

NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARINGSANTA FE, NEW MEXICOHearing Date SEPTEMBER 5, 1991 Time: 8:15 A.M.

NAME	REPRESENTING	LOCATION
Karen Aubrey	Kellahin Kellahin Aubrey	Santa Fe
DAVE BONEAU	YATES PETROLEUM	ARTESIA
THERESA PADILLA	YATES PETROLEUM	ARTESIA
Jo Kellahin	Kellahin Kellahin Aubrey	Santa Fe
William L. Fay	Sampbell, Fay, Fay and Fendley	Santa Fe

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

APPLICATION OF ANSCHUTZ CORPORATION)
FOR COMPULSORY POOLING, LEA COUNTY,)
NEW MEXICO) CASE NO. 10380
-----)

REPORTER'S TRANSCRIPT OF PROCEEDINGS
EXAMINER HEARING

BEFORE: Michael E. Stogner, Hearing Examiner
 September 5, 1991
 8:15 a.m.
 Santa Fe, New Mexico

This matter came for hearing before the Oil
Conservation Division on September 5, 1991, at 8:15 a.m.
at the State Land Office Building, 310 Old Santa Fe
Trail, Santa Fe, New Mexico, before Linda Bumkens, CCR,
Certified Court Reporter No. 3008, in and for the County
of Bernalillo, State of New Mexico.

FOR: OIL CONSERVATION
DIVISION

BY: LINDA BUMKENS CCR
Certified Court Reporter
CCR NO. 3008

ORIGINAL

I N D E X

September 5, 1991
 Examiner Hearing
 CASE NO. 10380

APPEARANCES

2

WITNESSES

PHIL M. WHITSITT

Examination by Miss Aubrey

4

Examination by Mr. Stogner

11

PAUL MARKO

Direct Examination by Miss Aubrey

14

Examination by Mr. Stogner

21

Direct Examination by Mr. Stovall

22

RECESS

24

REPORTERS CERTIFICATE

25

E X H I B I T S

ANSCHUTZ

Exhibits 2 through 7

14

Exhibits 8, 9 and 10

21

A P P E A R A N C E S

FOR THE DIVISION:

ROBERT G. STOVALL, ESQ.

General counsel

Oil Conservation Commission

310 Old Santa Fe Trail

Santa Fe, New Mexico

87501

FOR ANSCHUTZ
CORPORATION:

KELLAHIN, KELLAHIN & AUBREY

BY: MISS KAREN AUBREY, ESQ.

117 North Guadalupe

Santa Fe, New Mexico

1 MR. STOGNER: Hearing will come to order.
2 Docket number 25-91, today's date September 5,
3 1991. I'm Michael Stogner, appointed hearing
4 commissioner for today's cases. We'll call first
5 case 10380.

6 MR. STOVALL: Application of Anschutz
7 Corporation for compulsory pooling, Lea County, New
8 Mexico.

9 MR. STOGNER: Call for appearances.

10 MISS AUBREY: Karen Ann Aubrey with Kellahin,
11 Kellahin & Aubrey appearing for the applicant. I
12 have two witnesses to be sworn.

13 MR. STOGNER: Are there any other appearances
14 in this matter?

15 (No response)

16 MR. STOGNER: Will the witness please stand
17 and be sworn at this time?

18 (At which time Phil M. Whitsitt and Paul
19 Marko were duly sworn.)

20 MR. STOGNER: Thank you, Miss Aubrey. You may
21 continue.

22 MISS AUBREY: Thank you.

23 PHIL M. WHITSITT,
24 the Witness herein, being previously sworn, was
25 examined and testified as follows:

DIRECT EXAMINATION

1
2 BY MISS AUBREY:

3 Q. Will you state your name for the record,
4 please?

5 A. Phil Whitsitt.

6 Q. Mr. Whitsitt, have you testified previously
7 before the New Mexico Oil Conservation Division?

8 A. I have not.

9 Q. Would you review your professional degrees
10 education and your professional experience for the
11 Examiner?

12 A. I have a BBA degree. I entered the
13 business in 1964; it would be 27 years experience
14 as petroleum landman.

15 Q. Who are you employed by now?

16 A. The Anschutz Corporation.

17 Q. And how long have you been employed by
18 Anschutz?

19 A. Approximately four years.

20 Q. Are you familiar with the application and
21 the relief that Anschutz Corporation seeks today?

22 A. Yes, I am.

23 MISS AUBREY: Mr. Stogner, I tender
24 Mr. Whitsitt as an expert in petroleum land titles.

25 MR. STOGNER: Mr. Whitsitt is so qualified.

1 Q. (By Miss Aubrey) Mr. Whitsitt, would you
2 refer to your Exhibit Number 2, please; exhibit
3 Number 1 being the certificate of mailing and
4 compliance with commissioner order on notice. This
5 is a land plat. Would you explain for the Examiner
6 what this plat shows?

7 A. It shows the location of our proposed
8 12,000 foot Devonian test in the northeast quarter
9 of the southwest quarter of Section 18.

10 Q. And that's shown by the orange dot on the
11 map?

12 A. And it shows the proposed proration unit
13 consisting of the east half of the southwest
14 quarter.

15 Q. Would you refer now to Exhibit Number 3?

16 A. This is a list of the working interest
17 ownership of the east half west half Section 18. It
18 shows Arco Oil and Gas Company with a unleased
19 mineral interest covering an undivided 50 percent
20 interest in the 80-acre tract. Enron Oil and Gas
21 Company with 24.09 percent leasehold interest and a
22 19.57 percent net revenue interest. The Anschutz
23 Corporation with 17.12 percent leasehold interest,
24 and a 12.84 percent net revenue interest. Southland
25 Royalty Company with a 7.75 percent unleased mineral

1 interest and a 7.75 percent net revenue interest
2 Stanford Clinton Jr. with a 1.04 percent working
3 interest. It's an unleased mineral interest, and
4 1.04 net revenue interest.

5 Q. Of these working interest owners, which
6 ones does Anschutz seek to pool today?

7 A. Enron Oil and Gas Company and Stanford
8 Clinton Jr.

9 Q. Is there a dispute about the amount of the
10 Enron interest in this 80-acre proration unit?

11 A. There is a question about it. Our title
12 opinion reflects them as owning a 24.09 percent
13 interest. Their records reflect approximately
14 30 percent interest.

15 Q. Do you know what that difference is
16 attributable to?

17 A. This is probably due to a lease that we
18 have acquired previously owned by Enron that covers
19 the 6.25 percent interest. Their lease expired from
20 nondevelopment. We suspect that records just
21 haven't been updated to reflect this.

22 Q. And does Anschutz seek to pool whatever the
23 Enron interest in this unit is?

24 A. Yes.

25 Q. Have you -- as a professional landman, have

1 you had contact with Enron and with Stanford Clinton
2 Jr. in connection with the formation of a voluntary
3 unit in this area?

4 A. Yes, we have. We originally contacted
5 Enron in October of 1989, and we've subsequently
6 contacted them with numerous letters, telephone
7 conversations, proposals, and thus far have not
8 received any commitment from them.

9 Q. And does your Exhibit Number 4 reflect the
10 copies of the correspondence that you've had with
11 Enron Oil and Gas Company in connection with the
12 forming of this voluntary unit?

13 A. Yes, it does.

14 Q. Exhibit Number 5 is a letter of Stanford
15 Clinton Jr. Does that reflect the written
16 correspondence you've had with Mr. Clinton about
17 dedicating his interest to this unit?

18 A. Yes, it does.

19 Q. Have you also had telephone conversations
20 with Stanford Clinton Jr.?

21 A. I have.

22 Q. What have your conversations been with him
23 with regard to the possibility of the Anschutz
24 Corporation filing a pooling case?

25 A. Mr. Clinton had stated that he does desire

1 to be force pooled.

2 Q. Did you discuss the possibility of the
3 imposition of a risk factor penalty with
4 Mr. Clinton?

5 A. I did. In fact, he originally said that he
6 told me that he understood the penalty to be 300
7 percent, and that was what he wanted to do was to be
8 forced pool. We originally offered to lease his
9 interest, he did not want to lease. We extended to
10 him the opportunity to participate, he didn't want
11 to participate. He said he preferred to be forced
12 pooled with a 300 percent penalty.

13 Q. Have you sent both Enron and Mr. Clinton an
14 AFE for the proposed well?

15 A. We have.

16 Q. Let me ask you about Southland Royalty for
17 a minute. How does the Anschutz Corporation hold
18 the Southland Royalty interest?

19 A. We have that under a farm out agreement.

20 Q. And is there an upcoming expiration date on
21 that farm out?

22 A. There is. There's a November 16, 1991, spud
23 obligation. This farm out agreement is approaching
24 a year old, it's been extended numerous times, and
25 we're apprehensive about being able to extend it

1 again.

2 Q. The next exhibit is number 6, which is an
3 operating agreement. Has this operating agreement
4 been submitted to Arco under the terms of your
5 letter agreement?

6 A. This operating agreement is an attachment
7 to our Arco letter agreement.

8 Q. And have Mr. Clinton and Enron been
9 supplied with the same operating agreement?

10 A. Yes.

11 Q. Let me have you refer to the operating
12 agreement. In that document, you and Arco have come
13 to an agreement on the amount of overhead costs with
14 well drilling and producing; is that correct?

15 A. That is correct.

16 Q. What page is that on?

17 A. That is page four of Exhibit C.

18 Q. And what are those amounts?

19 A. A drilling well rate of \$5,850, and
20 producing well rate of \$585.

21 Q. The Anschutz Corporation seeks to be named
22 as operator of this well; is that correct?

23 A. That is correct.

24 Q. And in your professional opinion, are the
25 overhead rates, well drilling and producing, in line

1 with rates charged by other operators in the field?

2 A. Yes, they are.

3 Q. And has Arco executed this operating
4 agreement?

5 A. Arco has not executed the operating
6 agreement. They've executed the letter agreement,
7 which is attached, and they have agreed to the
8 operating agreement.

9 Q. Okay. Let me refer you now to Exhibit
10 Number 7, Mr. Whitsitt, which is an AFE for the
11 well. Are you familiar with that, sir?

12 A. Yes, I am.

13 Q. And in your opinion, is that a fair and
14 reasonable AFE for a well to be completed at 12,000
15 feet?

16 A. That is a fair and reasonable AFE.

17 Q. This AFE has been provided to Clinton and
18 to Enron; is that right?

19 A. Yes.

20 Q. It has also been provided to Arco?

21 A. That's correct.

22 Q. Mr. Witsitt,, were Exhibits 2 and 3 either
23 prepared by you or prepared under your direction?

24 A. Yes, they were.

25 Q. And in your opinion, will granting the

1 Anschutz Corporation's application for compulsory
2 pooling protect correlative rights, prevent waste
3 and promote conservation?

4 A. Yes, they will.

5 MISS AUBREY: Mr. Examiner, that's all that we
6 have of Mr. Whitsitt at this time.

7 MR. STOGNER: Thank you, Miss Aubrey.

8 EXAMINATION

9 BY MR. STOGNER: Mr. Whitsitt, referring to your
10 operating agreement, page four, showing an overhead
11 charge. How are the two figures derived?

12 A. They were actually suggested by Arco Oil
13 and Gas. Arco prepared the operating agreement and
14 furnished it to us attached to our letter agreement.
15 Those overhead rates were suggested by Arco.

16 Q. Does Anschutz operate some other wells
17 within this pool or field area?

18 A. We do not.

19 Q. Has Anschutz been an interest owner in any
20 properties out there where somebody else has been an
21 operator?

22 A. We have not.

23 Q. Is this your first venture in this area?

24 A. First venture in this area. We have
25 drilled previously in New Mexico.

1 Q. How do these rates in the Anschutz
2 Corporation overall, throughout the country, how do
3 they stand up to some of the others that you have
4 seen for wells of this similar depth?

5 A. They are in the ballpark.

6 Q. Are you familiar with the Ernst Young
7 overhead?

8 A. Yes, I am. I believe that this is
9 approximately the same interest shown for that depth
10 well in the Ernest Young survey.

11 Q. And as I understand it, I'm referring now
12 to Exhibit Number 3, Arco has assigned a letter of
13 intent essentially?

14 A. That's correct. Well, it's not a letter of
15 intent. Arco has signed a letter agreeing to either
16 participate or farm out to us in this well subject
17 to reviewing some confidential information that
18 Anschutz possesses.

19 Q. And they're not a party of this particular
20 hearing today?

21 A. No, they're not.

22 Q. Okay. And Southland Royalty has signed a
23 farm out?

24 A. That's correct.

25 Q. When did Anschutz first contact Mr. Clinton

1 about obtaining his interest?

2 A. Let's see the exhibit. Well, it's a letter
3 date June 3, 1991. I had talked with Mr. Clinton
4 previous to that; offered to buy an oil and gas
5 lease from him. He told me he did not want to
6 lease. I suggested he might want to participate in
7 the well, he did not want to participate. I told
8 him I would go ahead and send him an oil and gas
9 lease for his consideration. This letter covered
10 that oil and gas lease. We -- I'm sorry -- this is
11 not the right letter. The August -- that's right.
12 June 3, 1991 was the first letter. The second
13 letter, August 14, 1991, I sent him the operating
14 agreement and AFE, and later talked to him on August
15 the 28th, and he said, "I still prefer to be force
16 pooled."

17 Q. In your testimony it sounds like
18 Mr. Clinton was aware of the procedures; was a
19 practicing oil and gas man?

20 A. He seemed to be well aware of them. I
21 believe that he has been forced pooled in the past,
22 and seemed to think it was a pretty good program.
23 He likes your way of doing business

24 MR. STOGNER: I have no other questions of
25 Mr. Whitsitt at this time. Are there any other

1 questions of this witness?

2 MISS AUBREY: I have no questions.

3 MR. STOGNER: Mr. Whitsitt, you may be
4 excused.

5 MR. STOVALL: Did we actually admit the
6 exhibits?

7 MISS AUBREY: I'll move 2 and 3.

8 MR. STOGNER: At this time 2 and 7 will be
9 admitted into evidence.

10 (Anschutz Exhibits 2 and 7 were
11 admitted in evidence.)

12 MR. STOGNER: Miss Aubrey, before I forget, on
13 Exhibit 1, would you provide a copy of notice which
14 you used? We only have the cards. I'd like a copy
15 of the actual notice that went with those cards.

16 MISS AUBREY: Certainly.

17 MR. STOGNER: And that will be a supplement to
18 Number 1, correct?

19 PAUL MARKO
20 the Witness herein, being previously sworn, was
21 examined and testified as follows:

22 DIRECT EXAMINATION

23 BY MISS AUBREY:

24 A. Would you state your name, please?

25 A. Paul Marko.

1 Q. Mr. Marko, how are you employed?

2 A. As a petroleum geologist with the Anschutz
3 Corporation. I've been employed there approximately
4 six years as of last month.

5 Q. Have you testified previously before the
6 New Mexico Oil Conservation Division?

7 A. No, I haven't.

8 Q. Would you review your professional degrees
9 and your professional experience -- work experience
10 -- for the Examiner, please?

11 A. I have an MS in geology in 1965. I've been
12 employed as a petroleum geologist for 25 years,
13 since 1966.

14 Q. And you've worked for Anschutz?

15 A. For six years.

16 Q. Is the area which is the subject of today's
17 application within your area of control at Anschutz?

18 A. Yes, it is.

19 Q. Are you familiar with Anschutz's
20 application as filed in this matter?

21 A. Yes, I am.

22 MISS AUBREY: Mr. Stogner, I tender Mr. Marko
23 as an expert petroleum geologist.

24 MR. STOGNER: Mr. Marko is so qualified.

25 Q. (By Miss Aubrey) Mr. Marko, you've prepared

1 three exhibits for consideration by the examiner
2 today; is that correct?

3 A. That's correct.

4 Q. Which bears Exhibits Number 8, 9 and 10.
5 Would you refer first to Exhibit Number 8, which is
6 a structure map, and discuss the importance of
7 structure in production in the Devonian field in
8 this area?

9 A. We have a proposed location here, as noted
10 in Section 7, the northeast quarter of the southwest
11 quarter of Section 18, which is a development that
12 will be an extension, the development will, which
13 extend the field limits to the east one location,
14 and this is a structural -- this is a structural
15 reservoir controlled by structure.

16 Q. Is there other production in the Devonian
17 east of your proposed location in this area?

18 A. There is no production within several
19 miles.

20 Q. Okay. Your map shows other wells producing
21 from the Devonian; is that correct?

22 A. That's correct.

23 Q. Are all the wells that are spotted on
24 Exhibit 8, in fact, Devonian producers?

25 A. They are all Devonian producing or plugged.

1 Q. So the development in this area has been to
2 the west of your location; is that correct?

3 A. That is correct.

4 Q. Okay. In your opinion, Mr. Marco, is
5 structure controlling in the Devonian?

6 A. Yes.

7 Q. Will your proposed location be higher or
8 lower than the other producers that you've shown on
9 the map?

10 A. We have it shown as possibly 100 feet low,
11 but to the nearest producer directly offset to the
12 west, but hopefully some 100 feet above the low
13 approved oil.

14 Q. Okay. What is the depth of the low
15 approved oil in this area?

16 A. We have it estimated at a subsea of 8520.

17 Q. And is that based on production from other
18 wells?

19 A. That would be based on the perforations in
20 other wells in the field.

21 Q. Anschutz does not operate any of the other
22 wells in the field; is that correct?

23 A. No, they don't.

24 Q. Have you reviewed producing data logs for
25 the other wells in this field in order to create

1 your exhibits?

2 A. Yes.

3 Q. Do you have an opinion, Mr. Marco, as to
4 whether or not in this area the oil reserves vary
5 widely from location to location?

6 A. I think that is shown on our Exhibit
7 Number 10. The answer to the question is yes. The
8 Exhibit Number 10 shows the production current to --
9 or through December of 1990, and we will be
10 offsetting a well that has produced 388,000
11 barrels. The well directly offset to the south of
12 that well has produced 88,000 barrels. The well
13 directly north of that well has produced 99,000
14 barrels. So there's a four-to-one variance, at
15 least in that immediate location.

16 Q. And in looking at Exhibit Number 10 in the
17 southeast of the southeast of 13, there are two
18 producing wells?

19 A. That's correct.

20 Q. Can you draw any conclusions about the
21 reserves that have been produced by those two wells
22 given their completion dates?

23 A. That's about a three to one difference too.
24 The well in the extreme south, or the southeast of
25 the southeast of 13 has produced 1.3 million

1 barrels, and the well directly offset to the west
2 has produced 458,000 barrels. Both good wells, but
3 certainly a difference in the recovery for
4 approximately the same date of completion.

5 Q. What estimate is being used by Anschutz
6 Corporation as an average number of barrels of oil
7 that this proposed well will produce?

8 A. 300,000 barrels.

9 Q. Are you basing that on an average of
10 production in the area?

11 A. That is approximately the average of the
12 field; average per well for the field.

13 Q. Let me have you refer now to Exhibit
14 Number 9. Can you review that exhibit for the
15 Examiner and tell me how it was created?

16 A. That is an isopach of the net pay. I will
17 say it is more of a gross pay, I expect, but it's
18 based on the structural top of the Devonian
19 reservoir to the depth of the low approved oil at
20 8520, so it's an isopach of total interval from low
21 approved oil to the top of the reservoir.

22 Q. And based on your geological evaluation of
23 this prospect, what is the risk penalty factor that
24 you're asking the Division to impose in this case?

25 A. 300 percent.

1 Q. In your opinion, can you sort of summarize
2 for the examiner how your geological conclusions
3 justify the imposition of that risk penalty factor?

4 A. Well, Number one, I think it's an extension
5 well. We will be drilling and extending. If
6 successful, we will be extending the field probably
7 to the farthest location. It will be the farthest
8 location east of the present field. We are going --
9 it's a structural prospect. We are going off
10 structure, and we hope to have at least 50 feet of
11 interval in the well, but we are -- it's just the
12 risk on a field extension.

13 Q. Mr. Marko, have you -- we earlier
14 introduced Exhibit 7, which is the AFE for this
15 well. Have you reviewed that, sir?

16 A. Yes.

17 Q. And in your opinion, is that a fair and
18 reasonable AFE for a 12,000-foot Devonian well?

19 A. I think it's current as probably the middle
20 of August of this year. I think that's a good
21 number.

22 Q. And do you believe that is a fair price to
23 charge the other working interest owners for
24 completion of this well?

25 A. I believe so.

1 Q. Okay. Do have you any other comments you'd
2 like to make about Exhibits 8, 9 and 10 this
3 morning?

4 A. I don't believe so.

5 MISS AUBREY: Mr. Examiner, I offer
6 Exhibits 8, 9 and 10.

7 MR. STOGNER: Exhibits 8, 9 and 10 will be
8 admitted into evidence at this time.

9 (Anschutz Exhibits 8, 9 and 10
10 were admitted in evidence.)

11 Q. (By Miss Aubrey) Mr. Marko, will granting
12 the Anschutz's application in this matter protect
13 correlative rights, prevent waste, and promote
14 conservation?

15 A. Yes, I believe so.

16 MISS AUBREY: I have no more questions at this
17 time.

18 EXAMINATION

19 BY MR. STOGNER:

20 Q. Mr. Marko, let me make sure I have what you
21 propose for your risk penalty factor. You said 300
22 percent?

23 A. Uh-huh.

24 Q. Are you proposing a pay back plus 200
25 percent when you describe that as being 300 percent?

1 A. Yes. The recovery cost of the 100 percent
2 plus a 200 percent penalty.

3 Q. Okay. So that would -- pursuant to our
4 statute -- the way it is described in its wording in
5 there is pay back plus 200 percent?

6 A. I believe that's correct, yes.

7 MR. STOGNER: I don't have any questions.

8 MR. STOVALL: I go technical on this one.

9 DIRECT EXAMINATION

10 BY MR. STOVALL:

11 Q. A lot of Devonian formations in their area
12 or water drive; is this one?

13 A. We believe it is.

14 Q. Do you have any idea what the oil-water
15 contact is at this point? Is that 8520 what you're
16 using?

17 A. The 8520 is the low approved oil on
18 perforation. Both wells came in making both oil and
19 water, and perforated at the various depths. It was
20 very difficult to come up with something we felt
21 comfortable with as an oil-water contact. It was
22 just based at -- the perforations used in this
23 were -- the wells used made both oil and water, and
24 it was just the lowest perforations made by well,
25 the lowest depth used, the lowest perforation

1 operation is the best I can explain.

2 Q. What you're saying, you really haven't
3 established a clear oil-water contact at this point?

4 A. I don't feel comfortable with an oil-water
5 contact in this field as a set fixed number.

6 Q. Is this lake a lot of Devonian formation?
7 It would appear that you've got a couple million
8 barrel wells on top of structure. Are they draining
9 the reservoirs, theoretically?

10 A. There's also a very good well, which is one
11 of the very lowest wells. It only has 30 net feet
12 of pay above -- and that is the well we've mentioned
13 in the southeast quarter of Section 13. It is one
14 of the better wells in the field. It made 1.3
15 million barrels, and it is one of the structurally
16 lowest. It's the Hamon Number 2.

17 Q. Any concern that there may have been some
18 drainage off of your proposed location. That oil
19 may have been produced in part, at least?

20 A. Possibly we're hoping, because it is an --
21 excuse me -- a water drive reservoir, that we can
22 still recover our estimated 300,000 barrels because
23 this field has had a range of development -- it was
24 developed in the early '50s and '60s, and then
25 development continued. In fact, there's some wells

1 that have been completed as recently as 1986 and
2 1989, and they came out pretty strong. The last
3 well was completed in 1989; potential for 270
4 flowing, 270 barrels a day. That well is located in
5 Section 13 in the northwest of the southeast
6 quarter, right under the -- right above the word
7 Holloway there.

8 MR. STOVALL: I don't have any other
9 questions.

10 MR. STOGNER: Are there any other questions of
11 Mr. Marko?

12 MISS AUBREY: I have no other questions.

13 MR. STOGNER: Mr. Marko, you may be excused.
14 You have anything further, Miss Aubrey?

15 MISS AUBREY: Nothing further.

16 MR. STOGNER: Does anybody else have anything
17 further in Case Number 10380? If not, this case
18 will be taken under advisement.

19 (The foregoing case was concluded at the
20 approximate hour of 9:00 a.m.)

21 I do hereby certify that the foregoing is
22 a complete record of the proceedings in
23 the Examiner hearing, Case No. 10380
24 heard by me on 5 Sept. 1991.
25 Michael H. Stogner Examiner
Oil Conservation Division

1 STATE OF NEW MEXICO)
) ss.
2 COUNTY OF BERNALILLO)


3 REPORTER'S CERTIFICATE

4 BE IT KNOWN that the foregoing transcript of
5 the proceedings were taken by me, that I was then
6 and there a Certified Shorthand Reporter and Notary
7 Public in and for the County of Bernalillo, State
8 of New Mexico, and by virtue thereof, authorized to
9 administer an oath; that the witness before
10 testifying was duly sworn to testify to the
11 whole truth and nothing but the truth; that the
12 questions propounded by counsel and the answers of
13 the witness thereto were taken down by me, and that
14 the foregoing pages of typewritten matter contain a
15 true and accurate transcript as requested by counsel
16 of the proceedings and testimony had and adduced
17 upon the taking of said deposition, all to the best
18 of my skill and ability.

19 I FURTHER CERTIFY that I am not related to
20 nor employed by any of the parties hereto, and have
21 no interest in the outcome hereof.

22 DATED at Bernalillo, New Mexico, this day
23 November 14, 1991.

24 My commission expires
25 April 24, 1994


LINDA BUMKENS
CCR No. 3008
Notary Public