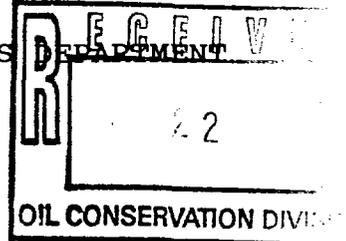


STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES  
OIL CONSERVATION DIVISION



IN THE MATTER OF THE HEARING CALLED BY )  
THE OIL CONSERVATION DIVISION FOR THE )  
PURPOSE OF CONSIDERING: )  
APPLICATION OF AMOCO PRODUCTION COMPANY )  
FOR SIMULTANEOUS DEDICATION, SAN JUAN )  
COUNTY, NEW MEXICO )

CASE NO. 11,586

**ORIGINAL**

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: MICHAEL E. STOGNER, Hearing Examiner

August 8th, 1996

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, MICHAEL E. STOGNER, Hearing Examiner, on Thursday, August 8th, 1996, 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.

\* \* \*

## I N D E X

August 8th, 1996  
 Examiner Hearing  
 CASE NO. 11,586

PAGE

## APPLICANT'S WITNESS:

PAMELA W. STALEY (Engineer)

Direct Examination by Mr. Carr	3
Examination by Examiner Stogner	12
Examination by Mr. Johnson	15

## REPORTER'S CERTIFICATE

17

\* \* \*

## E X H I B I T

Applicant's	Identified	Admitted
Exhibit 1	5	12

\* \* \*

## A P P E A R A N C E S

## FOR THE DIVISION:

ROY E. JOHNSON  
 Geologist, NMOCD  
 2040 South Pacheco  
 Santa Fe, New Mexico 87505

## FOR THE APPLICANT:

CAMPBELL, CARR, BERGE and SHERIDAN, P.A.  
 Suite 1 - 110 N. Guadalupe  
 P.O. Box 2208  
 Santa Fe, New Mexico 87504-2208  
 By: WILLIAM F. CARR

\* \* \*

1           WHEREUPON, the following proceedings were had at  
2           8:15 a.m.:

3           EXAMINER STOGNER: Call this hearing to order.  
4           Please make note of today's docket, Number 22-96, today's  
5           date, August 8th, 1996. I'm Michael Stogner, appointed  
6           Hearing Examiner for today's cases.

7           I'll call at this time Case Number 11,586, which  
8           is the Application of Amoco Production Company for  
9           simultaneous dedication, San Juan County, New Mexico.

10          At this time I'll call for appearances.

11          MR. CARR: May it please the Examiner, my name is  
12          William F. Carr with the Santa Fe law firm Campbell, Carr,  
13          Berge and Sheridan. We represent Amoco Production Company  
14          in this matter, and I have one witness.

15          EXAMINER STOGNER: Are there any other  
16          appearances in this matter?

17          Will the witness please stand to be sworn?

18          (Thereupon, the witness was sworn.)

19          EXAMINER STOGNER: Mr. Carr?

20                         PAMELA W. STALEY,

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

23                         DIRECT EXAMINATION

24          BY MR. CARR:

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

1 A. My name is Pamela Staley.

2 Q. And where do you reside?

3 A. I reside in Denver, Colorado.

4 Q. By whom are you employed?

5 A. Amoco Production Company.

6 Q. And what is your current position with Amoco?

7 A. I'm a staff petroleum engineer in regulatory  
8 affairs.

9 Q. Ms. Staley, have you previously testified before  
10 this Division and had your credentials as a petroleum  
11 engineer accepted and made a matter of record?

12 A. Yes, sir, I have.

13 Q. Are you familiar with the Application filed in  
14 this case on behalf of Amoco?

15 A. Yes.

16 Q. And are you familiar with the subject area?

17 A. Yes.

18 MR. CARR: Are the witness's qualifications  
19 acceptable?

20 EXAMINER STOGNER: They are.

21 Q. (By Mr. Carr) Would you initially just summarize  
22 what Amoco seeks with this Application?

23 A. Amoco seeks an exception to Division Rule 104 (D)  
24 (3) to simultaneously dedicate the following wells to the  
25 160.24-acre gas spacing and proration unit, comprised of

1 Lots 3 and 4 in the east half of the northwest quarter of  
2 Section 2, Township 31 North, Range 14 West of the New  
3 Mexico Principal Meridian, San Juan County, New Mexico.

4 That includes Amoco's proposed Ute Indian "A"  
5 Well Number 22, to be drilled at a location 1880 feet from  
6 the north line and 2150 feet from the west line of the said  
7 Section Number 2, also Amoco's existing Ute Indian "A" Well  
8 Number 17, located 1150 feet from the north line and 1050  
9 feet from the west line of the said Section 2.

10 Amoco proposes to continuously and concurrently  
11 produce Ute Dome-Dakota Pool gas from these wells.

12 Q. Now, Ms. Staley, we're dealing with an irregular  
13 section, are we not?

14 A. Yes, we are.

15 Q. And when we put in Lots 3 and 4 with the east  
16 half of the northwest, we're looking at what is the  
17 northwest quarter equivalent for Section 2; is that  
18 correct?

19 A. That's correct.

20 Q. Have you prepared exhibits for presentation here  
21 today?

22 A. Yes, sir, I have.

23 Q. And are those exhibits contained in a booklet  
24 marked Amoco Production Company Exhibit Number 1?

25 A. Yes.

1 Q. Let's go to that booklet, and could you just  
2 identify the first document contained therein?

3 A. The first document there is our Application to  
4 the NMOCD for simultaneous dedication.

5 Q. Now, Ms. Staley, there is a discrepancy between  
6 the well locations in the Application filed for this  
7 hearing and in the exhibits prepared for hearing today.  
8 Could you review the reasons for that discrepancy for the  
9 Examiner?

10 A. Yes. This particular tract is in an area that we  
11 originally used an earlier survey of 1923. This area had  
12 been resurveyed. The description in the Application was  
13 based on that old survey that had been in use for about 50  
14 years.

15 The tract is in an area that's within where the  
16 new survey was published and accepted in 1993, and the  
17 descriptions in our exhibit book today are from that new  
18 survey.

19 Q. Now, there are other wells in the area that Amoco  
20 has plans to drill. They fall outside the area where the  
21 survey has been published and accepted; is that not  
22 correct?

23 A. That is correct. There will be some wells that  
24 we drill that are in an unpublished, unsurveyed area.

25 Q. What is the impact of the new survey on the

1 locations of the wells which are, in fact, the subject of  
2 this Application?

3 A. This causes the locations to move. The location  
4 of the Ute "A" Number 22 is now unorthodox, and the well is  
5 490 feet from the east line and 760 feet from the south  
6 line of this 160-acre unit, instead of the regulated 790-  
7 foot setback.

8 Q. So the original locations that were proposed and  
9 contained in the Application are based on the old USGS  
10 survey; is that right?

11 A. Yes, that is correct.

12 Q. So this new 1993 survey changes the markers; the  
13 wells are still where you had hoped to originally drill  
14 them?

15 A. That is correct.

16 Q. Now, as to the unorthodox location for the Ute  
17 Indian "A" Well Number 22, will Amoco file an application  
18 for administrative approval?

19 A. Yes, we will. This location is necessary for  
20 geological reasons and the surface-use requirements. We've  
21 met with the Ute Mountain Utes, as well as the BLM, and  
22 we're trying to use existing pads where we can. And for  
23 geological and surface-location reasons, we want to use  
24 this location.

25 Q. Does Amoco operate all the offsetting tracts to

1 this proposed well location?

2 A. Yes, Amoco does.

3 Q. So it would qualify for administrative approval?

4 A. Yes, it would.

5 Q. What is the primary objective in the proposed  
6 well?

7 A. The basal Dakota formation.

8 Q. Let's go to the next document in this exhibit,  
9 the topographic map. Could you review that for Mr.  
10 Stogner?

11 A. Yes, the topographic map shown with the arrow  
12 shows the location of the well. This also includes the  
13 area that we shot the 3-D seismic across.

14 All the well locations in here are operated by  
15 Amoco and represent both Dakota and Paradox wells.

16 The red dots in the area are proposed wells in  
17 our drilling program this year that we'll be filing  
18 administrative applications on, as well as the well we're  
19 talking about here today.

20 Q. Now, you indicated Amoco had met with the Ute  
21 Mountain Utes and the BLM concerning the location for the  
22 proposed Ute Mountain -- or the Ute Indian "A" Well Number  
23 22?

24 A. Yes, we met with them, and this location is  
25 acceptable to them.

1 Q. Let's go to the next plat in the exhibit book.  
2 Can you identify and review that, please?

3 A. Yes, this plat shows part of the 4200-acre lease  
4 that we have under lease from the Ute Mountain Utes. As  
5 you can see, Amoco would be the only affected offset  
6 operator in this particular location.

7 Q. The next page is what?

8 A. The next page is just a C-102, which shows the  
9 survey location for the Ute Indian "A" Well Number 22.

10 Q. All right, and let's go, then, to the following  
11 plat. Can you identify and review that?

12 A. Yes, we're going to be talking about two wells  
13 today in this quarter section. This shows the location of  
14 both of the wells on the proration unit. There are 1320  
15 feet between the two wells.

16 Q. And these are -- You're showing here the new  
17 footage setbacks?

18 A. That is correct.

19 Q. And the proposed well is unorthodox to the east?

20 A. That is correct.

21 Q. All right. Let's go to the seismic map, the next  
22 exhibit, and I'd ask you to explain what this is and then  
23 review the information on this exhibit for Mr. Stogner.

24 A. This is a map on the base of the Dakota. The red  
25 area -- and I apologize for the quality of the reproduction

1 here, but the red area shows the highs in the -- on the  
2 dome, the green areas would show the lowest areas on the  
3 dome.

4 The arrow shows the location of the Ute Indian  
5 "A" Number 22.

6 The bright-colored faults, red, blue, light blue,  
7 et cetera, going across the structure, are existing faults  
8 that we have known about.

9 The 3-D seismic has shown quite a few new faults,  
10 as you can see in the light brown, and we found that this  
11 is a much more shattered and broken-up dome than we  
12 originally anticipated.

13 There is fault separation. If you look between  
14 the "A" Number 22 -- and the "A" 17 is posted to the  
15 northwest of that well -- rather faintly, I apologize, but  
16 it is posted there on the seismic. As you can see, they  
17 are fault-separated by the fault right next to the "A" 22  
18 well.

19 The -- There are more wells needed to produce the  
20 reserves in this pool, we believe, because of the complex  
21 faulting.

22 There is a well, you'll note, right next to the  
23 "A" Number 22. It's a small circle there. This well is  
24 producing deep sour gas from the Paradox limestone, and we  
25 will twin the existing "A" 7 well, rather than producing

1 out of it, because we don't want any chance of mixing those  
2 gas streams.

3 Q. Let's go now to the two-well cross-section, and  
4 I'd ask you to review that for the Examiner.

5 A. We're going to be looking from the "A" 17 well  
6 across to the Ute Indian Number 7, which was the well right  
7 next to the "A" 22.

8 Between those wells we have very good evidence  
9 now of the fault separation between those blocks. Two  
10 faults we see, or we believe actually separate these wells.  
11 The log and the seismic data confirm the fault separation  
12 between the "A" 17 well and the Number 2 well that we have  
13 proposed.

14 Q. All right, let's go to the last page of the  
15 exhibit book, and I'd ask you to review the 3-D seismic  
16 analysis.

17 A. Again, we're going to tour here from the "A" 17  
18 well, shown with a well marker at the top, to the "A" 7  
19 well, then through our proposed location, and then on  
20 across the section to the next fault.

21 The basal Dakota, which is our objective, is  
22 shown in the green, and you can see that there is a fault  
23 -- the two faults that we saw shown on the cross-section,  
24 and then our well, showing it in a high location, and then  
25 the downthrown fault, again confirming the evidence that

1 this is fault-separated from the "A" 22 -- pardon me, from  
2 the "A" 17 well.

3 Q. Ms. Staley, in your opinion is the Ute Indian "A"  
4 Well Number 22 necessary to effectively drain the reserves  
5 under the subject 160-acre spacing and proration unit?

6 A. Yes, we believe this is on a separate fault  
7 block.

8 Q. Will approval of this Application and the  
9 simultaneous dedication of the Indian "A" Wells Numbers 17  
10 and 22 be in the best interests of conservation, the  
11 prevention of waste and the protection of correlative  
12 rights?

13 A. Yes, sir.

14 Q. Was Exhibit 1 either prepared by you, or can you  
15 testify as to its accuracy?

16 A. Yes.

17 MR. CARR: At this time, Mr. Stogner, we would  
18 move the admission into evidence of Amoco Exhibit Number 1.

19 EXAMINER STOGNER: Exhibit Number 1 will be  
20 admitted into evidence at this time.

21 MR. CARR: And that concludes my direct  
22 examination of Ms. Staley.

23 EXAMINATION

24 BY EXAMINER STOGNER:

25 Q. Ms. Staley, whenever I look at the Form C-102 in

1 your plat -- or, I'm sorry, in your booklet -- that is, of  
2 course, the land plat in the OCD form -- is that based on  
3 the old survey or the new survey?

4 A. That is based on the new survey. We have  
5 surveyed this now three times, and this is a brand-new plat  
6 that we have done.

7 Q. And how about the location of the Number 17 well?

8 A. The survey? Are you asking about --

9 Q. Yeah, what is its new location? Is that shown on  
10 the next plat?

11 A. That is shown on the next plat. The two  
12 locations shown on the plat saying "Well Locations" at the  
13 top are the correct surveyed locations.

14 Q. Now, has this survey been published and accepted  
15 by the USGS?

16 A. Yes, sir, it has.

17 Q. And that was the resurvey of 1993?

18 A. It was accepted in -- It was actually surveyed in  
19 1985 and not accepted until 1993 and published.

20 Q. And this is based on the New Mexico Principal  
21 Meridian?

22 A. Yes, sir.

23 Q. Mr. Carr stated in his cross-examination -- I  
24 mean in his direct examination to you that Amoco plans to  
25 file for a nonstandard location?

1 A. Yes, sir.

2 Q. Has that been done yet?

3 A. It has not.

4 EXAMINER STOGNER: I see, it's not.

5 I'm going to request, Mr. Carr, at this time that  
6 if you can get something over to me this afternoon or  
7 tomorrow --

8 MR. CARR: Yes, sir, we can do that.

9 EXAMINER STOGNER: -- requesting that in a one-  
10 page letter, referencing back to this material and what's  
11 been presented today, and let's try to kill two birds with  
12 one stone, and I'll just include that as applicable in any  
13 order that's issued from this order.

14 Q. (By Examiner Stogner) Would that be any problem  
15 with Amoco?

16 A. That would be quite acceptable. We'd like to  
17 drill these --

18 MR. CARR: That would be preferred, Mr. Stogner.

19 Q. (By Examiner Stogner) Okay. Now, when I look at  
20 the topographic map of the Ute Dome field, you show section  
21 lines in here. Is that based on the old one, or is this a  
22 new survey?

23 A. We have taken the topography off of that quad and  
24 we have put the new surveyed lines onto that. So  
25 everything in this booklet represents the new survey.

1 Q. Now, usually a section 2 is in the northern  
2 portion of a township, and they usually have -- how would  
3 you say? -- corrective lots in the northern tier. Is that  
4 apparent in this new survey? I don't have a copy of it.

5 A. I don't believe so, Mr. Stogner. I believe that  
6 the -- there are not any along the northern line that I'm  
7 aware of. I believe the northern line is a true line.

8 Q. And so that is a true 640 acres in Section 2?

9 A. I believe it's slightly over 640 acres, but the  
10 correction, I believe, is on the east side.

11 Q. Okay.

12 A. And it's very slight.

13 EXAMINER STOGNER: Any other questions of this  
14 witness?

15 MR. JOHNSON: I have one.

16 EXAMINATION

17 BY MR. JOHNSON:

18 Q. What was the discrepancies in the footage calls  
19 from the 1923 survey to the 1993 survey?

20 A. We had as much as -- well, not on this particular  
21 well. We had as much as 300-foot discrepancy on this well.  
22 We had as much as 4200 feet on some of our wells. That was  
23 in the next township up, in trying to tie to the new  
24 markers.

25 Q. Is Amoco going to be filing new C-102s on all of

1 these existing wells out there to show the correction on  
2 the survey plots?

3 A. Yes, we've gone back and actually -- We've  
4 resurveyed, like I said, three times, twice during our  
5 seismic activity, and that's where we had the problem of  
6 everything not locating on the map correctly. And so we  
7 believe we have the correct survey at this time, on this  
8 particular well.

9 This well did not move much at all to the final  
10 survey. 300 feet was in an earlier adjustment that we had  
11 made. But this particular well moved the least of any of  
12 the wells that we're going to drill. But there were some  
13 severe movements.

14 EXAMINER STOGNER: No other questions of Ms.  
15 Staley? You may be excused.

16 Again, Mr. Carr, if you will submit to me a  
17 written request for a nonstandard location and ask that the  
18 record in this matter be incorporated in that Application.

19 Other than that, as far as the simultaneous-  
20 dedication portion goes, that will be taken under  
21 advisement at this time.

22 MR. CARR: Thank you, Mr. Stogner.

23 (Thereupon, these proceedings were concluded at  
24 8:35 a.m.)

25

\* \* \*

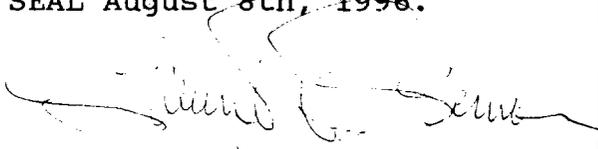
## CERTIFICATE OF REPORTER

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 August 8th, 1996.

  
 STEVEN T. BRENNER  
 CCR No. 7

My commission expires: October 14, 1998

I do hereby certify that the foregoing is a complete record of the proceedings in the oral hearing of Case No. 11586, heard by me on 8 August 1996.

  
 Michael H. Star, Examiner  
 Oil Conservation Division