

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 OF )  
COLORADO FOR POOL CREATION, A DISCOVERY )  
ALLOWABLE AND SPECIAL POOL RULES, EDDY )  
COUNTY, NEW MEXICO )

CASE NO. 13,897

ORIGINAL

2007 APR 26 AM 9:59

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: RICHARD EZEANYIM, Hearing Examiner

April 12th, 2007

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, RICHARD EZEANYIM, Hearing Examiner, on Thursday, April 12th, 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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April 12th, 2007  
 Examiner Hearing  
 CASE NO. 13,897

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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  
 Santa Fe, New Mexico 87504

\* \* \*

## ALSO PRESENT:

Zeno Farris, regulatory compliance, Cimarex

\* \* \*

1 WHEREUPON, the following proceedings were had at  
2 8:25 a.m.:

3 EXAMINER EZEANYIM: On page 2 of the docket, we  
4 call Case Number 13,897. This is the Application of  
5 Cimarex Energy Company of Colorado for pool creation, a  
6 discovery allowable and special pool rules, Eddy County,  
7 New Mexico.

8 Call for appearances.

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

11 EXAMINER EZEANYIM: Any other appearances?

12 Okay, may the witnesses stand up to be sworn,  
13 please?

14 (Thereupon, the witnesses were sworn.)

15 JON P. TATE,

16 the witness herein, after having been first duly sworn upon  
17 his oath, was examined and testified as follows:

18 DIRECT EXAMINATION

19 BY MR. BRUCE:

20 Q. Would you please state your name for the record?

21 A. Jon Tate.

22 Q. Where do you reside?

23 A. I live in Midland, Texas.

24 Q. Who do you work for and in what capacity?

25 A. I'm a senior landman employed by Cimarex Energy

1 Company.

2 Q. Have you previously testified before the  
3 Division?

4 A. Yes, sir, I have.

5 Q. And were your credentials as an expert petroleum  
6 landman accepted as a matter of record?

7 A. Yes, they were.

8 Q. And are you familiar with the land matters  
9 involved in this Application?

10 A. Yes, sir, I am.

11 MR. BRUCE: Mr. Examiner, I tender Mr. Tate as an  
12 expert petroleum landman.

13 EXAMINER EZEANYIM: Mr. Tate is qualified.

14 Q. (By Mr. Bruce) Briefly, Mr. Tate, what does  
15 Cimarex seek in this case?

16 A. Cimarex requests the creation of the Northeast  
17 Loco Hills-Wolfcamp Pool and a gas-oil ratio of 6000 to 1  
18 for the pool.

19 Q. And this would be an oil pool, correct?

20 A. Yes, sir, an oil pool.

21 Q. What is Exhibit 1?

22 A. Exhibit 1 is kind of big. It's basically a lease  
23 map on a 1-inch-to-1000 -- equals-1000-foot scale. It is  
24 kind of misleading, so -- those four inches there, that's  
25 actually one section, and it shows the leasehold ownership

1 in this immediate area.

2 Q. Okay. First in looking at this map, it notes the  
3 Keely 26 Federal Number 1 well. Is that the discovery well  
4 for this pool?

5 A. Yes, it is, in Section 26 of 17 South, 29 East.

6 Q. Okay. There's one other well noted, the Jackson  
7 Federal Well Number 1. Was that a Wolfcamp producer?

8 A. At one time, yes, sir.

9 Q. But it's plugged and abandoned?

10 A. That is my understanding, yes, sir.

11 Q. And on this map, the blue where Cimarex's well is  
12 denoted ConocoPhillips, what type of arrangement does  
13 Cimarex have with ConocoPhillips?

14 A. We currently have an exploration agreement dated  
15 November 1st, 2004, that covers five townships and range,  
16 one of which is 17-29, and it's included on this Keely  
17 well.

18 Q. Okay, so Cimarex is drilling wells under that  
19 agreement?

20 A. Yes, sir, we've drilled quite a few wells.

21 Q. And again looking at this map, are the only two,  
22 you know, current or former Wolfcamp wells noted in red on  
23 the map?

24 A. Yes, sir, they are.

25 Q. Therefore, there are no other Wolfcamp wells

1 within one mile of the Keely 26 Number 1?

2 A. Yes, sir, that's correct.

3 Q. And was Exhibit 1 compiled from company business  
4 records?

5 A. Company business records, the *Federal Register*  
6 and the State Land Office.

7 Q. And in your opinion, is the granting of this  
8 Application in the interest of conservation and the  
9 prevention of waste?

10 A. Yes, sir, it is.

11 MR. BRUCE: Mr. Examiner, because we're not  
12 seeking an increase in spacing or altering anybody's  
13 rights, and there are no other Wolfcamp wells, no notice  
14 was required to be given under Division Rules. The only  
15 operator within a mile is Cimarex, and therefore no mail --  
16 written certified notice was required to be given to  
17 anyone.

18 EXAMINER EZEANYIM: Okay.

19 MR. BRUCE: Mr. Examiner, I would move the  
20 admission of Exhibit 1.

21 EXAMINER EZEANYIM: Exhibit 1 will be admitted  
22 under evidence.

23 MR. BRUCE: And I have no further questions.

24 MR. BROOKS: What is the actual area where you're  
25 requesting the pool to be created?

1 MR. BRUCE: It would just be -- I think the  
2 Division would -- generally creates and expands oil pools,  
3 currently, by quarter section. So it would be the  
4 northeast quarter of Section 26.

5 MR. BROOKS: Okay, so that's all you're asking  
6 for right at the moment?

7 MR. BRUCE: That is correct.

8 MR. BROOKS: Okay, thank you.

9 EXAMINATION

10 BY EXAMINER EZEANYIM:

11 Q. And those -- these -- ConocoPhillips, is it in  
12 blue or green? Can you explain their -- you said you have  
13 with them?

14 A. The agreement, sir?

15 Q. Yeah, on that ConocoPhillips --

16 A. It's an exploration agreement where we're  
17 entitled -- we can drill anywhere on their acreage that we  
18 wish. And what we do is, we earn 55 percent of their  
19 original interest. We drill the well to casing point, and  
20 at casing point they have the option to review the logs and  
21 drilling data, RFT, drill stem test, whatever. And at that  
22 point they can elect to participate and pay their share of  
23 45 percent of their interest to get the well to casing  
24 point and set pipe.

25 If they elect not to participate in the drilling

1 of the well, they give us that remaining 45 percent and  
2 reserve an overriding royalty such that we get a 78-percent  
3 net revenue interest lease. And this is probably, I'm  
4 going to guess, anywhere from the 25th to probably about --  
5 I don't know, 15 to 25 wells was drilled under this  
6 agreement.

7 EXAMINATION

8 BY MR. BROOKS:

9 Q. I'm sorry, I probably wasn't following as  
10 carefully as I should, but does Cimarex also operate this  
11 Jackson Federal Number 1 well?

12 A. No, sir, we don't.

13 Q. Okay. Well, you said there were no other  
14 operators within one mile.

15 MR. BRUCE: That well is plugged and abandoned.

16 Q. (By Mr. Brooks) Oh, okay. And does your  
17 agreement, then, extend to this BP acreage that's shown in  
18 green in here?

19 A. No -- Well, I'd like to say yes or no. Not  
20 necessarily. These are just the lease owners of record.  
21 There could be operating rights, that if Conoco could have  
22 gotten like 25 percent of the operating rights, we could go  
23 in there. But I don't know that we have any ownership in  
24 that well at all -- or in that section at all.

25 MR. BRUCE: But under the Division Rules, we only

1 have to notify operators of existing Wolfcamp wells.

2 MR. BROOKS: Okay.

3 EXAMINER EZEANYIM: So that way it's plugged and  
4 abandoned --

5 MR. BRUCE: Correct.

6 EXAMINER EZEANYIM: -- at least for -- who --  
7 that well?

8 MR. BRUCE: I think our engineer could -- will  
9 discuss that --

10 EXAMINER EZEANYIM: Okay.

11 MR. BRUCE: -- and the geologist will discuss  
12 that further.

13 EXAMINER EZEANYIM: Okay, you may be excused.

14 THE WITNESS: Thank you, sir. Appreciate it.

15 LEE CATALANO,

16 the witness herein, after having been first duly sworn upon  
17 his oath, was examined and testified as follows:

18 DIRECT EXAMINATION

19 BY MR. BRUCE:

20 Q. Would you please state your name for the record?

21 A. Lee Catalano.

22 EXAMINER EZEANYIM: Lee --

23 THE WITNESS: Lee Catalano.

24 Q. (By Mr. Bruce) Spell that for the court  
25 reporter.

1 A. C-a-t-a-l-a-n-o.

2 Q. And where do you reside?

3 A. Midland, Texas.

4 Q. What is your job, and who is your employer?

5 A. I'm a senior geologist with Cimarex Energy there  
6 in Midland.

7 Q. Have you previously testified before the Division  
8 as a petroleum geologist?

9 A. Yes. Yes, I have.

10 Q. And were your credentials as an expert accepted  
11 as a matter of record?

12 A. Yes.

13 Q. And are you familiar with the geology involved in  
14 this Application?

15 A. Yes.

16 Q. And does your job at Cimarex cover this area of  
17 southeast New Mexico?

18 A. Yes, it does.

19 MR. BRUCE: Mr. Examiner, I'd tender Mr. Catalano  
20 as an expert petroleum geologist.

21 EXAMINER EZEANYIM: Mr. Catalano is so qualified.

22 Q. (By Mr. Bruce) Mr. Catalano, could you refer to  
23 Exhibit 2 and just very briefly discuss what this shows?

24 A. This map is a production map. Color key is down  
25 in the south -- the bottom corner of the map there, showing

1 different producing formations in the area. And of  
2 interest to our Keely 26 Number 1, the only other Wolfcamp  
3 producer is the previously mentioned well up in the  
4 northeast quarter of the northwest quarter of Section 35.

5 EXAMINER EZEANYIM: Which ones? Which ones?  
6 Apart from Keely Number 1, which ones are producing?

7 THE WITNESS: The only other Wolfcamp well that  
8 produced is down in Section 35 to the south of us. It's  
9 kind of a purplish-red color.

10 EXAMINER EZEANYIM: Oh, okay. Is it still  
11 producing there?

12 THE WITNESS: Pardon me?

13 EXAMINER EZEANYIM: Is it still producing from  
14 the Wolfcamp?

15 THE WITNESS: It is not producing, no.

16 EXAMINER EZEANYIM: Oh, is that one that is  
17 plugged and abandoned?

18 THE WITNESS: Yes, it's been plugged. It may be  
19 producing from the shallower zone, but it does not produce  
20 in the Wolfcamp.

21 Q. (By Mr. Bruce) And this map was simply prepared  
22 for purposes of the Form C-109, which is the request to  
23 create a pool and for a discovery allowable; is that  
24 correct, Mr. Catalano?

25 A. That's correct.

1 Q. Okay. Let's move on to Exhibit 3, and could you  
2 discuss the zone that has been developed in the Keely 26  
3 Number 1?

4 A. This is a structural cross-section showing the  
5 correlation between the Jackson Federal well in Section 35,  
6 which is the plugged Wolfcamp well, and our Keely 26  
7 Federal Number 1 discovery well. And it shows the  
8 discontinuity of the porosity zones within that  
9 stratigraphic interval.

10 Q. But the two wells are producing -- I mean, the  
11 Keely well is structurally higher than the Jackson well?

12 A. That's correct.

13 Q. But they are correlative zones?

14 A. They are correlative.

15 Q. Down at the bottom under the Jackson well, do you  
16 recall who drilled this well?

17 A. It was drilled by ARCO.

18 Q. Okay. And underneath the Jackson well log is a  
19 little time-versus -- I think -- production chart. What  
20 does that indicate?

21 A. That's showing the -- That's the production curve  
22 for the well, showing the oil, gas and water that was  
23 produced from that reservoir. And the time frame there  
24 from nineteen-eighty- -- basically produced from early 1985  
25 to 1986, just for a year.

1 Q. Okay, and then it was abandoned in --

2 A. And then --

3 Q. -- that zone?

4 A. And then it was abandoned from that zone. No  
5 further production from that zone.

6 Q. Okay. Let's move on to Exhibit 4. What does  
7 this show?

8 A. Exhibit 4 is a net porosity isopach map of the  
9 lower Wolfcamp zone showing the two wells that were on the  
10 cross-section and the separate porosity intervals that  
11 they're producing from.

12 Q. Now, one thing about this well, you're within a  
13 mile of it. Was a Wolfcamp pool ever created for this  
14 Jackson well, the one that's abandoned in the Wolfcamp?

15 A. No.

16 Q. Okay. So that's why you're seeking a new pool  
17 creation at this point?

18 A. Correct.

19 Q. And does the engineer have some additional data  
20 on --

21 A. Yeah.

22 Q. -- production from that well?

23 A. That's correct.

24 Q. Moving to Exhibit 5 --

25 EXAMINER EZEANYIM: Before you go to 5 --

1 THE WITNESS: Yes.

2 EXAMINER EZEANYIM: -- do you know where that  
3 Jackson well produced from? From the same Jackson -- I  
4 mean that Jackson well that is one mile away from your  
5 Keely Number 1? Do you know which pool produced that?

6 THE WITNESS: Originally, what I remember seeing,  
7 it was filed as a Cisco completion, but I don't know if --  
8 I don't -- I'm not aware that a pool was ever assigned to  
9 it.

10 MR. BRUCE: So there is no other pool name for  
11 that well, or no pool name for that well.

12 EXAMINER EZEANYIM: That's what I was wondering.

13 Q. (By Mr. Bruce) What is Exhibit 5, Mr. Catalano?

14 A. Exhibit 5 is a cross-section -- I'm sorry,  
15 structure map at the base of the lower Wolfcamp zone,  
16 showing that our Keely 26 Federal Number 1 is approximately  
17 50 feet high to the Jackson well down to the south.

18 Q. And even though they're correlative zones that  
19 will only produce for a while, in your opinion,  
20 geologically speaking, is this a new reservoir?

21 A. I believe it's a new reservoir.

22 Q. Were Exhibits 2 through 5 prepared by you or  
23 under your supervision?

24 A. Yes, they were.

25 Q. And in your opinion is the granting of this

1 Application in the interests of conservation and the  
2 prevention of waste?

3 A. Yes, I do.

4 MR. BRUCE: Mr. Examiner, I'd move the admission  
5 of Cimarex Exhibits 2 through 5.

6 EXAMINER EZEANYIM: Exhibits 2 through 5 will be  
7 admitted under evidence.

8 MR. BRUCE: And I have no further questions.

9 EXAMINER EZEANYIM: Mr. Brooks?

10 MR. BROOKS: No questions.

11 EXAMINER EZEANYIM: There are some geological  
12 questions I might ask, but let me hear the engineer first  
13 and see --

14 THE WITNESS: Okay.

15 EXAMINER EZEANYIM: You will be here so you can  
16 answer --

17 THE WITNESS: Yes.

18 EXAMINER EZEANYIM: -- some of them?

19 MAURICE P. GADDIS, JR.,

20 the witness herein, after having been first duly sworn upon  
21 his oath, was examined and testified as follows:

22 DIRECT EXAMINATION

23 BY MR. BRUCE:

24 Q. Would you please state your name and city of  
25 residence?

1           A.    My name is Maurice P. Gaddis.  I reside in  
2 Midland, Texas.

3           Q.    And who do you work for and in what capacity?

4           A.    I'm a senior reservoir engineer with Cimarex  
5 Energy.

6           Q.    Have you previously testified before the  
7 Division?

8           A.    Yes, I have.

9           Q.    And were your credentials as an expert reservoir  
10 engineer accepted as a matter of record?

11          A.    Yes.

12          Q.    Does your area of responsibility at Cimarex  
13 include this part of southeast New Mexico?

14          A.    Yes, it does.

15          Q.    And are you familiar with the reservoir  
16 engineering involved in this Application?

17          A.    Yes.

18               MR. BRUCE:  Mr. Examiner, I'd tender Mr. Gaddis  
19 as an expert reservoir engineer.

20               EXAMINER EZEANYIM:  Mr. Gaddis is so qualified.

21          Q.    (By Mr. Bruce)  Mr. Gaddis, could you refer to  
22 Exhibit 6 and discuss the reservoir properties of the two  
23 wells in this area?

24          A.    Okay.  As this exhibit shows, that I wanted to do  
25 a comparison between the Jackson Federal 1, which we know

1 produced from a Wolfcamp zone, and also the Keely 26  
2 Federal Number 1. I think the most obvious to us was that  
3 the oil gravity for the Keely well was a 66-degrees API,  
4 and the Jackson Federal was reported as 45, significant  
5 difference.

6 Our initial GORs, ours was a little over 5700  
7 standard cubic feet per barrel, and the initial GOR at the  
8 Jackson Federal was 1260.

9 We didn't have any pressure or any fluid levels  
10 we could find on the Jackson Federal. Our bottomhole  
11 pressure was fairly normal for that depth in that part of  
12 the world at 3895. And again, the others -- average  
13 porosities were fairly close, 5 for Keely, 4 for Jackson.

14 The average water saturations essentially was the  
15 same. Our net pay was considerably higher than -- in the  
16 Keely well, which would more or less account for the really  
17 good production we saw.

18 And I think that as far as just a note on the  
19 bottomhole pressure again, not being able to find anything  
20 for the Jackson Federal, but in -- I'll discuss the  
21 production here in a moment from the Jackson Federal, that  
22 it was probably about the same pressure.

23 Q. So in your opinion, the pressure for the Keely  
24 well, 3895 p.s.i., should be, in your opinion, a virgin  
25 pressure?

1 A. Yes.

2 EXAMINER EZEANYIM: What is the pressure at the  
3 point you measure your gas-oil ratio? Gas -- initial gas-  
4 oil ratio? Was it at that pressure?

5 THE WITNESS: The gas-oil ratio --

6 EXAMINER EZEANYIM: Yes --

7 THE WITNESS: -- we have --

8 EXAMINER EZEANYIM: -- I mean, your initial gas-  
9 oil ratio is 5728, right? That is initial?

10 THE WITNESS: That was the initial GOR, yes, sir.

11 Q. (By Mr. Bruce) Let's discuss the production  
12 characteristics from the two wells. Why don't you look at  
13 Exhibits 7 and 8 together, Mr. Gaddis --

14 A. Okay.

15 Q. -- and describe the production from these wells?

16 A. The first one let's take a look at as we compare  
17 these to each other, the Jackson Federal 1 Wolfcamp, as  
18 stated earlier, it came in in early '85, February of '85  
19 was the first reported production. The green square on the  
20 -- I guess the production graph shown, is an average daily  
21 production for that month, for your own information there,  
22 as well as the gas and the daily water. The gas-oil ratio  
23 is also shown as a -- pointing to the top triangle with the  
24 yellow -- it's a yellow background but a red line around  
25 it.

1           The important part to note here is, the oil well  
2 came on very strong, and the gas was low to start with and  
3 acting much like a black oil reservoir from just pressure  
4 depletion. The gas-oil ratio climbed, and then it began to  
5 fall off as the oil fell off. And the oil -- actually, it  
6 came on very strong, indicative of some very good  
7 permeability or fractures or both, and within a year it was  
8 depleted. As was previously shown on the net pay isopach  
9 map, we like this is indicative of a very limited reservoir  
10 that the Jackson Federal produced from.

11           Q.    And what does Exhibit 8 show?

12           A.    Okay, our next exhibit, the Keely 26 Federal  
13 Number 1, this is our Wolfcamp production from this well.  
14 It started -- This is day-by-day production from our own  
15 daily well tests that we get on this well. It began  
16 production December 13th. And as you can see, the -- once  
17 we had -- we had some -- our usual startup times and lining  
18 equipment out, and as we began to get it stabilized there  
19 toward the latter part of December we saw that we had an  
20 initial rate of around 268 barrels a day, and the gas-oil  
21 ratio, as previously stated, was 5728.

22           This -- the choke we had it set on was a --  
23 eventually for the stabilization, was a 10/64. And as it  
24 seemed to stabilize out, it was a slight decline commencing  
25 after that, but what we did notice was that the gas was

1 declining, the oil was slightly declining as well, but our  
2 gas-oil ratio was -- while there is some up-and-down  
3 movement in it, you can draw a line through it and say,  
4 Okay, this is fairly stable-looking. It's about 10,000 at  
5 that point.

6 But what we do notice is that in early March we  
7 wanted to see if this well had a choke size and a most  
8 optimum producing rate. We open the choke up to a 12/64  
9 and we see -- and you can see a subsequent increase in gas  
10 that came up and immediately began to decline off. The oil  
11 stabilized for a while. Then when we opened up to a 14/64  
12 choke we saw a jump in gas, but it immediately fell off the  
13 next day, and the same thing happened to the oil. And I  
14 think what -- the reason we only lasted three days there  
15 was that we saw the water jump up immediately.

16 And whether this was mobile water in the  
17 reservoir or something tonguing up from below, we did not  
18 know. But we wanted to squeeze it back and make sure we  
19 didn't start bringing water in.

20 We squeezed it back to an 8/64 choke, and you can  
21 see the subsequent drop in the gas production and a -- I  
22 think almost an abnormal drop in oil production.

23 And then we squeezed it back again to a 6/64.  
24 And at that point we saw loading, our choke began to plug  
25 off. We don't know whether the pressure drop was due to

1 hydrates freezing. We saw possible ice crystals, we also  
2 saw some potential paraffin. And the pressure drop at the  
3 nozzle was causing this, but it was also causing the gas --  
4 I'm sorry, the loading up to prevent the gas and the oil  
5 from coming in. And at the end of that time frame, before  
6 we totally lost our production, we opened it back up to a  
7 10/64, and you can see the recovery on the tail end of the  
8 production.

9 Q. So in short, if you choke back production too  
10 much, the well would die on you.

11 A. Choking it back too much with this -- at the  
12 pressure it's at, it will cause the well to die.

13 Q. And you would like to avoid that at all costs?

14 A. Yes, we would like to continue to produce at what  
15 we think is our most optimum producing rate.

16 Q. From an engineering standpoint, do you see any  
17 harm to the reservoir by increasing the gas-oil ratio from  
18 2000 to 6000-to-1?

19 A. No, there will not be any harm to the reservoir  
20 to increase the GOR.

21 Q. And therefore there would be no loss of reserves  
22 by the increase in the GOR?

23 A. There will be no loss of reserves.

24 Q. What is Exhibit 9, Mr. Gaddis?

25 A. Exhibit 9 is our Form C-109 for a -- I guess a

1 new pool, Exhibit. And this piece of it that I was most  
2 responsible for was the oil well potential, as I had stated  
3 earlier, our test of 268 barrels a day in 24 hours, and we  
4 did see 22 barrels of water that had since fallen off. And  
5 the gas through that test was 1535 MCF.

6 Q. And this resulted in the GOR that the Examiner  
7 asked you about, the 5728?

8 A. Yes.

9 Q. And when did the initial production begin?

10 A. This was December 13th, 19- -- I'm sorry, 2006.  
11 I'm in the wrong decade.

12 Q. Does Cimarex request that the pool rules for this  
13 well be made retroactive to the date of first production?

14 A. Yes.

15 Q. And does Cimarex also request a discovery  
16 allowable for this well?

17 A. Yes.

18 Q. Were Exhibits 6 through 9 prepared by you or  
19 under your supervision or compiled from company business  
20 records?

21 A. Yes.

22 Q. And in your opinion, is the granting of Cimarex's  
23 Application in the interests of conservation and the  
24 prevention of waste?

25 A. Yes.

1 MR. BRUCE: Mr. Examiner, I'd move the admission  
2 of Exhibits 6, 7, 8 and 9.

3 EXAMINER EZEANYIM: Exhibits 6, 7, 8 and 9 will  
4 be admitted under evidence.

5 MR. BRUCE: And I have no further questions of  
6 the witness.

7 MR. BROOKS: No questions.

8 EXAMINATION

9 BY EXAMINER EZEANYIM:

10 Q. What type of reservoir are we talking about here?

11 A. What happened to the well?

12 Q. I mean what type of reservoir are you talking  
13 about? This is an oil reservoir. What type of reservoir  
14 do you think it is?

15 A. We did some PVT work through FESCO, and my first  
16 thought, it was a volatile oil reservoir, and I tend to  
17 stay in that direction because the gas-oil ratio did come  
18 in -- while it came in fairly high, it did not -- it got up  
19 around the 10,000 level, and it just seemed to level out  
20 there.

21 Q. Yeah.

22 A. There is a possibility that it is a very, very  
23 rich gas reservoir. The PVT data indicated the possibility  
24 of a dewpoint, however a volatile oil reservoir can trick  
25 you and also show you the same things. So I -- because

1 this gas-oil ratio has not gone above 20,000 I would tend  
2 to lean that it is an oil reservoir.

3 And the second piece of that is that because we  
4 saw what appears to be some paraffin plugging at the choke,  
5 when we reduced the choke size to the 6/64, and some at the  
6 8/64, the pressure drop across the choke was so great that  
7 I believe the Joule-Thompson effect was enough to cause  
8 some of the hydrates to form. But the fact that we saw  
9 some type of heavy hydrocarbon plugging it off, it would  
10 lead me to believe that there's enough heavy above the  
11 heptanes that it's an oil, that it is really a black oil.

12 Q. Why do you think this is a discovery well?  
13 Why -- Can you explain to me why you think this well is a  
14 discovery well?

15 A. The reason I believe it's a discovery well was  
16 that to the south the Jackson Federal produced for a very  
17 short time. If that reservoir had been connected to our --  
18 while it is in the same correlative interval as the  
19 Wolfcamp, when this well was attempted from a -- from a  
20 piece of information that when the well started falling off  
21 they attempted to pump the well, and they could get no more  
22 inflow, they did not -- the pressure was so low that it did  
23 not appear to be connected to the rest of the reservoir.  
24 While our well has 25 to 27 feet of net pay, very low  
25 porosity, it appears to have very good -- it could be that

1 we're seeing either secondary porosity in there, as well as  
2 a dual-permeability system, you could have fractures --  
3 microfractures as well as natural permeability, and we are  
4 seeing a lot more -- I believe a lot more production on  
5 a -- if you put it into reservoir basis than what the other  
6 well saw. But the fact that the Jackson Federal fell off  
7 to nothing and they could not pump it to get any inflow  
8 into the well tells me that our well is a separate  
9 reservoir entirely.

10 Q. I asked this question before. Do you think that  
11 that Jackson Federal produced from the Cisco instead of  
12 from the Wolfcamp? Is that --

13 A. I have to go with my geologist on this. When the  
14 tops -- when we slid the logs and took a look at them,  
15 while it was called Cisco originally by ARCO, it is a  
16 Wolfcamp zone, and it is correlative to the same Wolfcamp  
17 zone that we're in, but it's a very limited reservoir.

18 Q. When was this well drilled?

19 A. The ARCO well was drilled -- it began production  
20 in February, 1985 --

21 Q. Yeah, I'm -- I mean, I'm not talking about the  
22 Jackson, I'm talking about the Keely.

23 A. Oh, the Keely well?

24 Q. Yeah.

25 A. I believe we actually were able to TD that well

1 in October of 2006, and we actually got on the well to  
2 produce it in November, roughly -- Okay.

3 Q. It was in November or December. I think you said  
4 first production was --

5 A. Yeah, we began producing in December, December  
6 13th of 2006 was first production from the Wolfcamp.

7 MR. BRUCE: Where was the TD in the well?

8 THE WITNESS: Around 11,000, Lee, in the Morrow?  
9 It was in the Morrow, around 11,000 feet.

10 Q. (By Examiner Ezeanyim) But you are interested in  
11 the Wolfcamp?

12 A. Yes, sir.

13 Q. Okay, what is the physical location of this well?  
14 I mean, the footage location of the well? I mean, what is  
15 the footage location of this well?

16 A. Have you got a copy of the --

17 MR. BRUCE: It's -- Mr. Examiner, on Exhibit 9,  
18 if you look at that, it is 1980 feet from the north line  
19 and 1550 feet from east line.

20 Q. (By Examiner Ezeanyim) Okay. And if I look at  
21 that, that's nonstandard. Did you get your NSL before you  
22 drilled the well? It's 2000 feet from the unit boundary.  
23 Did you have an NSL to drill the well?

24 MR. BRUCE: It was standard for a Morrow well, it  
25 would be -- that's right, it would be unorthodox for a --

1 EXAMINER EZEANYIM: Yeah, it's unorthodox if  
2 you --

3 MR. BRUCE: No, we don't, and we'll apply  
4 administratively for that.

5 THE WITNESS: Do you have one?

6 MR. FARRIS: Yeah, we got it, because when we  
7 were going to come back up --

8 MR. BRUCE: Okay.

9 MR. FARRIS: Yes.

10 MR. BRUCE: We will get you the -- That's right,  
11 we did.

12 EXAMINER EZEANYIM: I was wondering.

13 MR. BRUCE: Mr. Examiner, that was approved in  
14 March, and I will get you the order number. I couldn't  
15 remember.

16 MR. BROOKS: I think I may have written that one.  
17 I'm not sure, but I --

18 MR. BRUCE: I think so.

19 MR. BROOKS: -- I knew there was something  
20 familiar about this well name, but --

21 MR. BRUCE: We will get you the order.

22 EXAMINER EZEANYIM: In March, 2007?

23 MR. BRUCE: Yes.

24 Q. (By Examiner Ezeanyim) Okay. So where is the  
25 casing shoe on this well?

1           A.    I will have to see if it's -- Let me get a log  
2           that tells us our casing shoe -- I believe the long string,  
3           when we went to the Morrow, we set 5-1/2-inch through the  
4           Morrow --

5           Q.    Uh-huh.

6           A.    -- which would be approximately 11,000 feet, I  
7           believe.

8           Q.    I want to know the -- well, so that's -- Okay,  
9           yeah, you went to the Morrow, okay. In calculating the  
10          allowable for your discovery well, you know, we need to  
11          know what it is in the Wolfcamp. Of course, I know your  
12          perforations. I think your perforation is at 9078; is that  
13          right?

14          A.    Yes, perforations were 9078 to 9188.

15          Q.    Okay. Okay, so it doesn't really matter where  
16          your casing shoe is. It might be in the Morrow --

17          A.    Okay.

18          Q.    Could you explain why we didn't do any due  
19          process here? You know, because when you are doing this  
20          you need to notify everybody, you -- can you explain it to  
21          me why there were no advertisements, there were no notices  
22          to anybody?

23                MR. BRUCE: Mr. Examiner, under Division Rules,  
24          if you create a new pool -- if you seek an increase in  
25          spacing where there would be a difference in ownership

1 where somebody would have their interest reduced or et  
2 cetera, then you have to notify all of the interest owners  
3 in the well and in the well unit.

4 But under -- and I don't have the rule number in  
5 front of me. When you are doing something other than  
6 increase, when you're creating a pool but doing something  
7 other than increasing spacing --

8 EXAMINER EZEANYIM: Uh-huh.

9 MR. BRUCE: -- you only notify operators in the  
10 pool, and the only one is Cimarex, plus operators of other  
11 Wolfcamp wells within a mile. And as the witnesses have  
12 testified, there are no other Wolfcamp wells within a mile,  
13 and therefore notice wasn't required to be given to anyone.

14 MR. BROOKS: I think the Rule is 1210, but I  
15 don't have it memorized. If we need to check it, I'll need  
16 to go get my book.

17 EXAMINER EZEANYIM: No, don't worry, that's okay.

18 MR. BROOKS: I'm always -- I always regret it  
19 when I come down here without my book.

20 Q. (By Examiner Ezeanyim) Okay. Yeah, okay, more  
21 questions, I'm sorry. I need to get this information so I  
22 can make a decision here.

23 How did you come up with the name of the pool?  
24 Did you discuss with District 2, Artesia, or did you just  
25 name it whatever you wanted to name it? Did you discuss

1 with the District Office to see how you come up with the  
2 name? As you know, all the nomenclature we do here, we  
3 make sure our district geologist is involved in the -- so  
4 they have an idea what's going on.

5 MR. FARRIS: Yes, Bryan --

6 MR. BRUCE: Yeah, one of the people from Cimarex  
7 who's not a witness here says he did discuss it with Mr.  
8 Arrant in the Artesia Office. And of course this is quite  
9 close to Loco Hills, which -- There are other pools around  
10 here, North Loco Hills, this and that, and Northeast Loco  
11 Hills. So they did discuss it with the District Office.

12 EXAMINER EZEANYIM: Okay, so you want in the  
13 Northeast Loco Hills-Wolfcamp?

14 MR. BRUCE: Yes.

15 EXAMINER EZEANYIM: Well, you need to discuss  
16 with Bryan Arrant to see if he's comfortable with that.

17 MR. BRUCE: Yeah, he did. They did discuss it  
18 with him.

19 Q. (By Examiner Ezeanyim) Okay, so what type of  
20 pool rules are you asking for?

21 MR. BRUCE: Mr. Examiner, let me answer that.  
22 Other than the 6000-to-1 GOR, everything would be  
23 statewide, 40-acre spacing, 330-foot setbacks --

24 EXAMINER EZEANYIM: Okay.

25 MR. BRUCE: -- and that's basically it.

1 Q. (By Examiner Ezeanyim) -- Okay. So the only --  
2 here is 2000 to 1, you want 6000 --

3 A. Yes.

4 Q. -- because you think that's what -- By producing  
5 at 6000, don't you think you'll deplete the reservoir very  
6 fast, since you said it's a volatile oil reservoir?

7 A. I think that we will have to have that type of  
8 allowable, the 6000, because if we -- if it's anything  
9 less, we won't be able to produce at an optimum rate, or it  
10 really won't be able to produce very long --

11 Q. Uh-huh.

12 A. -- so...

13 EXAMINER EZEANYIM: Okay, I have nothing further.  
14 Thanks.

15 THE WITNESS: Thank you.

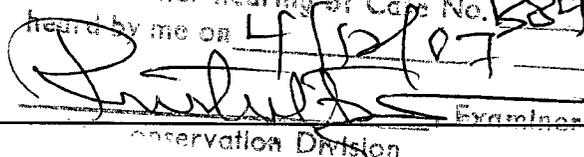
16 MR. BRUCE: I have nothing further in this  
17 matter, Mr. Examiner.

18 EXAMINER EZEANYIM: Okay, at this point Case  
19 Number 13,897 will be taken under advisement.

20 (Thereupon, these proceedings were concluded at  
21 9:01 a.m.)

22 \* \* \*

23 I do hereby certify that the foregoing is  
24 a complete record of the proceedings in  
25 the Examiner hearing of Case No. 13897  
heard by me on 4/12/07

  
Examiner  
Conservation Division

STEVEN T. BRENNER, CCR  
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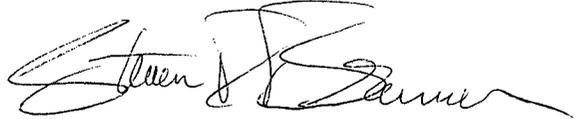
CERTIFICATE OF REPORTER

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

I, Steven T. Brenner, Certified Court Reporter and Notary Public, HEREBY CERTIFY that the foregoing transcript of proceedings before the Oil Conservation Division was reported by me; that I transcribed my notes; and that the foregoing is a true and accurate record of the proceedings.

I FURTHER CERTIFY that I am not a relative or employee of any of the parties or attorneys involved in this matter and that I have no personal interest in the final disposition of this matter.

WITNESS MY HAND AND SEAL April 13th, 2007.



STEVEN T. BRENNER  
CCR No. 7

My commission expires: October 16th, 2010