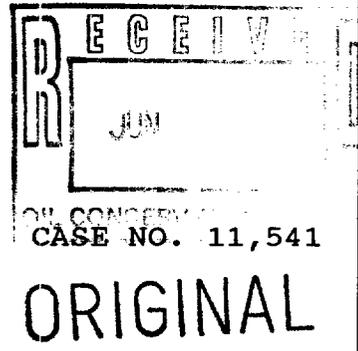


STATE OF NEW MEXICO

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)
)

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: MICHAEL E. STOGNER, Hearing Examiner

May 30th, 1996

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, MICHAEL E. STOGNER, Hearing Examiner, on Thursday, May 30th, 1996, 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.

* * *

I N D E X

May 30th, 1996
 Examiner Hearing
 CASE NO. 11,541

	PAGE
APPEARANCES	3
APPLICANT'S WITNESSES:	
<u>GREGORY E. WILHELM</u> (Landman)	
Direct Examination by Mr. Bruce	5
Examination by Examiner Stogner	11
<u>CURTIS ANDERSON</u> (Geologist)	
Direct Examination by Mr. Bruce	13
Examination by Mr. Kellahin	17
Examination by Examiner Stogner	
REPORTER'S CERTIFICATE	23

* * *

E X H I B I T S

Applicant's	Identified	Admitted
Exhibit 1	6	11
Exhibit 2	7	11
Exhibit 3	9	11
Exhibit 4	10	11
Exhibit 5	14	17
Exhibit 6	15	17
Exhibit 7	15	17

* * *

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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By: JAMES G. BRUCE

FOR MARATHON OIL COMPANY:

KELLAHIN & KELLAHIN
117 N. Guadalupe
P.O. Box 2265
Santa Fe, New Mexico 87504-2265
By: W. THOMAS KELLAHIN

* * *

1 WHEREUPON, the following proceedings were had at
2 9:02 a.m.:

3
4
5
6
7
8 EXAMINER STOGNER: At this time I will call Case
9 Number 11,541, which is the Application of Santa Fe Energy
10 Resources, Inc., for compulsory pooling, Eddy County, New
11 Mexico.

12 At this time I'll call for appearances.

13 MR. BRUCE: Mr. Examiner, Jim Bruce from the
14 Hinkle law firm in Santa Fe, representing the Applicant.

15 I have two witnesses to be sworn.

16 EXAMINER STOGNER: Any other appearances?

17 MR. KELLAHIN: Mr. Examiner, I'm Tom Kellahin of
18 the Santa Fe law firm of Kellahin and Kellahin, appearing
19 on behalf of Marathon Oil Company.

20 I do not have a witness.

21 EXAMINER STOGNER: Any other appearances?

22 At this time will the witnesses for Santa Fe
23 please stand and be sworn at this time?

24 (Thereupon, the witnesses were sworn.)

25 EXAMINER STOGNER: Mr. Bruce?

1 A. Yes.

2 Q. And does your area of responsibility include this
3 part of southeast New Mexico?

4 A. Yes, sir.

5 MR. BRUCE: Mr. Examiner, I tender Mr. Wilhelm as
6 an expert petroleum landman.

7 EXAMINER STOGNER: Are there any objections?

8 MR. KELLAHIN: No objection.

9 EXAMINER STOGNER: Mr. Wilhelm is so qualified.

10 Q. (By Mr. Bruce) Briefly, Mr. Wilhelm, what is it
11 that Santa Fe seeks in this matter?

12 A. Santa Fe seeks an order pooling all interests
13 from the surface to the base of the Morrow formation
14 underlying the north half of Section 26, Township 19 South,
15 Range 28 East, in Eddy County, New Mexico.

16 Q. Would you refer to your Exhibit 1 and describe
17 its contents for the Examiner?

18 A. Yes, sir. Exhibit 1 is a land plat which shows
19 an outline of the 320-acre spacing unit for our well. The
20 north half of Section 26 is comprised of two state leases,
21 one covering the northwest quarter and the other covering
22 the northeast quarter.

23 The proposed well, which is our Fort Sedgewick 26
24 State Com Number 1, is located at a standard location of
25 660 feet from the north line and 1980 feet from the west

1 line of Section 26, and it will be drilled to 11,500 feet.

2 Q. What spacing units do you seek to pool?

3 A. We seek to pool the northeast quarter of the
4 northwest quarter for all formations spaced on 40 acres,
5 the east half of the northwest quarter for all formations
6 spaced on 80 acres, the northwest quarter for all
7 formations spaced on 160 acres and the entire north half
8 for all formations spaced on 320 acres.

9 Q. And who are the parties you seek to pool at this
10 time?

11 A. We seek to pool Marathon Oil Company and ARCO
12 Permian.

13 Q. And combined, what interests do they own and in
14 what lease? Is it spread across the north half or what?

15 A. Marathon owns a 16-percent working interest in
16 the northwest quarter, and ARCO owns a 50-percent working
17 interest in the northwest quarter.

18 Q. Will you please describe Santa Fe's efforts to
19 obtain the voluntary joinder of Marathon and ARCO in this
20 well?

21 A. We have sent letters to all parties on April the
22 12th, a proposal to the working interest owners, together
23 with an AFE requesting that each of these parties join in
24 the well or farm out or sell their interests to Santa Fe.
25 A copy of the proposal letter is marked as Exhibit 2.

1 Subsequent to our April 12th letter, Joe Hammond,
2 who is a petroleum landman for Santa Fe, Midland office,
3 telephoned Marathon and ARCO under dates of April the 19th,
4 April the 23rd, May the 2nd, May the 13th, May the 15th,
5 and I have had conversations with Marathon on May the 22nd
6 and May the 29th. These conversations were seeking to have
7 these people join or farm out or sell their interests to
8 us, to Santa Fe.

9 Q. And what is the current status of the
10 negotiations with Marathon and ARCO?

11 A. Marathon has made a verbal offer to Santa Fe to
12 sell their 16-percent working interest in the northwest
13 quarter of Section 26. That offer has been presented to my
14 management.

15 Q. Okay. Nothing has been signed yet?

16 A. No, sir.

17 Q. And what about ARCO?

18 A. ARCO faxed me a letter on the 29th of May -- the
19 date of the letter is May the 28th of 1996 -- and that
20 letter says that Atlantic Richfield Company hereby elects
21 to participate in the drilling of the referenced well
22 subject to review and approval of your joint operating
23 agreement. And then the letter goes on to say that they'd
24 also like to review and approve the AFE.

25 Q. Okay. But they have not signed the operating or

1 the AFE yet?

2 A. No, sir.

3 Q. Okay. And if you do buy Marathon's interest and
4 if ARCO does sign up, then you will notify the OCD at that
5 time?

6 A. Yes, we will.

7 Q. In your opinion, has Santa Fe made a good-faith
8 effort to obtain the voluntary joinder of Marathon and
9 ARCO?

10 A. Yes.

11 Q. Would you identify Exhibit 3 for the Examiner?

12 A. Exhibit 3 is our AFE for the drilling of this
13 well, and we estimate that the costs to drill a completed
14 Morrow test will be \$837,300.

15 Q. And is this cost in line with those normally
16 encountered in drilling wells to this depth in Eddy County?

17 A. Yes.

18 Q. And do you have a recommendation as to the amount
19 Santa Fe should be paid for supervision and administrative
20 expenses?

21 A. Yes, sir, we proposed a monthly drilling well
22 cost of \$5550 and a producing rate of \$550.

23 Q. And are these amounts comparable to amounts
24 normally charged by Santa Fe and other operators for wells
25 of this depth in this area?

1 A. Yes.

2 Q. And were the parties being pooled notified of
3 this Application and this hearing?

4 A. Yes, sir, submitted as Exhibit 4 is an affidavit
5 of notice with the notice letter and certified return
6 receipts attached.

7 Q. Okay. Now, in this notice letter which was sent
8 out by me, Yates was notified, was it not?

9 A. Yes.

10 Q. And -- But Yates has agreed to join in the well;
11 is that correct?

12 A. Yates has executed and returned our drilling AFE.
13 They have yet to sign an operating agreement.

14 Q. Okay. But you feel confident they will join in
15 the well?

16 A. We do.

17 Q. Were Exhibits 1 through 4 prepared by you or
18 compiled from company business records?

19 A. Yes, sir.

20 Q. And in your opinion is the granting of this
21 Application in the interest of conservation and the
22 prevention of waste?

23 A. Yes, sir.

24 Q. One final question, Mr. Wilhelm. Do you request
25 expedited approval of the order in this case?

1 Q. Okay. Could you give me a breakout of Santa Fe's
2 interest in the northwest quarter?

3 A. Santa Fe owns 8-percent working interest in the
4 northwest quarter.

5 Q. And that is throughout the northwest quarter --

6 A. Yes, sir.

7 Q. -- or is that divided?

8 A. No, sir, throughout.

9 Q. ARCO Permian, is their interest in the northwest
10 quarter or the northeast quarter?

11 A. Their interest is 50-percent in the northwest
12 quarter only.

13 Q. So Marathon and ARCO would have a little bit of
14 interest, regardless of what size the proration unit was,
15 rather than 40, 80, 160 or 320?

16 A. If the well were drilled in the northwest
17 quarter, that is correct.

18 Q. I'm assuming it will be, since that's where
19 you're proposing to drill it.

20 A. Yes, sir, that is correct.

21 Q. And what did you say the expiration date was for
22 the lease that was to expire? At what date?

23 A. June 30th, 1996.

24 EXAMINER STOGNER: Are there any other questions
25 of this witness?

1 MR. BRUCE: No, sir.

2 EXAMINER STOGNER: Mr. Wilhelm may be excused.

3 Mr. Bruce?

4 MR. BRUCE: Call Mr. Anderson to the stand.

5 CURTIS ANDERSON,

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

8 DIRECT EXAMINATION

9 BY MR. BRUCE:

10 Q. Would you please state your name and city of
11 residence for the record?

12 A. My name is Curtis Anderson. I live in Midland,
13 Texas.

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

15 A. I'm a geologist for Santa Fe Energy Resources.

16 Q. Have you previously testified before the
17 Division?

18 A. Yes, I have.

19 Q. As a petroleum geologist?

20 A. Yes.

21 Q. And were your credentials as an expert geologist
22 accepted as a matter of record?

23 A. Yes.

24 Q. And are you familiar with the geological matters
25 pertaining to this Application?

1 A. Yes, I am.

2 MR. BRUCE: Mr. Examiner, I would tender Mr.
3 Anderson as an expert petroleum geologist.

4 EXAMINER STOGNER: Are there any objections?

5 MR. KELLAHIN: No objection.

6 EXAMINER STOGNER: Mr. Anderson is so qualified.

7 Q. (By Mr. Bruce) Mr. Anderson, would you refer to
8 your Exhibit 5 and discuss the zones of interest for this
9 proposed well?

10 A. Okay, Exhibit Number 5 is a production map of
11 this particular area, we're going to drill the Fort
12 Sedgewick Number 1 well. The north half of Section 26 is a
13 320-acre proration unit, and you can see the location as a
14 red box 660 from the north, 1980 from the west.

15 The production is indicated by zone for each well
16 on this map. One thing that's not on the legend, the
17 numbers that are in green are oil production, red is gas
18 production, and blue is water production for that
19 particular zone and for that particular well, cumulative
20 production through March of 1996.

21 This map represents the different zones that
22 produce from the various pools that are located within this
23 particular area and are outlined on the case description.

24 Q. And what is the target zone for the well?

25 A. The target zone for this particular well is what

1 I call Cisco/Canyon. In this area it's called the upper
2 Pennsylvanian, and it would be Winchester-Upper
3 Pennsylvanian Gas Pool.

4 Q. But you are going all the way down to the Morrow?

5 A. That's correct.

6 Q. Would you refer to Exhibit 6, identify that for
7 the Examiner, and discuss the primary zone of interest in
8 this map?

9 A. Exhibit Number 6 is an isopach map of the
10 productive zone within the upper Pennsylvanian, or
11 Cisco/Canyon, within this particular area.

12 Now, I might refer to Exhibit Number 7, which is
13 a type log of the Cisco/Canyon interval. On that type log
14 -- That type log is from a well located in the north half
15 of Section 25 and is indicated on the isopach map. The
16 target zone is highlighted in blue on the type log and is
17 designated as C1 interval.

18 Now, Exhibit Number 6 is an isopach of the clean
19 carbonate within that C1 interval, and you can see the
20 wells that are colored in blue and highlighted with large
21 production numbers located in the south half of 24, and in
22 Section 25 and in the north half of 36. These wells
23 produce from the C1 zone, which is interpreted to be a
24 carbonate detrital located in front of the Cisco/Canyon
25 shelf. Deposition was generally from the north to south.

1 As you move to the left on this exhibit, you can
2 see that this particular zone thins down and, further to
3 the left or the west, opens again into another development
4 of this particular interval, in which the proposed location
5 is located.

6 That particular pod is pretty much surrounded by
7 what I call show wells. The show wells are colored half
8 blue. I've designated them as show wells, whether it was
9 from a hydrocarbon show or whether there was an electric
10 log run in that particular wellbore that indicated the zone
11 may be productive. Now, these are still show wells,
12 because they are producing from deeper horizons and have
13 not yet come to this particular zone.

14 This is the -- Although we're taking the well to
15 the Morrow formation, which is about 11,500 TD, this zone
16 is at 9700 feet. We consider this to be the primary
17 target, what we generated our economics to drill this
18 prospect. We are aware of the other zones that produce in
19 this area and treat them as secondary objectives.

20 Q. Okay, but looking at your Exhibit Number 5, Mr.
21 Anderson, although there is a substantial amount of
22 production to the south and to the west, there's a couple
23 of sections around your well that have very little
24 production at this time; is that correct --

25 A. That's correct.

1 Q. -- from any zone?

2 Based on that, what penalty do you recommend, if
3 there are any nonconsenting owners in this well?

4 A. The cost plus 200 percent.

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

8 A. Yes.

9 Q. And were Exhibits 5, 6 and 7 prepared by you or
10 under your direction?

11 A. Yes.

12 MR. BRUCE: Mr. Examiner, at this time I would
13 move the admission of Santa Fe's Exhibits 5, 6 and 7.

14 EXAMINER STOGNER: Exhibits 5, 6 and 7 will be
15 admitted into evidence.

16 MR. BRUCE: Pass the witness.

17 EXAMINER STOGNER: Thank you, Mr. Bruce.

18 Mr. Kellahin?

19 MR. KELLAHIN: Thank you, Mr. Examiner.

20 EXAMINATION

21 BY MR. KELLAHIN:

22 Q. Mr. Anderson, did I correctly understand you to
23 tell us that your economics for drilling this well were
24 based upon the assessment of potential production out of
25 the Cisco only?

1 A. That's correct.

2 Q. All right. So you weren't adding any potential
3 reserves out of any of these other reservoirs?

4 A. No, sir.

5 Q. Let's start with some of the other reservoirs, so
6 I understand --

7 A. Okay.

8 Q. -- what secondary opportunity you might have.
9 The Application lists a lot of possibilities in this area.
10 What, in your opinion, is the likely probability that you
11 would obtain a successful Delaware well?

12 A. Very limited in this particular location. The
13 Outpost Delaware field is located just to the east, and
14 there's actually three wells in Section 25. Those wells
15 are not commercial.

16 The Delaware at this particular position is right
17 at the truncation or pinchout, and typical production along
18 that particular hinge line has not been good.

19 Q. I'm looking for a reference on your Exhibit 5,
20 and I see there's some shallower wells in here that are not
21 identified by depth. Do you have any Bone Springs wells in
22 here?

23 A. The Bone Springs does produce to the south, in --

24 Q. Oh, I see a caption down to the south, yes, sir.

25 A. Yes, sir.

1 Q. All right. What's your assessment of the
2 probability of having a successful Bone Springs well at
3 this location?

4 A. I would say the Bone Springs, we are looking
5 forward to maybe getting a decent show out of it, although
6 highly risky. We are again at the truncation here, but we
7 have some circumstances that make that a legitimate
8 secondary objective.

9 Q. Would you consider the Delaware to be a
10 legitimate secondary objective here?

11 A. No, sir.

12 Q. How about the Queen-Grayburg-San Andres?

13 A. I feel like we're just basinward of that. Now,
14 all the oil wells that you see just to the northwest
15 comprise those fields, you see the shallow dryholes that
16 exist in our section and in Section 23, pretty much define
17 the southeastward limit of that producing field. We really
18 don't hold much hope for it.

19 Q. How about when you get down to the Wolfcamp? I
20 see some Wolfcamp wells to the south; there's apparently
21 one north of you. What's your assessment of the
22 opportunity for Wolfcamp production?

23 A. Sure, within at least a mile and a half of this
24 particular location, there's not any commercial Wolfcamp.
25 The wells that do produce have been limited.

1 Now, you get further south, down in the next
2 township, there's some excellent production. We hope that
3 we expand and get a thicker reservoir here, as far as
4 Wolfcamp, but it's still highly risky.

5 The wells in Section 26, the one located in the
6 east half is indicated a Wolfcamp producer, and you can see
7 it just produced 12 million cubic feet before it was
8 plugged out.

9 The well in the south half has just been finished
10 in the last six months by Chi Energy. I do not have
11 production history on that well. It is producing from the
12 Wolfcamp and, from what I have heard, is holding up. It's
13 still -- has not produced long enough to be determined
14 whether it's going to be commercial or not.

15 Q. When we look at the spacing unit in the north
16 half of 26, we have discussed the Wolfcamp production out
17 of the well in the southeast of the northeast. What's the
18 current status of that well?

19 A. That well is plugged and abandoned.

20 Q. All right, so the whole spacing unit, now, is
21 available at any depth?

22 A. That's correct.

23 Q. What's your assessment of the Strawn opportunity
24 for a well at this location?

25 A. The Strawn has been very scattered in this area.

1 There is some production to the south. You're on the back
2 edge of the productive carbonate shelf at this particular
3 location, where it grades into the continental-type
4 deposits.

5 You do find some productive carbonates in the
6 area. In fact, a recent well drilled by Occidental in the
7 northeast of the southeast of Section 34, approximately a
8 mile and a half to the south, did have an accumulation of
9 Strawn.

10 You can see that in Section 34 there are three
11 deep wells, and now four deep wells. In Section 35 there
12 are four deep wells. Out of those eight deep wells, one of
13 them made a Strawn producer. So it's highly risky.

14 Q. How about the Atoka?

15 A. Atoka is -- There are some sands in this area
16 generally that are noncommercial.

17 Q. And then finally the Morrow?

18 A. The Morrow, this particular area, the Morrow
19 production is indicated on here. You do find some 2- to
20 3-BCF wells which are, of course, commercial wells, again
21 located in Section 26. Neither one of those particular
22 wells had commercial developments of Morrow sand.

23 Q. Rank your opportunities here for me, Mr.
24 Anderson. The Cisco is your best -- your first, primary
25 objective?

1 A. That's correct.

2 Q. And in terms of ranking these others as secondary
3 objectives, in what order of preference would you place
4 them?

5 A. I would put them to Morrow and then Bone Springs
6 and then possibly Wolfcamp.

7 MR. KELLAHIN: All right, sir. Thank you very
8 much, Mr. Examiner.

9 EXAMINER STOGNER: Thank you, Mr. Kellahin.
10 Mr. Bruce, any other questions?

11 MR. BRUCE: No, sir.

12 EXAMINER STOGNER: Does anybody else have any
13 other questions of this witness?

14 You may be excused.

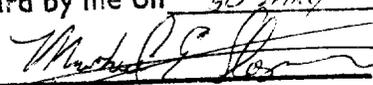
15 Do you have anything further, Mr. Bruce?

16 MR. BRUCE: No, sir.

17 EXAMINER STOGNER: If nobody else has anything
18 further in Case Number 11,541, this case will be taken
19 under advisement.

20 (Thereupon, these proceedings were concluded at
21 9:29 a.m.)

22 I do hereby certify that the foregoing is
23 a complete record of the proceedings in
24 the Examiner hearing of Case No. 11541,
25 heard by me on 30 May 1996.


_____, Examiner
Oil 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 June 2nd, 1996.



 STEVEN T. BRENNER
 CCR No. 7

My commission expires: October 14, 1998