

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. 12,078

APPLICATION OF DAVID H. ARRINGTON OIL)
AND GAS, INC., FOR AN UNORTHODOX WELL)
LOCATION, LEA COUNTY, NEW MEXICO)

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

November 5th, 1998

Santa Fe, New Mexico

OIL CONSERVATION DIV.
98 NOV 19 PM 2:43

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH, Hearing Examiner, on Thursday, November 5th, 1998, at the New Mexico Energy, Minerals and Natural Resources Department, Porter Hall, 2040 South Pacheco, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

* * *

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November 5th, 1998
Examiner Hearing
CASE NO. 12,078

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* * *

A P P E A R A N C E S

FOR THE DIVISION:

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FOR THE APPLICANT:

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 By: WILLIAM F. CARR

* * *

1 WHEREUPON, the following proceedings were had at
2 10:02 a.m.:

3 EXAMINER CATANACH: At this time I'll call Case
4 12,078, the Application of David H. Arrington Oil and Gas,
5 Inc., for an unorthodox well location, Lea County, New
6 Mexico.

7 Call for appearances in this case.

8 MR. CARR: May it please the Examiner, my name is
9 William F. Carr with the Santa Fe law firm Campbell, Carr,
10 Berge and Sheridan. We represent David H. Arrington Oil
11 and Gas, Inc., in this matter, and I have two witnesses.

12 EXAMINER CATANACH: Call for additional
13 appearances.

14 Okay, will the witnesses please stand and be
15 sworn in at this time?

16 (Thereupon, the witnesses were sworn.)

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

20 DIRECT EXAMINATION

21 BY MR. CARR:

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

23 A. My name is Dale Douglas.

24 Q. Where do you reside?

25 A. Midland, Texas.

1 Q. By whom are you employed?

2 A. I'm an independent landman performing contract
3 land services for David H. Arrington Oil and Gas, Inc.

4 Q. Mr. Douglas, have you previously testified before
5 the Oil Conservation Division?

6 A. Yes, sir.

7 Q. At the time of that testimony, were your
8 credentials as an expert in petroleum land matters accepted
9 and made a matter of record?

10 A. Yes, sir.

11 Q. Are you familiar with the Application filed in
12 this case on behalf of David H. Arrington Oil and Gas,
13 Inc.?

14 A. Yes, sir.

15 Q. Are you familiar with the proposed unorthodox
16 well location, which is the subject of this hearing?

17 A. Yes, sir.

18 Q. And are you familiar with the status of the lands
19 that are affected by this Application?

20 A. Yes, sir.

21 MR. CARR: Are the witness's qualifications
22 acceptable?

23 EXAMINER CATANACH: They are.

24 Q. (By Mr. Carr) Mr. Douglas, would you briefly
25 summarize for the Examiner what it is that David H.

1 Arrington seeks in this case?

2 A. We're requesting approval of an unorthodox well
3 location for the proposed Prince Nymph Well Number 1, to be
4 drilled to the Strawn formation. It would be at an
5 unorthodox location 2446 feet from the south line and 1006
6 feet from the east line, which is Unit I, of Section 29,
7 Township 15 South, Range 36 East.

8 Q. What acreage does Arrington propose to dedicate
9 to this well?

10 A. We're proposing that the northeast quarter of the
11 southeast quarter of Section 9 be dedicated, which is a
12 standard governmental 40-acre tract.

13 MR. CARR: Mr. Catanach, the case was originally
14 advertised for a 80-acre spacing unit, comprised of the
15 east half of the southeast quarter of Section 29. We have
16 discovered that we're slightly more than a mile from any
17 pool with 80-acre special pool rules, and for that reason
18 we are only seeking to dedicate to the well the northeast
19 of the southeast, which is a standard 40-acre spacing unit.

20 Q. (By Mr. Carr) Mr. Douglas, have you prepared
21 Exhibits for presentation in this case?

22 A. Yes, sir, I have.

23 Q. Would you refer to what's been marked for
24 identification as Arrington Exhibit Number 1 and review
25 this for Mr. Catanach?

1 A. Yes, sir. The land plat that's on the cover, the
2 first page, I've highlighted the 40-acre proration unit
3 that we would propose for this well and also have labels
4 there which identify the offset tracts, which would be
5 affected by this unorthodox location.

6 Those parties are listed on the second page.
7 There are some unleased mineral owners as well as some
8 leasehold operators. There are no operators of record with
9 producing wells that would be affected by this location.

10 Q. If I look at this exhibit, you have shaded a 40-
11 acre tract in Section 29, correct?

12 A. That's correct.

13 Q. Is that acreage that you have shaded the
14 northeast quarter of the southeast quarter of this section?

15 A. Yes, sir, it is.

16 Q. This is a 40-acre subdivision of the public land
17 survey?

18 A. That's correct.

19 Q. The way it is shaded, there is a slight strip of
20 acreage just to the west of this spacing unit that isn't
21 shaded yellow. Can you just explain what the status of the
22 leases are in the south half of this section?

23 A. Yes, sir, I can. For whatever reason, this
24 particular section in the south half, it was not divided of
25 record, nor is the ownership owned based on a government

1 subdivision. It's divided into what's known as the east
2 100 acres of the south half and the west 220 acres of the
3 south half. So with that 40 acres to be dedicated for this
4 well, it leaves a 10-acre strip on the west side of that 40
5 which is under lease to Arrington.

6 Q. If, in fact, a well was proposed in what is the
7 northwest of the southeast, there would be a 40-acre
8 spacing unit, but that 10-acre strip would have to be
9 included in that?

10 A. That is correct.

11 Q. And there are no Strawn wells in the immediate
12 area?

13 A. That's correct.

14 Q. Let's go to what has been marked as Arrington
15 Exhibit Number 2. Will you review that for Mr. Catanach?

16 A. The Exhibit Number 2 is the survey plat which
17 shows the proposed location, which is at 1006 feet from the
18 east line and 2446 feet from the south line.

19 Q. And this shows, in fact, that the well location
20 is encroaching on the tract due north of it?

21 A. That is correct.

22 Q. On what operators is the proposed well location
23 actually encroaching?

24 A. There are no operators with producing wells that
25 this location would be encroaching upon, but the records

1 reflect that there are leases owned by certain parties as
2 well as some unleased mineral owners, and those parties are
3 listed on Exhibit A, or excuse me, on Exhibit Number 3, the
4 second page. They're all listed there.

5 Q. And is Exhibit Number 3 a notice affidavit
6 confirming that notice of this Application and hearing have
7 been provided in accordance with OCD rules?

8 A. Yes, sir.

9 Q. And attached to that is a copy of the letter and
10 return receipt; is that right?

11 A. That is correct.

12 Q. And has notice been provided to all the
13 offsetting affected parties?

14 A. Yes, sir, it has been.

15 Q. Could you identify what has been marked as
16 Arrington Exhibit Number 4?

17 A. Arrington Exhibit Number 4 is a letter which was
18 prepared and signed on behalf of David Arrington Oil and
19 Gas, Inc., and Packard Energy Group, Inc., who, upon
20 receipt of their notice of this proposed location, had
21 entered an objection to this location. They have
22 subsequently agreed to waive any objection to this
23 location; and that's what the purpose of this letter is,
24 represents that waiver.

25 Q. And it was because of that potential for

1 objection that we brought the matter to hearing instead of
2 seeking approval administratively?

3 A. That's correct.

4 Q. Will Arrington call a geological witness to
5 review the technical aspects of this Application?

6 A. Yes, sir, we will.

7 Q. Were Arrington Exhibits 1 through 4 either
8 prepared by you or compiled at your direction?

9 A. Yes, sir, they were.

10 MR. CARR: At this time, Mr. Catanach, we would
11 move the admission into evidence of Arrington Exhibits 1
12 through 4.

13 EXAMINER CATANACH: Exhibits 1 through 4 will be
14 admitted as evidence.

15 MR. CARR: And that concludes my examination of
16 Mr. Douglas.

17 EXAMINATION

18 BY EXAMINER CATANACH:

19 Q. Mr. Douglas, as far as the offset tracts that you
20 did find the interest ownership within, can you identify
21 those?

22 A. Sure. If you'll look on Exhibit Number 1, the
23 land plat, the northwest quarter of Section 28 was one of
24 the tracts that was checked, and the north half of Section
25 29. The page that's attached as Exhibit A to that plat,

1 I've listed all of those parties, and next to their name I
2 have also listed a number which indicates which tract they
3 owned an interest in.

4 For example, Tract 1, if you'll go to the second
5 page, Chesapeake Operating, Anson Gas Corporation, and then
6 the next four names there were unleased mineral owners.

7 Q. So that covers all of the interest in Tract 1?

8 A. Yes, sir, it does.

9 Q. Okay, and in Tract 2 you've got several interest
10 owners as well?

11 A. That is correct.

12 Q. And that would cover all the interest owners in
13 Tract 2?

14 A. That's correct.

15 Q. Did you -- As far as the west half of the
16 southeast quarter of 29, did you examine that area there?

17 A. Yes, sir, we did. The 10-acre strip that we
18 mentioned earlier, the ownership of that 10 acres, which
19 would be affected by approximately six feet, is all owned
20 by Arrington and his partners in this particular proposed
21 well.

22 Q. What about west of that?

23 A. West of that tract, although I've not included
24 those on this, the ownership there, the same lessees own
25 those leases. We didn't notice them under this, but -- I

1 mean, they were noticed, but we didn't send them the notice
2 based upon their ownership in that western 220 acres.

3 Those people are Anson, Chesapeake and then
4 Arrington and his partners.

5 Q. Anson, Chesapeake, and those -- They own an
6 interest in the --

7 A. The western 220 acres.

8 Q. -- the western 220 acres of that south half?

9 A. That's correct.

10 Q. Anson, Chesapeake and Arrington?

11 A. And Arrington and his partners.

12 Q. And those are the only interest owners in that
13 area?

14 A. That's correct.

15 Q. So everybody has been noticed?

16 A. Yes. There are no unleased mineral owners under
17 that other acreage.

18 Q. Okay. Now, you are -- Are you close to a Strawn
19 producing pool? Do you know that?

20 A. The closest Strawn producing pool, I believe, is
21 the pool on the -- It's also on this map. It's about a
22 mile and a half, two miles, to the east southeast, and I'm
23 not certain as to the --

24 MR. BAKER: Dean.

25 THE WITNESS: It's the Dean field.

1 Q. (By Examiner Catanach) Do you know if that's
2 spaced on 80 acres?

3 A. I do believe it is spaced on 80s.

4 MR. BAKER: I believe so.

5 THE WITNESS: Which was the reason we had
6 originally applied for an 80-acre spacing. And then when
7 we discovered that it was more than a mile away we changed
8 it to the 40-acre.

9 Q. (By Examiner Catanach) Okay. Nobody at this
10 point has entered any objection to your location?

11 A. The only party being Packard, who has since
12 executed a waiver letter.

13 Q. Packard -- well, who -- How is Bahlburg related
14 to --

15 A. The Packard Energy Group is -- There's several
16 partners in that company, of which Bahlburg is associated
17 through them. All of the leases of record are in the name
18 of Packard Energy Group.

19 Q. Okay.

20 A. I've also verified that through Gary Lamb, who is
21 the president of Packard Energy Group, who said that
22 Bahlburg was a participant in that group.

23 I'd also mention to you that Bahlburg
24 individually was not noticed, since he was not a record
25 owner of any interest in that offset tract. The notice

1 went directly to Packard group. Subsequent to that, we had
2 received a couple of phone calls from Mr. Bahlburg,
3 representing that he was with the Packard Energy Group.

4 EXAMINER CATANACH: Okay, that's all I have of
5 this witness.

6 MR. CARR: At this time we call Bill Baker.

7 BILL D. BAKER, JR.,

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

10 DIRECT EXAMINATION

11 BY MR. CARR:

12 Q. Would you state your name for the record, please?

13 A. Bill D. Baker, Jr.

14 Q. And where do you reside?

15 A. In Midland, Texas.

16 Q. By whom are you employed?

17 A. David H. Arrington Oil and Gas, Inc.

18 Q. And what is your position with Arrington?

19 A. Exploration manager.

20 Q. Mr. Baker, have you previously testified before
21 the New Mexico Oil Conservation Division?

22 A. Yes, sir, I have.

23 Q. At the time of that testimony, were your
24 credentials as an expert in petroleum geology accepted and
25 made a matter of record?

1 A. Yes, sir, they were.

2 Q. Are you familiar with the Application filed in
3 this case on behalf of David H. Arrington Oil and Gas,
4 Inc.?

5 A. Yes, sir, I am.

6 Q. And are you familiar with the proposed well,
7 which is the subject of this hearing?

8 A. Yes, sir, I am.

9 MR. CARR: Are the witness's qualifications
10 acceptable?

11 EXAMINER CATANACH: They are.

12 Q. (By Mr. Carr) Mr. Baker, let's go to what has
13 been marked Arrington Exhibit Number 5. Would you identify
14 that and then review the information on this exhibit for
15 Mr. Catanach?

16 A. Yes, sir. Exhibit Number 5 is a structure map on
17 the top of the lower Wolfcamp 2nd Brother "A" pay zone,
18 which is the principal target of this prospect. This
19 particular map here shows that the lower Wolfcamp is a
20 north-south structural anticline, with north-plunging
21 structure.

22 This particular exhibit shows that the Number 1
23 Prince Nymph, our proposed prospect, will attempt to gain
24 anywhere from 20 to 40 feet of structural relief to two key
25 offset wells that I'm going to talk about in just a minute,

1 and those wells being the Trice Fisher Number 1 and the
2 Read Number 1 Alexander.

3 Both these two wells tested the lower Wolfcamp
4 2nd Brother "A", and they tested shows of oil and gas with
5 substantial amounts of water, indicating that they were
6 principally down in the water interval. Then our
7 particular location attempts to get out of that water
8 interval.

9 Q. And we have the trace for the cross-section shown
10 on this exhibit?

11 A. Correct, yes, sir, A-A'.

12 Q. All right, let's go to Exhibit Number 6, the
13 isopach map, and I'd again ask you to review it for Mr.
14 Catanach.

15 A. Okay, Exhibit Number 6 is an isopach of the 2nd
16 Brother A and B porosity intervals, which are the primary
17 pay targets here.

18 As you can see from the isopach, the carbonate
19 appears to be oriented in a northeast-to-southwest
20 orientation, with the porosity pinchout being to the south.

21 As you can see here, that the Trice Fisher Number
22 1 encountered approximately 60 feet of porosity in the 2nd
23 Brother carbonate system.

24 As you move to the south you see our proposed
25 Number 1 Prince Nymph. We hope to encounter approximately

1 25 feet of porous 2nd Brother pay.

2 And then you move on down to the Read Number 1
3 Alexander, which basically defines the southern pinchout of
4 the carbonate, and they only encountered 12 feet of porous
5 carbonate.

6 I've also indicated on here an approximate oil-
7 water contact throughout the reservoir to kind of give you
8 an indication of the productive area.

9 Q. All right, let's go to Exhibit Number 7, the
10 cross-section.

11 A. Okay, Exhibit Number 7 is a structural cross-
12 section that will basically show you the two key wells that
13 helped set up the project, as well as our proposed
14 location.

15 And if you look on the right-hand side of the
16 cross-section, that's where we'll begin there. That is the
17 Trice Number 1 Fisher. And this well was drilled back in
18 1959. And in drilling through the Wolfcamp 2nd Brother pay
19 zone here, they drill stem tested a couple of times.

20 In the initial drill stem test they encountered
21 excellent shows of oil gas. They actually had gas to
22 surface and tested oil at rates of 40 to 50 barrels of oil
23 per hour. Good pressures, no water.

24 They subsequently drilled a little deeper down
25 into the formation and re-drill stem tested and tested once

1 again oil and gas. This time they tested substantial
2 amounts of salt water with it.

3 They ended up drilling the well on down to a
4 depth of about 11,850 feet, plugged back to this Wolfcamp
5 interval here, attempted a completion in it, and throughout
6 a number of perforated intervals tested mostly salt water.
7 At one time they did test a little bit of oil out of it,
8 but they were testing mostly salt water throughout the
9 interval.

10 You can see here that there's a substantial
11 amount of porosity within the reef system. I used about a
12 four-percent cutoff and came up with approximately 60 feet
13 of porosity involved here.

14 As you move to the left on the cross-section, you
15 can see the proposed location. What we're hoping to do is
16 gain about 25 to 30 feet of structure and keep enough
17 porosity that we can make a commercial well. We anticipate
18 that we're going to get somewhere between 20 to 25 feet of
19 porosity in the A and the B intervals.

20 As you move on to the left you see the Charles
21 Read Alexander Number 1 well. This well was drilled back
22 in 1968, and it was an attempt to also gain structure to
23 the Trice well. It was a Wolfcamp proposal. What ended up
24 happening here is, not only did they come in structurally
25 low to the Trice Number 1 well, but the carbonate system

1 started to deteriorate, the porosities were getting tight,
2 and they only encountered about 12 feet of porous rock.

3 They did attempt a completion here, and they
4 tested the well at a rate of 122 barrels of oil a day and
5 238 barrels of water per day. I think they tested a total
6 of 1247 barrels of oil total, and P-and-A'd the well
7 shortly after completion attempts.

8 Q. Would you summarize the conclusions you've
9 reached as a result of your geologic study?

10 A. Well, basically in studying this area here, it
11 does appear like we have a northeast-southwest-trending
12 carbonate system that does have stratigraphically trapped
13 oil in a very small portion, here located in kind of the
14 southern part of the reservoir.

15 We believe that we can gain structure to the two
16 particular show wells here and that if we can maintain some
17 porosity in here we can make a commercial producer.

18 Q. Now, Mr. Baker, the primary objective of the well
19 is the Wolfcamp; is that right?

20 A. Yes, sir, the primary --

21 Q. And Mr. Arrington intends to take the well down
22 to the Strawn?

23 A. Yes, sir, and --

24 Q. Why is that?

25 A. Well, the reason for taking it on down to the

1 Strawn, it's just an additional thousand feet down to the
2 Strawn, and from recent drilling activity located several
3 miles to the south of us by a number of operators, there's
4 been a number of Strawn discoveries made in the area.

5 These are very small algal bioherms, so we just
6 decided for the additional thousand feet it would be
7 prudent to take it on down to the Strawn and test that
8 interval.

9 Q. In your opinion, is the proposed unorthodox well
10 location necessary to effectively produce the reserves
11 under this acreage from the Wolfcamp formation?

12 A. Yes, sir, it is.

13 Q. Will approval of this Application result in the
14 recovery of hydrocarbons that otherwise would be left in
15 the ground?

16 A. Yes, sir.

17 Q. Will approval of the Application otherwise be in
18 the best interest of conservation, the prevention of waste
19 and the protection of correlative rights?

20 A. Yes, sir, we feel they are.

21 Q. Were Exhibits 5 through 7 prepared by you?

22 A. Yes, sir, they were.

23 MR. CARR: At this time, Mr. Catanach, we would
24 move the admission into evidence of David H. Arrington Oil
25 and Gas Exhibits 5 through 7.

1 EXAMINER CATANACH: Exhibits 5 through 7 will be
2 admitted as evidence.

3 MR. CARR: And that concludes my direct
4 examination of Mr. Baker.

5 EXAMINATION

6 BY EXAMINER CATANACH:

7 Q. Mr. Baker, did the -- I guess it's the Trice
8 Number 1 well --

9 A. Yes, sir.

10 Q. Did that, in fact, produce from that upper A
11 section?

12 A. No, sir, there's nothing of record that indicates
13 they ever completed as a commercial producer. There's no
14 records anywhere that any oil that may have been produced
15 on test was ever reported. You know, obviously they tested
16 a little bit of oil out of it, but there's nothing of
17 record that indicates it was ever designated as a
18 commercial well, no, sir.

19 Q. Have any of the wells that you've shown in
20 Section 29, have any of those wells produced from the
21 Wolfcamp?

22 A. Yes, sir, the Read Alexander that is on your
23 cross-section here produced that 1247 barrels from the
24 Wolfcamp. But it was never put into a designated pool,
25 that I'm aware of. That was basically on test.

1 And then the Citation Number 1 Alexander, located
2 on the west half over there, produced approximately 5000
3 barrels out of the same stratigraphic interval here, but is
4 also, once again -- I think that was an undesignated
5 Wolfcamp. To the best of my knowledge, it was never put
6 into a pool.

7 Q. And that Union Texas well didn't produce
8 anything?

9 A. No, sir, that one was located in what I consider
10 to be back reef. It was real ratty, and it was basically
11 tight.

12 Q. Uh-huh. So your primary target is the B zone,
13 but you should encounter maybe something in the A?

14 A. We're certainly hoping so, yes, sir.

15 Q. Did you just use well control for your isopach
16 and structure?

17 A. In the initial instigation of this prospect, it
18 was all developed off of this particular subsurface well
19 control right here. Subsequently, we have some 3-D seismic
20 that basically substantiates what the subsurface well
21 control shows. But the prospect was generated off this
22 subsurface well control.

23 Q. Okay. Moving to your unorthodox location, you're
24 gaining structure?

25 A. Yes, sir.

1 Q. How much?

2 A. It's fairly apparent that we should gain anywhere
3 from a minimum of 18 to 20 feet, to maybe a maximum of 35
4 to 40.

5 Q. And you also believe that you're going to gain
6 carbonate thickness?

7 A. No, sir, I don't know that I'll gain carbonate
8 thickness. My risk here is that I hope I keep some
9 porosity. I think what we're going to do is go from 60
10 feet of carbonate in the Fisher to approximately 25 feet,
11 which we feel like is enough to make a commercial well.

12 Q. Well, if you move that south to a legal location,
13 you will lose some thickness?

14 A. Yes, sir, if I go to a legal location, we felt
15 like we were probably going to have anywhere from five to
16 ten feet, and we didn't deem that enough to make a
17 commercial well. I apologize, I didn't understand what you
18 were asking.

19 Q. Have you, in fact, looked at the Strawn in this
20 area, or is there a potential for Strawn?

21 A. Yes, sir, as far as possibly encountering the
22 carbonate systems, we believe the carbonate is present out
23 here. The one particular factor that bothers me a little
24 bit is, this particular area up in here appears to be
25 subsurfacely structurally lower than the majority of the

1 Strawn production located to the south of us, and
2 everything up in here so far that's encountered any
3 carbonate in the Strawn has been wet. So my fear is that
4 we could find a wet mound up in here.

5 EXAMINER CATANACH: Okay, I have nothing further
6 of this witness.

7 MR. CARR: That concludes our presentation in
8 this case.

9 EXAMINER CATANACH: Okay, there being nothing
10 further in this case, Case 12,078 will be taken under
11 advisement.

12 (Thereupon, these proceedings were concluded at
13 10:28 a.m.)

14 * * *

15
16
17 I do hereby certify that the foregoing is
18 a complete and correct transcript of the proceedings in
19 the Examiner hearing of Case No. 12078,
20 heard by me on 11/5/88 1988
21 David R. Catanach Examiner
22 Oil Conservation Division
23
24
25

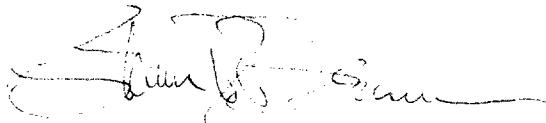
CERTIFICATE OF REPORTER

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

I, Steven T. Brenner, Certified Court 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 November 8th, 1998.



STEVEN T. BRENNER
CCR No. 7

My commission expires: October 14, 2002