

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 SANTA FE ENERGY)
RESOURCES, INC., FOR COMPULSORY)
POOLING, EDDY COUNTY, NEW MEXICO)

CASE NO. 12,091

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: MARK ASHLEY, Hearing Examiner

November 19th, 1998

Santa Fe, New Mexico

OIL CONSERVATION DIV
98 DEC-4 AM 8:47

This matter came on for hearing before the New Mexico Oil Conservation Division, MARK ASHLEY, Hearing Examiner, on Thursday, November 19th, 1998, at the New Mexico Energy, Minerals and Natural Resources Department, Porter Hall, 2040 South Pacheco, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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 Examiner Hearing
 CASE NO. 12,091

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A P P E A R A N C E S

FOR THE DIVISION:

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FOR THE APPLICANT:

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* * *

1 WHEREUPON, the following proceedings were had at
2 10:03 a.m.:

3 EXAMINER ASHLEY: The hearing is now called back
4 to order.

5 The Division calls Case 12,091.

6 MR. CARROLL: Application of Santa Fe Energy
7 Resources, Inc., for compulsory pooling, Eddy County, New
8 Mexico.

9 EXAMINER ASHLEY: Call for appearances.

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

12 EXAMINER ASHLEY: Any additional appearances?

13 Will the witnesses please stand to be sworn in?

14 (Thereupon, the witnesses were sworn.)

15 MEG MUHLINGHAUSE,

16 the witness herein, after having been first duly sworn upon
17 her 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. Meg Muhlinghause.

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

23 A. Santa Fe Energy Resources, as landman.

24 Q. Have you previously testified before the Division
25 as a petroleum landman?

1 A. Yes.

2 Q. And were your credentials as a petroleum landman
3 accepted as a matter of record at that time?

4 A. Yes.

5 Q. And are you familiar with the land matters
6 involved in this Application?

7 A. Yes.

8 MR. BRUCE: Mr. Examiner, I would tender Ms.
9 Muhlinghouse as an expert petroleum landman.

10 EXAMINER ASHLEY: Ms. Muhlinghouse is so
11 qualified.

12 Q. (By Mr. Bruce) What does Santa Fe seek in this
13 case?

14 A. Santa Fe seeks an order pooling the east half of
15 Section 23, Township 18 South, Range 31 East, to the base
16 of the Morrow formation for all pools or formations spaced
17 on 320 acres.

18 Q. What is Exhibit 1?

19 A. Exhibit 1 is a land plat outlining the proposed
20 east-half well unit. Santa Fe's acreage position is shaded
21 in yellow. The proposed well is marked in the northwest of
22 the southeast quarter of Section 23.

23 Q. Okay.

24 A. It also indicates the other ownership in the
25 area.

1 Q. On this map it says "ARCO Farmout". That's
2 farmed out to Santa Fe?

3 A. Yes.

4 Q. Okay. Taking into account that farmout, what is
5 the leasehold ownership of the well unit?

6 A. Santa Fe has 75 percent and Anadarko has 25
7 percent. We seek to pool only Anadarko.

8 Q. Are there any depth limitations in the rights
9 that you're seeking to pool?

10 A. No. Santa Fe owns rights below 4500 feet.

11 Q. Okay. So that should take into account all the
12 320- --

13 A. Right.

14 Q. -- acre gas zones?

15 Okay, let's discuss Santa Fe's efforts to obtain
16 the voluntary joinder of Anadarko in the well. What are
17 Exhibits 2 and 3?

18 A. Exhibit 2 and 3 contains copies of the letters
19 sent by Santa Fe Energy to Anadarko. We first called
20 Anadarko in June and asked them for a term assignment, and
21 we followed that with a written offer to Anadarko, and that
22 is Exhibit 2 --

23 Q. Did you follow --

24 A. -- dated July 2nd, 1998.

25 We mailed a proposal letter to Anadarko on July

1 30th, 1998, which is Exhibit 3.

2 Q. Now, did that letter, Exhibit 3, contain an AFE
3 and ask them to join in the well?

4 A. Yes, it did. And this well, on the AFE it was
5 initially proposed as the North Lusk Fed Com Number 1, and
6 the name has been changed to the Shugart 23 Fed Com Number
7 1. The location, however, has not been changed.

8 Q. The location and the costs are the same?

9 A. Correct.

10 Q. Okay. Now, besides this correspondence, did you
11 have any other contacts with Anadarko?

12 A. Yes, I called them approximately two to three
13 times a month ever since them. Their landman, Patrick
14 Smith, has assured me -- had assured me that they would
15 either participate or agree to some type of term
16 assignment.

17 Q. When was your last conversation with Anadarko?

18 A. My last conversation was this last Monday.

19 Q. And what was the content of that conversation?

20 A. I'd like to go previous to --

21 Q. Oh, okay.

22 A. -- my last conversation to them. I finally
23 advised their landman that the latter part of October, that
24 we were going to have to go to force pooling because we had
25 been negotiating with them for a very long time and had not

1 gotten a response.

2 I finally filed for force pooling on October 27th
3 for our protection, and I advised their landman of this.
4 And my last conversation was this last Monday, and contrary
5 to their previous statements they said they wanted to be
6 force pooled.

7 Q. Now, you mentioned that you had to go ahead and
8 file the pooling application. What is the reason for that?

9 A. Santa Fe has a December expiration, and we need
10 to get our well drilled.

11 Q. Okay. In your opinion, has Santa Fe made a good-
12 faith effort to obtain the voluntary joinder of Anadarko in
13 this well?

14 A. Yes.

15 Q. Would you please identify Exhibit 4 and discuss
16 the cost of the proposed well?

17 A. Exhibit 4 is a copy of the AFE for the well.
18 It's proposed for a 12,000-foot Morrow test with an
19 estimated dryhole cost of approximately \$734,000 and a
20 completed well cost of \$1,068,000.

21 Q. Are these proposed costs in line with the costs
22 of other wells drilled to this depth in this area of New
23 Mexico?

24 A. Yes.

25 Q. Does Santa Fe Energy request that it be

1 designated operator of the well?

2 A. Yes.

3 Q. Do you have a recommendation for the amounts
4 which Santa Fe should be paid for supervision and
5 administrative expenses?

6 A. We request that \$6000 a month be allowed for the
7 drilling well, and \$600 a month be allowed for a producing
8 well.

9 Q. And are these amounts equivalent to those
10 normally charged by Santa Fe and other operators in this
11 area for wells of this depth?

12 A. Yes.

13 Q. Finally, was Anadarko notified of this hearing?

14 A. Yes, and that's submitted as Exhibit 5. It's an
15 affidavit of notice with copies of the notice letters and
16 certified return receipts attached.

17 Q. Were Exhibits 1 through 5 prepared by you or
18 under your supervision or compiled from company business
19 records?

20 A. Yes.

21 Q. And in your opinion, is the granting of this
22 Application in the interests of conservation and the
23 prevention of waste?

24 A. Yes.

25 MR. BRUCE: Mr. Examiner, I tender Santa Fe's

1 Exhibits 1 through 5.

2 EXAMINER ASHLEY: Exhibits 1 through 5 will be
3 admitted as evidence.

4 EXAMINATION

5 BY EXAMINER ASHLEY:

6 Q. Ms. Muhlinghouse, you said that Anadarko
7 wanted -- wants to be force pooled?

8 A. They told me that on Monday, yes.

9 Q. And how come you guys couldn't reach any kind of
10 a --

11 A. Pardon?

12 Q. They weren't interested in anything other than
13 being force-pooled?

14 A. Yes. We had -- Previous to that, we had -- their
15 landman had told me that they would either participate or
16 negotiate a term assignment. We talked about different
17 terms as to those that were in my first proposal letter,
18 and I thought that's what they were going to do, and that's
19 why I had hesitated to come to force pooling. But we are
20 really getting down to the deadline here now, and they will
21 not do anything, so...

22 Q. Okay. Speaking about that deadline, what is that
23 deadline again? Or you have a lease that expires?

24 A. I have a lease expiration in Section 23 in
25 December, in the mid part of December.

1 Q. Okay, one other question about Exhibit 1.

2 A. Uh-huh.

3 Q. The northeast quarter of Section 23 shows ARCO
4 and Anadarko acreage. Is the ARCO acreage that -- you
5 farmed out that acreage from --

6 A. We are in the process. We have agreed upon
7 terms, and we're in the process of finalizing our
8 paperwork.

9 Q. Okay.

10 A. I do not foresee any problems with that at all.

11 EXAMINER ASHLEY: Okay. I have no further
12 questions. You may be excused.

13 Anything else further in this case?

14 MR. BRUCE: I have Mr. Hayes for a witness.

15 EXAMINER ASHLEY: Yes.

16 MICHAEL D. HAYES,

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

19 DIRECT EXAMINATION

20 BY MR. BRUCE:

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

22 A. Michael D. Hayes.

23 Q. Where do you reside?

24 A. Midland, Texas.

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

1 A. Santa Fe Energy Resources, as a geologist.

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

4 A. Yes, I have.

5 Q. Are you familiar with the geological matters
6 involved in this Application?

7 A. Yes, I am.

8 Q. And when you previously testified, were your
9 credentials as an expert geologist accepted as a matter of
10 record?

11 A. They were.

12 MR. BRUCE: Mr. Examiner, I tender Mr. Hayes as
13 an expert petroleum geologist.

14 EXAMINER ASHLEY: Mr. Hayes is so qualified.

15 Q. (By Mr. Bruce) Mr. Hayes, would you identify
16 Exhibit 6 and discuss the primary zone of interest in Santa
17 Fe's proposed well?

18 A. This exhibit is a structure on the top of the
19 Morrow. There's a contour interval on this map of 50 feet.
20 The proposed location is shown with a red square in the
21 southeast quarter of Section 23 of 18-31.

22 As you can see from the structure map, there's an
23 apparent closure there on the top of the Morrow at a subsea
24 depth of approximately 7450 feet.

25 The green outline is the 320-acre standup that

1 we're proposing for the proration unit.

2 The larger feature in the area -- There's a large
3 structural here with a fault-bounded southwest edge to it.

4 Santa Fe's leasehold position is summarized in
5 here. The stippled acreages are leasehold, the ARCO
6 farmout on this map is shown as a crosshatching in black,
7 and then the Anadarko lease hold is shown as a
8 crosshatching in red.

9 Additionally on here there's the cross-section
10 line, which I'll get to as a further exhibit, that goes
11 A-A', which is roughly a north-south cross-section that
12 runs through the proposed area.

13 Q. Okay, let's move on to the next exhibit, Exhibit
14 7. What does that show?

15 A. This is an isopach map of the middle Morrow
16 sands, which is our primary target in this well. The
17 contour interval here is 10 feet.

18 We feel that these are primarily fluvial-
19 dominated channel sands in the middle Morrow which trend
20 roughly in this area north to south. As one can see,
21 there's a thick that trends roughly north to south that
22 runs along the east half of Section 23.

23 This is a map, actually, of porosity greater than
24 7 percent, the isopach map is. It shows our proposed
25 location. And when you combine this map with our

1 structural position, this is the optimum location, and this
2 most closely matches the geology for the proration unit.

3 Q. How many feet of sand do you hope to get at your
4 proposed location?

5 A. It looks like we've got a good shot at about 35
6 feet of middle Morrow sands.

7 Q. Okay. What is Exhibit 8?

8 A. Exhibit 8 is a production map, just showing the
9 producing horizons in the area. This is a very productive
10 township. There's pay essentially from the Devonian all
11 the way up to the shallower, I believe in the Seven Rivers.

12 I've shown the production data from the Delaware
13 to the Devonian. Our rights basically start in the
14 Delaware here, and that's the reason I've shown those
15 zones.

16 There's some very good shallower-zone horizons,
17 but the direct offset to us I'll just pick up on, where it
18 shows there's Morrow production there. It is from the
19 middle Morrow. It's made approximately 382 million cubic
20 feet of gas.

21 Q. In Section 26?

22 A. In Section 26, that's correct. And almost a BCF
23 of gas from the Atoka, and about 20,000 barrels of liquids.

24 The cross-section line isn't on there, but if you
25 go through the cross-section wells, you'll note that

1 there's about .3 of a BCF from the Morrow there. The
2 second -- The next well to the south has about 1.6 BCF.
3 And you come down into Section 36, and you have
4 approximately 170 million cubic feet of gas.

5 So just on the cross-section line you can see
6 where there's two wells that are uneconomic and one well
7 that's probably marginally economic, 1.6 BCF.

8 Q. Well, let's move on to your cross-section. Could
9 you identify Exhibit 9 for the Examiner, and tell him what
10 it shows about the Morrow in this area.

11 A. It's a stratigraphic cross-section. Let me get
12 this opened up here. I've highlighted it. I'm not sure,
13 Jim, if they've got the highlighted in red or not. There's
14 different -- I'll trade out with you, might be easier.

15 I've just colored in the red the crossplot, the
16 density neutron in the Morrow interval. You can see that
17 there's sand present in the lower and middle Morrow
18 clastics.

19 The cross-section is shown for a couple of
20 reasons. One is to show the zones that we're primarily
21 chasing, which is the middle Morrow in this case. And then
22 it shows my marker that I use for the lower Morrow versus
23 the middle Morrow, to help identify the different zones in
24 there.

25 As one can see in here, the zones are

1 discontinuous. It's typical Morrow intervals. And the
2 zones don't correlate all that well, but the intent,
3 really, is to show the stratigraphy on here, as much as
4 anything.

5 Q. Okay. You say the continuity isn't good in these
6 zones?

7 A. It doesn't appear to be, that's correct.

8 Q. Well, based on what you've said about the offset
9 well production and the lack of continuity, what penalty do
10 you recommend should be assessed against Anadarko if it
11 goes nonconsent?

12 A. I recommend cost plus 200 percent. There's a
13 fair amount of risk in this area, as just -- you can see
14 from the cross-section wells.

15 Q. Were Exhibits 6 through 9 prepared by you or
16 under your supervision?

17 A. Yes, they were.

18 Q. And in your opinion, is the granting of this
19 Application in the interests of conservation and the
20 prevention of waste?

21 A. Yes.

22 MR. BRUCE: Mr. Examiner, I'd move that Santa
23 Fe's Exhibits 6 through 9 be admitted into the record.

24 EXAMINER ASHLEY: Six through 9, you said?

25 MR. BRUCE: Six through 9.

1 EXAMINER ASHLEY: Exhibits 6 through 9 will be
2 admitted as evidence.

3 MR. BRUCE: And that's all I have of this
4 witness.

5 EXAMINATION

6 BY EXAMINER ASHLEY:

7 Q. Mr. Hayes, can you tell me what pools are above
8 this that you might be interested in if this --

9 A. In addition to the Atoka and Morrow, I think
10 there's a reasonable chance -- You can see from the
11 production map there's quite a bit of production in here.
12 I haven't shown a lot of these zones; I've mapped a lot of
13 these zones.

14 It looks like reasonable chances in perhaps the
15 Bone Spring, I'm kind of hoping for maybe something in the
16 Delaware. I think the lower Morrow in this particular
17 wellbore has a fairly low chance of success, based on our
18 regional mapping. Wolfcamp, fairly unlikely. I wouldn't
19 rule it out.

20 There's -- It's a very complicated shelf-edge
21 area with a lot of areas that -- At this time I really
22 don't know what the chances are in some of these other
23 horizons.

24 EXAMINER ASHLEY: I have no further questions.

25 You may be excused.

1 THE WITNESS: Thank you.

2 MR. BRUCE: I have nothing further in this
3 matter, Mr. Examiner.

4 EXAMINER ASHLEY: Case 12,091 will be taken under
5 advisement.

6 (Thereupon, these proceedings were concluded at
7 10:20 a.m.)

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[Faint stamp and handwritten notes]
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[Signature]
Conservation Division

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 23rd, 1998.



STEVEN T. BRENNER
CCR No. 7

My commission expires: October 14, 2002