

STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY )  
THE OIL CONSERVATION DIVISION FOR THE )  
PURPOSE OF CONSIDERING: )  
APPLICATION OF CIMAREX ENERGY COMPANY )  
FOR A NONSTANDARD OIL SPACING AND )  
PRORATION UNIT AND COMPULSORY POOLING, )  
LEA COUNTY, NEW MEXICO )

CASE NO. 13,777  
(Reopened)

ORIGINAL

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REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: WILLIAM V. JONES, Jr., Hearing Examiner

May 24th, 2007

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, WILLIAM V. JONES, Jr., Hearing Examiner, on Thursday, May 24th, 2007, at the New Mexico Energy, Minerals and Natural Resources Department, 1220 South Saint Francis Drive, Room 102, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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## I N D E X

May 24th, 2007  
Examiner Hearing  
CASE NO. 13,777 (Reopened)

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## A P P E A R A N C E S

## FOR THE DIVISION:

DAVID K. BROOKS, JR.  
 Assistant General Counsel  
 Energy, Minerals and Natural Resources Department  
 1220 South St. Francis Drive  
 Santa Fe, New Mexico 87505

## FOR THE APPLICANT:

JAMES G. BRUCE  
 Attorney at Law  
 P.O. Box 1056  
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\* \* \*

1           WHEREUPON, the following proceedings were had at  
2 11:35 a.m.:

3           EXAMINER JONES: Okay, let's call Case 13,777,  
4 which is reopened, Application of Cimarex Energy Company  
5 for a nonstandard oil spacing and proration unit and  
6 compulsory pooling, Lea County, New Mexico.

7           Call for appearances.

8           MR. BRUCE: Mr. Examiner, Jim Bruce of Santa Fe,  
9 representing the Applicant. I have two witnesses.

10          EXAMINER JONES: Other appearances?

11          MR. CARR: Mr. Examiner, not an appearance, but  
12 if you're going to break for lunch after this hearing,  
13 could you tell us what time to return for the afternoon, so  
14 we don't have to keep witnesses here?

15          MR. BROOKS: Since we've gone on another -- Let's  
16 say 1:30, if that's okay.

17          EXAMINER JONES: 1:30 sounds good to me.

18          MR. CARR: All right, we'll get back at 1:30.

19          EXAMINER JONES: And the witnesses have already  
20 been sworn in the previous case.

21          MR. BROOKS: Sworn and qualified.

22          MR. BRUCE: Mr. Examiner, the only difference  
23 between this case and the one you just heard is that this  
24 case involves two separate fee tracts.

25                 And again, the first witness will be Tony Cervi.

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ANTHONY J. CERVI,

the witness herein, having been previously duly sworn upon his oath, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. BRUCE:

Q. Mr. Cervi, could you identify Exhibit 1 and identify that for the Examiner?

A. Yes, Exhibit 1 is a Midland Map plat highlighting a portion of Township 15 South, Range 36 East, and highlighted in green is a portion of Section 21, including the northwest quarter of the southwest quarter, and the southwest quarter of the northwest quarter.

Q. And in this one, page 2 of Exhibit 1 is the Division's Form C-102 for this well, correct?

A. Yes, that's correct.

Q. The Caudill 21 -- Caudill South 21 Fee Well Number 2H. This well has been drilled, correct?

A. Yes, it has.

Q. And does the second page of Exhibit 2 state the final surface and bottomhole locations of the directional wellbores?

A. Did you say Exhibit 2?

Q. Exhibit -- Page 2 of Exhibit 1, I mean.

A. Okay, I'm sorry. Yes, it does.

Q. Okay. And again, is this a Wolfcamp horizontal

1 test?

2 A. Yes, it is.

3 Q. And what is the Wolfcamp spacing in this area?

4 A. Forty acres.

5 Q. What does Cimarex seek in this case?

6 A. We seek an order creating an 80-acre nonstandard  
7 unit in the Wolfcamp formation and pooling the uncommitted  
8 interest owners.

9 Q. And again, each quarter-quarter section in this  
10 proposed nonstandard unit is a separate tract, correct?

11 A. That's correct.

12 Q. What is reflected in Exhibit 2?

13 A. Exhibit 2 is a listing of all of the interest  
14 owners in this 80-acre tract, whether they have been leased  
15 or unleased.

16 Q. What is the approximate number of interest owners  
17 in both tracts, combined?

18 A. Approximately 108.

19 Q. What is reflected on Exhibit 3?

20 A. Exhibit 3 is the list of uncommitted interest  
21 owners.

22 Q. Okay. And so Exhibit 2 are the people who were  
23 notified -- the interest owners in both quarter-quarter  
24 sections and the people who were notified for purposes of  
25 the nonstandard unit?

1 A. That's correct.

2 Q. And Exhibit 3 lists the people who were notified  
3 for purposes of the compulsory pooling?

4 A. Yes.

5 Q. Okay. Now one final matter on Exhibit 2. You  
6 went out and acquired approximately 100 leases; is that  
7 correct?

8 A. Yes, that is correct.

9 Q. And on page 6 of Exhibit 2 it lists the unleased  
10 owners who you have separately listed on Exhibit 3, and  
11 then there are two people -- the very two entities last  
12 listed, are they unleased owners?

13 A. Yes, they are unleased.

14 Q. But they participated in the well?

15 A. They participated in the well, and they have  
16 executed a joint operating agreement.

17 Q. Okay. And all of the addresses that you have on  
18 the leased or the -- what you list as either leased or  
19 working interest owners are taken from Cimarex's Division  
20 Order records; is that correct?

21 A. Yes, that's correct.

22 Q. Now again, has -- just like in the last case, has  
23 Cimarex been out in this area leasing interests for quite  
24 some time?

25 A. Yes, over two years.

1 Q. And when you could not locate or lease the people  
2 listed on Exhibit 3, did you send out well proposal letters  
3 to these interest owners?

4 A. Yes, we did.

5 Q. And is that reflected in Exhibit 4?

6 A. Yes, it is.

7 Q. And those letters were quite some time ago, nine  
8 months -- eight, nine months ago, and those persons have  
9 still not joined in the well, correct?

10 A. That's correct.

11 Q. What efforts -- Again, there are certain  
12 unlocatable people listed on Exhibit 3. What efforts did  
13 you make to locate these persons?

14 A. We conducted a search of the county records, the  
15 Internet, phone directories, and made an attempt to contact  
16 perceived relatives of these individuals.

17 Q. Okay. In your opinion, has Cimarex made a good  
18 faith effort to either obtain the voluntary joinder of  
19 interest owners in this well or to locate addresses for all  
20 of the unleased mineral owners?

21 A. Yes, we have.

22 Q. Could you identify Exhibit 5 and discuss the  
23 estimated cost of this well when it was drilled?

24 A. Yes, Exhibit 5 was the AFE prepared for the  
25 drilling and completion of this well. The estimated

1 dryhole cost was \$2,462,356, and the completed well cost  
2 was \$3,566,648.

3 Q. What was the actual completed well cost,  
4 approximately?

5 A. The actual completed well cost was approximately  
6 \$4 million.

7 Q. And is this cost in line with the cost of other  
8 wells drilled like this in this area of Lea County?

9 A. Yes.

10 Q. Do you request that Cimarex be appointed operator  
11 of the well?

12 A. Yes, I do.

13 Q. And do you have a recommendation of the amounts  
14 which Cimarex should be paid for supervision and  
15 administrative expenses?

16 A. \$6000 a month for a drilling well and \$600 a  
17 month for a producing well.

18 Q. And are these amounts equivalent to those  
19 normally charged by Cimarex and other operators in this  
20 area for wells of this depth?

21 A. Yes.

22 Q. Do you again request that this rate be adjusted  
23 periodically under the COPAS accounting procedure?

24 A. Yes, I do.

25 Q. And were Exhibits 1 through 5 prepared by you or

1 under your supervision?

2 A. Yes.

3 MR. BRUCE: Again, Mr. Examiner, I've got a  
4 couple of follow-up questions. But just like I said, I did  
5 not get the notice published as against the unlocatable  
6 people, and so I will -- I would ask that this matter be  
7 continued and that we will submit it.

8 One other matter, and I again ask Mr. Brooks'  
9 issue on this. Even though these records on Exhibit 2 came  
10 from Cimarex's Division Order files, I received a bunch of  
11 mail back that was -- even though these addresses should be  
12 current, and as you well know, it's usually up to the  
13 interest owner to notify Cimarex of a change in address,  
14 but I received, you know -- I don't know how many, but  
15 probably ten of these back from people who should be  
16 receiving money from Cimarex. And I don't mind publishing  
17 again as against those people. Would that be the way to  
18 go?

19 MR. BROOKS: Well, that would take care of it.

20 Now the way the Rule is written, it's only the  
21 unlocatable people, as I recall, that you need to publish.  
22 So I think an alternative way would be to show evidence  
23 that you've been sending checks to these people and they've  
24 been cashing them.

25 (Laughter)

1 MR. BROOKS: I think that would be pretty good  
2 evidence that those were good addresses. But I leave it to  
3 your discretion as to how you want to show it, because if  
4 you have a good address, it's not necessary to have a  
5 return receipt, as I -- That was what we intended when we  
6 wrote the Rule, and I think that's the way the Rule reads.  
7 But --

8 MR. BRUCE: Okay, then --

9 MR. BROOKS: -- that could be somewhat difficult  
10 to establish.

11 MR. BRUCE: -- continue the case for two weeks,  
12 Mr. Examiner, and I'll take care of it one way or the  
13 other.

14 MR. BROOKS: Okay.

15 MR. BRUCE: I was kind of surprised to get stuff  
16 back, but --

17 MR. BROOKS: Well, of course the Post Office  
18 returns it after a period of time if people don't come to  
19 the window and request their certified mail.

20 MR. BRUCE: Yeah, so -- Anyway, with that, Mr.  
21 Examiner, I'd move the admission of Cimarex Exhibits 1  
22 through 5.

23 I will be submitting Exhibits 6 and 7 in a couple  
24 of weeks.

25 And I'd pass the witness.

1 EXAMINER JONES: Exhibits 1 through 5 will be  
2 admitted into evidence.

3 And I have no questions.

4 MR. BROOKS: I don't have any questions for this  
5 witness.

6 MR. BRUCE: I do have one.

7 Q. (By Mr. Bruce) In looking at your Exhibit 1, Mr.  
8 Cervi, is Cimarex the offset operator to the west of this?

9 A. Yes, we are.

10 Q. And as I -- And if you look to the east, insofar  
11 as offset operators go, is the north half a single tract,  
12 pretty much?

13 A. Yes, the north half is a single tract.

14 Q. And what about the southwest quarter?

15 A. The southwest quarter is a single tract.

16 MR. BRUCE: Okay. So Mr. Examiner, if you wanted  
17 me -- Cimarex is the offset operator of all these tracts.

18 MR. BROOKS: Okay.

19 MR. BRUCE: Of the nonstandard unit, I should  
20 say.

21 MR. BROOKS: Very good.

22 MR. BRUCE: Call Mr. Rittersbacher back to the  
23 stand.

24 Have the record reflect that the witness was  
25 previously sworn and qualified.

1                    DAVID J. RITTERSBACHER,

2        the witness herein, having been previously duly sworn upon  
3        his oath, was examined and testified as follows:

4                    DIRECT EXAMINATION

5        BY MR. BRUCE:

6            Q.     Mr. Rittersbacher, could you turn to Exhibit 8,  
7        which looks pretty familiar, and discuss what that shows  
8        with respect to the proposed -- or I should say the Caudill  
9        South 21 --

10          A.     Exhibit 8 is the same exhibit that we used in the  
11        last hearing as a locator map, however instead of talking  
12        about the Denton field now we're going to shift to the west  
13        and talk about the Caudill field area, which is located in  
14        15 South, 36 East.

15                  That field was discovered in 1954. It produces  
16        primarily from the Devonian, Atoka and Permo-Penn, although  
17        the Permo-Penn production is completely dominated by the  
18        Wolfcamp formation, and that's the formation we're going to  
19        be discussing in this hearing today.

20          Q.     And again on this, you're kind of moving --  
21        rather than moving east, you're kind of moving to the west  
22        of existing -- or southwest of existing production; is that  
23        correct?

24          A.     Right. The location of the Caudill South 21 Fee  
25        Number 2H is shown by the arrow down in Section 21. It was

1 drilled from south to north on the southern margin of the  
2 Caudill field.

3 Q. Okay, why don't you move to your Exhibit 9 and  
4 identify that for the Examiner?

5 A. Exhibit 9 is a blowup of Section 21 on the south  
6 end of the Caudill field. It shows Cimarex acreage again  
7 in yellow. It's a Wolfcamp -- it's a Permo-Penn, but in  
8 this case all the production is Wolfcamp, as we mentioned  
9 earlier. So it's a Wolfcamp cum oil production map, and  
10 the cumulative production for each well is shown in the  
11 upper right-hand corner in green for each well in the  
12 section.

13 The red arrow identifies the location of the  
14 Caudill 21 Number 2H well. Surface hole location is in the  
15 northwest of the southwest, and the bottomhole location is  
16 in the southwest of the northwest. And the 80-acre unit  
17 for the well is the dashed line shown in orange.

18 This is a structure map on the base of the  
19 Wolfcamp C zone, which is our target in this area, and you  
20 can see that the structure dips off gently to the south.

21 Q. On this -- And then you have a cross-section, a  
22 line of cross-section is shown on this plat?

23 A. That's right. On Exhibit 9 the line of cross-  
24 section is denoted as A-A'. It's a three-well structural  
25 cross-section, and the purpose of that cross-section is to

1 show the reservoir continuity surrounding the horizontal  
2 well.

3 Q. And before you move off of Exhibit 9, it appears  
4 that four of these existing wells -- or four of the wells  
5 are plugged, correct?

6 A. That's right, all the wells that have a slash  
7 through them are no longer producing. They're inactive,  
8 plugged wells. The only producing well is the well that's  
9 in the southeast of the northwest. That's our Caudill 21  
10 Number 1 well, completed in 2006. That well produces a  
11 steady 25 to 30 barrels a day.

12 So the reason why we felt this needed a  
13 horizontal well is, we needed to get a higher rate to make  
14 the production more economic in this area.

15 Q. Okay, let's move on to Exhibit 10, your cross-  
16 section. What does that --

17 A. All right, the cross-section A-A', again that's a  
18 structural cross-section. The horizontal target zone  
19 within the Wolfcamp C interval is denoted by the red line,  
20 and the C interval itself that's our target is denoted in  
21 green on each of the logs.

22 I'd like to point out that the far right-hand  
23 well is the 21 Fee Number 2H pilot hole log.

24 The porosity zone, which is a neutron porosity  
25 log -- the porosity zone for the C zone is colored in

1 green, and that was our target interval for this well.

2           What we'd like to move to next is a display of  
3 the actual horizontal well that we drilled in that Wolfcamp  
4 C horizontal target zone, and that's Exhibit Number 11.

5           This well was drilled from south to north. And  
6 because we go upstructure to the north, the well was  
7 drilled at a slight incline to horizontal. So it moves  
8 upstructure as we move towards the toe of the well.

9           Let me point out the curves that are presented on  
10 this well. To the left-hand side is the gamma-ray that we  
11 acquire, MWD, and that's on the bottom of the log as we get  
12 into the horizontal. It's shaded in blue where the gamma-  
13 ray is clean.

14           On the right-hand side, or on the top as you get  
15 into the horizontal, is a display of the mudlog total gas,  
16 and that's shaded in red where we had gas shows. You can  
17 see that we had gas shows along the entire length of the  
18 lateral.

19           And we completed this well by placing three  
20 packers in the lateral. And they are shown as packers 1, 2  
21 and 3. Packer number 1 is at 11,645; packer number 2 is at  
22 11,269; packer number 3 is at 10,873.

23           Also shown on this display is where we cross the  
24 quarter-quarter section boundary, and that was at  
25 approximately 11,070 feet measured depth.

1           How we treated this well was, we treated it in  
2 three stages. Stage number 1 was from packer number 1 to  
3 the toe of the well, and it was acidized with 12,500  
4 gallons. Then we treated stage number 2 between packers 1  
5 and 2. That was treated with 12,000 gallons. And finally,  
6 we treated stage number 3 between packers 2 and 3 with  
7 16,000 gallons. So each section of the horizontal was  
8 treated, and all three sections are currently producing at  
9 this time.

10           Q. And what are the producing rates?

11           A. What we'd like to move to next is a production  
12 display, Exhibit 12. It's a daily production plot. It has  
13 three curves displayed. Each is daily production rates.  
14 In red is gas, in MCF per day. In green is oil, in barrels  
15 of oil per day. And in blue is water, in barrels of water  
16 per day.

17           You can see that the well IP'd in January for  
18 just over 100 barrels of oil per day, and has currently  
19 declined to a rate of 60 to 65 barrels of oil per day. And  
20 again, all three stages covering both quarter-quarter  
21 section tracts are contributing to the production of this  
22 well.

23           Q. And as a result, again since production is coming  
24 from each quarter-quarter section, do you think a  
25 nonstandard unit is necessary and proper?

1 A. We do.

2 Q. Were Exhibits 8 through 12 prepared by you or  
3 under your supervision?

4 A. They were.

5 Q. And in your opinion is the granting of this  
6 Application in the interests of conservation and the  
7 prevention of waste?

8 A. It is.

9 MR. BRUCE: Mr. Examiner, I'd move the admission  
10 of Cimarex Exhibits 8 through 12.

11 EXAMINER JONES: Exhibits 8 through 12 will be  
12 admitted.

13 EXAMINATION

14 BY EXAMINER JONES:

15 Q. This -- When you finally stopped, was that where  
16 you planned to stop?

17 A. Yes, it was.

18 Q. Okay. So you just stopped because if you would  
19 have gone further, you would have --

20 A. It would become nonstandard if we --

21 Q. Nonstandard?

22 A. -- had drilled any further.

23 Q. You would have had to come back and include that  
24 other 40 acres?

25 A. That's correct. And of course, one of the things

1 we don't want to do is get too close to the older wells  
2 that have been plugged, because they're depleted.

3 Q. Okay, there is a plugged well --

4 A. Yes, just to the north of where we landed --

5 Q. Okay.

6 A. -- in the northwest northwest.

7 Q. Okay. How did you put that acid down? Did you  
8 just pump it with a diverter or --

9 A. What we do is --

10 Q. -- what kind of --

11 A. -- we have -- in the packers we are able to seat  
12 a ball --

13 Q. Okay.

14 A. -- so we pump the acid stage, then we seat a ball  
15 and seal off that section of the well, then we pump the  
16 next stage, pump the next ball --

17 Q. But did you put some rock salt or something in it  
18 to divert the acid while you were pumping?

19 A. No, it just -- it treats between the packers, it  
20 goes wherever it chooses to go.

21 Q. Wherever it wants to go?

22 A. Yes.

23 Q. Okay. Can you pay out a well, making 60 -- Will  
24 this well pay out?

25 A. We think it will, because it's on a fairly

1 shallow decline, but it won't have a very high rate of  
2 return.

3 Q. And you've got to pump it, right?

4 A. It's pumping, that's correct.

5 Q. Okay. And it's on electricity, I assume?

6 A. That's right.

7 EXAMINER JONES: That's all my questions.

8 EXAMINATION

9 BY MR. BROOKS:

10 Q. Okay. Once again on Exhibit 9, the yellow is  
11 Cimarex Acreage, correct?

12 A. That's correct.

13 Q. And do you know if the acreage -- the working  
14 interest ownership in the acreage to the east, is that  
15 identical to the working interest ownership in the proposed  
16 unit?

17 MR. BRUCE: Mr. Cervi did testify that, yeah,  
18 that in this case the north half is a single fee tract --

19 MR. BROOKS: Yeah.

20 MR. BRUCE: -- and the southwest quarter is a  
21 single fee tract.

22 MR. BROOKS: Okay. Now does Cimarex own 100  
23 percent of the working interest in this --

24 MR. BRUCE: Well, except for the unleased  
25 interests --

1 MR. BROOKS: Except for the unleased interests.

2 MR. BRUCE: -- which are --

3 MR. BROOKS: -- the people you're pooling?

4 MR. BRUCE: Correct.

5 Q. (By Mr. Brooks) Okay. Now let's see, what -- I  
6 think I covered all the questions that would be necessary  
7 for where we were trying to get in the last hearing, but  
8 just to make sure they get on the record for this one as  
9 well, and you have a little more experience in this area, I  
10 gather, because you have several Wolfcamp wells in this --  
11 Cimarex has some Wolfcamp wells in this immediate vicinity?

12 A. Yes, we have two in this area now, the horizontal  
13 well that's producing, and then the 21 Number 1, which is  
14 a --

15 Q. Yeah.

16 A. -- well, which is in the southeast of the  
17 northwest.

18 Q. Okay. Have you made a determination to what -- I  
19 know the bubble shows the amount of production; it doesn't  
20 have anything to do with the radius, correct?

21 A. That's correct.

22 Q. So have you made any determination of the radius  
23 of drainage on these wells?

24 A. We have not.

25 Q. Okay. Do you have an opinion as to what you

1 expect to be the drainage area from this horizontal well,  
2 drilled as proposed?

3 A. I have an opinion that we will probably drain the  
4 80, because this particular zone has fairly good  
5 permeability. Although the fact that these wells date back  
6 to the late '50s and early '60s, the fact that there's  
7 remaining mobile oil in this area, speaks to the fact that  
8 they did not drain a very large area.

9 Q. Now, if you -- Based on your experience drilling  
10 in this area, you believe that vertical wells to the  
11 Wolfcamp would likely be uneconomic?

12 A. Well, what we -- we fall back on the rate that  
13 the 21 Number 1 produced at --

14 Q. Right.

15 A. -- which it IP'd around 70 barrels a day and then  
16 declined quickly to a 25- to 30-barrel-a-day well and then  
17 was flat. That was marginally economic. So we hope to do  
18 better with our horizontal well. And we did get a better  
19 IP, around 110 barrels a day, and now it seems to be  
20 flattening out around 60 to 65 barrels a day.

21 Q. So would you think that if you drill this  
22 horizontal well you would be able to produce reserves that  
23 would not otherwise be produced?

24 A. I believe so.

25 MR. BROOKS: Thank you, that's all I have.

1 MR. BRUCE: That's all I have, Mr. Examiner.

2 EXAMINER JONES: So Case 13,777, reopened, will  
3 be -- has been heard, but it will be continued to June 7th.

4 MR. BROOKS: Okey-doak.

5 EXAMINER JONES: And we'll break for lunch.

6 (Thereupon, these proceedings were concluded at  
7 11:58 a.m.)

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I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Examiner hearing of Case No. \_\_\_\_\_,  
heard by me on \_\_\_\_\_.

\_\_\_\_\_, Examiner  
Oil Conservation Division

