXIMATELY 3974 FEET TO
3990 FEET.

Case 4647

Oil Conservation Commission
Box 2088
Santa Fe, New Mexico 87501

Comes Apache Corporation, whose address is Box 2299, Tulsa, Oklahoma 74101, acting by and through the undersigned attorneys, and hereby makes application for the promulgation of special field rules on a temporary basis due to the completion of the Apache Corporation Jicarilla Apache Indian Reservation Well No. 1-7 (JAIR #1-7) located in the SE $\frac{1}{4}$ NE $\frac{1}{4}$ Section 7, Township 22 North, Range 5 West, Sandoval County, New Mexico, producing from the Point Lookout Sand at a depth of approximately 3974 feet to 3990 feet, and in support thereof respectfully shows:

1. Apache Corporation has recently completed its Jicarilla Apache Indian Reservation Well No. 1-7 in the SE $\frac{1}{4}$ NE $\frac{1}{4}$ Section 7, Township 22 North, Range 5 West, Sandoval County, New Mexico. Said well was completed in the Point Lookout Sand and is producing from perforated intervals of 3974 to 3990 feet. The well was drilled to a total depth of 5500 feet, plugged back and casing set to a depth of 4875 feet. Drillstem tests were made before casing was set and applicant is now in the process of installing a pump, but has not yet made a final potential test; however, previous drillstem tests indicate that the well will produce approximately 250 barrels of oil per day.

2. There is attached hereto, made a part hereof and marked Exhibit "A", a plat showing the well location and ownership of the oil and gas leases within a radius of 2 miles therefrom. As indicated

by said plat, the only other well which has been completed in the area is the Warren Drilling Company No. 1 Littleton located in the NW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 8, Township 22 North, Range 5 West which well is producing from a different section of the Point Lookout Sand.

3. That applicant plans to drill another well to be located in the NW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 8, which well is projected to be completed in the same pay zone in which the No. 1-7 well is completed.

4. That applicant believes that it will be in the interest of conservation and the prevention of waste and the orderly future development of the new pool that temporary special pool rules be adopted by the Commission providing for 80 acre spacing and proration units. It is believed that future development will show conclusively that one well will effectively and efficiently drain 80 acres or more. Applicant recommends that the special pool rules provide for fixed well locations to be located near the center of the NW $\frac{1}{4}$ or the center of the SE $\frac{1}{4}$ of each quarter section, with a tolerance of at least 150 feet, and that the 80 acres to be dedicated to each well may be either the N $\frac{1}{2}$, S $\frac{1}{2}$, E $\frac{1}{2}$ or W $\frac{1}{2}$ of the quarter section.

5. Applicant further believes that such temporary special rules and regulations will prevent the possibility of economic loss resulting from the drilling of unnecessary wells and will permit the operators in the pool to gather information concerning the reservoir characteristics as well as protect correlative rights.

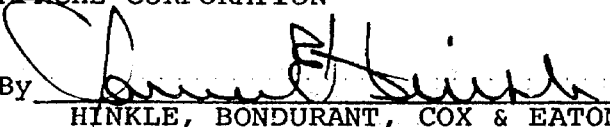
6. Applicant's No. 1-7 well is located in an undesignated pool and as soon as the pool has been designated applicant desires that the special pool rules apply to all wells drilled within one mile thereof.

7. Applicant requests that this matter be set down at the first possible examiner's hearing.

Respectfully submitted,

APACHE CORPORATION

By


HINKLE, BONDURANT, COX & EATON
Attorneys for Applicant
P.O. Box 10
Roswell, New Mexico 88201

NM074312

Simulaja
6200'

UNION
7-14-81
\$3.76

NM074312
YATES DRILLING CO.
4-17-72
ARTESIA

STATE K2395-5

TENNECC
11-1-81
14430

BEARD OIL CO.
OKLA. CITY
9-1-71
NM 0184675

RAYMOND CHORNEY
4-1-79
SNAC Ge. up

NM9174

TENNECO
12-1-78

12

NM8222

13

NM8222

24

NM8222

25

DELAWARE APACHE
4-22-80+
\$2.55

100% W&L
to 6723'

100% W&L
to 6723'

100% W&L
to 6723'

100% W&L
to 6723'

DELAWARE APACHE
4-22-80+
\$2.55

APACHE 50%
WARREN & LEE 25%
WOODS PETROLEUM 25%
to 6471'

100% W&L
to 6723'

100% W&L
to 6723'

100% W&L
to 6723'

100% W&L
to 6723'

DELAWARE APACHE
4-22-80+
\$2.55

APACHE 50%
WARREN & LEE 25%
WOODS PET. 25%
to 6471'

DELAWARE APACHE
4-22-80+
\$2.55

APACHE 50%
WARREN & LEE 50%
to 6543'

SUN
7-14-81
\$6.25

EXHIBIT "A"

DRAFT

GMH/dr

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:

APPLICATION OF APACHE CORPORATION
FOR THE CREATION OF A NEW POOL
AND SPECIAL POOL RULES, SANDOVAL
COUNTY, NEW MEXICO.

CASE No. 4647

Order No. R-4246

NOMENCLATURE

Records Center

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on January 19, 1972,
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

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

FINDS:

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

(2) That the applicant, Apache Corporation, seeks the creation
of a new oil pool for Mesaverde production in Sandoval County,
New Mexico, and the promulgation of special rules and regulations
governing said pool, including a provision for 80-acre spacing
units.

(3) That the Jicarilla Apache Well No. 1-7, located in the SE/4 NE/4 of Section 7, Township 22 North, Range 5 West, NMPM, Sandoval County, New Mexico, having its top perforations at

3924 feet, has discovered a separate common source of supply which should be designated the Venado - Mesaville

Oil Pool; that the vertical limits of said pool should be the

Mesaville formation; that the horizontal limits of said pool should be the SW 1/4 of Section 5, SE 1/4 of

Section 6, E 1/2 of Sec 7, and the W 1/2 of Section 8, Township 22 North, Range 5 West.

(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 80-acre spacing units, should be promulgated for the Venado-Mesaville Oil 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 the temporary special rules and regulations should be established for a one-year period in order to allow the operators in the subject pool to gather reservoir information to establish the area that can be efficiently and economically drained and developed by one well.

(7) That this case should be reopened at an examiner hearing in February 1973 at which time the operators in the subject pool should be prepared to appear and show cause why the Venado-Mesaverde Oil Pool should not be developed on 40-acre spacing units.

IT IS THEREFORE ORDERED:

(1) That a new pool in Sandoval County, New Mexico, classified as an oil pool for Mesaverde production, is hereby created and designated the Venado-Mesaverde Oil Pool, with vertical limits comprising the Mesaverde formation, and horizontal SW 1/4 of Section 5, SE 1/4 of Section 6, E 1/2 of Section 7 and the limits comprising the N 1/2 of Section 8, Township 22 North, Range 5 West, NMPM, Sandoval County, New Mexico.

(2) That temporary Special Rules and Regulations for the Venado-Mesaverde Oil Pool, Sandoval County, New Mexico, are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS

FOR THE

Venado-Mesaverde Oil Pool

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

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

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

RULE 4. Each well shall be located within 150 feet of the center of ~~a~~ ^{the NW 1/4 of SE 1/4 of} a governmental quarter-quarter section or lot.

RULE 5. The Secretary-Director may grant an exception to the ^{Postage} requirements of Rule 4 without notice and hearing when an ¹ application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the proposed location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all

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

RULE 6. A standard proration unit (79 through 81 acres) shall be assigned an 80-acre proportional factor of ^{2.0}~~2.0~~ for allowable purposes, and in the event there is more than one well on an 80-acre proration unit, the operator may produce the allowable assigned to the unit from the wells on the unit in any proportion.

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

IT IS FURTHER ORDERED:

(1) That the locations of all wells presently drilling to or completed in the Venado-Mesaverde Oil Pool or in the Mesaverde formation within one mile thereof are hereby approved; that the operator of any well having an unorthodox location shall notify the Aztec District Office of the Commission in writing of the name and location of the well on or before February 15, 1972.

(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 Venado-Mesaverde Oil Pool shall have dedicated thereto 80 acres in accordance with the foregoing pool rules; or, pursuant to Paragraph C. of said Section 65-3-14.5, existing wells may have non-standard spacing or proration units established by the Commission and dedicated thereto.

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

-6-

CASE NO. 4647

Order No. R-

(3) That this case shall be reopened at an examiner hearing in February 1973, at which time the operators in the subject pool may appear and show cause why the Uando-

Mesquite Oil Pool should not be developed on 40-acre spacing units.

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

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

DRAFT

dr/

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. 4647

Order No. R-4246-A

IN THE MATTER OF CASE 4647 BEING
REOPENED PURSUANT TO THE PROVISIONS
OF ORDER NO. R-4246, WHICH ORDER
ESTABLISHED SPECIAL RULES AND REGULA-
TIONS FOR THE VENADO-MESAVERDE OIL POOL,
SANDOVAL COUNTY, NEW MEXICO, INCLUDING
A PROVISION FOR 80-ACRE PRORATION UNITS.

ORDER OF THE COMMISSION

BY THE COMMISSION:

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

NOW, on this _____ day of February, 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 by Order No. R-4246, dated January 27, 1972, temporary
Special Rules and Regulations were promulgated for the Venado-Mesaverde Oil
Pool, Sandoval County, New Mexico, establishing 80-acre spacing units for a
period of one year.

(3) That pursuant to the provisions of Order No. R-4246, this case was reopened to allow the operators in the subject pool to appear and show cause why the Venado-Mesaverde Oil Pool should not be developed on 40-acre spacing units.

(4) That no operator in the subject pool appeared to show cause why the Venado-Mesaverde Oil Pool should not be developed on 40-acre spacing units.

(5) That it is not known at this time whether additional wells will be completed in the subject pool.

(6) That the operators in the subject pool have not established that one well can efficiently and economically drain and develop 80 acres.

(7) That ~~no necessity exists for the continuation of~~ the Special Rules and Regulations promulgated by Order No. R-4246 ~~and that said rules should~~ ~~therefore~~ be abolished.

IT IS THEREFORE ORDERED:

(1) That the Special Rules and Regulations governing the Venado-Mesaverde Oil Pool, Sandoval County, New Mexico, promulgated by Order No. R-4246 are hereby abolished.

(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.