

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 READ AND STEVENS, INC., )  
TO LIMIT THE WELL SPACING RULES FOR THE )  
LAKE ARTHUR-PENNSYLVANIAN GAS POOL TO )  
ITS CURRENT HORIZONTAL EXTENT, CHAVES )  
COUNTY, NEW MEXICO )

CASE NO. 13,804

ORIGINAL

2006 NOV 20 PM 12 51

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

November 9th, 2006

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH, Hearing Examiner, on Thursday, November 9th, 2006, 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

November 9th, 2006  
Examiner Hearing  
CASE NO. 13,804

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APPLICANT'S WITNESS:	
<u>JOHN C. MAXEY, JR.</u> (Engineer)	
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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

\* \* \*

1           WHEREUPON, the following proceedings were had at  
2   8:18 a.m.:

3           EXAMINER CATANACH: At this time I will call Case  
4   13,804, the Application of Read and Stevens, Inc., to limit  
5   the well spacing rules for the Lake Arthur-Pennsylvanian  
6   Gas Pool to its current horizontal extent, Chaves County,  
7   New Mexico.

8           Call for appearances.

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

11          EXAMINER CATANACH: Are there any additional  
12  appearances in this case?

13          Okay, swear in the witness.

14          (Thereupon, the witness was sworn.)

15                         JOHN C. MAXEY, JR.,

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. Will you please state your name for the record?

21           A. John Maxey.

22           Q. Where do you reside?

23           A. Roswell, New Mexico.

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

25           A. I work for Read and Stevens, Incorporated, I'm

1 the president of the company, I'm a petroleum engineer.

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

4 A. Yes, I have.

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

7 A. Yes, they were.

8 Q. And are you familiar with the engineering matters  
9 involved in this case?

10 A. Yes.

11 MR. BRUCE: Mr. Examiner, I would tender Mr.  
12 Maxey as an expert petroleum engineer.

13 EXAMINER CATANACH: Mr. Maxey is so qualified.

14 MR. BRUCE: Mr. Examiner, before we get into Mr.  
15 Maxey's testimony I've got a couple of exhibits for you.

16 The first one is a copy of Commission Order  
17 R-2449, which created the Lake Arthur-Pennsylvanian Gas  
18 Pool. This pool was created in March of 1963, so under  
19 rules then in effect the well spacing 160 acres, and it  
20 remains 160 acres to this day.

21 Submitted as Exhibit 2 is a couple of pages, the  
22 first one out of Byram's showing the current extent of the  
23 pool, and the pool does cover two adjoining quarter  
24 sections of land in 15-26 and 15-27. And attached to that  
25 is information from the Division's ONGARD site, showing

1 that the well in Section 36 of 15-26 is operated by Read  
2 and Stevens, Inc., and the second well, 31 of 15-27, is  
3 operated by COG Operating, L.L.C. Those are the only two  
4 wells in this pool.

5 Q. (By Mr. Bruce) Mr. Maxey, in this case Read and  
6 Stevens seeks to limit the 160-acre spacing provisions of  
7 the Lake Arthur-Pennsylvanian Pool to those two existing  
8 quarter-section well units; is that correct?

9 A. That's correct.

10 Q. Does Read and Stevens have drilling plans in this  
11 area for certain wells?

12 A. Yes, we have plans for a well just south of those  
13 two producers that are in that field.

14 Q. And are you also drilling a second well currently  
15 in that --

16 A. We're drilling a second well, it's in a different  
17 field further south. We have a rig that's running right  
18 now.

19 Q. Okay. And you would like your wells simply to be  
20 developed on statewide spacing rules for pools below the  
21 base of the Wolfcamp; is that correct?

22 A. That's right.

23 Q. Could you identify Exhibit 3 for the Examiner?

24 A. Exhibit 3 is -- basically, it's an IHS survey --  
25 or a search, excuse me, of production, existing production

1 and inactive production well spots in the vicinity of the  
2 red arrow, which is the well we have an approved BLM permit  
3 on right now. The symbols represent the various fields.  
4 The legend is in the lower right-hand corner of the exit.  
5 And basically these well spots are Penn production -- it  
6 would be Strawn-Morrow-Atoka production in the area -- and  
7 it's coded by -- I started to code it by color, I ran out  
8 of color, so I went with symbols.

9 And the two -- excuse me, the three largest  
10 fields in the area would be the red well spots which is  
11 Buffalo Valley, the green well spots which is Diamond  
12 Mound, and the black well spots which are Crow Flats. And  
13 we've drilled wells in all three, and all three of those  
14 fields, basically being the large fields in the area, are  
15 on 320-acre spacing. And a search of -- I did a search of  
16 Byram's on the remaining field names and found no field  
17 rules on any of the remaining fields.

18 There is a well, if you'll notice -- I'll go  
19 ahead and draw your attention to the red arrow on the map.  
20 Due south of that you see a symbol that overlies another  
21 symbol, a square with an X in it that overlies a green well  
22 spot. That well was drilled prior to the mid-1960s and was  
23 on 160-acre spacing in the Duffield field. And within the  
24 last 10 years Snow Oil and Gas re-entered that well, and it  
25 was on 320-acre spacing for the same existing Morrow that

1 was originally completed in the well.

2 The well was produced, it was plugged on 160-acre  
3 spacing. Then within the last 10 years Snow re-entered,  
4 re-stimulated the existing perforations in the Morrow, but  
5 it was done on 320-acre spacing. I did not do a search to  
6 see if they'd come to a hearing or how it was -- it may  
7 have been reclassified in a different field, is what it  
8 indicates in the IHS.

9 Q. And then you mentioned a well that you are  
10 currently drilling. Where is that well?

11 A. The well we're currently drilling is in Section  
12 17 of the same township --

13 Q. Okay, so just to the --

14 A. -- which would be a couple of miles --

15 Q. -- southwest of that well you were --

16 A. Right.

17 Q. -- discussing?

18 A. Right.

19 Q. And except for the two wells in the Lake Arthur-  
20 Penn Pool, all of these dozens of other wells are developed  
21 on 320-acre statewide spacing?

22 A. That's correct, based on the research I've done.

23 Q. What is Exhibit 4?

24 A. Exhibit 4 is basically the same map as Exhibit 3,  
25 but I wanted to illustrate -- again, it's done on an IHS

1 Energy search of their database. The various colored well  
2 spots indicate the various -- the way that the wells are  
3 classified productionwise on the IHS data, and again this  
4 is Penn production, the red being the Atoka formation. The  
5 blue is Morrow, black well spots are classified as Penn,  
6 which would be Atoka-Morrow. There is some Strawn  
7 production, that's the green well spots. And then yellow  
8 being classified as upper Penn, which again would probably  
9 be Strawn.

10 The two well spots in the Lake Arthur-Penn field  
11 are black, because they were classified as Penn production.

12 Q. Is Morrow the primary zone that you're looking  
13 for in the well you're currently drilling and also in the  
14 proposed well you have in --

15 A. Yes.

16 Q. -- Section 4 of 16-27.

17 A. Atoka-Morrow.

18 Q. Atoka-Morrow.

19 A. Yes.

20 Q. Let's move on to your cross-section, Exhibit 5.

21 A. Okay.

22 Q. Would you go through that and discuss the  
23 correlative producing zones in the wells in this area?

24 A. Exhibit 5 is a cross-section in the area. If  
25 you'll notice the key map in the upper left-hand side of

1 the cross-section, the cross-section runs from A' up in the  
2 northern part of the map, Section 36, the well that we  
3 operate is in the Lake Arthur-Penn, it moves south to the  
4 well in Section 16, which is a Diamond Mound well on 320-  
5 acre spacing. And then the cross-section moves on to a  
6 well in Section 21, and that well is in the Duffield-Morrow  
7 on 320-acre spacing.

8 If you'll notice on the cross-section, it's  
9 just -- this is -- the cross-section was set up to show you  
10 that the Penn section -- it was hung on the Morrow -- or  
11 excuse me, it was hung on the Atoka, stratigraphic cross-  
12 section hung on the Atoka. That's why the Strawn -- the  
13 marker on top of the Strawn moves upward.

14 You can tell that basically what we're doing here  
15 is, from A' going to A we're falling off the shelf, headed  
16 Basinward, and all the sediment is thickening. And  
17 basically we're looking at very -- the same type of  
18 environment for all these wells and this entire play out  
19 here.

20 Q. Looking at this exhibit, do you -- or does Read  
21 and Stevens' geologist notice any difference in the  
22 producing intervals among the wells from the various  
23 Pennsylvanian pools in this three- or four-township area?

24 A. No, we've noticed no difference in the sands.  
25 It's a series of sand channels stacked on top of each

1 other, typical Morrow, trending north or northwest, and  
2 they can be mapped to the south or southeast.

3 Q. And do you see any difference in an engineering  
4 standpoint as to the producing characteristics of the wells  
5 in this area?

6 A. No difference.

7 Q. And again, Read and Stevens would simply like to  
8 conduct its ongoing exploration in this area on statewide  
9 rules; is that correct?

10 A. That's correct, we'd just like to develop from  
11 this point forward in the future on 320s.

12 Q. In your opinion, is the granting of Read and  
13 Stevens' Application in the interests of conservation and  
14 the prevention of waste?

15 A. Yes.

16 MR. BRUCE: Mr. Examiner, Exhibit 6 is simply my  
17 notice affidavit to the other operator in the pool, COG  
18 Operating, L.L.C. They have been notified, they have not  
19 objected. We only notified the operator since we are not  
20 seeking to alter anybody's interest in any existing spacing  
21 units in the pool.

22 Q. (By Mr. Bruce) Were Exhibits 1 through 6, Mr.  
23 Maxey, prepared by you or compiled under your supervision?

24 A. Yes.

25 MR. BRUCE: Mr. Examiner, I'd move the admission

1 into evidence of Exhibits 1 through 6.

2 EXAMINER CATANACH: Exhibits 1 through 6 will be  
3 admitted.

4 EXAMINATION

5 BY EXAMINER CATANACH:

6 Q. Mr. Maxey in Section -- there's two existing  
7 wells, right, one in Section 36?

8 A. In the Lake Arthur-Penn, yes.

9 Q. And that's operated by -- is that you or --

10 A. Yes. The well to the east is operated by COG  
11 now.

12 Q. Section 31 is COG?

13 A. Yes, it used to be Maralo and they sold it to  
14 COG.

15 Q. And those wells are -- Are they both producing  
16 from the -- what you call the Atoka-Morrow?

17 A. The well to the east is producing from Strawn,  
18 equivalent to the Strawn sand that we have on our cross-  
19 section --

20 Q. Uh-huh.

21 A. -- and we are also producing from the Morrow in  
22 our well. They did not have Morrow sand in their well.

23 Q. Okay, so in your well you're producing from  
24 Morrow and Strawn?

25 A. Yes, it's been commingled.

1 Q. You kind of lump the Atoka-Morrow together on the  
2 cross-section.

3 A. Right.

4 Q. There is a Morrow section in here, right?

5 A. Yes, there's a Morrow section, I believe in the  
6 Diamond Mound. It's really not differentiated, and when  
7 you talk to geologists in this area -- our geologist, other  
8 company geologists -- they'll tell you this is really all  
9 the same. They don't have -- there's not much difference  
10 between Morrow-Atoka in this area up on the shelf, and you  
11 -- there's better differentiation as you move southward  
12 into the Basin.

13 Q. Okay, you're currently drilling a well in Section  
14 17; is that correct?

15 A. Yes.

16 Q. And that really doesn't have any bearing on this  
17 case, because that's going to be 320 anyway.

18 A. That's 320.

19 Q. And you plan on --

20 A. It's Diamond Mound.

21 Q. Okay.

22 A. That's the field it was placed in.

23 Q. You plan on drilling a well in Section 4?

24 A. Yes, that red arrow is our location.

25 Q. And so you would be within a mile of the Lake

1 Arthur-Penn?

2 A. Yes.

3 Q. So that's the reason?

4 A. That's why it was placed in that field, that's  
5 correct.

6 Q. Okay.

7 A. That is a federal location, and we do have an  
8 approved APD on it.

9 Q. What's the proposed 320 unit for that well?

10 A. It would -- That's the irregular-shaped section.

11 Q. Uh-huh.

12 A. It would be a standard 320, which would consist  
13 of basically the southwest quarter and the four lots north,  
14 so it would be a standup west half. There are two standard  
15 320-acre locations in that section, and if we drilled up on  
16 the north end of that section we'd have to either get an  
17 administrative or a hearing order on a nonstandard  
18 proration unit.

19 Q. Okay, is that going to be at a standard well  
20 location?

21 A. Yes.

22 Q. Now, if you're not subject to the Lake Arthur-  
23 Penn, would you be subject to any other pools? Are you  
24 within a mile of any other Atoka-Morrow pools?

25 A. I have -- You know, I did not ask the Artesia

1 office about that.

2 Q. Okay.

3 A. But based on the map of existing production, it  
4 could be classified wildcat.

5 Q. Okay. And in that well in Section 4, what do you  
6 anticipate completing the well in? Atoka-Morrow?

7 A. Yes.

8 Q. Is there any Strawn present there?

9 A. There's Strawn potential there, because we are  
10 offsetting Strawn production. There's not much Strawn  
11 production in the area, that's why I put together the one  
12 map by producing zone.

13 Q. So you may end up in more than one pool,  
14 depending on what you complete the well in. There may be  
15 separate Strawn and Atoka-Morrow pools. I don't know, I'll  
16 have to check on the pool situation.

17 A. Yeah, I'm not sure how it would be placed in  
18 separate pools, but -- In the existing well that we have,  
19 we are commingled with Strawn and Morrow and are placed in  
20 one pool in the Lake Arthur-Penn.

21 Q. Yeah, the Pennsylvanian -- the old Pennsylvanian  
22 pools took into -- I think they encompassed the whole  
23 Pennsylvanian --

24 A. I believe that's correct.

25 Q. But some of the newer pools, they kind of

1 differentiate --

2 A. Right.

3 Q. -- and break out the Morrow-Atoka?

4 A. Yes, that's correct.

5 Q. But geologically, you don't see any difference  
6 between the Lake Arthur area and the area to the south?

7 A. Absolutely none. The only -- The cross-section  
8 illustrates we're just moving from shelfward, more  
9 Basinward across the cross-section, and you have thickening  
10 of the sediment and you tend to encounter more and more  
11 Morrow sand as you move to the south. Very typical.

12 Q. Is there anything to the north of the Lake  
13 Arthur-Penn Pool?

14 A. Well, the search that I did, basically if you  
15 came in about one section from the border I put on this  
16 map --

17 Q. Uh-huh.

18 A. -- on the two different maps, that's where the  
19 search -- the northern end of the search is. If you look  
20 at those Buffalo Valley well spots, the red ones, and where  
21 they're truncated, that's basically the northern extent,  
22 all the way across that map of the search, so I went about  
23 -- a little over two miles north of those existing wells.  
24 The Buffalo Valley extends further north, but there's  
25 really -- to the west of the Buffalo Valley there's not a

1 significant Morrow production present. There's a lot of  
2 dry holes up there.

3 EXAMINER CATANACH: Okay, I don't think I have  
4 anything else.

5 MR. BRUCE: I have nothing further.

6 EXAMINER CATANACH: Okay, there being nothing  
7 further in this case, 13,804 will be taken under  
8 advisement.

9 (Thereupon, these proceedings were concluded at  
10 8:39 a.m.)

11 \* \* \*

12  
13  
14  
15  
16  
17 I do hereby certify that the foregoing is  
18 a complete record of the proceedings in  
the examiner hearing of Case No. 13804  
19 heard by me on November 9 2006

20 David R. Catnach, Examiner  
Oil Conservation Division  
21  
22  
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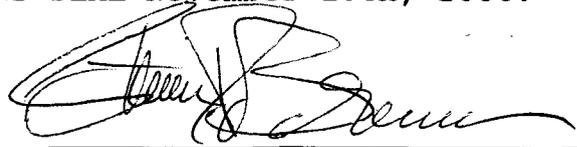
CERTIFICATE OF REPORTER

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 November 10th, 2006.



STEVEN T. BRENNER  
CCR No. 7

My commission expires: October 16th, 2010