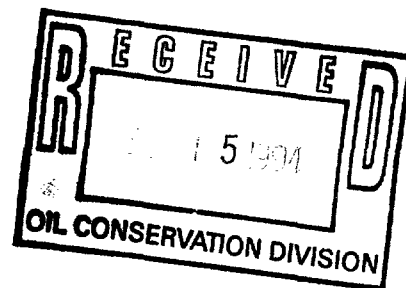


NEW MEXICO OIL CONSERVATION DIVISION
STATE LAND OFFICE BUILDING
STATE OF NEW MEXICO
CASE NO. 11076

IN THE MATTER OF:

The Application of Santa Fe Energy
Operating Partners, L.P., for a Unit
Agreement, Lea County, New Mexico.



BEFORE:

JIM MORROW

Hearing Examiner

State Land Office Building

September 1, 1994

REPORTED BY:

CARLA DIANE RODRIGUEZ, NMCCR No. 4
Certified Shorthand Reporter
for the State of New Mexico

ORIGINAL

A P P E A R A N C E S

FOR THE OIL CONSERVATION DIVISION:

State of New Mexico Oil Conservation Division
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By: RAND L. CARROLL, ESQ.

FOR THE APPLICANT:

HINKLE, COX, EATON, COFFIELD & HENSLEY
Post Office Box 2068
Santa Fe, New Mexico 87504-2068
BY: JAMES BRUCE, ESQ.

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1 EXAMINER MORROW: We'll call the
2 hearing back to order and call Case 11076, which
3 is the application of Santa Fe Energy Operating
4 Partners for a unit agreement, Lea County, New
5 Mexico.

6 I'll call for appearances at this
7 time.

8 MR. BRUCE: Mr. Examiner, Jim Bruce
9 from the Hinkle Law Firm in Santa Fe representing
10 the Applicant. I have two witnesses to be
11 sworn.

12 EXAMINER MORROW: Any other
13 appearances?

14 Will the witnesses please stand to be
15 sworn.

16 **CURTIS D. SMITH**

17 Having been first duly sworn upon his oath, was
18 examined and testified as follows:

19 EXAMINATION

20 BY MR. BRUCE:

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

23 A. My name is Curtis Smith.

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

1 A. I am a landman for Santa Fe Energy.

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

4 A. Yes, I have.

5 Q. Were your credentials as an expert
6 landman accepted as a matter of record?

7 A. Yes, they were.

8 Q. Are you familiar with the land matters
9 involved in this application?

10 A. Yes, I am.

11 MR. BRUCE: Mr. Morrow, I tender Mr.
12 Smith as an expert landman.

13 EXAMINER MORROW: We will accept Mr.
14 Smith.

15 Q. Briefly, what does Santa Fe seek in
16 this case?

17 A. Santa Fe Energy seeks to ^{utilize} ~~initialize~~
18 3,514.96 acres of state and federal land in Lea
19 County, New Mexico.

20 Q. Now, this is a lesser amount of land
21 than was advertised, is that correct?

22 A. That's correct. After the preliminary
23 approval meeting with the BLM and the state, the
24 unit boundaries were reduced.

25 Q. The same land is included--I should

1 say, a lesser amount of land, but the--

2 A. Same sections, just lesser amounts of
3 lands in those sections.

4 Q. Okay. Is the property currently within
5 the unit described in Exhibit 1?

6 A. Yes, it is. Exhibit 1 is a legal
7 description of the property, and Exhibit 2 is a
8 land plat outlining our Quail Ridge Unit with
9 Santa Fe Energy's acreage highlighted in yellow,
10 and also with the tract numbers that correspond
11 with Exhibit B to the unit agreement.

12 Q. So, the yellow is not the unit outline?

13 A. That's correct.

14 Q. Are there some other units in the area?

15 A. Yes. We're directly contiguous to the
16 Commanche State Unit to the east. Also, the West
17 Lynch Deep Unit, where Unocal is the operator,
18 also to the east.

19 Q. Is this an exploratory unit?

20 A. Yes, it is.

21 Q. So it's all voluntary?

22 A. Yes, it's a voluntary, exploratory
23 unit.

24 Q. What is Exhibit 3?

25 A. Exhibit 3 is the proposed unit

1 agreement, and it is a standard federal/state
2 form.

3 Q. Have the BLM and the Commissioner of
4 Public Lands preliminarily approved the unit?

5 A. Yes, they have. And Exhibits 4A and
6 4B, 4A is my designation letter from the BLM, and
7 4B is the preliminary approval letter from the
8 state.

9 Q. Who are the working interest owners in
10 the unit?

11 A. The working interest owners are shown
12 in Exhibit 5: Santa Fe Energy, Mitchell Energy,
13 HEYCO, and other partners of HEYCO, Yates
14 Petroleum and Yates Petroleum partners, and
15 Marshall & Winston, with their partners.

16 Q. How many of the working interest owners
17 have committed their interests?

18 A. Santa Fe Energy, with 63 percent, has
19 committed its interest, Mitchell Energy has
20 responded favorably but has not formally ratified
21 the unit as of this date, and they have 17
22 percent; and, with that, we'll have 81 percent
23 working interest approval of the unit.

24 Q. You're still working with the other
25 parties?

1 A. Yes, we're talking with HEYCO and
2 Yates, Marshall & Winston, et al.

3 Q. What is Exhibit 6?

4 A. Exhibit 6 is the operating agreement
5 for the unit, and Santa Fe Energy is designated
6 as the operator.

7 Q. In your opinion, is the granting of
8 this application in the interest of conservation
9 and the prevention of waste?

10 A. Yes.

11 Q. Were Exhibits 1 through 6 prepared by
12 you or under your direction?

13 A. Yes, they were.

14 MR. BRUCE: Mr. Examiner, I tender
15 Exhibits 1 through 6.

16 EXAMINER MORROW: Exhibits 1 through 6
17 are admitted.

18 EXAMINATION

19 BY EXAMINER MORROW:

20 Q. Mr. Smith, what did you say the
21 Mitchell status is?

22 A. We've talked to Mitchell, they need to
23 talk to their management. They have not formally
24 ratified the unit as of this date.

25 Q. They haven't indicated, even verbally,

1 that they're in agreement?

2 A. They like the idea.

3 EXAMINER MORROW: Okay. Thank you,
4 sir.

5 MIKE DILLI

6 Having been first duly sworn upon his oath, was
7 examined and testified as follows:

8 EXAMINATION

9 BY MR. BRUCE:

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

12 A. My name is Mike Dilli. I live in
13 Midland, Texas.

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

16 A. I'm a senior geologist for Santa Fe
17 Energy.

18 Q. Have you previously testified before
19 the Division as a geologist?

20 A. No, I have not.

21 Q. Where did you receive your education?

22 A. Ft. Lewis College in Durango, Colorado.

23 Q. What type of degree did you get?

24 A. I got a degree in geology, bachelor of
25 science.

1 Q. When did you graduate?

2 A. 1980.

3 Q. Since 1980, what has been your work
4 experience?

5 A. I worked for approximately one year for
6 a company in Denver called Tri-Ex Corporation,
7 and in July of 1981, I went to work for Santa Fe
8 Energy.

9 Q. In their Midland office?

10 A. In the Denver office. And I have been
11 transferred to Midland.

12 Q. What are your duties at Santa Fe at
13 this time?

14 A. Exploration geologist, primarily
15 assigned to Southeast New Mexico.

16 Q. Have you testified before any other
17 state commissions as an expert witness?

18 A. I'm an expert witness in the states of
19 Utah, Colorado and Oklahoma.

20 Q. Are you a professional geologist in any
21 state?

22 A. State of Wyoming.

23 Q. Are you familiar with the geology
24 involved in this prospect?

25 A. I am.

1 MR. BRUCE: Mr. Morrow, I tender Mr.
2 Dilli as an expert petroleum geologist.

3 EXAMINER MORROW: He's so qualified.

4 Q. What zone, Mr. Dilli, will the initial
5 test well be drilled to?

6 A. To the Morrow formation.

7 Q. Where will the initial test well be at
8 this point?

9 A. It will be in either Section 30 or 31.

10 Q. If you would refer to your exhibits
11 maybe together, 7, 8 and 9, starting with Exhibit
12 7, would you discuss the Morrow geology in this
13 area?

14 A. Exhibit 7 is an isopach map of the
15 Middle Morrow section, Pennsylvanian Morrow
16 section.

17 Exhibit 8 is a structure map drawn on
18 top of the Lower Morrow formation.

19 Exhibit 9 is a type log taken from a
20 well immediately east of the proposed unit
21 outline in Section 32. That type log will help
22 clarify what we're mapping in this proposed
23 unit.

24 Referring to the type log, you can see
25 where the top of the Middle Morrow marker is

1 marked on that log, and the top of the Lower
2 Morrow.

3 The isopach map, shown on Exhibit 7, is
4 a combination of all the sands within that Middle
5 Morrow interval. These sands are extremely
6 difficult to correlate individually over a large
7 area, so we generally lump these sands together.

8 Exhibit 7 is an isopach of these sands,
9 and what this exhibit shows is a north/south
10 trending depositional fairway of channel system
11 coming through the prospect area, the proposed
12 unit area.

13 We feel like that the Middle Morrow
14 sands will be relatively thick in this area as
15 these channels have stacked up.

16 The structure map shows that we are
17 dipping at approximately 150 feet per mile
18 downdip from the producing wells to the north,
19 that are also productive in the Middle Morrow
20 section.

21 The key well is in Section 19, in the
22 southwest quarter. That well was drilled by Oxy
23 in 1968, and that well encountered a very thick
24 interval of sands. However, they ran two drill
25 stem tests over the Morrow sands in that

1 interval, recovering nothing but gas cut mud.

2 Q. That's the well that's immediately
3 north of the proposed unit?

4 A. Immediately north of the proposed unit,
5 yes. This well, with the results of those drill
6 stem tests, could be an impermeable well, which
7 is why you see the proposed permeability barrier
8 on Exhibit 7. This does not condemn our
9 prospect. In fact, there are wells in the middle
10 Morrow interval, throughout this area, that are
11 tight, that occur along these depositional
12 fairways. It's just a permeability problem.

13 But the fact it had a large amount of
14 sand in that well gives us encouragement that
15 perhaps we can get some better porosity and
16 permeability by drilling further south.

17 Q. Has there been previous Morrow drilling
18 in this area?

19 A. None within the unit outline.

20 Q. You discussed the Middle Morrow sand,
21 Exhibit 7. What about the Lower Morrow sand? and
22 I refer you to Exhibit 8.

23 A. Exhibit 8 is the structure map drawn on
24 top of the Lower Morrow marker which is, again,
25 highlighted on the type log. There are sands

1 that occur within the Lower Morrow, and, in fact,
2 those sands are productive to the north of us.

3 However, the Lower Morrow sands are
4 generally more continuous, we feel like, more
5 continuous units, and there's a possibility that
6 that sand will be wet as far downdip as we're
7 going from the wells to the north. However, it
8 does remain a secondary objective.

9 Q. Now, you mentioned the city service
10 well. Are there any other wells of interest?

11 A. The type log is the well immediately
12 east of the unit in Section 32. The thin amount
13 of sands seen in that well helps us determine
14 that there's--that's the eastern edge of this
15 depositional fairway. The wells further south of
16 the unit encounter the sand, but their production
17 is marginal and they're a lot thinner porosity.

18 Q. What are the unit boundaries based on?

19 A. The unit boundaries are based on
20 15-foot porous density/porosity cutoff interval.
21 That's highlighted in green on Exhibit 7. The
22 well in Section 32 had 12 foot and is
23 uneconomic. There are wells with 15 to 20 feet
24 of porosity that we, in our experience in the
25 area, have found can be an economic cutoff, and

1 15 feet is about what we would like to find, so
2 that's what we've determined is our economic
3 limit.

4 Q. So you believe this is a good prospect?

5 A. Yes, I do.

6 Q. Are there any potential secondary zones
7 outside the Morrow?

8 A. Yes, there is. In addition to the
9 Lower Morrow, which I discussed earlier, the Bone
10 Springs formation is productive out here and
11 Delaware is also a secondary objective.

12 Q. In your opinion, will the granting of
13 this application be in the interests of
14 conservation and the prevention of waste?

15 A. Yes, it will.

16 Q. Were Exhibits 7 through 9 prepared by
17 you or under your direction?

18 A. Yes, they were.

19 MR. BRUCE: Mr. Examiner, I move the
20 admission of Exhibits 7 through 9.

21 EXAMINER MORROW: 7 through 9 are
22 admitted.

23 EXAMINATION

24 BY EXAMINER MORROW:

25 Q. Mr. Dilli, on this type log, is that

1 the well that's shown with the 12/30 on it on
2 Exhibit No. 7, I believe?

3 A. Yes, it is.

4 Q. And it is producing or did produce in
5 the Middle Morrow?

6 A. It has been abandoned. It did produce
7 less than a 10th of a Bcf of gas.

8 Q. It had 12 feet of porosity in it, huh?

9 A. Yes.

10 Q. And the city service well is the well
11 with the 40/135 beside it, on that same exhibit?

12 A. Yes, sir, it is.

13 Q. It never did produce anything?

14 A. They never attempted a completion.

15 Q. The log shows it to be ~~tied~~ tight? JHM

16 A. Yes, they do; that, in conjunction with
17 the drill stem tests.

18 Q. This production in the north, where you
19 indicated production in the north part of your
20 proposed unit boundary, what's the nature of that
21 production?

22 A. You mean, the little black holes?

23 Q. The black dots, yes.

24 A. Most of those are producing out of the
25 Yates formation.

1 Q. You think all of them probably are out
2 of the Yates?

3 A. Yes.

4 Q. Your unit would be for specific depths,
5 or is it for anything in the Morrow, or--

6 A. All depths.

7 MR. BRUCE: You can ask Mr. Smith, but
8 he said it would be all depths.

9 MR. SMITH: Our initial well under the
10 unit agreement requires us to drill to the Morrow
11 to approximately 13,500 feet, but we're asking
12 for unitization of all depths.

13 EXAMINER MORROW: These wells up here
14 that are currently operating, would they be part
15 of the unit?

16 MR. SMITH: The HEYCO well--

17 EXAMINER MORROW: In 29 and 30.

18 MR. SMITH: I would expect those to be
19 excluded. I don't expect HEYCO to contribute
20 that producing well to the unit. So, probably
21 the depths in that well, in that proration unit,
22 will be included.

23 EXAMINER MORROW: The rest of them
24 would have the option of being included?

25 MR. SMITH: Yes, sir, because our

1 initial well in the north half of 30 would
2 include the deep rights below the HEYCO well in
3 the north-half proration unit, if we drill in the
4 north half of 30.

5 Q. (By Examiner Morrow) Okay. It would
6 be in the north half of 30, do you know where the
7 initial well will be drilled, Mr. Dilli?

8 A. No, we do not.

9 MR. BRUCE: Mr. Examiner, this is in
10 the potash area so they're going to have to deal
11 with the BLM and the state regarding the well
12 locations, because of that.

13 EXAMINER MORROW: That's the reason
14 they haven't decided yet?

15 MR. SMITH: Yes, sir. Section 31 is in
16 the inferred potash area.

17 EXAMINER MORROW: All right. Thank
18 you, Mr. Dilli, for your testimony. Did we
19 admit those exhibits?

20 MR. BRUCE: I move the admission of
21 them if they're not admitted, 7 through 9.

22 EXAMINER MORROW: Exhibits 7 through 9
23 are admitted into evidence, and Case 11076 will
24 be taken under advisement.

25 (And the proceedings concluded.)

CERTIFICATE OF REPORTER

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

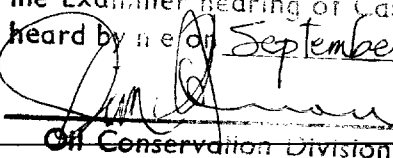
I, Carla Diane Rodriguez, Certified
Shorthand Reporter and Notary Public, HEREBY
CERTIFY that the foregoing transcript of
proceedings before the Oil Conservation Division
was reported by me; that I caused my notes to be
transcribed under my personal supervision; and
that the foregoing is a true and accurate 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 September 16,
1994.


CARLA DIANE RODRIGUEZ, RPR

I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No. 11076
heard by me on September 1, 1994.

 Examiner
Oil Conservation Division