

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:) CASE NO. 10690

APPLICATION OF SANTA FE ENERGY
OPERATING PARTNERS, L.P.

REPORTER'S TRANSCRIPT OF PROCEEDINGS

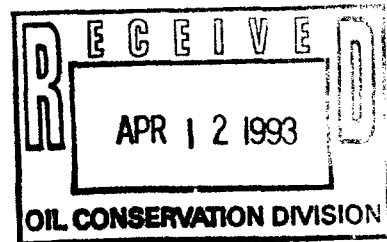
EXAMINER HEARING

BEFORE: Michael E. Stogner, Hearing Examiner

March 18, 1993

Santa Fe, New Mexico

This matter came on for hearing before the
Oil Conservation Division on March 18, 1993, at the
Oil Conservation Division Conference Room, State Land
Office Building, 310 Old Santa Fe Trail, Santa Fe, New
Mexico, before Deborah O'Bine, RPR, Certified Court
Reporter No. 63, for the State of New Mexico.



I N D E X

March 18, 1993
 Examiner Hearing
 CASE NO. 10690

APPEARANCES PAGE
3

SANTA FE ENERGY'S WITNESSES:

CURTIS SMITH

Examination by Mr. Bruce 5

Examination by Examiner Stogner 9

DONALD ECKERTY

Examination by Mr. Bruce 11

Examination by Examiner Stogner 15

REPORTER'S CERTIFICATE 21

E X H I B I T S

	ID	ADMTD
Exhibit 1	6	9
Exhibit 2	6	9
Exhibit 3	7	9
Exhibit 4	8	9
Exhibit 5	8	9
Exhibit 5A	10	10
Exhibit 6	12	15
Exhibit 7	12	15
Exhibit 8	13	15
Exhibit 9	15	15

A P P E A R A N C E S

FOR THE DIVISION: ROBERT G. STOVALL, ESQ.
General Counsel
Oil Conservation Commission
State Land Office Building
310 Old Santa Fe Trail
Santa Fe, New Mexico 87501

FOR THE APPLICANT: HINKLE, COX, EATON, COFFIELD
& HENSLEY
P.O. Box 2068
Santa Fe, New Mexico 87504
BY: JAMES BRUCE, ESQ.

1 EXAMINER STOGNER: With that, we'll proceed
2 on and call next case, No. 10690.

3 MR. STOVALL: Application of Santa Fe
4 Energy Operating Partners, L.P., for a unit agreement,
5 Eddy County, New Mexico.

6 EXAMINER STOGNER: Call for appearances.

7 MR. BRUCE: Mr. Examiner, Jim Bruce from
8 the Hinkle Law Firm in Santa Fe representing the
9 applicant. We have two witnesses to be sworn.

10 EXAMINER STOGNER: Any other appearances?
11 Will the witnesses please stand to be
12 sworn.

13 (Witnesses sworn.)

14 EXAMINER STOGNER: Let's take about a five-
15 minute recess.

16 (Whereupon, a recess was taken.)

17 EXAMINER STOGNER: Hearing will come to
18 order. I don't know if I have, but I will call Case
19 No. -- we have called it?

20 MR. STOVALL: Did we swear the witnesses?
21 We did swear the witnesses. I thought we did.

22 THE WITNESS: Yes.

23 EXAMINER STOGNER: So we've done
24 everything. Okay. Mr. Bruce.

25 CURTIS SMITH,

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

3 EXAMINATION

4 BY MR. BRUCE:

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

7 A. My name is Curtis Smith. I live in
8 Midland, Texas.

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

10 A. I work for Santa Fe Energy Resources, Inc.,
11 and I am a landman.

12 Q. Have you previously testified before the
13 Division as a petroleum landman?

14 A. Yes, I have.

15 Q. And your credentials were accepted as a
16 matter of record?

17 A. Yes, they were.

18 Q. Were you in charge of the land matters
19 involved in the formation of the Mosley Canyon Unit?

20 A. Yes, I have been.

21 MR. BRUCE: Mr. Examiner, I tender Mr.
22 Smith as an expert landman.

23 EXAMINER STOGNER: Mr. Smith is so
24 qualified.

25 Q. (BY MR. BRUCE) Mr. Smith, what does Santa

1 Fe seek in this case?

2 A. Santa Fe seeks the formation of an
3 exploratory unit covering 2,402.38 acres of federal,
4 state, and fee land located in Eddy County, New
5 Mexico.

6 Q. And what land is in the unit, and I refer
7 you to Santa Fe Exhibit 1?

8 A. The land within the unit is the south half
9 of the north half and south half of Section 3, all of
10 Section 4, all of Section 9, and all of Section 10 of
11 Township 24 South, Range 25 East, Eddy County, New
12 Mexico.

13 Q. And does Exhibit 1 indicate the different
14 fees, state, etc. ownership?

15 A. Yes. Exhibit 1 is a plat of the boundaries
16 of the unit. Tract 1 is federal land. Tracts 6, 7,
17 and 8 are fee land, and the remainder is state land.

18 Q. And what is Exhibit 2?

19 A. Exhibit 2 is a copy of the Unit Agreement
20 for the Mosley Canyon Unit.

21 Q. And, in your opinion, is this agreement
22 fair and reasonable?

23 A. Yes. It is a State Land Office form.

24 Q. What are its basic provisions?

25 A. The unit covers all formations and provides

1 that a well shall be drilled to test the Strawn
2 Formation within six months after its effective date.
3 It contains a six-month continuous drilling, and
4 production will be allocated based on approved
5 participating areas.

6 Q. Who are the working interest owners?

7 A. Santa Fe is the only working interest
8 owner, and thus there is 100 percent approval by the
9 working interest partners or owners.

10 Q. Has the Land Commissioner preliminarily
11 approved the unit?

12 A. Yes, he has, and his letter of preliminary
13 approval is submitted as Exhibit 3.

14 Q. What about the BLM, what have they said?

15 A. I have talked to John Simmons at the BLM,
16 and he has stated that since the BLM has such a small
17 interest in the unit, that if the State Land
18 Commissioner approves the unit, then the BLM will
19 approve the unit as well.

20 Q. At this time have any of the fee lessors
21 ratified the unit?

22 A. No, although we have requested
23 ratification.

24 Q. Of all the royalty interest owners, what
25 percent have committed to the unit as of today?

1 A. 83.3 percent, being the state and BLM with
2 their preliminary approvals, verbal and written.

3 Q. Is this a voluntary unit?

4 A. Yes, this is a voluntary unit; so the
5 lessors who have not ratified the unit are not
6 affected by it.

7 Q. What is Exhibit 4?

8 A. Exhibit 4 is a copy of our AFE for the
9 initial well. The well will be drilled to a depth of
10 approximately 10,300 feet at a completed cost of
11 \$742,000.

12 Q. When does Santa Fe anticipate commencing
13 the well?

14 A. Mid-April.

15 Q. Who was notified of this hearing?

16 A. The BLM and the Land Commissioner.

17 Q. And are copies of their notice letters
18 attached to your affidavit of notice?

19 A. They're attached to my affidavit which is
20 Exhibit 5.

21 Q. Did you notify the fee lessors?

22 A. No, since this is a voluntary unit, we did
23 not notify the fee lessors, although we have requested
24 their voluntary joinder.

25 Q. Were Exhibits 1 through 5 prepared by you

1 or under your direction?

2 A. Yes, they were.

3 Q. In your opinion, would the granting of this
4 application be in the interest of conservation,
5 prevention of waste, and the protection of correlative
6 rights?

7 A. Yes, it will.

8 MR. BRUCE: Mr. Examiner, at this time I
9 move the admission of Santa Fe Exhibits 1 through 5.

10 EXAMINER STOGNER: Exhibits 1 through 5
11 will be admitted into evidence.

12 EXAMINATION

13 BY EXAMINER STOGNER:

14 Q. In looking at the listing, Exhibit B?

15 A. Yes.

16 Q. Schedule of Ownership, I show Exxon on the
17 first --

18 A. I have requested and assigned it from
19 Exxon. We have drilled our Lamb Chop 20, and I have a
20 copy of that letter if you need it, and they are going
21 to assign the balance of their interest to us, the 40
22 percent.

23 Q. If you can provide us a copy of that and
24 make it a supplement to this particular -- do you have
25 some extra copies?

1 MR. BRUCE: Yes.

2 If I could ask a question of the witness,
3 Mr. Examiner?

4 EXAMINER STOGNER: Go ahead, Mr. Bruce.

5 Q. (BY MR. BRUCE) I'm handing you Exhibit 5A,
6 Mr. Smith. Is this the request for the assignment
7 from Exxon?

8 A. Yes, it is.

9 Q. And Exxon owes Santa Fe the assignment
10 because of the drilling of a well by Santa Fe in this
11 area?

12 A. Yes, that's correct.

13 MR. STOVALL: That's a farmout, I assume;
14 is that correct.

15 THE WITNESS: Um-hm, yes, sir.

16 MR. BRUCE: I would request that Exhibit 5A
17 be made part of the record, Mr. Examiner.

18 EXAMINER STOGNER: Exhibit 5A will be
19 admitted into the evidence at this time also.

20 Any other questions of Mr. Smith?

21 MR. STOVALL: No, I have none.

22 EXAMINER STOGNER: He may be excused.

23 Mr. Bruce?

24 MR. BRUCE: Call Mr. Eckerty to the stand.

25 DONALD ECKERTY,

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

3 EXAMINATION

4 BY MR. BRUCE:

5 Q. Would you please state your full name for
6 the record.

7 A. My name is Donald Gale Eckerty.

8 Q. Where do you reside?

9 A. In Midland, Texas.

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

11 A. I work for Santa Fe Energy Resources, Inc.,
12 as a senior geophysicist.

13 Q. Have you previously testified in that
14 capacity before the Division?

15 A. I have.

16 Q. And were your credentials accepted as a
17 matter of record?

18 A. They were.

19 Q. Are you familiar with the geophysics
20 involved in the proposed Mosley Canyon Unit?

21 A. I am familiar. Should I state that in this
22 particular case, no geophysics per se will be
23 presented. In this hearing I will be under the
24 capacity of a geologist. I do both for Santa Fe.
25 Geophysicist is just my official title.

1 Q. I think you've previously qualified before
2 the division as a geologist; is that correct?

3 A. I have.

4 MR. BRUCE: Mr. Examiner, I tender Mr.
5 Eckerty as an expert geologist.

6 EXAMINER STOGNER: Mr. Eckerty is so
7 qualified.

8 Q. (BY MR. BRUCE) Mr. Eckerty, what is the
9 target formation of the initial test well for the
10 proposed unit?

11 A. The target formation is the Strawn
12 Formation, Pennsylvanian age.

13 Q. And referring to Exhibit No. 6, would you
14 identify that for the examiner?

15 A. Yes, sir. Exhibit No. 6 is a structure map
16 on top of the Middle Strawn lime. It is submitted for
17 just a general idea of what the structural geology is
18 in this area. We are looking at basically east dip.
19 The feature that I am about to discuss does not show
20 up very well on the structure; so I will be referring
21 mainly to my subsequent exhibits.

22 Q. Okay. Why don't you move on to both
23 Exhibits 7 and 8 and discuss the Strawn geology in
24 this area?

25 A. Okay. Exhibit 7 is an isopach built on

1 clean carbonates within the Middle and Lower Strawn
2 Formation.

3 Exhibit 8 is cross-section B-B', a
4 stratigraphic cross-section hung on the base of the
5 Strawn and shown on Exhibit 7. It shows Santa Fe's
6 interpretation of the facies relationships within the
7 Strawn Formation.

8 The Santa Fe model used in exploring the
9 Strawn Formation is of algal mound build-ups along
10 what we call the basin edge or the shelf edge of the
11 Strawn carbonate.

12 As you can see, the well in Section 14 at
13 position B' and the well shown in B' on Exhibit 8
14 shows Strawn Formation with dirty, spicular, siliceous
15 carbonate. This is typical basinal Strawn.

16 The other wells on the cross-section and
17 the wells depicted on Exhibit 7 show varying amounts
18 of clean carbonate in the Middle and Lower Strawn.
19 The well in Section 10, the Horseshoe Bend well, has
20 74 feet of clean carbonate. This is the HNG South
21 Horseshoe Bend well.

22 It's Santa Fe's model in this area that the
23 large algal mound build-ups which we predict to exist
24 in this area lie close to the basinward edge of the
25 shelf. Therefore, we would expect a mound to occur,

1 if in fact it does, just updip or west of the HNG
2 Horshoe Bend well in Section 10. We are predicting
3 our mound to center in the northeast of the northeast
4 of Section 9, very likely spilling into Sections 4, 3,
5 and 10.

6 We know from experience that the Frontier
7 Hills Field to the east, and I'd like to reference
8 Case 10598, which we presented to you in November,
9 that the build-ups can come and go precipitously. In
10 other words, we could build up to a 300 to 400 foot
11 Strawn algal mound within a location of that HNG well
12 in Section 10.

13 It's also our experience that within a
14 mound, the reservoir can be compartmented. In other
15 words, we could drill two wells into a mound core and
16 encounter separate reservoirs. This was also
17 referenced back to the 10598 case in November on Santa
18 Fe's Sheep Dip prospect.

19 So we feel that we want to drill a well at
20 what we feel is a good location in Section 9 to first
21 test our theory that a mound does exist, and then
22 unitize to assure logical development of the mound.

23 It's also our experience that a mound such
24 as this can have on the order of 20 Bcf of gas
25 associated with it, and in this area as much as

1 300,000 barrels of condensate.

2 Q. Is Exhibit 9 a summary of your testimony?

3 A. Exhibit 9 is a written summary giving Santa
4 Fe's regional Strawn geology in which we discuss the
5 Strawn shelf edge from the Carlsbad area northeast
6 into Lea County. And Exhibit 9 finishes with a
7 detailed Mosley Canyon prospect writeup in which we
8 take the wells in Mosley Canyon and show the analogies
9 to the specific wells in the Frontier Hills Field.

10 Q. Were Exhibits 6 through 9 prepared by you
11 or under your direction?

12 A. They were.

13 Q. And, in your opinion, is the granting of
14 this application in the interest of conservation and
15 the prevention of waste?

16 A. It is.

17 MR. BRUCE: Mr. Examiner, I move the
18 admission of Santa Fe's Exhibits 6 through 9.

19 EXAMINER STOGNER: Exhibits 6 through 9
20 will be admitted into evidence.

21 EXAMINATION

22 BY EXAMINER STOGNER:

23 Q. In looking at your Exhibit No. 7, the well
24 in Section 10, now, you show that to be a dry hole.
25 Was that a Strawn test?

1 A. It was a Morrow test.

2 Q. Did they bypass the Strawn as they were
3 coming back up?

4 A. They ran no test in the Strawn. As you can
5 see from the Exhibit 8 on the cross-section, although
6 there is a well-developed Lower Strawn lime, which is
7 shown in blue just above the Atoka, the Middle Strawn
8 still had not developed far enough onto the shelf
9 edge, and there were just about, oh, 20 feet of clean
10 Strawn lime associated with it.

11 No testable porosity in HNG's opinion must
12 have existed in the Strawn at that time. In fact, I
13 feel that Santa Fe likely would not have tested a well
14 with these porosity indicators also.

15 Q. Going back to the east on your contours,
16 and you hit the dotted line of the Strawn facies?

17 A. Right.

18 Q. Well, is that to be assumed that that would
19 be a zero line?

20 A. That is our zero line. That is where we
21 feel -- we draw the edge, the basinward edge of the
22 Strawn carbonate shelf. And it's close to this basin
23 edge where we see development of the major algal
24 mounds.

25 Q. Now, in looking at your map, correct me if

1 I'm wrong, the well in which stands out to me as
2 having the least amount of carbonate, I assume,
3 thickness -- would that be a good word?

4 A. Clean thickness, yes, sir.

5 Q. Clean thickness, let's go with that one,
6 would be the one with 58 feet in Section 13 -- I'm
7 sorry, Section 32; is that correct?

8 A. Section --

9 A. Section 32 up in the northwest portion of
10 the map?

11 A. That is a fairly thin amount of clean
12 carbonate.

13 Q. But that is producing?

14 A. That well is a producer. It's a satellite
15 well to a smaller mound which occurs in the southeast
16 of the southwest of 32.

17 Q. But that does indicate to me that between
18 the 100- and the 50-foot clean depth or clean
19 thickness, it's possible to have production?

20 A. It is possible.

21 Q. How about outside the 50, going toward the
22 zero line?

23 A. Very -- well, I do not expect commercial
24 production in less than really 70 feet or so of
25 carbonate. This well did produce from 58 feet, but

1 you're getting pretty marginal. We feel that the best
2 reservoir is developed in close proximity to the mound
3 cores.

4 We consider the core and the immediately
5 adjacent surrounding carbonate to be a complex in
6 which the immediately adjacent material is in part
7 derived from the core and has some of the same
8 diagenetical advantages which form porosity in the
9 core. So we wish to stay as close to a core well when
10 we find it as we can.

11 Q. I'm trying to come up with a determination
12 why the boundary was drawn like it was and not take in
13 the north half of the north half of 3 but included all
14 that stuff to the east side of 10 and the far east
15 side of No. 3.

16 A. As I said, we're trying to stay mostly 50
17 to 70 feet or thicker. We feel that this complex will
18 stand -- the mound itself will stand by itself and
19 will not be affected by the production further to the
20 west.

21 Q. There's a big chunk of Section 3 that was
22 excluded. I'm trying to establish why the bounds
23 excluded that northeastern portion of the mound as
24 you're proceeding down into the 100-foot level but yet
25 took in a lot of the 0 to 50 line in Sections 10 and

1 3?

2 MR. BRUCE: Excuse me, Mr. Examiner. For
3 one thing, as far as why that was excluded, that
4 tract, Mr. Smith could also testify. I believe it's
5 unleased federal land at this point.

6 EXAMINER STOGNER: Okay. Perhaps then, Mr.
7 Smith, why don't you jump right in and substantiate
8 that?

9 MR. SMITH: That's 160 acres open federal
10 land that we have nominated for the April federal land
11 sale.

12 EXAMINER STOGNER: So that's why it was
13 excluded.

14 MR. SMITH: At this point we don't own it,
15 and we don't know if we will own it.

16 EXAMINER STOGNER: Do you know why it's
17 open federal? Is there any reason, or it just hasn't
18 been leased?

19 MR. SMITH: The lease expired in '92 or
20 '91; I'm not real sure.

21 EXAMINER STOGNER: But as far as you know,
22 it's not an unleaseable portion of the federal system
23 or anything?

24 MR. SMITH: That's correct. It's on the
25 notice for the April federal land sale.


1 EXAMINER STOGNER: I don't have any other
2 questions then.

3 Any other questions of Mr. Eckerty or Mr.
4 Smith? He may be excused.

5 Anything else further in this case, Mr.
6 Bruce?

7 MR. BRUCE: No, sir, Mr. Examiner.

8 EXAMINER STOGNER: In that case, case
9 10,690 will be taken under advisement.
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I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No. 10690,
heard by me on 18 March 1993.

Oil Conservation Division Examiner

1 CERTIFICATE OF REPORTER

2
3 STATE OF NEW MEXICO)


4) ss.

5 COUNTY OF SANTA FE)

6 I, Deborah O'Bine, Certified Shorthand
7 Reporter and Notary Public, HEREBY CERTIFY that I
8 caused my notes to be transcribed under my personal
9 supervision, and that the foregoing transcript is a
10 true and accurate record of the proceedings of said
11 hearing.

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

16 WITNESS MY HAND AND SEAL, March 30, 1993.

17 
18 _____

19 DEBORAH O'BINE
20 CCR No. 63

