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. 11077

APPLICATION OF SANTA FE ENERGY OPERATING PARTNERS

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

VOLUME II

BEFORE: Jim Morrow, Hearing Examiner

September 1, 1994

Santa Fe, New Mexico

This matter came on for hearing before the Oil Conservation Division on September 1, 1994, at Morgan Hall, 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.

ORIGINAL

I N D E X

September 1, 1994
Examiner Hearing
CASE NO. 11077

E X H I B I T S

A P P E A R A N C E S

FOR THE DIVISION: RAND L. CARROLL, 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 87504-2068
BY: JAMES G. BRUCE, ESQ.

FOR WALTER KRUG: KELLAHIN AND KELLAHIN
117 N. Guadalupe
Santa Fe, New Mexico
BY: W. THOMAS KELLAHIN, ESQ.

DARRELL ROBERTS,

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

EXAMINATION

BY MR. BRUCE:

Q. Would you please state your name.

A. It's Darrell Roberts.

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

A. I work for Santa Fe Energy, and I'm a drilling engineer in Midland, Texas.

Q. Have you previously testified before the Division as a drilling engineer?

A. Yes, I have.

Q. Were your credentials as a drilling engineer accepted as a matter of record?

A. Yes, they were.

Q. Are you the person responsible for obtaining the APD and will you be responsible for drilling this well?

A. Yes, sir.

MR. BRUCE: Mr. Examiner, I tender Mr. Roberts as an expert drilling engineer.

EXAMINER MORROW: All right. We accept Mr. Roberts.

Q. (BY MR. BRUCE) Mr. Roberts, Mr. Smith and Mr. Kellahin already went into this in a little detail, but what was the original footage location, the original proposed footage location for the Sinagua No. 2 well?

A. It was 660 feet from the south line and 1,980 from the east, which was within the 150 foot radius of a dry hole, but the BLM denied that application because that dry hole never did produce from the Yates.

Q. Okay. So that dry hole was a Yates well?

A. Right.

Q. So even though you were drilling deeper, they still denied it?

A. Right.

Q. When was this location proposed?

A. The latter part of 1994.

Q. What did Santa Fe Energy do then?

A. We then proposed the same well at a different location, at 1,770 feet from the south line and 1,637 feet from the east line, and then like Curtis said, we were at the BLM, and they told us they were going to deny that because we were outside of the 150-foot radius because of topographic reasons.

Q. So the drilling island they talked about or you talked about with the BLM, you weren't in an appropriate place for that?

A. We initially tried to stake the well within the 150-foot radius of the Dewey Sparger well, but because of pipelines and topographic reasons, we moved it further away to the south -- southeast of the Dewey Sparger well.

Q. To the southeast is the preferred geological location anyway?

A. That's true.

Q. And, once again, these problems you're encountering is because this well is in the oil-potash area?

A. Right, it is.

Q. So you've had two locations denied. What did you do next?

A. When we found out that we'd be granted this drilling island, I contacted a surveyor and went out with him and staked three different locations in the northwest quarter of the southeast quarter of Section 18 and submitted all these plats to the BLM and came up with the only location that they would give us, which was 2,041 feet from the south line and 2,171 feet from the east line. This was mainly

because of sand dunes and topographic reasons.

Q. So besides the potash, there are other topographic reasons?

A. Right.

Q. And you were the person in conjunction with Mr. Smith dealing with the BLM on all these issues?

A. That's correct.

Q. What is Exhibit 6?

A. Exhibit 6 is a sundry notice that we sent in to alter our APD mainly to change the surface location and also to apply for authority to directionally drill the well.

Q. Could you briefly discuss the directional drilling aspects of this case and go through the sundry notice for the examiner?

A. Okay. Like I say, the first page of this exhibit is the sundry notice and explains exactly what we were trying to do. And then we have a C-102, which is a plat showing the surface location and our proposed bottomhole location.

And then skip the third page, which is a division of interest. And then I have a computer printout of the well path data on an every 100-foot interval that shows how we're going to drill the

directional well. But basically we're going to be drilling vertically to around 5,500 feet and then taking the well off at 2 degrees per hundred at an azimuth of 130 degrees to a total TD of 13,700 feet, which would give us a bottomhole displacement of 1,144 feet.

Q. Is the procedure you're using for the directional drilling of this well a common procedure?

A. Yes, it is.

Q. And Santa Fe has drilled other directional wells?

A. Yes, they have.

Q. What is the incremental cost of the directional drilling over and above the vertical hole?

A. Around $150,000.

Q. Walter Krug has expressed concern about potential harm to the Yates formation. Do you see any basis for this concern?

A. No, sir, I don't.

Q. Santa Fe drilled the Sinagua 18 #1 well fairly recently, did they not?

A. Yes, they did.

Q. And that well is located in the southwest quarter of the northeast quarter?

A. Yes, sir.

Q. Does this offset any of Mr. Krug's well?

A. Yes, it does. It offsets his well No. 7 in the southwest quarter of the northeast quarter.

Q. How far is the Wallen Production Company No. 7 well away from your Sinagua No. 1 well?

A. Six hundred and sixty-eight feet, by my calculation.

Q. And, once again, in the Sinagua No. 1 you drilled through the Yates?

A. Yes, we did.

Q. Into the Morrow?

A. Yes, we did.

Q. Were any problems encountered in drilling that well?

A. Not that I've heard.

Q. Your proposed Sinagua No. 2 well, how far away is that from Mr. Krug's nearest well?

A. By my calculations, it's 866 feet.

Q. So it's about 200 feet further away from Mr. Krug's nearest well than your No. 1 well was?

A. Exactly.

Q. So you would anticipate no problems?

A. No.

Q. In your opinion, is there any need for any

special drilling or casing or cementing procedures for Santa Fe's well?

A. No.

Q. Is it pretty common in this state to drill through a shallow producing formation to reach a deeper formation?

A. Yes, sir.

Q. Now, without -- if there were no potash problems, and assuming the geology was correct, could you have drilled even closer to Mr. Krug's wells and at a standard location?

A. Yes. By the Commission rules, we could have drilled, staked the well and permitted a well at 1,980 from the south line and 2,310 from the east line, which would have been 760 feet from Mr. Krug's nearest well without even notifying him.

Q. So, in other words, you don't believe there's any basis for any special procedures required for this well?

A. No, I don't.

Q. In your opinion, will the granting of this application be in the interests of conservation, the protection of waste, and the protection of correlative rights?

A. Yes.

Q. Was Exhibit 6 prepared by you?

A. Yes, it was.

MR. BRUCE: Mr. Examiner, I move the admission of Santa Fe's Exhibit 6.

EXAMINER MORROW: Exhibit 6 is admitted.

EXAMINATION

BY MR. KELLAHIN:

Q. Mr. Roberts, when you looked at the proximity of your surface location for this well to the Krug No. 7 well -- no, I don't have the Krug well number. The Sinagua No. 2 is 866 feet away from which Krug well?

A. 8Y.

EXAMINER MORROW: Which one, sir?

THE WITNESS: 8Y.

Q. (BY MR. KELLAHIN) 8Y. So that's --

A. According to your prehearing statement, it's located at 2,310 from the south line and 2,285 from the west line in unit letter K of Section 18.

Q. So that's the west offset to your surface location?

A. Yes, sir.

Q. When you looked north of your surface location in unit letter G, there's the Wallen Federal 7, did you calculate to see how close you were to

that well?

A. No, I didn't.

Q. Then there's another Krug well in unit letter F, which is the northwest offset to your surface location. Are you with me? That would be --

A. No. 6 well.

Q. The No. 6 well.

A. Yes.

Q. Did you calculate how close you were to that well?

A. No, I didn't.

Q. What's the drilling procedure? You will set up and drill the surface hole and then set the surface casing string?

A. Yeah. There will be three strings of casing prior to us getting to our kick-off point; is that what you mean?

Q. I want to know what happens from surface to the kick-off point.

A. Let me tell you. I'll tell you the depths and the size of casing we'll be setting.

Q. Does Santa Fe use a printed or a written drilling procedure or program for these wells?

A. Yes, we do. I haven't drawn up one for this well.

Q. What I'm concerned about is what happens with relation to the Yates interval. All right?

A. Okay.

Q. If you'll describe for me what happens in the drilling and then in setting up the wellbore as you enter the Yates and move out of the Yates? What do you do?

A. Our last string of casings to be set prior to entering the Yates would be a string of 13-3/8, 68-pound casing set at 3,300 feet.

Q. Is that the surface casing string?

A. That would be the first intermediate.

Q. The first intermediate after the surface casing string?

A. Our surface casing will be 20-inch set at 450 feet. We'll circulate that back to surface. Our 13-3/8 set at 3,300 feet will -- that's right at the top of the Yates.

Q. Stop right there. That first intermediate, the 13?

A. 13-3/8.

Q. Is going to be set before you move into the Yates?

A. It's over the salt section.

Q. That's your salt protection string?

A. Right, or potash.

Q. What then do you do to move below the base of that first intermediate string to get you into the Yates?

A. We'll be drilling an 11-inch hole starting at 3,300 feet, drilling with fresh water, and then our casing point is at 5,200 feet. We are required by the BLM in the potash area to circulate cement up to the 13-3/8 casing, which is at 3,300 feet.

Q. If you set -- that's that second intermediate string, if you will --

A. Yes.

Q. The 11 inch?

A. It would be 8-5/8 and 11-inch hole.

Q. The 8-5/8 then, is that the casing string that's set through the Yates interval?

A. Yes.

Q. After 5,200 feet, we're well below the Yates?

A. Yes.

Q. The process is to drill that with fresh water?

A. Yes.

Q. Is there pressure on the drilling fluids?

A. There's a hydrostatic of the fluid.

Q. What is the pressure relationship between the formation and the drilling fluids?

A. I'm sure it's overbalanced.

Q. But the fluids that are introduced into the Yates are going to be fresh water? No?

A. I'm not sure that any fluid will go into the Yates.

Q. If you're overbalanced, wouldn't that put pressure on the reservoir?

A. It would put pressure on it, but I'm not sure the fluid will go into the Yates. You have to have porosity and permeability.

Q. If fluids are introduced into the Yates, what kind of fluids would it be?

A. Fresh water.

Q. Does the Yates produce any fresh water?

A. Probably not.

Q. Does it produce any saltwater or waters associated with Yates oil production?

A. I think there's some water, some formation water.

Q. Is it feasible to design a drilling program so that fresh water is not introduced into the Yates as you drill through it?

A. Not economically, I don't think.

Q. Do you have a sense as a drilling engineer what those pressures or protocols need to be to accomplish that?

A. Could you --

Q. To not introduce the drilling fluids or the drilling materials into the Yates as you drill through it?

A. Well, I don't think -- we didn't lose any on our No. 1 well, and we drilled with fresh water.

Q. You didn't lose any what?

A. Any fresh water.

Q. Your returns back to the surface of the drilling fluids told you that you weren't losing returns in the reservoir?

A. Right.

Q. After you drilled through the Yates, are you still drilling with fresh water?

A. Yes.

Q. You get to the point where you're ready to set the 8-5/8 in the 11-inch hole?

A. Uh-huh.

Q. What do you do then?

A. We run our casing and then displace the drilling fluid and the fresh water with cement which weighs 15 pounds per gallon as opposed to 8.3 pounds

per gallon for water.

Q. After you do that, then what happens?

A. We let the cement set up, and then we drill out of the 8-5/8 casing a 7-7/8 hole with fresh water again.

Q. Then you continue to drill vertically to a kick-off point?

A. Yes.

Q. Where's your kick-off point?

A. 5,400 feet, I believe.

Q. At that point you start building angle, and I think you said 2 degrees per 100 feet?

A. Yeah, to a maximum deviation of 8 degrees from vertical, which is not very much deviation. And then we'll hold that to other TVD of around 13,700 feet.

Q. Other than the first well, the Sinagua No. 1, have you had any other personal experience with drilling deep gas wells in proximity to Yates oil wells?

A. Not personal, but there's two wells to the north of our No. 1 well, the TXO well, two TXO wells in Section 7, I believe, that set casing at 5,200 feet, and they did not lose circulation or returns into the Yates.

Q. But when we move through the Yates, the drilling material is going to be fresh water, the drilling fluid, if you will, is going to be fresh water?

A. Yes.

Q. And you successfully accomplished that when you drilled the Sinagua No. 1?

A. Yes, sir.

Q. That was the same protocol, the same procedures?

A. Yes, sir.

MR. KELLAHIN: Thank you, Mr. Examiner.

EXAMINER MORROW: Go ahead.

MR. BRUCE: I have nothing further of this witness.

EXAMINATION

BY EXAMINER MORROW:

Q. The three wells or your three locations that you submitted to BLM, all those were within that drilling island; is that correct?

A. Yes, sir. I have the actual locations if you want them, but they were mainly around the Dewey Sparger well. One of the three is the one --

Q. Is that the southernmost well?

A. Yes, sir. They were all surrounding that

one.

Q. And all the ones that proves is where the X is on the Exhibit No. 8?

A. That's just a hand drawn. It's not exact.

Q. Well, I know. It's approximate?

A. Yes, sir.

Q. Where were the others about?

A. One was further to the west, closer to the 8Y well, but there's a big sand dune there, and they disallowed it. The other one would be southwest of the Dewey Sparger well within 150 feet. There's also a big sand dune there. So we elected -- and they approved this one that's exactly 200 feet from the Dewey Sparger well.

Q. The 8Y well, Mr. Wallen's well, is that one the southwesternmost in the drilling island; is that correct?

A. Yes, sir.

Q. Where is that Sinagua No. 1 on some of these plats? Maybe on Exhibit No. 1 you might tell me.

A. That's not on any of the plats that I have.

Q. This one right here.

A. Okay. On this Exhibit No. 8 of theirs,

it's that well there (indicated).

Q. Oh, yeah, it's marked. All right.

A. And Mr. Krug approved this actual location of the No. 1.

Q. Was his nearest well still 8Y, or did he have other wells nearer?

A. No, the No. 7.

Q. Which one is it?

A. It's on the northeast corner of that drilling island.

Q. I thought you said you were 800 feet from his nearest well?

A. Well, our No. 2 well is 860 feet from the 8Y, but our No. 1 well is 668 feet from the No. 7 well.

Now, I probably pointed to the wrong well on the Sinagua No. 1. This is one we applied for originally, and then it was denied, and this is the one we actually drilled (indicated).

MR. KELLAHIN: I'm sorry, could you show me, Mr. Roberts?

THE WITNESS: Yes. We applied for this one, and then this is the one we actually drilled.

MR. KELLAHIN: The northern location was applied for the drilled location south of the first

proposed location?

THE WITNESS: Right.

Q. (EXAMINER MORROW) It was right in the corner of that rectangle?

A. Yes. That's the drilling island that the BLM gave us also. This would be the No. 7 well (indicated). This would be the No. 6 well. This would be the No. --

Q. Where is 6 again?

A. Up here in the northwest quarter of the drilling island. The 8Y would be the southeast corner -- southwest corner.

Q. Three of those are island wells. One of them is the Dewey Sparger well?

A. Yes, sir, we're closest to the Dewey Sparger well, within -- we're 200 feet from his wells.

Q. Does BLM require that you run a temperature survey or a bond log to make sure you tie it back into that 13-3/8?

A. They haven't been.

Q. You just do it by calculations?

A. Yes, sir.

Q. Do you normally do that or not?

A. As long as we have good returns on our

cement, we figure -- we pump, I guess, like 130 percent excess or 30 percent excess on our cement, and we've been able to circulate cement up to that 13-3/8 casing.

Q. Are all the Wallen wells Yates wells?

A. Yes, sir.

Q. What depths are those completed at?

A. I think in the prehearing statement, it says they're all around 3,300 to 3,500 feet.

EXAMINER MORROW: Anybody else have anything?

Thank you, Mr. Roberts. Appreciate your testimony.

MR. BRUCE: Mr. Examiner, I call Mike Dilli to the stand again. Mr. Dilli was previously sworn and previously qualified as an expert petroleum geologist, if we could have the record reflect that for this case?

EXAMINER MORROW: Okay. Good.

MIKE DILLI,

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

EXAMINATION

BY MR. BRUCE:

Q. What is the primary zone of interest for the Sinagua No. 2 well, Mr. Dilli?

A. Pennsylvanian Morrow sandstone.

Q. Would you please refer to Exhibit 6 and discuss the Middle Morrow geology, or I should say Exhibit 7.

And before you do that, maybe for the examiner's convenience, looking at Section 18, are those -- right in the middle of Section 18, are those four black dots, those four oil wells, is that the drilling island that we were talking about?

A. Yes, it is, and you can see the well numbers on this plat, that they were talked about in the previous plats.

Q. So that little odd-shaped rectangle formed by those four wells is the drilling island that Mr. Roberts talked about?

A. Right.

Q. Okay, go ahead. Would you discuss the Middle Morrow geology and discuss some of the concerns about why you want that bottomhole location?

A. The Middle Morrow sandstones, this map is an isopach map, using density porosity cutoff at 10 percent. The Middle Morrow section is a series of fluvial sandstones being deposited from the north to

the south across the location.

We feel like the bottomhole location where we've applied for, 1,300 and 1,300 from the south and east line, will best be located for encountering the thick porous and permeable Morrow sandstones within the Middle Morrow interval.

Q. Besides the Middle Morrow, is there any other prospective zone?

A. Yes. At this particular location, the Lower Morrow sandstone is also prospective. That sandstone is what is being produced in the Santa Fe Sinagua No. 1-18 well.

Q. And the Lower Morrow isopach is marked Exhibit 8?

A. Yes, it is.

Q. Go ahead.

A. This isopach, again, is an isopach at density porosity greater than 10 percent cutoff. This map represents a specific sandstone within that interval, which we have called the Sinagua sandstone. It is a continuous sand that runs, again, from north to south across the area.

And we also feel that the bottomhole location where we've proposed will be best situated and best suited to encounter this sandstone in its

most thickest and permeable position.

Q. Up in the north half by the 12/22, that's the Sinagua No. 1 well; is that correct?

A. Yes, it is.

Q. As Mr. Roberts discussed, there were several proposed well locations to the south and east of Santa Fe's final surface location. Why did you want the final bottomhole location, besides getting in the center of the fairway, why did you want that final bottomhole location to be to the south and east of the surface location?

A. For a couple of reasons, one, of course being getting into the center part of the fairway of both these sandstones we have mapped. Additionally, we wanted to get further away from the Sinagua 1-18 well for potential drainage.

Q. You don't want to crowd that well too much?

A. No, we don't.

Q. And that's a fairly decent well?

A. Yes. It's producing at over 3 million a day and 100 barrels of condensate a day.

Q. If the interest owners who Santa Fe seeks to force pool go nonconsent, what penalty do you recommend against those interest owners?

A. Cost plus 200 percent or 300 percent penalty.

Q. What would you base that on?

A. A couple of reasons. The Morrow sands are extremely risky to drill for, with the discontinued nature of especially the Middle Morrow sands. This well is a deep well, and it's also a directional well, which may have more mechanical risks. And it also is costing us about $150,000 more than a straight well. It's a pretty good prospect, but we still think there's some risk involved in it.

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

A. Yes, it is.

Q. Were Exhibits 7 and 8 prepared by you or under your direction?

A. Yes, they were.

MR. BRUCE: Mr. Examiner, I move the admission of Santa Fe's Exhibits 7 and 8.

EXAMINER MORROW: 7 and 8 are admitted.

MR. KELLAHIN: I have no questions. Thank you.

EXAMINATION

BY EXAMINER MORROW:

Q. Are the numbers beside those wells that describe the drilling island, are those TD's, over to the left?

A. Like the 3-8, the 25?

Q. Yes.

A. Yes, that's the TD's of those wells.

Q. For all four Yates' wells?

A. Um-hm.

Q. The control is all to the north and maybe a little to the west in one case; is that correct?

A. Yes, it is.

Q. Is there some more control to the north that we don't see here?

A. Yes. To the north there is, oh, a string of good Morrow producers.

Q. Is there potential for the Sinagua No. 1 in the Middle Morrow?

A. Yes, sir, we believe that there's some behind pipe zones and that, but the well is producing at such a good rate right now, we haven't perforated it.

EXAMINER MORROW: Thank you, sir.

MR. BRUCE: I have nothing further in this case, Mr. Examiner.

EXAMINER MORROW: Thank you.

MR. KELLAHIN: Mr. Examiner, I'd like to present for the record copies of the completion reports for Mr. Krug's seven Yates wells in this immediate vicinity. They were taken from the OCD case files upstairs. I've marked each one as a separate exhibit number. The exhibit number corresponds to the well in the order in which I've listed them on the prehearing statement. So No. 1 represents Exhibit 1.

EXAMINER MORROW: How many wells are there?

MR. KELLAHIN: Seven.

EXAMINER MORROW: You've given me two, Tom?

MR. KELLAHIN: Pardon?

EXAMINER MORROW: There's two in this pile?

MR. KELLAHIN: Perhaps I didn't -- here's an extra one. We would move the introduction of Exhibits 1 through 7. In addition, Exhibit 8, which Mr. Smith and I talked about, we'd move the introduction of that exhibit.

EXAMINER MORROW: 1 through 8 are admitted.

MR. KELLAHIN: I'd like to make a short

statement about my position when you're ready, Mr. Examiner.

EXAMINER MORROW: Okay.

MR. KELLAHIN: Mr. Krug's obviously concerned about any potential risk or harm to his Yates oil production. He believes he set up his production so that eventually it may be part of a waterflood project. He's concerned about the proximity of the gas well.

I would suggest that it would relieve his anxiety if you would require the applicant, as Mr. Roberts has testified about having a detailed drilling program -- it would help Mr. Krug's anxiety level, I think, if you would require Santa Fe to submit to you their detailed drilling program in writing and let you approve that, using your own expertise and judgment with regards to what happens in the Yates.

I'm certainly not in any position to judge that what they're doing poses no risk to the Yates, and I think it would satisfy Mr. Krug if you would require the applicant to submit those details to you and let you pass judgment on it.

That's his concern, and that's his request.

EXAMINER MORROW: Okay, sir.

MR. BRUCE: Mr. Examiner, Santa Fe certainly has no problem with submitting a detailed drilling program to you. We don't believe there's any problem here. Santa Fe is simply drilling through a shallow producing formation to a deeper producing formation. This happens weekly in New Mexico without problem. We think the fact that the Sinagua No. 1 well was drilled in the north half even closer to Mr. Krug's wells without problem shows that there is no problem.

We believe that any Santa Fe drilling program will be approved by you, and we don't think there's any need for any special drilling or casing procedures. Thank you.

EXAMINER MORROW: Anything further?

MR. BRUCE: No, sir.

EXAMINER MORROW: Case 11077 will be taken under advisement.

I believe this case is going to be long enough that we should take a lunch break. We can vote on 30 minutes or an hour. Whichever you all prefer will suit me okay.

MR. BRUCE: Mr. Carr is not only long-winded, he's got a big appetite; so he probably

needs an hour.

EXAMINER MORROW: What do you all want to do?

MR. CARR: Whatever pleases you, Mr. Morrow. We could go forward now, I can break for half an hour or an hour.

MR. BRUCE: My clients need to go check out of their hotel and do everything; so if we could have an hour, we'd appreciate it.

EXAMINER MORROW: All right. We will break for one hour.

CERTIFICATE OF REPORTER

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

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

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, October 31, 1994.

Deborah O'Bine

DEBORAH O'BINE
CCR No. 63

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 11077, heard by me on September 1, 1994.

, Examiner
Oil Conservation Division

CUMBRE COURT REPORTING
P.O. Box 9262
Santa Fe, New Mexico 85704-9262
(505) 984-2244 FAX: 984-2092