

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

CASE 10,011

EXAMINER HEARING

IN THE MATTER OF:

Application of Santa Fe Energy Operating Partners,
L.P., for an Unorthodox Gas Well Location, Lea
County, New Mexico.

TRANSCRIPT OF PROCEEDINGS

BEFORE: DAVID R. CATANACH, EXAMINER

STATE LAND OFFICE BUILDING

SANTA FE, NEW MEXICO

July 25, 1990

ORIGINAL

A P P E A R A N C E S

FOR THE DIVISION:

RAND L. CARROLL
Attorney at Law
Natural Gas Programs
P.O. Box 2088
Room 206, State Land Office Building
Santa Fe, New Mexico 87504

FOR THE APPLICANT:

HINKLE, COX, EATON, COFFIELD & HENSLEY
Attorneys at Law
By: JAMES BRUCE
500 Marquette, N.W.
Albuquerque, New Mexico

ALSO PRESENT:

JAMES MORROW
Chief Engineer
Oil Conservation Division
State Land Office Building
Santa Fe, New Mexico 87504

* * *

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Appearances

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Exhibits

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GARY GREEN

Direct Examination by Mr. Bruce

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Examination by Examiner Catanach

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ROBERT C. SEILER

Direct Examination by Mr. Bruce

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Examination by Mr. Catanach

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Certificate of Reporter

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* * *

E X H I B I T S

APPLICANT'S EXHIBITS:

Exhibit 1

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Exhibit 2

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Exhibit 3

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Exhibit 4

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Exhibit 5

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Exhibit 6

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Exhibit 7

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1 WHEREUPON, the following proceedings were had
2 at 8:46 a.m.:

3 EXAMINER CATANACH: At this time we'll call
4 Case 10,011.

5 MR. CARROLL Application of Santa Fe Energy
6 Operating Partners, Limited Partnership, for an
7 unorthodox gas well location, Lea County, New Mexico.

8 EXAMINER CATANACH: Are there appearances in
9 this case?

10 MR. BRUCE: Mr. Examiner, my name is Jim
11 Bruce from the Hinkle law firm in Albuquerque,
12 representing the Applicant, and I have two witnesses to
13 be sworn.

14 EXAMINER CATANACH: Any other appearances?
15 (Thereupon, the witnesses were sworn.)

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

19 DIRECT EXAMINATION

20 BY MR. BRUCE:

21 Q. Mr. Green would you please state your full
22 name and city of residence?

23 A. My name is Gary Green. I live in Midland,
24 Texas.

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

1 A. Santa Fe Energy Operating Partners, LP, as a
2 landman.

3 Q. And have you previously testified before the
4 OCD and had your credentials accepted as a matter of
5 record?

6 A. Yes, I have.

7 Q. And are you familiar with the land matters
8 involved in Case 10,011?

9 A. Yes, I am.

10 MR. BRUCE: Mr. Examiner, is the witness
11 considered acceptable?

12 EXAMINER CATANACH: He is.

13 Q. (By Mr. Bruce) Mr. Green, briefly what does
14 Santa Fe seek in this case?

15 A. Santa Fe seeks approval of an unorthodox gas
16 well location for a well to be drilled 1980 feet from
17 the south line, 990 from the west line of Section 27,
18 Township 21 South, Range 32 East, in Lea County, with
19 the south half of Section 27 to be dedicated to Santa
20 Fe's Bilbrey Federal "27A" Well Number 1.

21 Q. Would you please refer to Exhibit Number 1
22 and describe the offset owners to this well?

23 A. Exhibit Number 1 is a land plat showing the
24 offset operators to the south to be Collins and Ware in
25 the northeast quarter of Section 34; northwest quarter

1 of Section 34 to be open federal acreage; Section 33 to
2 be Texaco, Inc.; offset to the east in the south north
3 half of Section 35 to be open BLM acreage; and Section
4 26 owned by Conoco, Inc.

5 Q. Okay. And before we move on, what is the
6 reason for a laydown unit for this well?

7 A. Section 27 contains two separate federal
8 leases, being the north half of the section and south
9 half of Section 27.

10 We've been advised by the BLM that unless we
11 could prove specific geological reasons that there
12 would only be one well location in that section, we
13 would have to drill two wells. They would not let us
14 communitize those two leases, because we had enough
15 acreage in each lease to drill a well on.

16 Q. Okay. Were the offset operators or owners
17 notified of the hearing today?

18 A. Yes, they were.

19 Q. And would you explain what is contained in
20 Exhibit Number 2?

21 A. Exhibit Number 2 contains several letters,
22 the first being dated June 27th, 1990, letter to
23 Texaco, Collins and Ware, the BLM and Yates Petroleum,
24 advising them that we were going to drill -- or
25 proposing to drill an unorthodox location, asks them if

1 they did not have any objections to sign a waiver, and
2 also advising them that we were going to apply for
3 administrative approval for this location, but we were
4 also going to apply for an OCD hearing July 25th.

5 The first letter to Texaco, we received their
6 waiver back on the 23rd, which is the second letter,
7 where they have -- do not have any objections to our
8 location.

9 The third letter, Collins and Ware signed a
10 letter where they have no objection to our location.

11 And then letters dated July 2nd, providing
12 the offset operators with the Application and notice of
13 our hearing.

14 Q. Was that done by certified mail?

15 A. Yes, it was. There is a letter dated July
16 6th, advising Santa Fe that they had assigned these
17 leases to Conoco, Inc.

18 Q. That's Yates Petroleum?

19 A. Yates Petroleum Corporation.

20 Q. And they had previously owned the acreage in
21 Section 26?

22 A. They had previously owned the acreage, yes,
23 in Section 26.

24 Letters dated July 6 to Conoco asking them
25 for a waiver and also providing them with copies of the

1 Application for the hearing.

2 Q. So when you originally gave notice for the
3 hearing, your records showed that Yates owned the
4 acreage in Section 26; is that correct?

5 A. Yes, they did.

6 Q. And Yates then informed you that they had
7 assigned it to Conoco; is that correct?

8 A. Yes.

9 Q. Now, does Santa Fe have lease-expiration
10 concerns regarding this well?

11 A. Yes, they do. The south half of Section 27
12 is a federal lease that expires 8-31-90.

13 Q. And therefore you need to have an Order
14 approved in time for you to commence drilling by that
15 date; is that correct?

16 A. Yes, we do.

17 Q. In your opinion, is the granting of this
18 Application in the interest of conservation, the
19 prevention of waste and the protection of correlative
20 rights?

21 A. Yes, it is.

22 Q. And were Exhibits 1 and 2 prepared by you or
23 under your direction?

24 A. Yes, they were.

25 MR. BRUCE: Mr. Examiner, I move the

1 admission of Exhibits 1 and 2.

2 EXAMINER CATANACH: Exhibits 1 and 2 will be
3 admitted as evidence.

4 EXAMINATION

5 BY EXAMINER CATANACH:

6 Q. Mr. Green, have you had any response from
7 Conoco at all?

8 A. I have talked to Conoco a number of times on
9 the telephone, first of all, after I got my letter back
10 from Yates, and we went for a couple of days. They
11 couldn't identify the property as being owned by
12 Conoco.

13 My last conversation with them, I asked them
14 to sign a letter. They said that they didn't have a
15 problem, but it would probably take more than a week --
16 and this was the end of last week -- take more than a
17 week to get it before the person to sign it that needed
18 to sign it.

19 Q. And their acreage is in Section 23 and 26?

20 A. Yes, sir.

21 Q. And that's all they have?

22 A. Yes.

23 Q. Okay. What's the current status of Section
24 -- the east half of Section 28?

25 A. The east half of Section 28 is HBP. Santa Fe

1 drilled and operates the Bilbrey "28" Federal Number 1
2 well.

3 Q. Is that a Pennsylvanian well?

4 A. It's a Morrow well.

5 Q. Morrow well? Is that common interest between
6 that well and the proposed well? Would that be --

7 A. Yes.

8 Q. -- common interest?

9 A. Common interest, common working interest,
10 Santa Fe is the operator, C and G and Kerr-McGee own
11 interest in there. Santa Fe owns 44-something percent,
12 C and G owns 44, Kerr-McGee owns 10 percent in all of
13 28, 27, 22, and 21.

14 Q. Is that well in 28 -- that's also federal?

15 A. Yes.

16 Q. Federal lease, okay. Now, the part about
17 drilling two wells in the BLM, could you go over that
18 again?

19 A. We have been advised a number of times by the
20 BLM when we've asked to communitize to federal leases,
21 the response has been that if there is enough acreage
22 in a lease then they will not allow you to communitize
23 that with another lease, that you will have one lease
24 well versus one well holding two leases, basically,
25 what they're telling us, unless you can prove

1 specifically that that's the only way you can get the
2 reserves and there is no other opportunity for reserves
3 on the other part of the leases.

4 MR. BRUCE: Mr. Examiner, there is a federal
5 regulation that states that too. I don't have it
6 handy, but there is a regulation stating that same
7 thing.

8 EXAMINER CATANACH: Okay. Could you get that
9 for me?

10 MR. BRUCE: Sure.

11 EXAMINER CATANACH: Get me a copy of that?
12 That's all the questions I have of the
13 witness.

14 MR. MORROW: Just for my information, I
15 wanted to ask why that was an issue. Do you normally
16 have standup units in the -- Do the Rules require that
17 in this area, or maybe all over the state? What's the
18 situation on that?

19 MR. BRUCE: For -- ?

20 MR. MORROW: I guess, clarify for me the
21 reason for your question of Mr. Green, why was this a
22 laydown unit?

23 MR. BRUCE: Because if this was a standup
24 unit, the well would be at an orthodox location.

25 MR. MORROW: Okay, thank you.

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ROBERT C. SEILER,

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

DIRECT EXAMINATION

BY MR. BRUCE:

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

A. Robert C. Seiler, Midland, Texas.

Q. And who are you employed by and in what
capacity?

A. Santa Fe Energy Operating Partners, L.P. I'm
a senior staff geologist.

Q. And have you previously testified before the
OCD as a geologist?

A. Yes, I have.

Q. And are you familiar with the geological
matters related to this Application?

A. Yes, I am.

Q. And does this Application cover the area
which you are responsible for at Santa Fe?

A. Yes.

MR. BRUCE: Mr. Examiner, is the witness
acceptable?

EXAMINER CATANACH: Yes, sir.

Q. (By Mr. Bruce) Mr. Seiler, would you please

1 refer to Exhibit Number 3 and describe its contents for
2 the Examiner?

3 A. Exhibit Number 3 is a production map for a
4 portion of Township 21 South, Range 32 East, centered
5 around Section 27 of that township.

6 Shown on this map in the center with
7 stippling and outlined by a dashed line is the laydown
8 proration unit for the south half of 27.

9 Additionally shown on here are the producing
10 wells in the area. All of them on this plat that do
11 produce are Morrow producers, as indicated by the red
12 coloring.

13 Additionally shown in the red square is the
14 proposed or requested exception location, being 990
15 from the west and 1980 from the south of 27.

16 Q. Okay. Would you please refer to Exhibit
17 Number 4 and discuss the structure in this area?

18 A. Exhibit Number 4 is a structure map of that
19 same plat area that we saw in Section -- or Exhibit 3.
20 It is a structural map that is drawn on the top of the
21 lower Morrow. That horizon, mapped horizon, will be
22 identified on the next exhibit, being the cross-
23 section.

24 The structure in the area basically shows a
25 southerly dip, a dip at the rate of about 200 feet per

1 mile.

2 Q. Okay, would you please move on, then, to the
3 cross-section you just mentioned and discuss its
4 contents?

5 A. The cross-section is labeled cross-section --
6 Stratigraphic Cross-Section, B/B-prime. The index, the
7 line of section, then, is shown on the maps, Number 4
8 and then the subsequent map.

9 A little large, but in an attempt to show the
10 detail for the primary objectives we have chose this
11 scale.

12 This is a cross-section through, then, four
13 -- three wells and our proposed location, showing the
14 Morrow section.

15 The various horizons of interest are
16 identified. The shallowmost is identified as the
17 Bilbrey sand.

18 Coming on down, then, deeper through the
19 various Morrow sands labeled C, E, F and G and so on,
20 down to the top of the lower Morrow which, as I made
21 reference before, is the level on which the structure
22 map was drawn.

23 And then there's one additional Morrow sand
24 identified called the lower Morrow A-1 sand.

25 Q. What is the approximate depth of your

1 proposed well?

2 A. We are proposing a 14,800-foot well.

3 Q. Okay. Please move on to Exhibits 6 and 7 and
4 discuss those.

5 A. Exhibit Number 6 is an isopach map of the
6 shallowest sand that's been highlighted on the cross-
7 section, being the -- what we've identified and called
8 the Bilbrey sand. It is a net isopach map, porosity
9 equal to or greater than 6 percent cross-plot neutron
10 density.

11 The map indicates a sand trend or a sand --
12 we envisioned as a sandbar trending northeast to
13 southwest with a maximum thickness of 20 feet. That's
14 been observed in the well in Section 33, the Texaco
15 Bilbrey "33" Fed Number 1.

16 The sand trends, then, from the Texaco well
17 back to the northeast, through the area of our proposed
18 location.

19 Highlighted on the map by the red symbol on
20 the map is the only producer in this sand at this time,
21 which is the well in the west half of Section 28, that
22 being the Santa Fe Bilbrey "28A" Fed Number 1. This
23 sand, however, is present in the well in Section --
24 east half of Section 28, being the Bilbrey "28" Fed
25 Number 1.

1 That sand was DST'd in that well, as
2 indicated on the map, and had a flow rate of over 28
3 million a day.

4 I should point out that there is a location
5 spotted in Section 22 by double circles, that being the
6 Santa Fe Bilbrey "22" Fed Number 1. That well is
7 currently drilling in the Delaware. It has not reached
8 any of these horizons yet.

9 The sand trend then indicated shows that at
10 our proposed location, our exception proposed location
11 of 990 from the west line, we would anticipate a sand
12 thickness of 14 to 15 feet.

13 If we were to back off to a standard location
14 of 1980 from the west line, we would have considerably
15 thinner sand thickness, in the range of less than 10
16 feet. And due to the lack of control to the east and
17 northeast, we feel that that's a much riskier situation
18 and therefore are asking for the exceptional location
19 of 990 from the west line.

20 Q. Okay. Would you move on to Exhibit 7 and
21 discuss the A-1 sand?

22 A. 7, Exhibit 7, is a map of the lower Morrow A-
23 1 sand, again identified on the cross-section.

24 This sand is somewhat different in that we
25 envision this as being an effluvial setting in a

1 channel that basically was north-south or a little bit
2 northeast-southwest.

3 This sand is quite a bit more elusive, if you
4 will. We have missed it in a number of wells.

5 However, we did encounter it in the well in
6 the west -- excuse me, east half of Section 28, had 12
7 feet of sand with 11 feet of net, and as indicated by
8 the red symbol, this well is producing from this A-1
9 sand. The sand was not present in the 28-A, nor was it
10 present in the Santa Fe well in Section 21.

11 The proposed location 990 from the east --
12 sorry, the west line of Section 27 -- indicates that we
13 would have a sand thickness of nine to ten feet,
14 whereas if we were 1980 from the west line or at a
15 standard location, from the mapping we would just
16 barely see the sand, or we would miss it totally.

17 It's, once again, very risky with not much
18 control back to the north, and therefore we feel this
19 also justifies another reason to ask for an exception
20 location 990 from the west.

21 Q. Okay. And is Santa Fe requesting that this
22 Application be approved without a penalty in
23 production?

24 A. Yes, we are, the reason being that there are
25 no objections from any offset operators that would be

1 affected directly.

2 Texaco would be the closest one in the
3 direction that we have moved, and they have signed the
4 waiver, so we feel there's no problem.

5 Q. And as Mr. Green has testified, the acreage
6 ownership is common in Sections 27 and 28; is that
7 correct?

8 A. That's correct.

9 Q. Were Exhibits 3 through 7 prepared by you or
10 under your direction?

11 A. Yes, they were.

12 Q. In your opinion, is the granting of this
13 Application in the interest of conservation, the
14 prevention of waste and the protection of correlative
15 rights?

16 A. Yes.

17 MR. BRUCE: Mr. Examiner, I move the
18 admission of Exhibits 3 through 7.

19 EXAMINER CATANACH: Exhibits 3 through 7 will
20 be admitted as evidence.

21 EXAMINATION

22 BY EXAMINER CATANACH:

23 Q. Mr. Seiler, on your Exhibit Number 4, your
24 structure map --

25 A. Yes, sir.

1 Q. -- If you were to move to a standard
2 location, you wouldn't lose anything structurally?

3 A. No, sir, you would be moving along strike, so
4 you would not.

5 Q. Okay. But structure isn't a big factor in
6 this location?

7 A. To date in this area we have not see water in
8 any of the primary zones, so we don't see that as a
9 concern.

10 Q. Now, the well in the east half of Section 28,
11 that's currently only producing from the A interval?
12 A-1 sand?

13 A. That's correct. And that's indicated on the
14 cross-section, the perforations are shown on the cross-
15 section and the description of the exact footages and
16 what -- how it tested and so on.

17 Q. Will that well be re- -- or completed in the
18 Bilbrey sand as well?

19 A. The well is performing extremely well, now,
20 in the A-1 sand, and our current plans are for us to
21 stay there.

22 But certainly at some time we would
23 consider -- at depletion we would consider moving
24 uphole and getting all the objectives, and the Bilbrey
25 sand would certainly be one of them.

1 Q. Now, are there any wells in this particular
2 sand that have encountered less than ten feet of sand,
3 in the Bilbrey?

4 A. Well, yes -- Well, we missed it totally in
5 Section 21.

6 Q. 21.

7 A. The positive control to the north actually
8 ends in Section 28 at this time, and you might say the
9 jury is still out on 22. We're drilling that well now,
10 hoping that that sand will extend out there.

11 Q. How would you think that the sand thickness
12 that you encounter would relate to the productivity of
13 the well?

14 A. Relative to the A-1 sand, there's the --
15 There is variability as -- I'm talking of the A-1 sand.
16 I'm sorry, was that your reference to the A-1 sand or
17 the Bilbrey sand?

18 Q. Either.

19 A. Either, okay. The A-1 sand can be a problem
20 as indicated by the recent Texaco well in Section 33
21 where they did indeed have 12 feet of sand gross but
22 had zero net.

23 Fortunately, they had some middle Morrow
24 Sands, the E and the F and so on, and were able to make
25 a good completion there in those sands. But the A-1

1 sand was basically tight.

2 The Bilbrey sand to date, when encountered
3 and tested, has proven to be productive. There are
4 some older wells that they made lower completions and
5 haven't tested the Bilbrey sand yet, although it looks
6 good on logs.

7 Q. Do these Morrow channel sands generally trend
8 this direction?

9 A. Generally, in this area, from the north to
10 the south. And, in that we are in Lea County, you can
11 see an influence from the northeast as well, coming off
12 the platform.

13 So I would say in general, yes, the channel
14 sands would trend roughly as shown.

15 Q. Now, in the Bilbrey sand, a move to a
16 standard location would -- you would encounter probably
17 less than 10 feet of sand. Is it Santa Fe's opinion
18 that they probably couldn't make an economical well out
19 of that, or --

20 A. No, if indeed we got the 10 feet, I think we
21 would probably do okay.

22 As indicated by the completion, we've got 13
23 feet that's performing very, very well. And the 11
24 feet that we saw on the 28 tested very fine. Ten feet
25 would probably be okay.

1 The concern is, sir, is the map is drawn, if
2 you will, somewhat optimistically, with not a lot of
3 control to bring that much sand thickness to the north
4 and the east. With the existing control, it could be
5 easily contoured with virtually zero at that location,
6 although I don't think that's the case.

7 So it's just trying to increase our odds of
8 finding sufficient sand. It could be 10 or less at the
9 proposed location that we've asked for.

10 Q. Essentially the same situation in the A-1
11 sand?

12 A. Yes. I think, though, there it's perhaps
13 even a little more pessimistic, just that we haven't
14 seen the total thicknesses.

15 I mean, we saw 20 feet within a mile of our
16 location in the Bilbrey sand in the Texaco well. We
17 have never seen a thickness of that magnitude in this
18 A-1 sand. It just isn't that thick. And therefore I
19 don't think it would be that wide, if you will, of a
20 deposit.

21 And so I think the chances are even riskier,
22 if I could say it that way, for the A-1 sand at a
23 standard location, and same, actually, for the proposed
24 location.

25 EXAMINER CATANACH: I have no further

1 questions.

2 The witness may be excused.

3 Anything further in this case?

4 MR. BRUCE: No, sir.

5 EXAMINER CATANACH: Case 10,011 will be taken
6 under advisement.

7 (Thereupon, these proceedings were concluded
8 at 9:11 a.m.)

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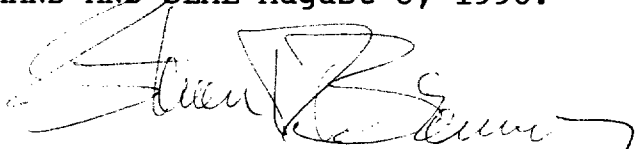
CERTIFICATE OF REPORTER

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

I, Steven T. Brenner, Certified Shorthand 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 August 8, 1990.


STEVEN T. BRENNER
CSR No. 106

My commission expires: October 14, 1990

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 10011, heard by me on July 25 1990.


David R. Cotnam, Examiner
Oil Conservation Division