

CASE 7499: ARIZONA PROSECUTIONS COUNTY FOR  
CONVICTIONS FOR THE, IN COUNTY, NEW  
MEXICO

*Lucy*

DOCKET MAILED

Date 2/19/82 (Poolers)

Cumulative Perks:  
200 % Risk Factor  
\$4200 / mo salary  
1 mo profit

Daw - 100% penalty

CASE NO.

7499

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APPLICATION,  
TRANSCRIPTS,  
SMALL EXHIBITS,  
ETC.

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION  
STATE LAND OFFICE BLDG.  
SANTA FE, NEW MEXICO  
31 March 1982

EXAMINER HEARING

IN THE MATTER OF:

Application of Amoco Production Com-  
pany for compulsory pooling, Lea  
County, New Mexico.

CASE  
7499

BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation  
Division:

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For the Applicant:

Clyde L. Mote, Esq.  
AMOCO PRODUCTION COMPANY  
Houston, Texas



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

For Dow Chemical Co.:

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## I N D E X

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1  
2 MR. NUTTER: We'll call next Case Num-  
3 ber 7499.

4 MR. PEARCE: Application of Amoco Pro-  
5 duction Company for compulsory pooling, Lea County, New  
6 Mexico.

7 MR. MOTE: Clyde Mote for Amoco Pro-  
8 duction Company, in association with Bill Carr and Katie  
9 Kruger.

10 We'll have, probably have no witnesses  
11 in this.

12 MR. EZZELL: Calder Ezzell with the  
13 Hinkle Law Firm of Roswell, representing Dow. We have two  
14 witnesses to swear.

15  
16 (Witnesses sworn.)  
17

18 MR. EZZELL: And we realize that Amoco  
19 may wish to put on witnesses after -- after hearing our state-  
20 ment, and we have no objection.

21  
22 MARK MARTIN  
23 being called as a witness and being duly sworn upon his oath,  
24 testified as follows, to-wit:  
25

## DIRECT EXAMINATION

BY MR. EZZELL:

Q Would you state your name, residence, occupation, and employer, please?

A. My name is Mark Martin. I'm Area Manager, Dow Chemical, for New Mexico/West Texas, and I live in Midland, Texas.

Q Have you previously testified before the Oil Conservation Division for the State of New Mexico and had your qualifications as an expert landman accepted?

A. I have previously testified.

MR. EZZELL: We would tender Mr. Martin as an expert in the field of petroleum landman.

MR. NUTTER: Mr. Martin is so qualified.

MR. EZZELL: Thank you.

Q Are you familiar with the application of Amoco in this case?

A. Yes, sir.

Q Could you explain your position?

A. Well, I was going to. As you know, we were here on the 3rd of March, I might give a little rundown as to what's happened since then, if you so please.

We talked to -- I talked to Mr. Vasquez

1  
2 on the 4th after the meeting and we set up a tentative meeting  
3 for the 17th in Houston, at which time we -- in the meantime  
4 our geologist got our maps cleaned up and get them in a pre-  
5 sentable form. We went to Houston for the day on the 17th  
6 and met with Amoco folks there. We were well received and  
7 we showed them everything that we had come up with in the  
8 area and left them a complete set of cross section, and I  
9 don't know, five or six maps on different formations.

10 And I advised Amoco at that time that  
11 our intention in being there was that we were still trying  
12 to talk them out of a Devonian test at this particular loca-  
13 tion and that however we did agree that the Penn possibili-  
14 ties were very good in this area, and in fact we wanted to  
15 recommend to our management to participate in the Penn test,  
16 which we have now done.

17 And at any rate, I advised them also  
18 at that time that we intended to notify the Commission as  
19 soon as possible that we wanted to appear at this meeting  
20 to show our maps and our interpretation of the area and that  
21 if -- if they, after looking at our information, if they  
22 could agree with us so that we could call the whole thing off.

23 On, I think it was this last Friday,  
24 I talked to Mr. Vasquez again and he indicated they were  
25 meeting that afternoon to make a final determination and then

1  
2 I think he called me back on Monday saying that they had made  
3 a final determination tht they did not want to back off the  
4 Devonian location. They wanted to -- and also they didn't --  
5 we suggested a slight change of location for a Penn test.

6 So at any rate, their advice was that  
7 they were going to appear here at the Commission and let it  
8 ride the way it was.

9 Of course, our purpose in coming  
10 back is that we want to put on some geologic evidence. We  
11 would hope to convince the Examiner that the geological evi-  
12 dence indicates a Devonian location as is proposed by Amoco  
13 is unwise and that -- and that it really isn't fair on the  
14 part of Amoco to force partners into a Devonian location at  
15 this point since the partners aren't near as well represented  
16 in acreage surrounding it as Amoco is.

17 And we feel that the result of a forced  
18 pooling being granted, that it puts Dow in a position of having  
19 to either participate in a well we don't really believe in  
20 to the Devonian, or it forces them out of their Penn rights,  
21 or into a farmout situation as to their Penn rights.

22 And we feel that we'd pay a dispropor-  
23 tionate cost to help evaluate Amoco acreage, since they own  
24 most of the acreage to the north. The location directly to  
25 the north Dow would have 1/8th in and then this location, of

1 course, we have 1/4.

2 We would rather, if Amoco is intent on  
3 a Devonian test, that they move on their full interest acreage  
4 to drill it, and just kind of leave us out of it.

5 MR. EZZELL: Mr. Examiner, would you  
6 like the record of this hearing to reflect a summary of what  
7 transpired at the -- at the March 3rd hearing?

8 MR. NUTTER: No, sir, it's part of the  
9 record here already.

10 MR. EZZELL: All right.

11 A. I guess that's all I have.

12 Q. Do you have anything else to add to your  
13 testimony at this time?

14 A. No. As I say, we have recommended parti-  
15 cipation in a Penn test at this location and I have every  
16 reason to believe that we would be approved, that we'll be  
17 approved, this recommendation.

18 Q. By your management?

19 A. Yeah.

20 Q. Have you made -- in your opinion has  
21 Dow made every effort to negotiate a mutually acceptable ar-  
22 rangement with Amoco for the drilling of a well in this area,  
23 be it a Devonian well or a Pennsylvanian well?

24 All farmout possibilities have been dis-  
25

1 cussed and nothing has been mutually agreed upon?

2 A We have discussed farmout possibilities.  
3 We, as I stated before, we were given the choice of a 40 per-  
4 cent break in farmout, which we didn't think was adequate in  
5 the event we elected to farmout. As I say, our desire is to  
6 try to convince our management, and I think we can, to parti-  
7 cipate in the Penn test, and we feel like it's got real good  
8 possibilities.  
9

10 And I don't know whether we've done all  
11 we can as far as trying to cooperate with them. I do know  
12 that our geologists went to -- spent a lot of hours getting  
13 these maps cleaned up and we're kind of short staffed, anyway.

14 Q And in other words, you feel that the  
15 best Amoco farmout proposal is unfair and therefor you have  
16 not been able to accept that, and on the other hand, you have  
17 not been able to convince Amoco that they need to drill a  
18 Devonian test rather than a Devonian test, and that's  
19 pretty much the status of the negotiations?

20 A Well, I won't say unfair. In some in-  
21 stances it would be fair --

22 Q In light of the offset production you  
23 do not feel that it's fair.

24 Thank you.

25 MR. EZZELL: I have no further questions



1  
2 of this witness at this time.

3 MR. NUTTER: Any questions of Mr. Martin?

4 MR. MOTE: Yes.

5  
6 CROSS EXAMINATION

7 BY MR. MOTE:

8 Q Mr. Martin, do you understand that Belco  
9 is also an interest owner in this particular property that's  
10 being force pooled in this hearing?

11 A That's right.

12 Q And is it your testimony or do you know  
13 whether or not Amoco has offered you the same thing that  
14 Belco's already accepted?

15 A That's right, they have.

16 Q Isn't that some evidence to you that  
17 they think that it's probably fair?

18 A Not necessarily. I think that there's  
19 a lot of circumstances that would preclude -- that would  
20 change their thinking on the farmout. I won't get into their  
21 reasons. That's their business, of course.

22 Q With regard to this meeting that we had  
23 in Houston, you were met by employees of Amoco Production  
24 Company there, were you not?

25 A That's true.

1  
2 Q And you were with a fellow by the name  
3 of Jack Hammer and L. B. Taylor from your company?

4 A That's right.

5 Q At that meeting were you not furnished  
6 a packet of well estimates which showed a good deal further  
7 information with regard to the program that Amoco intends  
8 to use in drilling this well, if approved?

9 A Yes. We received a good bit of other  
10 information as far as the pipe program and mud and all that  
11 sort of thing. Now I'm not familiar with it because Mr.  
12 Hammer took that, all that information with him, and so I  
13 don't -- of course I couldn't interpret it, anyway, but yes,  
14 we were furnished a good deal of information on the engineering  
15 involved in the drilling of the well.

16 Q Is Mr. Hammer going to testify?

17 A No.

18 Q You don't, just to get it in the record,  
19 you're not denying that we furnished a drilling program and  
20 a casing program and all the scout tickets of all adjoining  
21 wells, the bit records, the mud records, and other information  
22 dealing with the AFE that was previously furnished you. You  
23 agree that all was furnished to you, don't you?

24 A I don't know what was furnished. I didn't  
25 see it, but I know we didn't need the scout tickets. We had

1  
2 all that, and when we got together, we kind of got on one  
3 side of the room and then the engineering bunch got on the  
4 other side of the room and discussed things, and I really  
5 don't know what all they did discuss, but I do know that --

6 MR. NUTTER: Now when you say we got  
7 together on one side of the room, you mean the land people.

8 A. Well, the geologists and the exploration  
9 people, and then, like I say, the engineers got together and  
10 they discussed their thing, and I'm not -- I'm not aware of  
11 everything that they furnished, but I assume that Mr. Hammer  
12 got everything that he thought he needed because I haven't  
13 heard anything from him.

14 MR. MOTE: No further questions.

15 MR. NUTTER: Are there any questions of  
16 Mr. Martin? He may be excused.

17  
18 L. B. TAYLOR, JR.

19 being called as a witness and being duly sworn upon his oath,  
20 testified as follows, to-wit:

21  
22 DIRECT EXAMINATION

23 BY MR. EZZELL:

24 Q Would you state your name, your residence,  
25 occupation, and employer, please?

1  
2 A. L. B. Taylor, Jr., and I'm an area geologist for  
3 Dow Chemical Company in Midland.

4 Q Have you testified before the New Mexico  
5 Oil Conservation Division before?

6 A. No, I have not.

7 Q Would you briefly state your education  
8 and employment experience, please?

9 A. I have a degree in petroleum geology,  
10 a BS degree in 1949.

11 Q And where did you receive that degree?

12 A. Texas Tech.

13 Q All right, and what could you tell us  
14 about your work experience?

15 A. I worked for an independent in Midland  
16 area when I first got out of school and then I went to work  
17 for Southland Royalty about four years. I was on my own for  
18 a few years and then I went to Great Western Drilling Company  
19 and since 1976 I've been with Dow Chemical Company.

20 Q And the -- have you practiced your pro-  
21 fession of geology --

22 A. Yes.

23 Q -- continuously during that thirty some  
24 odd year time?

25 A. Yes, I have.

Q What is your specific responsibility with Dow Chemical?

A I'm the Area Geologist for New Mexico and West Texas.

Q And how much of your thirty plus year experience has been devoted to New Mexico and West Texas?

A All of it has been. I lived in Midland all that time except for five months I lived in Lovington back in the early fifties.

MR. EZZELL: We would tender Mr. Taylor as an expert geologist.

MR. NUTTER: Mr. Taylor is so qualified.

Q Are you familiar with Amoco's application in this case?

A Yes, I am.

Q And have you prepared exhibits to explain to explain to the Commission the opposition that Dow has to this application?

A Yes, I have.

Q Would you proceed with your testimony, please? There's a pointer up there if you need it.

A I want to apologize for the size of this thing, but I did not reduce it, but it has been revised a little bit since we showed this to Amoco in Houston. Our

1  
2 map did not come out as well in here and we replaced that,  
3 and there were some small differences in perforations where  
4 I showed the pay zones. But anyway it is corrected as much  
5 as that. I believe all the perforations are shown in yellow,  
6 the productive zones.

7 This is what is typically called an area  
8 of the Strawn Lime, which is the first marker here, and I be-  
9 lieve and the Atoka, the Morrow Clastics, Mississippian,  
10 Woodford, Devonian, and I believe that these Pennsylvanian  
11 formations do reflect the Devonian structure, and it's from  
12 this, the Morrow Clastics zone that I have Isopached the in-  
13 terval down to the Devonian, which I think is the key to the  
14 structure of the Devonian.

15 I want to say that I do not believe that  
16 the area to the north where the proposed location is, is  
17 separate from a well that produced water on drill stem test,  
18 that Shell well in --

19 Q Would you locate those on the map?

20 A And this is the well right here that  
21 tested water.

22 Q If you could show the location on the  
23 map there.

24 A Oh, I'm sorry. Okay, this, this was a  
25 dry hole right here in 22 is the proposed location -- is the

1  
2 dry hole. The proposed location --

3 MR. NUTTER: Now there's two dry holes  
4 in Section 22. Which one?

5 A. Yes, sir, this is the Shell well. This  
6 one did not go to the Devonian.

7 MR. NUTTER: Okay, the northernmost dry  
8 hole shown in Section 22, then.

9 A. Yes, sir. And that well is the Shell  
10 No. 1, North Antelope Ridge Unit. And the proposed location  
11 that Amoco has is this location up in here at this point, and  
12 I tie all this in in one structure and I believe that their  
13 location here, according to the structure on the Morrow  
14 Clastics and these other Pennsylvanian limes, reflect the  
15 Devonian, and I believe that this well right here will not --  
16 this location will not be any higher than the well in --

17 MR. NUTTER: Now you're referring to the  
18 proposed Amoco location which is in the south half of Section  
19 3?

20 A. Yes, sir.

21 MR. NUTTER: Where would that location  
22 fall with respect to your cross section?

23 A. Okay. This is the -- it would actually  
24 be to the north of this Adobe Well, which is productive out  
25 of what we normally call the Strawn, out of this zone right

1 here, the 1-Y is the offset to it.

2 This is another well that was drilled.  
3 This is a BTA well, this was both productive out of the Atoka,  
4 this is Atoka and Morrow Lime production.  
5

6 MR. NUTTER: Now, Mr. Taylor, you keep  
7 saying this, this, this, and that's not going to reflect in  
8 the record, so if you can describe the location that you're  
9 referring to when you say this well.

10 A. The location -- the well in the -- in the  
11 north half of Section 2 is an Atoka well. This is an Atoka  
12 and Morrow Lime well in the south half of Section 2.

13 The gas well in the north half of Section  
14 11 is a Morrow well.

15 This is -- the well in the north half  
16 of Section 10, which is the southwest of the proposed loca-  
17 tion, is what we normally call the Strawn, Strawn Lime.

18 So I believe that this -- I can show  
19 on my map that we could move up dip by moving just to the  
20 east of this well structurally. We can gain structure in a  
21 better position for the Pennsylvanian, but I also suggest  
22 that this location here, the location would gain no structure  
23 to this well that got water on a drill stem test in the  
24 north half of 22.

25 Q

And that is the well that penetrated



1 the Devonian?

2 A. Yes.

3 MR. NUTTER: Now on your cross section,  
4 Mr. Taylor, I see five wells that apparently have penetrated  
5 the Devonian. The one on the far right, which would be the  
6 one on -- the northernmost well on your map.

7 A. Yes, sir.

8 MR. NUTTER: And then it looks like about  
9 the ninth well from the top. That would be the well in Sec-  
10 tion 22?

11 A. The well in Section 34.

12 This is the well in Section 22, yes.

13 Q. That is the dry hole in Section 22.

14 A. Right here.

15 MR. NUTTER: And then there are  
16 three other Devonian tests there at the south end of the cross  
17 section.

18 A. These wells right in here are productive  
19 from the Devonian in Section centered in 34.

20 And I don't believe there is a separa-  
21 tion structurally and the -- our estimated original oil -- gas/  
22 water contact, rather, is -11340, obtained from a drill stem  
23 test and other data, and these three wells that are productive  
24 in the south end of that area.  
25

1  
2 This well got water at -- on a drill  
3 stem test at a datum of -11260 to 11336, so --

4 MR. NUTTER: Now that's the one in Sec-  
5 tion 22?

6 A. Yes, sir, that's the well in 22, and  
7 actually it's about four feet high to the gas/water contact.

8 So, anyway, this one did get water at  
9 a point roughly equivalent to these wells here.

10 MR. NUTTER: How about the other Devonian  
11 wells?

12 A. This one is a dry hole on a section up  
13 to the north there.

14 MR. NUTTER: it was high, however, wasn't  
15 it?

16 A. It was high, yes.

17 MR. NUTTER: Why was it dry, no porosity,  
18 or what?

19 A. I think it's structural position on  
20 another structure.

21 MR. NUTTER: Your map went further to  
22 the north to show that structure continuing on up --

23 A. Yes, sir. I show -- I show this coming  
24 up on another structure here, to the north.

25 MR. NUTTER: -- so it wasn't wet.

posed -- the arrows I have would be a suggested location that would be, would gain structure on everything all the way down.

But their proposed location is in Section 3, 1980 from the east and 660 from the south line.

Q That is the unmarked circle?

A It's the unmarked circle. And you can see that from this interpretation here, that we would gain very little structure. In fact their proposed location would probably be low to the dry hole in the Strawn, and I think you'll find that to be consistent, or just practically so, all the way through. It's going to vary some but it's going to be just about flat or low to that well as I interpret it.

MR. NUTTER: Where was the dry hole in the Strawn, Mr. Taylor?

A In the northwest of 22.

Q He's referring to the Devonian dry hole.

A The Devonian dry hole is a dry hole in everything, and at least it did not produce from anything. I wouldn't say that it wouldn't produce, but -- from some of these zones, but it was a dry hole in the Devonian and tested water in the Devonian.

Q So your Exhibit Two represents your conclusion that the Amoco location in Section 3 is on a separate structure from the southern Devonian producers --

1

2

A. That's correct.

3

Q -- that they correlate it to.

4

A. That's correct.

5

Q And it also goes to show your agreement

6

with the Amoco geology as to the productivity, the possible

7

productivity from the Strawn in the south half of Section 3,

8

although you have a slight different --

9

A. Right.

10

Q You think they would gain structure?

11

A We would gain structure, I believe, at

12

their location over the Strawn well that's marked in yellow

13

there just southwest of it.

14

There's just one Strawn well in this

15

field and that is the one that's been colored in yellow there,

16

just southwest of the proposed location. I do believe that

17

they'd have a good chance to make a Strawn well at that

18

location, but I think we would gain structure by moving to

19

the east.

20

Q Okay. I'd like to refer you to your

21

Exhibit Number Three. Would you explain that exhibit, please?

22

A Exhibit Number Three is really the top

23

of the Atoka, the second line, second correlation here, and

24

I believe this is consistent with the Strawn, and I think

25

you'll find all these maps are consistent. There's a saddle

1  
2 in the south half of 22. The Devonian dry hole is in the  
3 northeast corner of 22. The Atoka producers are outlined in  
4 yellow and the yellow triangles are indicated Atoka producers.  
5 I believe that the proposed location -- Amoco's proposed  
6 location will be flat or low to the well that tested water  
7 in the Devonian in 22. I believe they can gain structure  
8 by moving to the east and that would be our proposed location  
9 where the arrow is.

10 Q Gain structure in the Atoka?

11 A In the Atoka.

12 Q Okay. So this Exhibit Three, like your  
13 Exhibit Two, shows your agreement with the Amoco position that  
14 the southeast quarter of Section 3 would be productive from  
15 the Atoka and also indicates your conclusion that the Devonian  
16 in that location would be on a completely separate structure  
17 from the Devonian producers to the south.

18 A That's correct. I would say it has a  
19 good chance of making an Atoka well.

20 Q All right, I refer you to your Exhibit  
21 Number Four. Would you explain this exhibit, please?

22 A This is the top of the Morrow Clastics  
23 zone, right here, and I believe that you will see again that  
24 this is separated with a saddle here in the south half of 22.  
25 The dry hole in the northeast of 22, Devonian dry hole, would

1  
2 indicate that the proposed location would be probably flat  
3 or low to that well, again, on the Morrow, as it has been on  
4 the Strawn and Atoka.

5 Q So once again this exhibit establishes  
6 the prospectivity of the Morrow Clastics.

7 A I believe so.

8 Q And in the southeast quarter of Section  
9 3, and that the -- is additional evidence that the Devonian  
10 would be located on a separate structure from the southern  
11 producers.

12 A I'll qualify that a little bit by saying  
13 that, of course the Morrow Clastics are very erratic, but  
14 structurally we would gain structure by moving to the east  
15 just as the other formations have indicated. I see no gain  
16 in structure over that Devonian dry hole.

17 Q All right. I'd refer you to your Exhibit  
18 Number Five. Would you explain this exhibit?

19 A Okay. Number Five is an Isopach between  
20 the Morrow Clastics and the Devonian. Based on the -- the  
21 structure on the top of the Morrow Clastics. And I believe  
22 that this also shows that our -- there is a thickening --  
23 I've indicated where the colored triangles are all the wells  
24 that have penetrated the Morrow Clastics and gone to the  
25 Devonian, so these are actual measured thicknesses on the logs,

1  
2 the yellow triangles. The others are estimates by adding  
3 the -- a thickening on the flanks of the structure to the  
4 actual Morrow Clastic structure that you just saw on the last  
5 map, and again I believe that we would probably be flat,  
6 roughly flat, with the well that went to the Devonian and  
7 got water.

8 So in my opinion all of these maps sug-  
9 gest that there would be -- we would gain no structure, or  
10 very little at all, over the well that tested water in the  
11 Devonian.

12 Q And once again this exhibit evidences  
13 your opinion that there is a separate structure --

14 A Absolutely.

15 Q -- in the Devonian formation.

16 A Right.

17 Q All right, I refer you to your Exhibit  
18 Number Six. Would you explain this exhibit, please?

19 A This is my Devonian structure based on  
20 the Isopach. The estimated points are projected from the  
21 base of the -- from the top of the Morrow Clastics. The  
22 actual Devonian points are the ones that are indicated in  
23 yellow. The other points are estimated.

24 But I see no reason to tie this structure  
25 off at all to the north, as has been presented before, but

1  
2 I believe that it's the same structure based on our Strawn  
3 and Atoka and Morrow Clastics structure, and projected the Iso-  
4 pach on down to the Devonian.

5 I believe that everything suggests that  
6 we can gain no structure at all at this location and it will  
7 probably be flat or low to this well that tested water in  
8 the Devonian.

9 Q So in your opinion as an expert geologist,  
10 and from a geological standpoint, would you consider the  
11 Pennsylvanian series, that is, the Strawn, Atoka, and Morrow,  
12 would you consider that geologically a relatively low risk  
13 prospect?

14 A Yes, just from the proximity of the --  
15 to the producers in that area, I would say it is a relatively  
16 low risk --

17 Q Inasmuch as you --

18 A -- part of the Pennsylvanian.

19 Q Inasmuch as you have pretty good well  
20 control on three sides.

21 A Right.

22 Q What is your opinion on the prospectivity  
23 of the Devonian at the Amoco proposed location?

24 A I think it's a big risk to go to the  
25 Devonian, based on information that I have presented here.



1

2

Q Okay.

3

4

MR. EZZELL: I have no further questions of this witness at this time.

5

6

MR. NUTTER: Are there any questions of Mr. Taylor?

7

8

MR. MOTE: Yes, sir, Mr. Examiner.

9

CROSS EXAMINATION

10

BY MR. MOTE:

11

12

13

14

15

16

Q Mr. Taylor, with regard to the exhibits which you've shown here, especially Exhibits, I believe, Six and Five, what did you use to -- now Exhibit Six, what did you use as a marker to determine information shown on this exhibit? Did you come down from the top of the Morrow or did you use some other marker?

17

18

A From the Morrow Clastics marker, right here.

19

20

21

Q I understood you to say awhile ago, was I mistaken, that that was rather irregular, it was a hard sand to pick?

22

23

24

25

A I'm speaking of the pay zone within that formation. It's not hard to pick. I think that anyone will agree that that's a good marker and it's generally picked in this area.

1  
2 But the, what I was saying is erratic  
3 is the sands within that zone as far as the irregularity,  
4 they're very irregular and erratic. And I would say that the  
5 sands within there, you're having some risk, of course, in  
6 that, finding the sands present, but structurally on the top  
7 of this Clastic zone, it follows all these other Pennsylvanian  
8 markers. So structurally we should be low, or flat to this  
9 well, but within that carbonate. Within that Clastic zone  
10 we can predict the sand is going to be there, they should be.

11 Q When you say it follows the other markers  
12 in the Pennsylvanian, are you meaning that you can start at  
13 the top, say, the Strawn, and you can pick it pretty easy.

14 And you pick a top of the Atoka, you  
15 more or less just used the same width of all the Morrow  
16 Clastics and things so far below the Atoka? Is that what  
17 you've done?

18 A I think if you look at that closely  
19 you're going to see some -- some differences there. You're  
20 going to see that Strawn thinning there, but that -- it is  
21 generally a good marker for each one of those. We selected  
22 markers that we thought to be good correlative markers.

23 Q Would you consider the top of the Morrow  
24 Clastics to be a better marker than the top of the Strawn?

25 A No better.

1

2

Q. Do you consider it as good?

3

A. The reason I use it is it's closer to the Devonian.

4

5

Q. Do you consider it as good?

6

A. No, I wouldn't consider it as good to reflect the Devonian because it's closer.

7

8

I'm saying that all of these maps, they're going to vary in some from each other, but each one of them, I think, reflect the Devonian generally.

10

11

MR. EZZELL: Could you clarify that question? I think it got on the record wrong?

12

13

A. I'm not quite sure I did understand the answer to my question. Let me see if I do understand your testimony.

14

15

16

That is that you can pick the top of the the Strawn, you can pick the top of the Atoka, you can pick the top of the Morrow Clastics, each equally as well from the markers within those zones, now is that correct?

17

18

19

20

A. Yes, we can pick those markers here.

21

Q.

Isn't it a fact that each one of them are more or less uniform and thickness has nothing to do with it?

22

23

24

A.

No, they are not that uniform, but the marker that we use, we use the gamma rays, and so forth, but

25

1  
2 I think that you'll find that they are good markers to follow.

3 Q Do you have available to you any commer-  
4 cial productions of cross sections, such as this, to make  
5 these picks?

6 A Yes, we do.

7 Q And what do they use as their marker?  
8 Do they use Strawn or do they use something else?

9 A They -- the ones that I have use the  
10 Strawn.

11 Q Okay.

12 A And I can't say for sure about the Mor-  
13 row Clastics. I don't know whether they do or not; I think  
14 they do.

15 Q Let's go to your Isopach map, which I  
16 believe is your Exhibit Number Five.

17 Let me see if I understand what you've  
18 done here. The yellow symbols on here are the Devonian com-  
19 pletions, are those that penetrated the Devonian, is that  
20 correct?

21 A They penetrated the Devonian.

22 Q And strictly speaking, that is really  
23 your only control on the map, isn't that correct?

24 A That's the only measured control, yes,  
25 sir.

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Q And all of these figures by all of these various wells that are shown up and down the exhibit are measured, you say, from what you --

A All of the yellow are measured on the logs.

Q I'm not talking about the yellow ones. I'm talking about all the other wells.

A These others are estimated.

Q Okay. So you've got a Devonian well to the south in 22 and a Devonian to the north in Section 23 that do give you some control in the area, have you not?

A Yes, that's correct.

Q How far apart are those wells?

A Those wells are seven and a half miles, I guess.

Q All right. Now, going from the one in Section 22, I believe you're somewhere above the 1800-foot Isopach and between -- draw sort of a line between those two wells and you go from 1832 up to 1900 and you go up to 2000 feet, don't you? And it's somewhere above 2000 feet there's a contour before you get to the other Devonian well in Section 23 to the north, don't you?

A That's correct.

Q How far different are they in elevation,

1 those two wells, thickness, excuse me?

2 A In elevation?

3 Q Thickness is my question, I'm sorry.

4 A Now which two wells are you referring  
5 to?

6 Q The two Devonian wells that you've shown,  
7 that you said were your control for that area.

8 A The two wells you're referring to, the  
9 one in Section 23 and the one in Section 22, 1810 compared  
10 to 1832 looks like 22 feet difference.

11 Q So you've shown for a difference of 22  
12 feet in thickness between those two wells over seven and a  
13 half miles distant, you've somehow gotten the idea that this  
14 formation thickened somewhere over 200 feet between those  
15 two wells, even though you have absolutely no control for  
16 that, isn't that correct?

17 A We have no control -- yes, we do have  
18 control between those wells, we certainly do.

19 Q Now what --

20 A Based on our Morrow Clastic zone, we  
21 have control, which I believe reflects the Devonian, and I  
22 would separate the two.

23 Q You have no true measure --

24 A No measure.  
25

1

2

Q -- other than those two Devonian wells.

3

A No measure.

4

Q So over that seven and a half mile period,

5

I mean seven and a half mile distance, you've increased the

6

thickness of that zone over 200 feet. Do you agree with me

7

on that?

8

A That's correct.

9

MR. NUTTER: I think, Mr. Mote, the re-

10

cord ought to show it's actually about six miles between the

11

two wells.

12

MR. MOTE: All right.

13

Q What would be the effect of a thickening

14

of the Morrow between those two wells from the standpoint of

15

the proposed location? Would it make the proposed location

16

a better prospect or a worse prospect?

17

A Thickening in the Morrow in that direction?

18

Q Yes, between those two wells.

19

A Okay, let me interject something right

20

here. There is a thickening between the productive area and

21

the well in Section 22. Now if you look at those you'll see

22

there is a thickening, and a measured thickening.

23

There's a 1637 there in Section 4; 1642

24

in Section 34; 1782 in Section 27; 1832 in Section 22; and

25

then we jump way up six miles north and we get an 1810. There

1  
2 is a thickening in that direction.

3 Now your question is what would the  
4 effect of thickening do? It would make it lower. It would  
5 make it lower, normally.

6 Q So it would make a poorer prospect, is  
7 what you're telling me.

8 A For the Devonian, yes, sir.

9 Q Now you constructed your Devonian con-  
10 tour map on this Isopach map, did you not?

11 You used the information from the Iso-  
12 pach map to construct your Devonian contour map?

13 A That was one of the tools. It was  
14 based on these several formations.

15 Q If you would, get out your Exhibit Num-  
16 ber Six. On the Devonian well which you show as being 11257  
17 in Section 22, --

18 A Yes, sir.

19 Q What that 1157 on there? What does  
20 that mean? Is that the subsea depth, 11257? Is that the  
21 subsea depth at which the Devonian was encountered?

22 A Yes, sir.

23 Q And going north, you have another well  
24 there that didn't reach the Devonian. That figure 11294 is  
25 estimated in that well, is that correct?



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2

A. Yes, sir.

3

4

Q And what was that? Is that a producer in some zone?

5

A. Yes, it is.

6

Q What was that?

7

A. That is the Atoka.

8

9

Q And then the one back to the north of that in Section 15 is at 11308 estimate.

10

A. Yes, sir.

11

12

Q What -- where is that well? Is that well --

13

14

A. That's also the Atoka. It's right here on this section.

15

16

Q That was a dual completion, wasn't it, Atoka-Morrow?

17

18

19

A. This one right in here. This one did have open hole production in the Morrow, yes. This is Atoka-Morrow, and the one on the south was Atoka.

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Q All right, and now go back to the well to the Devonian well you show at 11257 in Section 22. Just about east of there you show another well that's -11335 where you estimated it touches the top of the Devonian, is that correct?

A. Yes.

1

2

Q And what well is that?

3

A I don't have it on the cross section.

4

I can't identify that.

5

Q All right. All right, now going to the

6

well I just mentioned, which is in the southeast corner,

7

southeast portion of Section 22, from there up to the Devonian

8

that's completed as a dry hole, it looks like you're going

9

up structure, doesn't it, you go from 11335 up to 11257, do

10

you not?

11

A That's correct.

12

Q And then up to the well up to the north

13

in Section 15 you hit the well that's 11294, estimated top

14

of the Devonian, do you not?

15

A Yes.

16

Q So you're going down a little bit there,

17

aren't you?

18

A That's right.

19

Q Then you go to the next well which is

20

11308 where it's estimated to hit the Devonian, you're

21

going down again, aren't you?

22

A Yes, sir.

23

Q You weren't here to hear Mr. Allen --

24

Mr. Oertel's, Allen Oertel's testimony as a geologist in this

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area, but have you seen his interpretation of this area?

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A. Yes, I have.

Q And you know that he closed his structure just right around the northern portion of Section 15 there. In other words, the contour map would come back to the south. Have you seen that interpretation?

A. I've seen that interpretation.

Q Do you consider that to be a reasonable interpretation since -- by where I've taken you from going from the lowest to the high and then back down that there may be some possibility that those contour lines may close there?

A. I see no reason for tying it off, as I've stated before. I don't -- I don't see any reason for tying it off.

Q Well, I guess my question was do you think it's a reasonable interpretation?

A. Who knows?

I don't interpret it that way and I think based on these -- these other formations all the way there, that they're all about flat across there and I see no reason to put a saddle in that area. I certainly would see a reason to separate the well that tested water from the Devonian producers, put a saddle in there.

Q If the Devonian well that you show in

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Section 22 and the one you show in Section 27, if they're on separate structures, as you show they are, why is it that the oil/water contact is so almost exactly the same?

A. Now what wells are you referring to?

Q. The one in 27 and the one in 22. I believe you testified that the oil/water contact was roughly the same in those two wells.

A. I didn't say that the -- wait a minute. I say that this one has -- this one got water above where this, the well to the south got gas production. So it's not the -- they got water where this one had gas, is what I'm saying.

Q. Well, what about the original oil/water contact in those two wells? Are they the same or not?

A. The gas/water contact?

Q. Oh, gas/water contact, yes.

A. Between these two?

Q. Yes.

A. The gas/water contact may be approximately the same but they test -- they did not get any gas. I don't where the gas/water contact, or if it has any. The only thing I know is the well in Section 22 tested water and no gas, so I can't say what it would be, if there's any gas/water contact in Section 22, the well in Section 22; cer-

1  
2 tainly didn't test it on drill stem test, and that's -- that  
3 is the whole point that this is separated from production,  
4 it has to be on a separate structure because of that.

5 Q We remembered your testimony to be that  
6 the gas/water contact was four feet different in those wells.  
7 Were we in error?

8 A They tested water in an interval that  
9 runs above that, where the base of their test was approxi-  
10 mately where the gas/water contact was in this well. This  
11 well tested only water, so it has to be separated. There's  
12 no gas in that well, as far as I can determine; not from the  
13 drill stem test, there's certainly not.

14 MR. MOTE: I believe that's all.

15 MR. NUTTER: Are there any other ques-  
16 tions of this witness? He may be excused.

17 Did you have anything further, Mr. Ez-  
18 zell?

19 MR. EZZELL: No further witnesses, no.

20 MR. NUTTER: Did you plan to put any  
21 testimony on, Mr. Mote?

22 MR. MOTE: No, sir.

23 MR. NUTTER: Okay. I suppose we're  
24 ready for closing statements. Mr. Mote, you may go last  
25 being the applicant.

1  
2 MR. EZ ZELL: Mr. Examiner, I suppose  
3 the one thing that we have clearly established by the evidence  
4 is that the experts on either side disagree on the structure  
5 of the top of the Devonian and the March 3rd hearing we  
6 heard the Amoco expert geologist support his conclusions,  
7 which I believe did not take into consideration the dry hole  
8 in Section 22 at that time. His top of the Devonian was  
9 picked based on the average interval between the Devonian  
10 in the wells that they did have control to the south, and I  
11 believe one well three miles to the -- three or four miles  
12 to the west.

13 His Devonian tops were based upon the  
14 average interval between some point in the Pennsylvanian  
15 series and the top of the Devonian on those wells where the  
16 Devonian was penetrated.

17 By the same token the Dow expert geolo-  
18 gist has done the same thing, projected the top of the De-  
19 vonian by reference to the -- some point in the Pennsylvanian,  
20 I believe that this point his was the top of the Morrow Clastics.

21 There is, I don't think either -- either  
22 side would contend that the actual Devonian structure can be  
23 more than speculation and interpretation on the available  
24 data at this time, however, we have a situation in which both  
25 sides have certain rights and without some unusual application,

1  
2 someone is going come out on the short end.

3 Quoting our statute on forced pooling,  
4 from Section 70-2-17 of the '78 Comp, all orders affecting  
5 such pooling shall be upon such terms and conditions as are  
6 just and reasonable and will afford to the owner, or owners,  
7 of each tract or interest in the unit the opportunity to  
8 recover and receive without unnecessary expense his just and  
9 fair share of the oil and gas, or both.

10 In this situation the proposed well by  
11 Amoco leaves Dow Chemical with three alternatives, all of  
12 which they feel to be unacceptable.

13 They are being asked to participate to  
14 the extent of a 20 or 25 percent working interest in this  
15 Devonian test, which will cost them at least \$1.1 or \$1.2  
16 million on a well that their experts say should not be  
17 drilled, or at least should not be drilled to the Devonian  
18 formation.

19 By the same token their experts are  
20 adamant that they should participate, or should drill, given  
21 the opportunity, a Pennsylvanian test in the south half of  
22 Section 3.

23 The second alternative offered by -- to  
24 Dow by Amoco is a farmout with a 40 percent back in. They  
25 feel this is unfair because they will be farming out not

1  
2 only the Devonian rights but the farmout as proposed would  
3 include the Pennsylvanian rights. As we've heard from the  
4 Dow geologist and the Dow Area Manager, the company is very  
5 excited about a -- about a Pennsylvanian test. They would  
6 love to participate in it. They would love to get their  
7 money in the hole without having to be force pooled or farm  
8 out to where their participation in the Pennsylvanian pro-  
9 duction would be reduced by 60 percent.

10 The third alternative is to be subject  
11 to an order of this Commission force pooling their interest  
12 and in all strata. We would assume that Amoco would be  
13 asking the maximum penalty and if that was given it would be  
14 a 200 percent penalty applicable to all formations. This  
15 would be fine with Dow as far as the Devonian is concerned,  
16 because they have absolutely no expectations of Devonian  
17 production and they wouldn't care what the -- what the penalty  
18 is. But this same 200 percent penalty, if granted, would  
19 apply to the Pennsylvanian series. Dow thinks that is mani-  
20 festly unfair in that all of the experts agree that it is  
21 a relatively low risk and very, very good prospective area  
22 to drill a Pennsylvanian well.

23 If the forced pooling order as requested  
24 by Amoco was granted, the penalty would apply not only, and  
25 assuming Dow is correct in that the Devonian is nonproductive,



1  
2 the penalty would apply not only to the costs of drilling  
3 the productive Pennsylvanian well, which everybody agrees  
4 will occur, but it would also cover the, what Dow feels would  
5 be unnecessary expenditure of the costs of drilling the well  
6 from the base of the Pennsylvanian down to the Devonian. So  
7 this would even -- even further delay their participation  
8 in the -- in the Pennsylvanian series because the well that  
9 would be subject to the well costs which the penalty would  
10 be paying back, would be the extra costs of drilling the  
11 Devonian well, rather than just the costs of the Pennsylv-  
12 vanian.

13 There's also the ugly spectre in Dow's  
14 mind that what if the 200 percent penalty were granted and  
15 Amoco drilled the well, got through the Pennsylvanian series  
16 and based on logs or shows or whatever engineering data was  
17 available, they stopped and completed in the Pennsylvanian.  
18 There they have a 200 percent penalty working on the Pennsyl-  
19 vanian where, and in fact have never drilled to the Devonian.  
20 If Dow had known that would be the case, they would have  
21 participated in the first place in the Pennsylvanian test  
22 and we wouldn't have been here for two protracted hearings.

23 Dow certainly does not -- does not in-  
24 tend that Amoco has no right to explore the Devonian forma-  
25 tion. Amoco owns the leases. They own numerous leases all

1  
2 through the area, and we respect Amoco's right to drill a  
3 bad well. They think it would be -- they think they've got  
4 a chance, they think they've got a reasonable chance, or they  
5 wouldn't be spending that kind of money, but our people  
6 disagree and cannot justify the expenditure based on geology  
7 with which they disagree.

8 The only thing that I can think of that  
9 would be equitable and in compliance with the statute, would  
10 be a division of the penalty between the Pennsylvanian series  
11 and the Devonian. What I'm saying is Amoco established at  
12 the original hearing that the Devonian is a high -- is a  
13 very high risk well, entitling them to the maximum -- maxi-  
14 mum penalty. Dow agrees with this. As a matter of fact,  
15 they would probably maintain that it is a no risk well because  
16 it has no chance at all, but nevertheless, it is a very risky  
17 proposition to drill to the Devonian.

18 On the other hand, everybody seems to  
19 be in agreement that the Pennsylvanian is not nearly as risky,  
20 and in fact, due to the numerous productive zones in the  
21 three offset wells, or four offset wells, that we've heard  
22 testimony about, it seems as though it is an exceptionally  
23 good Pennsylvanian prospect.

24 So we would propose in the event that  
25 the Commission feels that a forced pooling order must be

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2 entered, we would initially ask that this order be denied,  
3 but if the Commission feels that an order must be entered  
4 allowing Amoco to drill to the Devonian, that the penalty  
5 imposed be the statutory maximum of 200 percent only insofar  
6 as it applies to the Devonian formation, and with respect  
7 to the Pennsylvanian series, and everything up the hole from  
8 there, since the risk element on which the penalty is based  
9 is not present to the same extent that it is in the Devonian,  
10 we would ask that a minimum penalty, not to exceed 100 per-  
11 cent, and perhaps lower, be imposed on the Pennsylvanian  
12 series.

13 I'm not aware of this having been done  
14 in New Mexico before. It is evidently fairly common in other  
15 jurisdictions where forced pooling exists. I would cite a  
16 March 25, 1980, case in the Supreme Court of Oklahoma, style  
17 C. F. Birun, B-I-R-U-N, and Company, et al, versus the  
18 Corporation Commission, wherein there were thirteen possibly  
19 productive zones. One party wanted to drill to the Hunton  
20 formation, which apparently lays some 13,500 feet below the  
21 surface. Other parties were eager to drill, not unlike  
22 this case, to the Morrow formation, which lay at about 11,000  
23 feet subsurface.

24 The Corporation Commission, which is  
25 Oklahoma's comparable body to the OCD, entered an order pooling

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2 as one unit all formations from the surface down to the base  
3 of the Morrow. Although they do not have risk penalties in  
4 Oklahoma, and instead compensate operators and penalize non-  
5 operators, or nonconsenting parties in a different manner, I  
6 think in Oklahoma a nonconsenting party is given an override  
7 and maybe a cash bonus, or a combination of the two, and  
8 never comes back in to participate in production, whereas  
9 the operator, although having to pay the cash bonus or be  
10 subject to the additional override, does get the additional  
11 working interest pooled. In that case one series of penalties  
12 was established for the top twelve formations down to the  
13 base of the Morrow, and a separate penalty was established  
14 for the separate pool, separate unit to be pooled, being  
15 the Hunton formation.

16 And I think this was upheld by the  
17 Oklahoma Supreme Court. It indicates in the case that it  
18 had been done numerous times by the Commission, although  
19 there was a controversy with respect to the formula allocating  
20 costs to the Hunton formation as opposed to the -- to the  
21 Morrow formation. The formula was in dispute and that is  
22 the reason it was appealed to the Supreme Court.

23 I think in our case it would be a rela-  
24 tively easy accounting to allocate costs for a Pennsylvanian  
25 Well as opposed to costs for a Devonian Well. The 200 percent

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2 penalty would apply to the costs for the Devonian; i.e. the  
3 excess costs, the margin of costs over that that it would  
4 take to drill the Pennsylvanian well. The 200 percent penalty  
5 would apply as to those costs and it would be based on pro-  
6 duction out of the Devonian formation.

7 The lesser penalty applying to the Penn-  
8 sylvanian series, where the risk is not present to the same  
9 extent, would apply to Pennsylvanian production only insofar  
10 as it covers those costs, the reasonable costs for drilling  
11 a Pennsylvanian well.

12 This, it seems, would allow the appli-  
13 cant to drill a Devonian test without forcing this unneces-  
14 sary hardship of the three alternatives I spoke of earlier,  
15 on down. The Respondent Dow would still be able to partici-  
16 pate fully in the Pennsylvanian production that they desper-  
17 ately want to participate in, although it would be subject  
18 to this -- this lower penalty that we propose.

19 By the same token they would not be  
20 forced to spend \$1.1 million if the AFE is true, to drill a  
21 Devonian test that all of their experts advise against and  
22 that their management cannot possibly justify. This would  
23 be in accordance with the -- with our statute, which mandates  
24 the protection to the extent possible of all parties, and  
25 would still allow the drilling of the well at the proposed

1  
2 location or a location to be agreed upon, and allow both  
3 parties to participate in the formations that they so desire.

4 MR. NUTTER: Thank you. Mr. Mote?

5 MR. MOTE: It's probably pretty evident  
6 from what the Examiner's seen already, that really no new  
7 evidence has been introduced. The control for the exhibits  
8 which are evidenced by virtue of testimony today are really  
9 just the same control points, the same evidence you've seen  
10 before, with some different interpretation on where the  
11 contours lie and the thickening of the various zones, some  
12 of which may be in our opinion strained.

13 For example, the Isopach map, the wit-  
14 ness testified that the zones were more or less regular in  
15 thickness, starting with the top of the Strawn on down to  
16 the top of the Devonian. but when he contoured the Isopach  
17 map, even though there was only 20 feet difference between  
18 the only two control points, he arbitrarily establishes a  
19 thickening of over 200 feet, and he admits that the thicken-  
20 ing of the -- this interval by over 200 feet has the result  
21 of making the proposed well a less desirably location be-  
22 cause it puts us further off the top of the structure.

23 Since he bases his contour map on the  
24 top of the Devonian on the Isopach map, it's very evident  
25 that the thickening in the Devonian of the Isopach map is

1  
2 what is shown up in the contour map to make the proposed  
3 location much less desirable.

4 Now the one suggestion that he makes to  
5 move the well to the east, of course, is an unorthodox loca-  
6 tion, at least looks like it to us. We don't believe it's  
7 orthodox; it would require probably another hearing. But  
8 our testimony, our interpretation, as you well know, is that  
9 the high exists all the way down from the Strawn to the De-  
10 vonian at the proposed location. We certainly believe that  
11 it's there.

12 We're willing to risk Amoco's money on  
13 it and are willing to gamble \$4.4 million dollars on the  
14 fact that this Devonian prospect and that we can recover  
15 from the Devonian, and we'll go it alone, if necessary. I  
16 think we're entitled to do that, it's our lease. We do  
17 think that it should be pooled in order to be able to make  
18 this test, but if Dow wants to stay out, that's fine.

19 They say they weren't offered anything  
20 that was reasonable. Well, we've seen -- heard from wit-  
21 nesses that Belco thought it was reasonable enough to accept  
22 the offer. The only reason Dow is staying out, apparently,  
23 is because they don't want a Devonian test or they don't want  
24 the money. I haven't figured out yet exactly which of those  
25 two are their basic, primary reasons, but for one of the two

1  
2 reasons, they just don't want a Devonian test. That's I  
3 guess, the main difference between the parties.

4 If the Devonian test is made and allowed  
5 under the application before you at this time, then if it's  
6 completed as a producer, then you're going to have faster  
7 payout. There's no doubt about it. Dow's going to recover  
8 its money faster so that it can get back in the well if it  
9 wants to stay out, but it doesn't have to get in if it  
10 doesn't want to.

11 With regards to the penalty, we believe  
12 that the 200 percent penalty is absolutely necessary all the  
13 way down, and I heard some testimony in another case this  
14 morning that the penalty was mostly because of whether or  
15 not production may be obtained. In other words, the penalty  
16 seems to be considered by some based on the question of  
17 whether or not a successful completion of a well is going  
18 to be made.

19 We consider a penalty for many other  
20 things, could be necessary, such as it's going to take a  
21 longer time to drill the well because you're down in the  
22 Devonian.

23 So the risk is greater the longer the  
24 length of time that it's going to require things to be  
25 considered, such as the possibility of fire and blowout,



1  
2 and other things, over a longer period of time. The risk  
3 is there and we ask that the 200 percent penalty apply all  
4 the way from the top down to the bottom.

5 Actually, the suggestion made by counsel  
6 for Dow to split the penalty between zones, we think would  
7 be as horrendous as actually to split ownership, which we  
8 addressed before. Most of the extra costs are going to be  
9 spent by the time we get down to the Devonian. The zones,  
10 we're going to have a problem with which zones might get  
11 prior preference with regard to workovers and things like  
12 that, the legal liability involved, all those things just  
13 make a split ownership theory completely unworkable.

14 There's no way that we can take the  
15 estimated costs that permit you to establish a penalty on  
16 a Pennsylvanian test as opposed to a Devonian test, because  
17 we don't know what -- what's going to happen, in what stages  
18 it's going to happen. If something happens in the Pennsyl-  
19 vanian that is not -- you can't go on down to the Devonian,  
20 then we think that the 200 percent penalty should apply to  
21 that, also.

22 If something happens down in the Devon-  
23 ian, we think that the 200 percent should apply all the way  
24 down.

25 There's just no way that it can be

1  
2 divided up between the parties and come out with any sort  
3 of equity.

4 I think it all boils down to the fact  
5 that this is an Amoco lease; we're willing to spend the  
6 money; we think the location is there and we think the State  
7 is entitled to know what's down there, and we'd like to find  
8 out whether or not the State's got some production down in  
9 the Devonian, and we're willing to spend the money to do it.

10 MR. NUTTER: Thank you, Mr. Mote.

11 Does anyone else have anything to offer  
12 in Case Number 7499?

13 We'll take the case under advisement.

14  
15 (Hearing concluded.)  
16  
17  
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25

C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that  
the foregoing Transcript of Hearing before the Oil Conserva-  
tion Division was reported by me; that the said transcript  
is a full, true, and correct record of the hearing, prepared  
by me to the best of my ability.

Sally W. Boyd CSR

SALLY W. BOYD, C.S.R.

Rt. 1 Box 153-B  
Sausalito, New Mexico 87501  
Phone: (505) 453-7409

I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Examiner hearing of Case No. 2499  
heard by me on 8/21 1982.

[Signature] Examiner  
Oil Conservation Division

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION  
STATE LAND OFFICE BLDG.  
SANTA FE, NEW MEXICO  
3 March 1982

EXAMINER HEARING

IN THE MATTER OF:

Application of Amoco Production  
Company for compulsory pooling,  
Lea County, New Mexico.

CASE  
7499

BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation  
Division:

W. Perry Pearce, Esq.  
Legal Counsel to the Division  
State Land Office Bldg.  
Santa Fe, New Mexico 87501

For the Applicant:

Clyde Mote, Esq.  
AMOCO PRODUCTION COMPANY  
Post Office Box 3092  
Houston, Texas 77001

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A P P E A R A N C E S

For Dow Chemical: T. Calder Ezzell, Jr., Esq.  
HINKLE LAW FIRM  
600 Hinkle Bldg.  
Roswell, New Mexico 88201

E X H I B I T S

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1  
2 MR. NUTTER: We'll call next Case 7499.

3 MR. PEARCE: Application of Amoco Pro-  
4 duction Company for compulsory pooling, Lea County, New  
5 Mexico.

6 MR. NUTTER: I'll call for appearances  
7 in this case.

8 MR. MOTE: I'm Clyde Mote, attorney,  
9 representing Amoco Production Company, in association with  
10 Bill Carr.

11 We have three witnesses.

12 MR. EZZELL: I'm Calder Ezzell, with the  
13 Hinkle Law Firm of Roswell, representing Dow Chemical.

14 We are opposing the application and I  
15 have one witness.

16  
17 (Witnesses sworn.)

18  
19 MR. MOTE: Let the record show that  
20 I've handed a full, complete of all the exhibits which will  
21 be offered in this proceeding to opposing counsel for Dow  
22 Chemical, and three copies to the Examiner.

23 We have as our first witness Mr. Philip  
24 Vasquez.  
25

PHILIP VASQUEZ

being called as a witness and being duly sworn upon his oath,  
testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. MOTE:

Q If you would, please state your name,  
by whom employed, and in what capacity and location?

A My name is Philip Vasquez. I'm em-  
ployed by Amoco Production Company in Houston, Texas. I am  
employed as a landman.

Q And what is your educational qualifi-  
cations?

A I graduated in 1978 from the University  
of Texas with a BBA in petroleum land management.

Q After graduation you went to work for  
Amoco, is that correct?

A That's correct.

Q And what has been your duties since  
going to work for Amoco?

A I have worked in the land department at  
Amoco for three years.

Q Have you previously testified before  
the Division?

1

2

A. No, I haven't.

3

4

Q Are you familiar with the application that's made in this proceeding?

5

A. I am.

6

7

Q Are you familiar with the area of this application?

8

A. I am.

9

10

MR. MOTE: Are there any questions concerning his qualifications to testify as a landman?

11

MR. NUTTER: Mr. Vasquez is qualified.

12

13

14

Q You'll be asked to testify concerning certain exhibits. Were these exhibits either prepared by you or under your supervision and direction?

15

A. They were.

16

17

18

Q All right, you will go to your first exhibit. I believe this is a plat of the area involved, is it not?

19

A. That's correct.

20

21

Q And you have the 320 acres which is the subject of this proceeding outlined in red, do you not?

22

A. That's correct.

23

24

Q And the red arrow shows the proposed well.

25

A. The proposed location, that's right.



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Q All right. Do others -- do you -- do others own an interest in the proposed 320-acre pooling area?

A Yes, sir, they do. Belco and -- Belco Petroleum and Dow Chemical Company each own an undivided half interest in the west 160 acres, being the southwest quarter of Section 3, and which is approximately 80 acres per company. They each hold 80 acres.

Q So what you're saying is Amoco owns about a half of it, and each of them own about a quarter in the 320 acres. Is that what you're saying?

A That's correct.

Q All right, have you personally had discussions with people from Belco and with Dow concerning a voluntary communitization of this property?

A I have.

Q And with regard to your discussions with Belco, what was the result of your discussions with them?

A Belco farmed out to the drilling of this well for 1/16th override with the option to convert their override at well payout to a 40 percent working interest.

Q All right, have you also had discussions with Dow?

A Yes, I have.

Q And were your discussions with someone who's in this room?

A That's correct, Mr. Mark Martin.

Q Now, have you been able to work anything out with Dow up to this time?

A No, we haven't.

Q Did you make them the same offer as you made to Belco with regard to a farm out --

A We have.

Q -- farm in to Amoco?

A We have.

Q All right, turn to your Exhibit Number Two. I believe this is a letter dated January 13th, 1982, to Dow from Amoco Production Company, is it not?

A That's correct.

Q And I wish you'd just briefly summarize the substance of this letter to the examiner.

A This is our proposal letter to Dow Chemical Company proposing the drilling of an approximate 14,900 foot Morrow Devonian formation test, showing the location, or showing the -- where we will be drilling the well in Section 3, Township 23 South, Range 34 East in Lea County.

We have supplied the estimated gross dry hole and estimated gross producer costs. We have also

1  
2 proposed a one section working interest area, which makes  
3 up the entire Section 3. We show the acreage breakdown and  
4 the percentages of the two -- the three parties.

5 We also give them an option, an alter-  
6 native to joining the drilling of this well by farming out  
7 to Amoco and having Amoco pay for the entire cost with Dow  
8 to retain a proportionate 1/16th overriding royalty interest  
9 convertible at well payout to a 40 percent working interest.

10 Q Have they responded favorably to this  
11 letter?

12 A No, they -- they did not.

13 Q All right, I believe you've got another  
14 letter dated February the 5th, 1982, which was a letter to  
15 Dow and Belco, I believe. Would you please turn to Exhibit  
16 Number Three? What does this letter show in substance?

17 A By formal request from Belco, Amoco  
18 received authority to show our geological information and  
19 our Devonian prospect to both Dow and Belco, contingent  
20 upon them committing to either farming out or joining in the  
21 drilling of the subject well.

22 Q Did you discuss with Dow and Belco at  
23 times previous to this the possibility of coming to this  
24 Division for obtaining the compulsory pooling order?

25 A We had. We notified by telephone that

1  
2 we were eager to see this well drilled as soon as possible  
3 and that we were going to put this on the docket for the  
4 compulsory pooling hearing in order to speed up the drilling  
5 of this well, since we had received negative responses from  
6 them prior to this letter.

7 Q All right. Did it seem like, in your  
8 discussions with Dow, that the primary concern is that they  
9 are not interested in making a Devonian test? Is that your  
10 understanding?

11 A That's correct.

12 Q All right, do you have --

13 MR. NUTTER: Before we go on any further,  
14 Mr. Vasquez, this Exhibit Three is a letter addressed to  
15 Belco and Dow.

16 A Yes, sir.

17 MR. NUTTER: However, on page three of  
18 the exhibit is the return receipt of Belco and page four is  
19 simply something addressed to Amoco.

20 Is there evidence here that you sent  
21 this to Dow, also?

22 A Sir, this is an error and I do not have  
23 evidence here showing that.

24 Q You have discussed with them their re-  
25 ceipt of this letter, have you not?

1  
2 A Yes, they have acknowledged receipt of  
3 this letter and --

4 MR. NUTTER: In subsequent correspondence  
5 or --

6 A Yes, subsequent telephone conversations.  
7 MR. EZZELL; Mr. Examiner, Dow did re-  
8 ceive that letter.

9 MR. NUTTER: Okay, fine.

10 MR. EZZELL: In a timely manner.

11 MR. NUTTER: Okay.

12 Q Turn to your Exhibit Number Four. I  
13 believe this is the letter which made an application for the  
14 hearing which we're now in the process of hearing, is that  
15 correct?

16 A That's correct.

17 Q And was a copy of this letter sent to  
18 both Belco and Dow?

19 A That's correct.

20 Q And is this the first time that we have  
21 something in writing showing that the south one half of the  
22 section is -- is what is proposed to be compulsory pooled?

23 A That's correct.

24 Q And why was it necessary, if you know,  
25 to go to the south one half rather than using the entire

1  
2 section from the standpoint of compulsory pooling?

3 A. We -- I believe we can only compulsory  
4 pool proration units around legal locations.

5 Q What you're saying is a Devonian test  
6 in this area would -- would not permit more than 320-acre  
7 dedication. Is that what you're saying?

8 A. That's correct.

9 Q All right, go to your Exhibit Number  
10 Five. I believe you just received this letter recently. did  
11 you not?

12 A. Yes, sir, last Friday.

13 Q If you would, just give us the substance  
14 of this letter. I believe this is a letter from Amoco Pro-  
15 duction Company -- to Amoco Production Company from Dow,  
16 is it not?

17 A. That's correct.

18 Q Give us your understanding of the broad  
19 range of what it states in this letter.

20 A. This letter requests a continuance of  
21 this hearing for an additional thirty days, stating that  
22 they, Dow Chemical did not have sufficient time to evaluate  
23 our proposed well. And also this letter proposes various  
24 options that we may be able to work out with Dow Chemical  
25 for the drilling of this well.

1  
2 Q This also acknowledges, does it not,  
3 that they received the January 13th letter?

4 A That's correct.

5 Q And have you discussed with them whether  
6 or not they had some knowledge of the actual application of  
7 Amoco for the south half dedication sometime before January  
8 13th, 1982?

9 A Well, for the proposal of this -- this  
10 one section working interest area and drilling of this well,  
11 they did say over the telephone that they had been notified  
12 by Belco previous to this.

13 Q Previous to January 13th of '82?

14 A Previous to January 13th, that's correct.

15 Q Since Dow has made this request for a  
16 continuance, why does Amoco feel it necessary to -- to con-  
17 tinue with this hearing?

18 A We feel it's necessary due to the fact  
19 that we would like this well drilled as soon as possible.  
20 There is a possibility of drainage being taking place under  
21 this south half proration unit by the direct offsetting wells  
22 that are around to the south, southeast, and east of this  
23 south half proration unit.

24 Also, we have had to reschedule a deep  
25 rig to drill this well and we would -- we have one scheduled

1  
2 to drill this well as soon as possible, and as soon thereafter  
3 as we receive an order from the Commission.

4 Q Do you have anything further to testify  
5 in this proceeding?

6 A I do not.

7 MR. MOTE: We offer Exhibits One through  
8 Five into evidence and tender the witness for cross examin-  
9 ation.

10 MR. NUTTER: Exhibits One through Five  
11 will be admitted in evidence.

12 Are there any questions of the witness?

13 MR. EZZELL: Yes, sir, Mr. Examiner.

14  
15 CROSS EXAMINATION

16 BY MR. EZZELL:

17 Q Mr. Vasquez, you were the landman in  
18 charge of the -- of putting together this proposed unit for  
19 Amoco from the word go?

20 A That's correct.

21 Q When -- when were the -- your prospective  
22 partners in this -- in the originally proposed one section  
23 working interest unit initially contacted?

24 A Belco Petroleum was contacted in early  
25 November and a formal letter was written to them on November



1  
2 5th.

3 At that time Belco said that they -- that  
4 they represented Dow Chemical Company. They were working  
5 interest partners with them and that it would only be neces-  
6 sary to send a letter to Belco Petroleum.

7 Q Was that in fact the case?

8 A No. At the time I -- in early January  
9 I again tried to contact the parties. Belco maintained the  
10 same thing but I called Dow, Mr. Mark Martin. He said that  
11 he had been notified by Belco earlier about this proposal of  
12 this well but he had not received a copy of the letter.  
13 Therefor, I wrote up another letter and sent it to Dow Chem-  
14 ical.

15 Q And that misrepresentation by Belco ex-  
16 plains the discrepancy of some two months between the November  
17 5 letter to -- to Belco, and the January 13th letter to both  
18 Belco and Dow?

19 A That's true.

20 Q All right. When you said that Belco,  
21 who has an interest, I believe, of a net of 25 percent of  
22 the south half, has agreed to farm out.

23 A That's right.

24 Q When did they agree?

25 A They agreed by telephone, I believe,

Friday, last Friday.

Q So they had -- they had a full two months more to look at the deal than -- than Dow, but they still just -- just got around to agreeing to your proposal on last Friday?

A. That's correct.

Q Okay. You -- you stated this is a Devonian test?

A. Yes.

Q And that the Devonian is to be produced on the basis of a 320-acre production unit. Why have you designated the south half, where Amoco only owns a half interest in the -- in the leases, rather than the east half, if you still want to have that proposed well location, where Amoco would have a full 75 percent of the unit?

MR. MOTE: May I interject this? I believe that question would be more properly directed towards the geologist, who will testify next.

MR. EZZELL: All right, I'd be happy to hold that question.

Q You stated that, twice, that Amoco is very eager to drill this prospect.

A. That's correct.

Q By virtue of some problems with scheduling

1  
2 a deep rig and drainage.

3 Is it the Devonian that's being drained  
4 or is it in fact Pennsylvanian series formations, Morrow,  
5 Atoka, Strawn?

6 A. Again, could you ask our geologist that  
7 question? I could tell you that it's the Pennsylvanian form-  
8 ation with the limited knowledge I have, but I believe for --

9 Q I just thought we could testify --

10 A. Yes.

11 Q -- to what the wells show producing on  
12 your map --

13 A. Uh-huh.

14 Q -- were drilled to, but I will defer  
15 that question, as well.

16 With respect to your specific negotia-  
17 tions with Dow Chemical, your initial proposal was for a  
18 full one section working interest unit.

19 A. That's correct.

20 Q With a 1/16th -- with either participa-  
21 tion or a farmout based on 1/16th with a 40 percent back in.

22 A. 40 percent back in, that's right, due  
23 to the extreme risk and cost involved.

24 Q The -- you testified as to a letter  
25 you received from Dow, your Exhibit Five, on February 26.

1  
2 Does that letter, in your opinion, indicate their willingness  
3 to work with Amoco either in the drilling of a -- of a test  
4 well to the Morrow formation or the drilling of a test well  
5 to the Devonian formation on seeing your -- your reasoning  
6 for choosing a Devonian test, or in the alternative, offering  
7 a farm out on the basis of a 1/16th override and a 50 per-  
8 cent back in?

9 A. These are just suggested terms and there  
10 is no commitment on Dow to do any of this, and this was the  
11 first correspondence we received from Dow since the begin-  
12 ning of our negotiations. Therefor, we -- we felt that it  
13 was necessary to proceed with the hearing if -- if Dow was  
14 just going to start doing something on -- on this prospect  
15 at this time.

16 Q Well, don't you think this letter evi-  
17 dences Dow's eagerness to work something out with Amoco as  
18 far as the participation or a farm out with respect to the  
19 proposed test?

20 A I believe it represents Dow's eagerness  
21 to delay the hearing another thirty days and, you know, talk  
22 about terms. That's true.

23 I believe that we, you know, after the  
24 order is issued, if Dow Chemical proposes terms that are  
25 acceptable to Amoco, Amoco will be more than willing to

1 negotiate those terms and accept something that's reasonable.

2 Q But in fact, Dow has on the date of this  
3 letter proposed a 1/16th -- a farm out with a 1/16th override  
4 convertible to a 50 percent back in working interest at pay-  
5 out.  
6

7 A Again, this is not a commitment. This --

8 Q But it is a suggestion?

9 A -- is just suggested terms, that's  
10 right.

11 Q Did you respond to Dow after receipt of  
12 this letter?

13 A No, I responded to Dow right before  
14 they mailed it to us. On Friday morning I notified Dow of  
15 Belco's farming out under terms of 1/16th, back in for 40  
16 percent, and at that time Dow, or Mr. Martin, informed us  
17 that they were going to send a letter by telecopy real quick  
18 to us, so we would have something to bring to the hearing  
19 today.

20 Q So Friday was the 26th of February?

21 A That's correct.

22 Q That is the -- you received this by --

23 A I received that Friday afternoon.

24 Q -- telecopy on the same day that --

25 A Right after.

1

2

Q -- Belco agreed to the farmout?

3

A That's correct.

4

Q Okay.

5

6

MR. EZZELL: I have no further questions  
of this witness. Thank you, Mr. Vasquez.

7

8

#### CROSS EXAMINATION

9

BY MR. NUTTER:

10

Q Mr. Vasquez, somewhere in this testimony

11

or in these documents, I get the impression that Belco has

12

farmed out to you for 1/16th override and a back in at payout

13

of 40 percent proportionate working interest.

14

A That's correct.

15

Q And also I note in the Dow letter, on

16

page two, in the middle of the paragraph it says as a last

17

resort it would be recommended from this office that Dow

18

farm out on the basis of a 1/16th override convertible to

19

a 50 percent back in at payout.

20

Now those terms are not acceptable to

21

Amoco, I presume?

22

A That's correct.

23

Q So what's holding you up is the differ-

24

ence in the 40 percent versus the 50 percent back in after --

25

A Yes, sir.

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Q Proportionate back in after --

A Yes, sir.

MR. NUTTER: Are there any other questions of the witness?

MR. MOTE: I have a couple more I'd like to ask.

MR. NUTTER: Yes, sir.

REDIRECT EXAMINATION

BY MR. MOTE:

Q Just to make the record clear, just because we're having this hearing today, does that -- do you not intend to discuss anything further with Dow with regards to trying to work something out?

A No, we -- we intend to continue negotiations if at all possible.

Q And you're asking that this hearing go forward and that an order be issued as soon as possible so that things will not be delayed, but in the meantime are you saying that you're going to continue to try to work with Dow to work something out?

A That's correct.

Q And today in this proceeding, do you anticipate, knowing the evidence, that we're going to furnish

1  
2 them with the full geological evidence that we have with  
3 regard to this reservoir, or formation?

4 A. That's right.

5 MR. MOTE: I believe that's all.

6 MR. NUTTER: Are there any other ques-  
7 tions? The witness may be excused.

8 MR. MOTE: Call Mr. Allen Oertel.

9  
10 ALLEN OERTEL

11 being called as a witness and being duly sworn upon his oath,  
12 testified as follows, to-wit:

13  
14 DIRECT EXAMINATION

15 BY MR. MOTE:

16 Q If you will, please state your name,  
17 by whom employed, in what capacity and location?

18 A My name is Allen Oertel. I'm employed  
19 by Amoco Production Company of Houston as a petroleum geolo-  
20 gist.

21 Q Are you familiar with the area concerned  
22 in this application?

23 A Yes, I am.

24 Q And are you familiar with the applica-  
25 tion made?



1

2

A. Yes.

3

4

Q Have you previously testified before this Division?

5

A. Yes.

6

7

MR. MOTE: Is there any question concerning his qualifications to testify as an expert geologist?

8

MR. NUTTER: He's qualified.

9

10

11

Q You'll be asked to testify concerning certain exhibits. Were these exhibits either prepared by you or under your supervision and direction?

12

A. Yes.

13

14

Q Turn to your Exhibit Number Six, which I believe is a composite of several things, is it not?

15

A. Yes, it is.

16

17

18

Q All right, if you would, just go through these -- if you would, just go through this exhibit and explain what each of the various matters on here show.

19

20

21

22

23

A In the lower lefthand corner of the exhibit is a regional geologic map. It indicates by the orange arrow and a black dot the approximate location of the subject well, being in southern Lea County, New Mexico, in the northern portion of the Delaware Basin.

24

25

Immediately above that is a generalized stratigraphic column of southeast New Mexico. Gas well

1  
2 symbols to the right of the column indicate possible gas  
3 reservoirs, being the Wolfcamp, Strawn, Atoka, Morrow, and  
4 Devonian formations.

5 In the center of the exhibit is a type  
6 log of the area which we feel to be representative of pro-  
7 duction that may be obtained. The log is the Shell No. 1  
8 Antelope Ridge Unit, located in Section 27, Township 23 South,  
9 Range 34 East.

10 The well initially potentialized in 1962  
11 from the Devonian with a CAOF of 48.9 million cubic feet per  
12 day.

13 MR. NUTTER: Excuse me, Mr. Oertel.

14 A. Yes.

15 MR. NUTTER: Now on your map up here  
16 you've got an orange arrow. Is that the proposed location?

17 A. That is the proposed location.

18 MR. NUTTER: And this log is of a Shell  
19 well in Section 27, so it's approximately three miles, four  
20 miles to the south, is that correct?

21 A. That's correct.

22 MR. NUTTER: Okay.

23 A. The total production from the Devonian  
24 in this well was 5.1 Bcf plus 113,000 barrels of oil. It  
25 was abandoned, recompleted in 1967 in the Morrow, potentializing

1  
2 9-million a day, and to date, as of 12-1-81, which was the  
3 latest date we had production figures available for, had  
4 cumed 23.5 Bcf plus 221,000 barrels of oil.

5 The plat located in the upper right  
6 portion of the exhibit is a plat showing the production of  
7 the Antelope Ridge area as of 12-1-81. The color coding,  
8 blue dots represent Devonian production; red are Morrow;  
9 green, Atoka; brown, Strawn; and Wolfcamp production is in-  
10 dicated by yellow dots.

11 There is no Wolfcamp production in the  
12 immediate area.

13 The orange arrow, as you mentioned,  
14 does indicate the proposed location of the subject well. I  
15 would like to indicate the significant wells around the  
16 area which we feel to be important.

17 The first well would be over in Section  
18 6, Township 23 South, Range 34 East. All the subject wells  
19 are in that township and range. This is the Continental  
20 Bell Lake Unit No. 6. This well was completed in the De-  
21 vonian flowing 30.5 million cubic feet of gas per day. This  
22 was in 1960. It is still producing approximately 1-1/2 million  
23 per day and to date has cumed 24.9 Bcf.

24 So Devonian wells in this area can be  
25 quite long lived.

Q How far is that well location from the proposed well?

A Approximately three miles to the west.

Q All right, go ahead.

A Directly to the east of Section 3 is an Atoka completion, the BTA 8006. This well potentialized in the Atoka and potentialized flowing 3.76 million cubic feet per day plus 252 barrels of oil.

Immediately to the south and southeast of our proposed location the BTA Hudson State No. 1-Y potentialized out of the Morrow flowing 4.6 million cubic feet of gas per day.

And immediately to the south of our proposed location a Strawn completion which potentialized in 1961 flowing 400 Mcf per day.

In --

MR. EZZELL: What was that last one?

A In Section 10 it's the Williamson AAA Federal No. 1.

And then down in Section 14 and 15, in the east half of Section 14 the BTA Ridge, which potentialized out of the Morrow flowing 912 Mcf per day. In the west half of Section 14 the Natomas Supron 14 which IP'd flowing 6.73 million cubic feet per day out of the Atoka-Morrow

1 interval.

2  
3 In the south half of Section 15, an  
4 Atoka completion, completed with a CAOF of 11-million a day,  
5 and finally, in the north half of Section 15, a well was  
6 potentialed out of the Atoka flowing 8.8 million a day, and  
7 from the Morrow with a CAOF of 3.3 million a day.

8 We feel that this shows that the pro-  
9 duction in the area is very good from several horizons.

10 Q Does that conclude your testimony on  
11 this exhibit?

12 A Yes, it does.

13 Q Turn to your next exhibit, please, Ex-  
14 hibit Number Seven. I believe this is a structure contour  
15 map on the Wolfcamp, is that correct?

16 A Yes.

17 Q All right. Would you please explain  
18 what's shown on this exhibit?

19 A As you mentioned, this is a structure  
20 contour map on top of the Wolfcamp formation, elevation --  
21 excuse me, the contour interval is 100 feet; all elevations  
22 given are in subsea values.

23 What this shows is that there is a high  
24 in the south half of Section 3. Our proposed location again  
25 indicated by an orange arrow, and we are drilling as close

1  
2 to the top of this structure as a legal location in the south  
3 half of Section 3 would allow.

4 Q Are all wells shown on this exhibit wells  
5 which you used in your -- as control in your opinion as to how  
6 these contour lines are made?

7 A Yes.

8 Q All right, go to your Exhibit Number  
9 Eight. I believe this is the same type of map on the Strawn,  
10 is that correct?

11 A Yes.

12 Q All right, explain this map.

13 A Again this shows a similar shaped struc-  
14 ture in the south half of Section 3, with our proposed loca-  
15 tion again being on the highest portion of the structure that  
16 a legal location in the south half of Section 3 will allow.

17 Q Does this show a Strawn producing well  
18 on this exhibit?

19 A Yes, it does, in the north half of Sec-  
20 tion 10, the Williamson AAA Federal No. 1 potentialed last  
21 year flowing 800 -- excuse me, flowing 400 Mcf per day.

22 Q And this in the Strawn shows that like  
23 the Wolfcamp that the proposed location seems to be on a high  
24 in this --

25 A Yes.

1

2

Q -- formation, is that correct?

3

A. Yes.

4

Q All right. Go to Exhibit Number Nine.

5

6

I believe this is a structure map as well as an Isopach of the Atoka, is that correct?

7

A. Yes.

8

9

Q Explain what's shown on this further to the Examiner.

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A. On the right half of the exhibit -- the left half of the exhibit is a structure contour map of the Atoka formation. It shows a high in the south half of Section 3 with our proposed location being again on top of the structure near the crest, as close as a legal location would allow.

In the -- on the right half of the exhibit is an Isopach of the productive interval within the Atoka formation. Contour intervals on this are 10 feet and it shows that we expect to hit 70+ feet of productive interval in the Atoka formation at the proposed location.

Q Does -- are any wells shown on this exhibit which are actually producing from the Atoka?

A. Yes.

Q Which wells are those?

A. In the north half of Section 2, the BTA

1  
2 Antelope 8006 productive from the Atoka, flowing 3.76 million  
3 per day plus 252 barrels of oil. We would be approximately  
4 300 feet up dip from that well.

5 Down in Section 14 in the west half,  
6 this well is productive from the Atoka-Morrow interval.

7 In Section 15 in both the south half and  
8 the north half, both of these wells are productive from the  
9 Atoka.

10 Q And like this as well as the other ex-  
11 hibits, did all of the wells which you've shown on there  
12 penetrate the Atoka and were used in control in this exhibit?

13 A Yes.

14 Q Go to your Exhibit Number Ten. I believe  
15 this is a structure map and an Isopach map in the Morrow, is  
16 that correct?

17 A Yes, it is.

18 Q Please explain this exhibit further  
19 to the Examiner.

20 A On the left half is a structure contour  
21 map on the top of the Morrow formation. Again a structure in  
22 the south half of Section 3 with our proposed location near  
23 the crest of the structure.

24 On the west -- excuse me, righthand  
25 portion of the exhibit, a gross sand Isopach of the Morrow



1  
2 formation. It shows that we would expect between 70 and 80  
3 feet of sand at our proposed location.

4 Q Would you --are most of the wells shown  
5 on these exhibits also used in control in your preparation  
6 of these exhibits?

7 A Yes, they are, all are.

8 Q I notice a good sand configuration on  
9 the east one-half of the Section 3. Why is it that you favor  
10 a south half dedication as opposed to a west -- to an east  
11 half dedication?

12 A While --

13 Q On this Section 3?

14 A While an east half dedication may pos-  
15 sibly have a thicker sand package in the Morrow, it wouldn't  
16 give us as good of a structural position, which we feel would  
17 be more favorable. We would be possibly as much as a 100 to  
18 150 feet down dip in an east half dedication, and an example  
19 of the type of thing that I'm speaking about is down in Sec-  
20 tion 14.

21 Two wells, both of them penetrating the  
22 Morrow, in the east half of Section 14, BTA Ridge encountered  
23 73 feet of sand in the Morrow. They attempted to complete  
24 in the Morrow. It flowed 900 Mcf.

25 The well in the west half of Section 14

1  
2 completed approximately 50 to 60 feet up dip encountered  
3 only 30 feet of sand but was structurally higher and completed  
4 flowing 8.8 million a day.

5 Excuse me, I'm in error on that.

6 MR. NUTTER: So structural position was  
7 more important than the thickness of pay.

8 A. I wouldn't say it's more important but  
9 it's advantageous. It's more advantageous to have both a  
10 good sand package and good structural position.

11 MR. NUTTER: And you feel if you drilled  
12 in the north half of the southeast quarter, which would be  
13 a standard location for an east half dedication, you'd be  
14 losing quite a bit of structural position then.

15 A. Where was that location mentioned?

16 MR. NUTTER: Well, you're drilling in  
17 the south half of the southeast.

18 A. That's correct.

19 MR. NUTTER: And if you had an east half  
20 dedication a standard location would be in the north half  
21 of the southeast and you'd be losing structural position by  
22 moving north.

23 A. That's correct.

24 Q. Do you have anything further with regard  
25 to this exhibit?

1

2

A. No.

3

Q Turn to Exhibit Number Eleven.

4

I believe this is a structure map on the Devonian, is that correct?

5

6

A. Yes.

7

Q All right, would you please explain this

8

exhibit further to the Examiner?

9

A. This shows a structural high in the

10

south half of Section 3 with our proposed location again being

11

near the crest of the structure.

12

Q Does the Devonian in this area have good

13

porosity and permeability?

14

A. In the area wherever the Devonian has

15

been tested they have encountered good porosity and perme-

16

ability; however, what is necessary for a Devonian well is

17

good structural position. Wells that have tested off struc-

18

ture in the Antelope Ridge Bell Lake Area have produced

19

water.

20

Q In your opinion as a geologist, do you

21

believe that it is necessary that Amoco drill this well at

22

this location to protect its correlative rights in the area?

23

A. Yes.

24

Q And do you believe that, knowing the

25

drilling --knowing the completed wells in the area of this

1  
2 proposed location and the possibility of drainage even now  
3 and in the future occurring, do you think it's necessary  
4 that this well be drilled as soon as possible?

5 A. Yes.

6 Q. Of course, the area in the immediate  
7 vicinity of this proposed location are not Devonian comple-  
8 tions, is that correct?

9 A. That's correct.

10 Q. But there are completions in three other  
11 zones within the immediate vicinity of the proposed well,  
12 are there not?

13 A. Yes.

14 Q. And what -- what three zones is that  
15 that they have been completed in?

16 A. They're completed in the Morrow, the  
17 Atoka, and the Strawn.

18 Q. Do you have notes to show which ones of  
19 the wells those are?

20 A. Yes. On Exhibit Number Six, the color  
21 coding indicates the zones of completion in this -- in the  
22 wells that you have mentioned.

23 In Section 2, Atoka completion; in  
24 Section 11, a Morrow completion; in Section 10, a Strawn  
25 completion; and then down in Sections 14 and 15, Morrow and

Atoka completions.

MR. NUTTER: Mr. Oertel, some mention has been made that the well in Section 10 could be an Atoka completion rather than a Strawn completion. Is it completed in -- in the lower Strawn?

A. It was completed --

MR. NUTTER: That could be interpreted as being Upper Atoka or vice versa?

A. According to our interpretation, we believe it to be a Strawn completion, and that's the way it was reported.

It was originally reported as a Wolfcamp completion but later reissued as a Strawn completion.

MR. NUTTER: Well, when it was reported as a Wolfcamp completion were the perforations the same as what they are now?

A. Yes.

MR. NUTTER: So it was originally reported way up there then.

A. Well, that was a -- we thought it odd that there was Wolfcamp. It would have been the first Wolfcamp completion in the Antelope Ridge area, and so we looked at it and at that time we decided that it wasn't Wolfcamp; that it was Strawn, and then it was subsequently re-released

1  
2 as a Strawn completion.

3 MR. NUTTER: I see.

4 MR. MARTIN: Would it be possible for  
5 me to interject something on this well?

6 MR. NUTTER: Yes, sir.

7 MR. MARTIN: We're under that well. We  
8 farmed out to J. C. Williamson.

9 MR. NUTTER: Let the record show it's  
10 Mr. Martin of Dow Chemical speaking.

11 MR. MARTIN: Yeah. And as the intent  
12 of the farmout was, and the way it was written, because they  
13 had some kind of nomenclature hearing that they got Wolfcamp  
14 assigned to the zone in and above 12,010 feet.

15 Now that concerned me at the time. I  
16 guess I was too dumb to really go ahead and check it out be-  
17 fore we got involved in it, because -- anyhow, as I said,  
18 they went ahead and, as you say, called it a Wolfcamp, and  
19 they referred to it as a Wolfcamp all the time.

20 And they completed, I think, in about,  
21 oh, about 11,900 or something like that, 11,800 or 900. Any-  
22 way, there was something like 20 feet down to where that cut  
23 off at.

24 And, like I say, that's been a concern  
25 to me a long time. What it was, if they're getting production,

1  
2 in the first place we have a tough time getting information  
3 from them, but if they are getting production, is it coming  
4 from there or is it coming from down the hole. And we have  
5 tried different ways of trying to convince them to, well, what  
6 are you to do, maybe send surveys down to try to find out  
7 where the -- where the gas was coming from.

8 But, as I say, we've always called that  
9 particular zone in there the Strawn, too, and as I say, they  
10 came out with some kind of a nomenclature hearing out of --  
11 out of New Mexico a few months ago whereby that was classified  
12 as Wolfcamp.

13 And I'm sorry I can't be more definite  
14 about it, but to be truthful with you, I don't know if it's  
15 Strawn or -- or Wolfcamp, either.

16 MR. NUTTER: And Dow is a party to the  
17 well?

18 MR. MARTIN: We're -- well, we farmed it  
19 out, yeah.

20 No, we're not a partner. We were a  
21 party to the original Adobe AAA Well years ago and then under  
22 this part of Section 10, the way it's owned is this: That  
23 Supron has 45 percent, Dow and Belco own 55 percent together.  
24 And then we all jointly farmed out to J. C. Williamson about  
25 the time these wells down in 15 were --

1  
2 MR. NUTTER: Well, now, you said you  
3 were a party to the old AAA.

4 MR. MARTIN: Yeah.

5 MR. NUTTER: The AAA is the new well,  
6 isn't it?

7 MR. MARTIN: Well, the --

8 A The Adobe Federal is the AA.

9 MR. MARTIN: -- AA.

10 MR. NUTTER: The Adobe Federal is the  
11 AA.

12 MR. MARTIN: Okay, AA.

13 MR. NUTTER: Yeah.

14 MR. MARTIN: Old Adobe AA Well that was  
15 drilled there, and then they drilled a substitute well for  
16 it. They lost it, I guess, shallow, and then, as I say,  
17 the deal was to re-enter that well and recomplete out of the  
18 Wolfcamp and the Bone Springs. That was Williamson's proposal.  
19 And we had no object to that -- no objection to that, but  
20 as I say, there is some doubt as to what is really accurate  
21 about it, so we're going to have to draw a conclusion one  
22 of these days. Excuse me.

23 MR. NUTTER: Well, that clarifies it to  
24 the extent that we're still confused.

25 Q Does that conclude your testimony, Mr.



1  
2 Oertel?

3 A. Yes, it does.

4 MR. MOTE: With that we offer Exhibits  
5 Six through Eleven into evidence and tender the witness for  
6 cross examination.

7 MR. NUTTER: Exhibits Six through Eleven  
8 will be admitted in evidence.

9 Are there any questions of the witness?

10 MR. EZZELL: Yes, Mr. Examiner.

11  
12 CROSS EXAMINATION

13 BY MR. EZZELL:

14 Q Mr. Oertel, how long did you say you'd  
15 been with Amoco?

16 A. Fourteen months.

17 Q Fourteen months. Is that your first  
18 employment?

19 A. Yes, since graduation.

20 Q Since receiving your graduate degree?  
21 You testified that the basis for the laying down of the pro-  
22 posed drillsite unit as opposed to standing it up in the  
23 east half was structure based on the Morrow formation, is  
24 that correct?

25 A. Structure based on Wolfcamp, Strawn,

1  
2 Atoka, Morrow, and Devonian formations.

3 Q Okay, well, you just testified from one  
4 exhibit that only had Morrow as to the -- as to the reason  
5 for laying it down as opposed to standing it up.

6 A Well, if I may add, all exhibits show  
7 that the structural high is in the south half of the section  
8 and that's the way I intend it to be.

9 Q Okay. On your Exhibit Eleven, which is  
10 your contour map of the Devonian, in this cross section map  
11 there are -- correct me if I'm wrong -- there are no wells  
12 that have penetrated the Devonian?

13 A That's correct.

14 Q Okay, so this is -- this is a projection.

15 A Yes, it is.

16 Q There's --

17 A All subsea elevations or control points  
18 are marked as estimated.

19 Q Okay. The -- where is the nearest well  
20 that has penetrated the Devonian?

21 A Three miles to the east of the proposed  
22 location, which is the Conoco Bell Lake -- I'm sorry, the  
23 west, to the west.

24 Q Okay.

25 A Conoco Bell Lake 6, which potentialized

1  
2 in 1960.

3 Q What about the Shell Northeast Antelope  
4 Ridge No. 1, I believe it is, looks like it's three miles  
5 due south, excuse me, two and a half miles due south in Sec-  
6 tion 22, north half?

7 A Section 22, north half. To my knowledge  
8 that did not penetrate the Devonian.

9 Q Okay, our map showed it being 14,761  
10 feet. Would that not have reached the Devonian?

11 A That would have reached the Devonian.

12 Q Okay. So if this map is correct, which  
13 is just a commercially prepared map, that would have -- that  
14 would have penetrated the Devonian but you do not have that  
15 as a part of your control, if it did?

16 A That's correct. That is to the south.  
17 I used only those points that are on the map as control points,

18 Q Okay. Yet your control well for the  
19 entire area is one mile further south than this Devonian  
20 dry hole that we just talked about.

21 A That's correct.

22 Q Okay. And you testified that the wells  
23 that were draining Section 3 were --

24 A I didn't say that they were draining.

25 Q No, not that --

1

2

A. I said they possibly were draining.

3

4

Q Are an Atoka well in Section 2; a Morrow in Section 11; and a mystery well in Section 10.

5

A. That's correct.

6

7

8

Q Okay. When were these wells -- do you have the information as to when these wells were completed, and in the case of the Section 10 well the recompletion?

9

10

11

A. The recompletion was in 19 -- all three of those wells were completed in 1981. The Section 10 well was recompleted in 1981.

12

13

Q So this immediate area around this unit has just recently become hot.

14

A. That's correct.

15

16

17

Q With these three wells to the east, southeast, and south, all being Morrow, Atoka, or Strawn producers in 1981.

18

19

20

21

22

A. One thing I would like to add about the well in Section 10. There was a show. They DST'd an interval in the productive interval of the Atoka, which flowed as much as 3.1 million a day, stabilizing to 1.3 million a day; however, this zone was not completed. This was in the --

23

Q That was on a DST?

24

A. That was a DST.

25

Q And they've got that behind the pipe?

1

2

A. Yes.

3

Q Okay. That was Williamson that did that

4

DST?

5

A. No, that was the Adobe Federal AA.

6

That was in the old well.

7

Q

MR. MARTIN: That was the old well,

8

yeah.

9

A.

That's right.

10

Q

Oh, okay, I misunderstood you.

11

A.

And it was plugged.

12

Q

Okay.

13

A.

So that just indicates what I feel to

14

be more Atoka potential in the area.

15

In Section 11 Atoka has not been pro-

16

duced because we're still producing Morrow out of that well.

17

So there is a good potential in that well.

18

Q

In other words, there is, for the entire

19

Pennsylvanian series, there is great potential in Section 3

20

at your proposed location.

21

A.

Yes.

22

Q

Based on the offsets and the structure

23

maps you've --

24

A.

That's correct.

25

Q

-- brought us, for which you have actual

1  
2 control.

3 A. That's right.

4 Q Okay.

5 MR. EZZELL: Thank you. I have no  
6 further questions.

7 A. I have one thing I would like to add.  
8 On the Devonian map --

9 MR. EZZELL: What exhibit is it?

10 A. The Exhibit Number Eleven. I'd just  
11 like to add the method in which I contoured this, which I  
12 feel to be valid. Since there are no Devonian tests in the  
13 area I used all of the Devonian tests in the area, which I  
14 knew of at the time, measured the thickness of that interval  
15 from the Strawn to the top of the Devonian, and this was  
16 approximately four or five wells in the Antelope Ridge Area.  
17 That thickness did not vary more than 100 feet over approxi-  
18 mately twelve miles.

19 So I felt confident in adding that  
20 thickness from the Strawn to the Devonian to show the Devon-  
21 ian structure.

22 Also, the fact that Devonian wells in  
23 the area have proved to be productive for over twenty years,  
24 I feel that this is also a very good spot for a Devonian  
25 location.

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Q So you -- do you have anything besides your projected, based on the bottom of the Strawn, is that what you projected from the interval between the bottom -- top of the Strawn --

A. From the top of the Strawn to the top of the Devonian.

Q To the top of the Devonian from the control wells in the area that didn't have any control.

A. The control wells in the Antelope Ridge area.

Q Okay. Do you have any seismic covering the area shown on your structure map?

A. The geophysicists tell me this is in the middle of an area called the San Simon sink and at the present time there is no geophysic coverage in the area.

Q Okay, so your projections on the Devonian show on your Exhibit Eleven and are based on the average thickness of the interval in the area between the top of the Strawn and the top of the Devonian.

A. That's correct.

Q Okay, thank you.

MR. NUTTER: Are there any other questions of the witness? He may be excused.

MR. MOTE: We'll call as our next witness

Mr. Jim Allen.

J. C. ALLEN

being called as a witness and being duly sworn upon his oath,  
testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. MOTE:

Q Would you please state your name, by whom  
employed, in what capacity and location?

A My name is James C. Allen. I'm Regional  
Petroleum Engineering Supervisor for Amoco Production Com-  
pany from Houston, Texas.

Q Did you prepare the application in this  
proceeding?

A I did, yes, I prepared the letter re-  
questing the hearing.

Q You're familiar with the area and the  
subject matter of this application? Is that correct?

A That is correct.

Q You've testified previously many times  
before the Division, have you not?

A Yes, sir.

Q As an engineer?



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A. Yes, sir.

MR. MOTE: Is there any question concerning his qualifications, Mr. Examiner?

MR. NUTTER: Mr. Allen is qualified.

Q. You have, I believe, one exhibit which you intend to introduce into evidence. Was this either prepared by you or under your supervision and direction?

A. This was prepared on my direction by our Division Drilling Staff. This is a more detailed cost estimate than we normally furnish partners with our AFE's. In fact, this particular worksheet is one that we use inter-office from which we prepared the AFE's from.

So it does show far more detail than you would get on an a normal AFE that we circulate to partners.

Q. All right. This is Exhibit Number Twelve, is it not?

A. That is Exhibit Number Twelve, yes.

Q. Please explain what's shown on this exhibit, at least in some -- not in detail but general principles involved in it.

A. All right, sir. This worksheet is an estimate on, for example, we run through on the day work basis, we've estimated 125 days to drill and complete a dual

1  
2 Morrow-Devonian test, at \$8000 a day for the rig, or a  
3 \$1,000,000.

4                   Going on through here, I think most of  
5 the items are self-explanatory.

6                   When we get to the bottom, this does  
7 reflect a complex casing program which will be used in this  
8 well.

9                   For example, you'll notice we are setting  
10 2200 feet of 20-inch surface casing. The AFE previously  
11 furnished partners only called for 700 feet, but experience  
12 in the area has shown that additional protection is needed  
13 and therefor we increased this to 2200 feet.

14                   So we have broken it out into both  
15 tangible, intangible costs, as well as the casing string.

16                   Q           And do you have a copy of the casing  
17 program available in case the Examiner wants to see it, or  
18 anyone else here in this room?

19                   A           I have wellbore sketch which reflects  
20 this casing program that is available if anyone would care  
21 to see it, yes, sir.

22                   Q           And what was your estimate with regard  
23 to the drilling and producing of this well?

24                   A           All right. The costs, dry hole costs  
25 are \$3,616,000 and producer costs are \$4,409,000.

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Q That's slightly different from the testimony already in this proceeding for an AFE, is it not?

A Yes. It's approximately \$200,000 higher, and this is a direct result, almost exclusively -- well, it is a direct result of adding the additional 1300 feet of 20-inch casing; additional drilling time, et cetera.

Q All right. Have you made any calculation of what you consider overhead costs to be in connection with this proposal?

A Yes, sir, I've used the overhead costs which we used in negotiating with other major operators within the State of New Mexico.

Q All right, and what would those overhead costs be per month while producing and while drilling?

A The overhead charge -- costs are \$420 a month while producing and \$4200 a month while drilling.

Q Have you more or less made a survey of costs in the area of majors to determine whether or not this is somewhere in the ballpark?

A I have compared this with negotiated overhead charges we have with other major operators within southeast New Mexico, and we're approximately in the middle. There are two or three higher and a couple lower.

Q Well, do you consider these costs usual

1  
2 and reasonable when considering the other major companies  
3 operating in the area?

4 A. Yes, sir, I do.

5 Q. Do you have some sort of penalty to  
6 recommend to the Division?

7 A. Well, I'd recommend the 200 percent  
8 penalty be approved, particularly in view of this deep and  
9 expensive a well.

10 Q. And Amoco Production Company to be  
11 operator?

12 A. Yes, sir.

13 Q. Does Amoco anticipate for this well to  
14 be commercial and pay out costs of drilling and operating,  
15 plus a reasonable profit to the unit?

16 A. Yes, sir.

17 Q. In your opinion would the granting of  
18 this application be in the interest of conservation, the  
19 prevention of waste, and protection of correlative rights?

20 A. Yes, sir.

21 MR. MOTE: We offer Exhibit Number  
22 Twelve into evidence.

23 MR. NUTTER: Exhibit Twelve will be  
24 admitted in evidence.

25 MR. MOTE: And I submit the witness

1  
2 for cross examination.

3 MR. NUTTER: Do you have any questions  
4 of Mr. Allen?

5 MR. EZZELL: No, sir.  
6

7 CROSS EXAMINATION

8 BY MR. NUTTER:

9 Q Mr. Allen, I notice here on your AFE  
10 you've got 28,400 feet of tubing. Is that sufficient tubing  
11 for a dual completion, triple completion, quadruple comple-  
12 tion, or what?

13 A Yes, sir, that's for a dual completion,  
14 to include both the Morrow and the Devonian.

15 Q I see. So you're anticipating a dual,  
16 although you've got three possible Pennsylvanian zones --

17 A That's right.

18 Q -- and the Devonian.

19 A This entire estimate is for a Devonian-  
20 Morrow dual.

21 Q I see.

22 A If it's anything other than that --

23 Q Okay, it's identified at the top, I see.

24 A Yes, sir.

25 MR. NUTTER: Are there any other questions

1  
2 of Mr. Allen? He may be excused.

3 MR. MARTIN: Am I -- am I allowed to ask  
4 a question?

5 MR. NUTTER: No, sir.

6 MR. MARTIN: Okay.

7 MR. NUTTER: Your attorney can.

8 MR. MOTE: That concludes our case, Mr.  
9 Examiner.

10 MR. NUTTER: The witness may be excused.  
11 Mr. Ezzell, would you call your witness?

12 MR. EZZELL: I'd like to call Mr. Mark  
13 Martin.

14  
15 MARK S. MARTIN

16 being called as a witness and being duly sworn upon his oath,  
17 testified as follows, to-wit:

18  
19 DIRECT EXAMINATION

20 BY MR. EZZELL:

21 Q Mr. Martin, would you state your name,  
22 your residence, your occupation, and your employer, please?

23 A My name is Mark S. Martin and I'm with  
24 the Dow Chemical Company. I'm Area Manager for the oil and  
25 gas -- I'm Area Manager for the New Mexico, Texas-New Mexico

Area of the Oil and Gas Division of Dow Chemical.

Q Would you state your educational background and work experience, please?

A I have a business degree from the University of Nebraska from way back, '56, and I've worked for about eight or nine years with Exxon, it was called Humble then, now Exxon, in Oklahoma in all, various stages of land work, and then I went with Samedan Oil Corporation in 1965 and moved from Ardmore, Oklahoma, and I've been in Midland, west Texas ever since '65.

And I've been with Dow Chemical about eight years, now. I've been Area Manager the last six or seven.

Q Are you familiar with the well proposed by Amoco that's been the discussion of this hearing.

A... Oh, yes.

Q When did it first come to your attention?

A I had heard rumors there was going to be a well proposed probably end of December or first of January. It -- the location was shown on the 12-31 PI report as being staked at that time. I know that's when the geologist pointed out that there was a well staked in -- in the area, and if I had heard about it prior to that time, it was, perhaps, in an offhand method; nothing except that

1  
2 Mary Ward, who is the landman for Belco, indicated that Amoco  
3 was going to propose a well in this general area.

4 I was not -- I was not in direct contact  
5 with Amoco until sometime in the early part of January when,  
6 first time Philip called me, and indicated then that his in-  
7 formation was that Belco handled it for both of them and I  
8 assured Phil then that that wasn't the case and that would  
9 he please -- or he probably volunteered to send me a letter  
10 with the proposal, and that's the letter of the 13th with  
11 the AFE attached.

12 Q Which was promptly received.

13 A Oh, yeah, I don't remember when I got  
14 it. I don't think it's stamped, but it was bound to have  
15 been before the 15th.

16 Q How did you respond to this proposal?

17 A Well, I --

18 Q Explain your company procedures for  
19 making a -- for the decision making process when -- when  
20 receiving a proposal such as this.

21 A Well, I of course, get together with  
22 our geologist and we start looking at it. We have one  
23 senior geologist and two young geologists in our office,  
24 but at any rate, I took it up with our geologists and then  
25 we also got together with -- with Belco over the telephone



1  
2 to see what the situation was and discuss the fact that Amoco  
3 was adamant about a Devonian test. And --

4 Q What was the result of those discussions  
5 with Belco?

6 A Well, there wasn't much results. We  
7 discussed it back and forth and tried to figure out some way  
8 of, if we could, to convince Amoco to drill a well to the --  
9 only the Morrow, which is really the hot zones in this area,  
10 the Pennsylvanian series, and we -- and of course, we had  
11 discussions back and forth.

12 The only person I ever talked to with  
13 Amoco was Philip, and that was as a landman, and I suggested  
14 to Philip at that time that -- is there some way that we  
15 could get together with their people and our people and dis-  
16 cuss it, because of the -- of the expensive nature of the  
17 test; that I wondered if Amoco could convince us or show us  
18 why a Devonian test was necessary. I mean not necessary,  
19 but of course, they want to drill to the Devonian.

20 And at any rate, these negotiations and  
21 information -- I'm probably rambling on. Go ahead, and if  
22 you've got another question --

23 Q I notice on the map here, most of the  
24 acreage where Dow appears shows a 50-50 split between Dow  
25 and Belco.

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25

A. Yeah.

Q Is there some sort of partnership involved? Was there a partnership involved in the acquisition of the leases? Were they acquired --

A. Yeah, there was originally. We at one time were in with Belco in kind of a built-in partnership situation years ago. We acquired acres together. But -- and on those specific projects where we drilled a well, why they were operator, and so on and so forth.

Q They were jointly planned?

A. Oh, yeah, and then in the acreage that came out of our original partnership situation, we just flat owned half and half.

Q But it would still be logical for you, and as a matter of practice you do consult with Belco and they with Dow when a well is proposed on joint land?

A. We did up to this time, and ordinarily we're pretty good about passing information back and forth.

Q You stated that you have an experienced geologist in your -- in your Midland office.

A. Yes.

Q Is it your practice to have detailed geological workups done on all of your acreage?

A. Oh, no, we don't have it on all our

1  
2 acreage. Like I say, we're kind of a situation where we've  
3 got to fight the fire that's getting the closest to --

4 Q Prior to receipt of the February 13th  
5 letter advising you of the proposal to drill this well in  
6 Section 3 by Amoco, did you have a detailed geological work-  
7 up of your interest in Section 3?

8 A Well, we have regional geology around  
9 the area and we update it when -- when these wells are com-  
10 pleted.

11 Q That's so with the offset wells -- the  
12 offset wells in Section 2, 10, and 11, that we've discussed  
13 prior to this point? Okay.

14 A See, we obviously didn't think too  
15 highly of this area early, because we farmed out to Estoril,  
16 the group down in 15.

17 Q Right.

18 A And -- but they got -- of course, those  
19 are tremendous wells.

20 Q But your opinion of this specific pro-  
21 spect has changed in light of the three 1981 completions  
22 offsetting your acreage in Section 3 to the south, southeast,  
23 and east.

24 A Yes, sir.

25 Q So what is your company's position on

1  
2 the prospects for this south half of Section 3, or the entire  
3 section; you have an interest in both halves?

4 A. Well, the, obviously, it's a very pros-  
5 pective area in the Pennsylvanian.

6 Q Does Dow want to drill a well?

7 A. Well, we --

8 Q Or participate in a well?

9 A. Yes, we would want to participate in a  
10 Pennsylvanian well. That's what we are recommending in  
11 Section 3, and the -- I think he quoted some statistics here  
12 from the well to the east; the latest information we had  
13 was that it, that BTA well went on production 2-25-82,  
14 making 6.8 million a day, and 288 barrels of oil per day.  
15 That's a pretty good well.

16 Q And that is an Atoka well?

17 A. It's out of the Atoka, yeah.

18 Q So basically we have -- we have geolo-  
19 gical expert testimony to the extent that this is a highly  
20 prospective area in the Morrow, Atoka, and Strawn, in the  
21 Pennsylvanian series, is that correct?

22 A. Yes, sir. I think we'd agree with  
23 about everything they said on the Pennsylvanian series, as  
24 far as it being very, very prospective.

25 Q And therefor, your company's position

1

2

would be that this would be -- that a Morrow, Atoka, or Strawn well at the proposed location in Section 3 would be a reasonably low risk well for those formations?

5

A. Oh, I think as far as production is concerned; mechanically, I don't know how low a risk it is.

7

Q Okay. How did you respond -- when was your initial response to the February 13th -- or excuse me, January 13th proposal from Amoco?

10

A. Do you mean to Amoco?

11

Q To Amoco, did you call them, did you write them, did you --

13

A. I don't recall. Phil and I had talked on the phone quite a bit and I told him the problem we were having with it, and he, of course --

16

MR. NUTTER: By "Phil" you mean Mr.

17

Vasquez with Amoco?

18

A. Yes, excuse me. Phil Vasquez.

19

Anyway, we exchanged views a number of

20

time on the telephone and we were having trouble resolving

21

in our own mind. When we first started working on the area

22

we thought, well, perhaps the Devonian isn't too bad a

23

prospect. And as we got into it, according to our informa-

24

tion this well in 22, which is two miles south, tested water

25

out of the Devonian, and like I say, this is secondhand from

1  
2 my geologist, and so his problem with it is whether or not  
3 you can get high enough from that well to this location to  
4 be a viable Devonian prospect.

5 Q Okay. So you have no question -- your  
6 company's position is that there would be no question as to  
7 whether or not you would participate in the Pennsylvanian  
8 series test at this location?

9 A I'm not saying my company.

10 Q Well.

11 A I'm saying that our office would --

12 Q Your recommendation.

13 A -- recommend without hesitation the  
14 participation in a Pennsylvanian test here.

15 Q And the -- subject to budget restrictions  
16 from your home office?

17 A Yes.

18 Q The problem, then, was that your office  
19 was not convinced as to the prospective nature of the De-  
20 vonian formation.

21 A That's right.

22 Q Did you attempt to arrange any meetings  
23 with Amoco whereby you could have your experts meet with  
24 their experts to compare notes on the -- on the prospective-  
25 ness of the Devonian formation?

1  
2 A Yes, sir. Mr. Vasquez and I discussed  
3 that a number of times and I guess it was our discussions  
4 that prompted the letter we got dated the 5th of February,  
5 which incidentally was a day or two after we got notice that  
6 we were going to a party to a compulsory pooling.

7 Q What was the gist of that letter in  
8 response to your request that you arrange a meeting for the

9 A Well, the gist was that, yes, we could  
10 probably set up a meeting to show -- well, the words are to  
11 show you our geological information on the above referenced  
12 well, and contingent upon your company committing to either  
13 joining in the drilling of the well or farmout the interest  
14 under the -- the provisions of the January 13th, which was  
15 the 40 percent back in, and so forth.

16 Q In other words, after having notified  
17 Amoco that Dow had -- and possibly Belco, had questions  
18 about a Devonian test, but was strongly in favor of a  
19 Pennsylvanian series test, you tried to arrange a meeting  
20 where they could convince you that their geological informa-  
21 tion was valid and sound and did support the drilling of a  
22 Devonian test? Is that correct?

23 A I'd said that was basically correct.  
24 I don't know whether we came on that strong to tell them  
25 that we are all in favor of a Pennsylvanian test. We said

1  
2 that is the prospect in the area as far as we're concerned,

3 Q And they responded that they would be  
4 happy to show you their geological information and their  
5 rationale for a Devonian test only after you had firmly com-  
6 mitted to either participate in the blind or farm out to them  
7 on a 40 percent back in.

8 A That's correct.

9 Q Okay.

10 A And not only geological, I had a lot of  
11 concerns mechanically.

12 Q What are the mechanical concerns?

13 A Well, I don't want to get into them.  
14 I'm not an expert witness on that. The only thing is I've  
15 been at a number of meetings and they talk about the, you  
16 know, mechanical problems. Of course, Amoco had their share  
17 of them in this same area, too, in the shallow zones and in  
18 the Morrow, the Atoka, the difference in pressures and all  
19 that sort of thing, and so I wanted to, on top of the geology,  
20 I wanted to discuss, you know, what kind of engineering plans  
21 did they have. What kind of pipe program? What were their  
22 plans, you know, if they get into a high pressure Atoka  
23 zone? Are they apt to say, okay, let's don't risk the well,  
24 let's produce it right there? Or are they going to say, no,  
25 we'll just put some pipe to protect that and go on?



1  
2 In other words, kind of reassuring, I  
3 guess, is what you might say. I want to be reassured that  
4 we understood, you know, kind of what the plans were as far  
5 as drilling the well.

6 Q But you were never afforded an oppor-  
7 tunity to meet with the Amoco personnel to assuage these  
8 fears except subject to the same condition that you already  
9 agreed to participate or already agreed to farm out with a  
10 40 percent back in.

11 A Well, that was the crux of this letter  
12 and then, as I say, Philip and I had a conversation, token  
13 conversation on the 12th of February, and at that time I  
14 told him, I said, well, we would agree to join or farm out,  
15 but not agree to the terms ahead of time.

16 This, in our discussion before, they  
17 said, well, this is fairly common and Amoco does this all  
18 the time, but I've been I've been in the business a long  
19 time and it's always been my practice and experience that  
20 I've had, that when somebody gets ready to drill an expen-  
21 sive unit, you know, a well that involves other parties,  
22 that they call a meeting, discuss it and say, okay, here's  
23 what we're going to do and here's why we want to do it.  
24 And you're going to be getting AFE's in the next few weeks,  
25 or what have you.

1  
2 But in this instance we get a cold  
3 order with a cold AFE attached to it, asking us to sign that  
4 AFE and join or in the alternative, farm out with a 40 per-  
5 cent back in.

6 And as I say, we -- Philip and I discus-  
7 sed a number of times about the possibility of getting to-  
8 gether with some other technical people, getting together  
9 and discuss this thing, because a million dollar well in our  
10 budget, that's a big well.

11 Q Okay. Do you have anything else to add  
12 to aid the Examiner in his decision?

13 A Well, I don't know whether it will aid  
14 anybody or not, but there's some things I'd like to say, if  
15 I can.

16 But, for instance, I am not an expert  
17 geologist and so forth, but this Devonian interpretation is  
18 is an interpretation. They're working with estimated tops  
19 on the Devonian. You're talking about a deep Devonian test  
20 and, of course, it's an old knowledge in the business, you  
21 don't drill a deep Devonian test without some seismic  
22 and of course, I know this could be a bad seismic area.  
23 That's fine and dandy. I'm not a great deal on seismic.

24 But the trouble is, your closest pro-  
25 duction in the Devonian to the south has got a dry hole be-

1  
2       tween it. The closest to the west is three miles away, and  
3       the best interpretation by the most experienced geologist,  
4       I can't see how they want to spend that kind of money on this  
5       interpretation, and I hate to be critical about it, and as  
6       I say, I'm not an expert geologist, but I've seen jillions  
7       of deals. I've seen a ton of, you know, prospects that were  
8       being tried to sell to Dow and that sort of thing.

9                       And this is --

10               Q           And in fact you were never -- never  
11       shown this map prior to --

12               A           Not till today.

13               Q           -- today, so they were asking you to  
14       make your decision based on a purely speculative interpre-  
15       tation that you had not even seen, is that correct?

16               A           Well, yes. And the other thing that  
17       concerns me on this is that here we're being asked to pay  
18       a half interest in a Devonian test --

19               Q           A quarter interest.

20               A           Well, a quarter, Belco and us a half  
21       interest. In other words, Amoco's paying half and the part-  
22       ners are paying half, in a test well to the Devonian in an  
23       area that -- where we have limited acreage to be helped by  
24       it. In other words, Belco and Dow have very little acreage  
25       in this area; Amoco's got all the rest of it. I suggested

1  
2       tween it. The closest to the west is three miles away, and  
3       the best interpretation by the most experienced geologist,  
4       I can't see how they want to spend that kind of money on this  
5       interpretation, and I hate to be critical about it, and as  
6       I say, I'm not an expert geologist, but I've seen jillions  
7       of deals. I've seen a ton of, you know, prospects that were  
8       being tried to sell to Dow and that sort of thing.

9                       And this is --

10               Q           And in fact you were never -- never  
11       shown this map prior to --

12               A           Not till today.

13               Q           -- today, so they were asking you to  
14       make your decision based on a purely speculative interpre-  
15       tation that you had not even seen, is that correct?

16               A           Well, yes. And the other thing that  
17       concerns me on this is that here we're being asked to pay  
18       a half interest in a Devonian test --

19               Q           A quarter interest.

20               A           Well, a quarter, Belco and us a half  
21       interest. In other words, Amoco's paying half and the part-  
22       ners are paying half, in a test well to the Devonian in an  
23       area that -- where we have limited acreage to be helped by  
24       it. In other words, Belco and Dow have very little acreage  
25       in this area; Amoco's got all the rest of it. I suggested

1  
2 to them this morning that if they really wanted to drill  
3 Devonian, they've got 100 percent leases all over the place  
4 to try.

5 But here it appears that we're being  
6 asked to spend half the exploration money to prove up a  
7 Devonian prospect in the area, and if we don't do it, we're  
8 drug the heels into a forced pooling situation where we've  
9 got to farm out and give us what we feel is a good position  
10 in the Pennsylvanian play.

11 It -- it really concerns me and upsets  
12 me that we're put in a position where we've got to get out  
13 of the Penn play because somebody wants to drill a Devonian  
14 test and wants us, like I say, to spend half the exploration  
15 money.

16 I don't know, as I say, it just -- and  
17 plus, I think on the face of it, we've had since the 13th  
18 of January to get -- to make a determination on it, and I  
19 don't know whether we're slower than most people are or not  
20 to come up with something, but in the first place, we had  
21 a gray area in that we didn't like the Devonian concept, and  
22 so we are trying to resolve that with Amoco during -- during  
23 that time. I say trying. We suggested meetings to discuss  
24 why they wanted to go to the Devonian, and we were unable  
25 to get together and to the effect that, well, they could

1  
2 either convince us or that we ought to drill the Devonian  
3 test or we ought not.

4 I don't know what else to say.

5 MR. EZZELL; I have no further questions.

6 MR. NUTTER: Are there any questions  
7 of Mr. Martin?

8  
9 CROSS EXAMINATION

10 BY MR. MOTE:

11 Q Mr. Martin, what is your title with  
12 Dow?

13 A I'm Area Manager of the West Texas/New  
14 Mexico Area, I guess you'd call it. It's a -- it's an ex-  
15 ploration office. We've got three geologists, myself, and  
16 a girl. We handle West Texas and New Mexico.

17 Q You're head of that office?

18 A Head of the office.

19 Q And you've got one experienced geologist  
20 and two other geologists in that office?

21 Do you have someone in the office that  
22 pays attention to wells that are being drilled and what's  
23 found in those wells?

24 I mean did you know about these three  
25 wells in the area that were drilled right in the vicinity

1  
2 of the proposed well last year? In 1981?

3 A. You say are we aware of these wells in  
4 what?

5 Q. 2, 10, and 11.

6 A. 2, 10, and 11?

7 Q. Yes, sir.

8 A. Well, 10 we farmed out, and I assure  
9 you --

10 Q. Okay, you followed that one pretty close.

11 A. And we keep up as best we can with the  
12 staff we've got. Yes, we try to keep up with wells in areas  
13 where we are -- have leases and so forth.

14 Q. And I believe, I don't know whether it  
15 was you or somebody else called this sort of a hot area.  
16 I don't know whether it was you or not.

17 A. Well, it is a hot area.

18 Q. So you'd naturally pay more attention  
19 to what you consider a hot area than you would some area  
20 that didn't have much prospect, wouldn't you?

21 A. That's right.

22 Q. So can I assume that when this informa-  
23 tion came in that you passed it on to your geologists and  
24 they made their interpretations and --

25 A. Which information?

1  
2 Q Information concerning these three wells  
3 that were drilled in 1981.

4 A Well, they're the ones getting that in-  
5 formation.

6 Q Okay, so they took this information  
7 and they correlated it with the information they already had  
8 and they were keeping you advised from day to day or week to  
9 week, or whatever, as to the prospects in the area, were  
10 they not?

11 A Uh-huh.

12 Q So you've got up to date information  
13 in the very area of this proposed location already, haven't  
14 you?

15 A In the Penn zone, yes.

16 MR. MOTE: I believe no further questions.

17 MR. NUTTER: Are there any other ques-  
18 tions of the witness?

19 A We have no information on the Devonian,  
20 in this area, because there isn't any.

21 MR. NUTTER: Are there any further  
22 questions? The witness may be excused.

23 Call for closing statements. Mr. Mote,  
24 you may go last.

25 MR. FZZELL: Mr. Examiner, the position



1  
2 of my client, Dow Chemical, is simply stated, as they had  
3 asked of Amoco, the applicant, in their last correspondence,  
4 they would ask again for a continuance with respect to this  
5 matter, not in the -- obviously, not in the continuance of  
6 the conducting of the hearing, but for a 30-day continuance  
7 in the consideration of the evidence presented today, by the  
8 Examiner and the Commission.

9 The evidence we have seen today, as the  
10 term has just been used again, clearly establishes this as  
11 a very hot Pennsylvanian area.

12 We have heard Mr. Martin's testimony  
13 that the Midland office, which is in charge of the -- of  
14 the area this prospect is located in, would enthusiastically  
15 recommend to Dow's home office that they participate to the  
16 extent of their acreage in this area for a Pennsylvanian  
17 series test.

18 As Mr. Martin alluded to, Amoco is  
19 seeking to put them in a position where they have several  
20 options and all of them are bad.

21 They can either farm out on what they  
22 feel is unfair terms because they do not feel that the con-  
23 siderable added risk by going to the Devonian formation is  
24 justified, they can farm out on what they consider unfavorable  
25 terms, and thereby still be able to participate in the Penn-

1  
2 sylvanian series prospects, which they're enthusiastic about,  
3 but at a greatly diluted basis.

4 Their other alternative, and as Amoco  
5 is seeking to do today, is to be force pooled and be subject  
6 to the 200 percent penalty that Amoco has requested. This  
7 will effectively take them out -- take them out of the Penn-  
8 sylvanian play until the well paid for itself three times over.

9 They have, as evidenced by the letter  
10 of February 26th, which is Amoco's Exhibit Number Five, they  
11 have evidenced every willingness to deal with the -- to nego-  
12 tiate with Amoco for Pennsylvanian series tests; for a com-  
13 promise with respect to going to the Devonian; or for farm  
14 out, which they, as they state, is in the last resort because  
15 they still would not wish to have their position in the hot  
16 play diluted to a 50 percent extent, but they're still  
17 willing to do that rather than be forced to drill into the  
18 Devonian formation at the cost to them of over \$1.1 million,  
19 when in fact, despite they're continued request Amoco wouldn't  
20 even show the basis for the Devonian test in the first place.

21 We see that Belco, who, as we under-  
22 stood, as we understand orally last Friday agreed to the  
23 40 percent back in provision through the farm out. Belco  
24 had two months more to consider this prospect and they just  
25 now made the -- were able to make their decision on Friday,

1  
2 possibly faced with the unfortunate, unacceptable prospects  
3 of being force pooled with penalty provision.

4           Dow Chemical had the prospect to look  
5 at for two months less. We've heard testimony that they do  
6 not have a large staff. They have to go to the home office  
7 for approval, and that their initial response was that they  
8 were not in favor of a Devonian test and wanted to find out  
9 why Amoco was.

10           We've heard testimony that it's industry  
11 practice in the drilling of expensive wells when you have  
12 partners who are entitled as a matter of law to participate  
13 in a well, to have a meeting to explain why in this case the  
14 Devonian would be a justifiable expense, rather than just  
15 drilling to the Pennsylvanian series, which there is every  
16 expectation, as both sides agree, of good commercial production.

17           We have heard testimony from Mr. Martin  
18 that there are considerable engineering problems involved in  
19 drilling through the Pennsylvanian to go down to the Devonian,  
20 which can cause irreparable harm to the Pennsylvanian zones  
21 that have been penetrated.

22           We have not heard any -- any engineering  
23 testimony to understand what Amoco plans to do to prevent  
24 this damage, if in fact they do plan to drill through the  
25 Pennsylvanian and into the -- to the Devonian.

1  
2 They have asked, Applicant has asked for  
3 a 200 percent penalty based on the depth and the risk and the  
4 expense of the prospect where their own exhibits and their  
5 own expert testimony, as agreed to by Dow, establishes that  
6 as far as the Pennsylvanian is concerned it's a very low risk  
7 prospect, and that would -- that would seem to make the 200  
8 percent penalty excessive.

9 So in summary, Dow would ask that the,  
10 in order to give the parties an opportunity to negotiate the  
11 matter, there are many other alternatives available to the  
12 parties, such as a joint -- a jointly drilled Pennsylvanian  
13 series test with the expense from the Pennsylvanian down to  
14 the Devonian borne by Amoco on a Devonian depth farm out  
15 basis only.

16 Dow has exhibited the willingness to  
17 enter into almost any sort of negotiations which have always  
18 been refused up until today by Amoco.

19 So we would just ask that in order to  
20 give the parties time to consider this matter and to nego-  
21 tiate, so that the rights of all parties will be protected  
22 and not diluted unfairly, we would ask that the Examiner  
23 and the Commission stay the consideration of the evidence  
24 heard today for the period of, say, thirty days, to give the  
25 parties time to work the matter out.

1  
2 At that point, if in fact no agreement  
3 has been reached, and since we have heard the lengthy testimony  
4 put on today, the Examiner can then consider the evidence  
5 presented and proceed in a normal course of making a decision.

6 In case we cannot have that relief, we  
7 would seek a denial of the compulsory pooling application,  
8 and in the event that it was approved, we would seek, by  
9 virtue of the low risk involved in the Pennsylvanian series  
10 test, that the penalty imposed be only 100 percent.

11 I have nothing further.

12 MR. NUTTER: Mr. Mote?

13 MR. MOTE: Mr. Examiner, with regard to  
14 the continuance suggested, I think we've shown ample evidence  
15 that Amoco feels it necessary that this well be drilled, be  
16 done within the shortest possible time. We feel like there  
17 is a strong possibility of drainage either occurring or pos-  
18 sibly will occur in the future, and we also feel like the  
19 rig schedules we have demand that this be placed on the pro-  
20 gram and it be drilled in the very near future.

21 We would suggest that rather than not  
22 considering the testimony which has been introduced today,  
23 that we urge the Examiner to go ahead and issue an order as  
24 soon as possible granting the forced pooling that we've re-  
25 quested.

1  
2 Now, you've heard testimony from Mr.  
3 Vasquez that just because the hearing is held today, just be-  
4 cause we've already introduced all of our exhibits and given  
5 them the full benefit of all our knowledge with regard to  
6 this test, that this is not going to keep us from continuing  
7 to negotiate. We intend to keep negotiating with them, but  
8 we don't want anything to hold up the possibility of us  
9 drilling this well in the very near future.

10 The plain fact of the matter is that  
11 they just don't want to test the Devonian. I don't know  
12 whether it's because of budget restrictions or what, or just  
13 failure to properly assess the matter. I have an idea that  
14 Dow is pretty well up in this area from testimony that was  
15 given. They have three geologists that -- that are working  
16 for the witness who's just testified for Dow. They know the  
17 information, probably, as well as anyone in the area. They  
18 could come to their own conclusions with regard to the De-  
19 vonian.

20 I think whether or not the various form-  
21 ations are laid more or less on an even pattern throughout  
22 the area is something that almost any geologist could arrive  
23 at. With all the information in the area and with the know-  
24 ledge and interest that they have, we don't feel that they've  
25 been deprived of any information.

1  
2 But we will remind the Examiner that  
3 we did offer to show them everything that we have, just on  
4 the basis of we'll show you, but we expect some -- you either  
5 to join us or to farm out, which is a very reasonable request.  
6 We don't ordinarily give everyone that we give an AFE to the  
7 full information about our test. It would be disastrous.  
8 We expect people to rely on their own geologists and their  
9 own engineers to make their own independent determination.  
10 We certainly wouldn't want them to rely on our geologist.  
11 There might even be some liability involved by relying on  
12 our geology, whether or not they ought to do something.

13 They've got their own geologists. They've  
14 got their own landmen. They've got an engineer. Let them  
15 make up their own mind.

16 Amoco certainly feels that a Devonian  
17 test is proper. We feel like that we can, if permitted to  
18 drill the well, under the compulsory pooling provisions, that  
19 apply in this state, that we can not only test but would be  
20 able to make a producer and make a profit out of this well.  
21 We're not doing it just to prove up acreage. We don't drill  
22 a \$4-million well to prove up acreage. We drill to make a  
23 profit and that's what we intend to do in this case.

24 One other thing, I was a little bit  
25 surprised at counsel referring to a landman's assessment of

1  
2 the engineering problems involved. I didn't object to it  
3 because I didn't think the Examiner would even pay any atten-  
4 tion to a landman talking about engineering problems. But  
5 I would remind you that -- that we have had an engineer here  
6 on the stand from Amoco who said that he had a wellbore  
7 sketch showing complete casing program proposed for this well  
8 clear down to the Devonian, and it was here available to the  
9 Examiner, available to Dow, and we've still got it and if  
10 they still want it, that's what they're complaining about,  
11 well, we'll still give it to them right now.

12 With regard to trying to divide up the  
13 responsibility and saying well, some of us will go down to  
14 the Morrow, some of us will go to the Atoka, the rest of us  
15 will go on down to the Devonian and test the Devonian, this  
16 would do nothing but just create horrendous problems.

17 Let's suppose that some of them were  
18 going down to just the Morrow and agreed to split costs up  
19 to that point. What would -- what happens when some of them  
20 want to go on down to the Devonian but they've got a real  
21 wellburner in the Morrow. You end up with a lawsuit, pro-  
22 bably, saying we don't want to go any further. We're afraid  
23 you're going to screw up what you've already got. We want  
24 to keep what we've got and not go to the Devonian. We  
25 don't want you making a test on something that we've already



1  
2 got in the bag.

3 I think that there are horrendous prob-  
4 lems involved in trying to split this thing up. It would  
5 just be something we couldn't handle.

6 So we're asking for permission to drill  
7 this Devonian test and that it be done under the statutes of  
8 tis state under the compulsory pooling that we've asked.

9 MR. NUTTER: Thank you, Mr. Mote.

10 To be frank with you, gentlemen, I'd  
11 rather see some equitable solution worked out between you  
12 than have to enter an order that is going to make someone  
13 unhappy.

14 In the first place, you're talking, Mr.  
15 Mote, about the necessity for getting prompt action on this  
16 and you disagree with the proposal for a continuance because  
17 of that reason.

18 Now, of course, normal procedure, there  
19 could be a delay of probably sixty days if we entered an order,  
20 ten minutes from now, before your order would be final, not  
21 counting the possibility of appeal, because they've got  
22 thirty days in which they could ask for a de novo, and then  
23 by the time we fixed a de novo hearing another thirty days  
24 could easily elapse. So it would be sixty days before we'd  
25 have a hearing on a de novo.

1  
2           So I think that it may be possible that  
3     some sort of a delay here of about 28 days would -- would  
4     put us to our scheduled hearing for March the 31st, might  
5     save time in the long run.

6           Now, we could either do it one of two  
7     ways. We can either continue the case for thirty -- until  
8     the 31st of March, or we can rely on the evidence that we've  
9     got here today and just delay entering an order; delay entering  
10    an order until about the 31st of March.

11           I think that I would be inclined to  
12    give Dow time to study this evidence that you've presented  
13    here today, the geological evidence.

14           Now you stated that you don't normally  
15    give the geological evidence to everybody that you send an  
16    AFE to. I grant you that, but I think that this is a very  
17    substantial investment that you're asking Dow to make. They've  
18    got a 25 percent interest in the well. The AFE shows a \$4.4  
19    million dollar total completed well cost. That's more than  
20    \$1 million, and I think they should have at least sixty days  
21    in which to make a decision on the investment of \$1.1 million.

22           From the date that you sent that first  
23    letter to them on January the 13th, that hasn't been sixty  
24    days yet. I think they could take this geological information  
25    and you might be surprised at the outcome of their interpre-

1  
2 tation of your Devonian geology. You said let them make up  
3 their mind as to the Devonian -- let them make up their own  
4 mind as to the Devonian prospect. I think they already have.

5 MR. MOTE: I think they have, too.

6 MR. NUTTER: And they foreclosed the  
7 idea of drilling to the Devonian.

8 Maybe when they take your structural  
9 maps and their geologists have a chance to look at it for  
10 the first time, they may agree with you that it's worthwhile  
11 to test the Devonian.

12 But I think in the long run that a delay  
13 here in final disposition of the case may be to the advantage  
14 of everyone in time saved.

15 So with that in mind, I think I will  
16 continue this case to the hearing scheduled to be held at  
17 this same place at 9:00 o'clock a. m. March the 31st of  
18 1982, and I'm planning on making an order at that time, if  
19 it's necessary, unless you tell me that you have reached an  
20 agreement and want a dismissal of the case. I plan on making  
21 an order based on the record that we have here today, unless  
22 one of you at least ten days before the date of that hearing  
23 advises us that you've got substantial information not in-  
24 cluded in the record today, based on your interpretation of  
25 new evidence, substantial interpretation -- interpretative

1  
2 differences from what we've got here today, or substantial  
3 new information. In that case, you'd notify us at least ten  
4 days before the date of the hearing and we'll expect both  
5 parties to be back at the hearing. Otherwise, I don't think  
6 it will be necessary for either party to be here at the  
7 hearing because we'll make the order based on the testimony  
8 here today.

9 I don't know if that makes anybody happy  
10 or not, but I think that's the way it ought to be handled.  
11 Right now we've got the option of denying the case, pooling  
12 through the Morrow, or pooling through the Devonian, and I  
13 don't think any of those are going to make either -- both  
14 parties happy; none of those three will.

15 So maybe if we postpone until the 31st  
16 some action, somebody will come out ahead, and hopefully,  
17 both parties will.

18 With that we'll continue the case and  
19 Mr. Pearce has a telegram from Belco that should go in the  
20 record.

21 MR. PEARCE: Mr. Examiner, with your  
22 permission, the Oil Conservation Division received yesterday,  
23 March 2nd, 1982, the following telegram:

24 Amoco Production Company is requesting  
25 an order to pool all mineral interests in the Wolfcamp

1 through Devonian formations underlying the south half of  
2 Section 3, Township 23 South, Range 34 East, Lea County, New  
3 Mexico. Said, and I quote, telegram tooling Case 7499 is  
4 to be heard on March 3rd.  
5

6 Belco Petroleum upon representation by  
7 Amoco Production that Amoco has agreed to the terms of Belco's  
8 farm out to it, covering Belco's interest in the south half  
9 of Section 3, will not protest this compulsory, again,  
10 tooling hearing.

11 Had Amoco not accepted said farm out,  
12 Belco would be in attendance to protest.

13 Belco requests the Commission to note  
14 in the record in this case that Belco is not making an ap-  
15 pearance in protest on the verbal assurance from Amoco Pro-  
16 duction Company that the Belco farmout letter dated February  
17 26th, 1982, was acceptable to Amoco.

18 Signed Belco Petroleum, by James  
19 Patrick Miller, Division Attorney.

20 MR. NUTTER: Thank you, Mr. Pearce.

21 Does anyone have anything they wish to  
22 offer in Case Number 7499?

23 We'll continue the case to the hearing  
24 on March 31st.

25 (Hearing concluded.)

C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division was reported by me; that the said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability.

Sally W. Boyd CSR

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 7499 heard by me on 3/3 1982.

[Signature], Examiner  
Oil Conservation Division

SALLY W. BOYD, C.S.R.

Rt. 1 Box 195-B

Santa Fe, New Mexico 87501

Phone (505) 435-7409



STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

BRUCE KING  
GOVERNOR  
LARRY KEHOE  
SECRETARY

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87501  
(505) 827-2434

March 22, 1982

Mr. Mark Martin  
Area Manager  
Dow Chemical Company  
1123 Wilco Building  
Midland, Texas 79701

Re: Case 7499

Dear Mr. Martin:

Reference is made to our telephone conversation of March 19, 1982, and to your telegram received today, in both of which you have requested permission to enter new testimony and exhibits in Case No. 7499, Application of Amoco Production Company For Compulsory Pooling, Lee County, New Mexico.

This case was originally heard by me as examiner on March 3 and continued to the hearing scheduled for 9 a.m. March 31, 1982.

Dow Chemical as well as Amoco will be permitted to put on new testimony and exhibits March 31, if desired.

Very truly yours,

DANIEL S. NUTTER  
Chief Engineer and  
Trial Examiner

DSN/fd

cc: Jim Allen  
Amoco Production Company  
Houston, Texas



STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

BRUCE KING  
GOVERNOR  
LARRY KEHOE  
SECRETARY

July 22, 1982

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87501  
(505) 827-2434

Mr. Clyde Mote, Attorney  
Amoco Production Company  
P. O. Box 3092  
Houston, Texas 77001

Re: CASE NO. 7499  
ORDER NO. R-7032

Applicant:

Amoco Production Company

Dear Sir:

Enclosed herewith are two copies of the above-referenced Division order recently entered in the subject case.

Yours very truly,

**JOE D. RAMEY**  
Director

JDR/fd

Copy of order also sent to:

Hobbs OCD	<u>x</u>
Artesia OCD	<u>x</u>
Aztec OCD	

Other Kate Krueger, Calder Ezzell



STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
DIVISION FOR THE PURPOSE OF  
CONSIDERING:

CASE NO. 7499  
Order No. R-7032

APPLICATION OF AMOCO PRODUCTION  
COMPANY FOR COMPULSORY POOLING,  
LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on March 31, 1982, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 21st day of July, 1982, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Amoco Production Company, seeks an order pooling all mineral interests in the Wolfcamp through Devonian formations underlying the S/2 of Section 3, Township 23 South, Range 34 East, NMPM, Antelope Ridge Area, Lea County, New Mexico, to be dedicated to a well to be drilled at a standard location thereon 660 feet from the South line and 1980 feet from the East line of said Section 3.
- (3) That the applicant owns an oil and gas lease on the SE/4 of said Section 3, and has taken a farmout on an undivided 50 percent working interest in the SW/4 of said Section 3, thereby controlling 75 percent of the working interest in the proposed spacing and proration unit and having the right to drill thereon, which it proposes to do.
- (4) That Dow Chemical U.S.A. is the owner of a 50 percent undivided working interest in the SW/4 of said Section 3, and appeared at the hearing in opposition to Amoco's proposal to pool the S/2 of Section 3 and drill a 14,900-foot well to test the Devonian formation underlying said lands.

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Case No. 7499  
Order No. R-7032

(5) That this case originally came on for hearing on March 3, 1982, at which time both sides presented testimony; that the case was then continued to the March 31, 1982, hearing in order to give the parties to the hearing additional time in which to negotiate and resolve their differences.

(6) That during the interim period between hearings there were apparently good faith efforts made to arrive at an amicable solution, but certain differences between the parties remain.

(7) That both parties agree, and the geological evidence tends to confirm, that the Pennsylvanian formation, particularly the Morrow section, underlying the proposed spacing and proration unit is a good prospect for obtaining commercial production.

(8) That the geological evidence concerning the Devonian prospect is somewhat less conclusive, but the evidence appears to preponderate towards the view that prospects for commercial production from the Devonian formation are much more uncertain than such prospects for the Pennsylvanian, and that Dow is justified in not desiring to participate in going to the Devonian.

(9) That to avoid the drilling of unnecessary wells, to protect correlative rights, and to afford to the owner of each interest in said unit the opportunity to recover or receive without unnecessary expense his just and fair share of the gas underlying the subject lands, the subject application should be approved by pooling all mineral interests, whatever they may be, within said unit, and Amoco should be designated operator of the subject well and unit, provided however, that Dow should be given the opportunity to participate in the drilling of the subject well on a split-risk basis, i.e., (1) to participate in drilling and completion costs to the Morrow formation without penalty or to go non-consent to the Morrow and participate in the Morrow subject to a certain charge for the risk involved in drilling to said formation, and (2), to participate in the additional drilling and completion costs from the Morrow to the Devonian without penalty or to go non-consent from the Morrow to the Devonian and participate in the Devonian subject to a separate and different charge for the risk involved in the additional drilling.

(10) That it is the intent of this order to break the drilling of the subject well down into two separate and distinctive phases: (1) from the surface of the ground through the Morrow pay; and (2) from the base of the Morrow pay through the Devonian pay; to provide alternative selections to the pooler, Dow; and to provide cost accounting for a single Morrow

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Case No. 7499  
Order No. R-7032

completion vs. a single Devonian completion or a Morrow-Devonian dual completion.

(11) To the above ends, all charges and costs which would be directly attributable to a single Morrow completion should be charged to the Morrow zone and subject to the Morrow risk factor provided herein, if applicable, and paid out of Morrow production only; all charges and costs which would be directly attributable to the drilling of a single Devonian completion from the base of the Morrow pay through the Devonian pay as well as any extra up-hole charges and costs resulting from drilling the well to the Devonian above and beyond what would normally be spent drilling to the Morrow only (such as extra hole size, extra casing and cementing, rig charges, etc.) should be charged to the Devonian zone and subject to the Devonian risk factor provided herein, if applicable, and paid out of Devonian production only; all common charges to a Morrow-Devonian dual (including the separation packer, dual Christmas tree, etc.) shall be split between the two zones and each portion made subject to the risk factor for that zone and paid out of production from that zone.

(12) That after the effective date of this order and within 60 days prior to commencing the subject well, Amoco should furnish the Division and Dow itemized schedules of estimated well costs as follows:

- A. A cost estimate for a normal single Morrow test well to the anticipated Morrow completion depth (13,500 - feet).
- B. A cost estimate for a normal single Devonian test well to the anticipated Devonian completion depth (14,900 - feet).
- C. A cost estimate for a Morrow-Devonian dual completion at the above depths.

(13) That the cost estimate prescribed in Finding No. (12) A above should include only normal drilling, testing, and completion costs with a suitably sized drilling rig and normal mud, logging, and testing charges and casing and cementing costs for a single Morrow completion without anticipation of drilling beyond the expected Morrow completion depth.

(14) That the cost estimate prescribed in Finding No. (12) B above should include only normal drilling, testing, and completion costs with a suitably sized drilling rig and normal mud, logging, and testing charges and casing and cementing costs.

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Case No. 7499  
Order No. R-7032

for a single Devonian completion without anticipation of an upper pay (Morrow) being present or requiring testing.

(15) That the cost estimate prescribed in Finding No. (12) C above should include normal drilling, testing, and completion costs with a suitably sized drilling rig and normal mud, logging, and testing charges and casing and cementing costs for a Morrow-Devonian dual completion.

(16) That within 30 days from the date the above-described schedules of estimated well costs are furnished to it, Dow should make its election as to whether to participate in the subject well.

(17) That if it elects to participate, Dow should have the opportunity of choosing its mode of participation, i.e., whether to participate in drilling to and completing in the Morrow only, or to participate in drilling and completing in both the Morrow and Devonian.

(18) That if it elects to participate, Dow should be afforded the opportunity of paying its share of estimated well costs for the mode selected in lieu of paying its share of reasonable well costs out of production.

(19) That should Dow elect not to pay its share of estimated well costs from the surface down through the Morrow pay, it should have its share of reasonable well costs for said formation withheld from production from the Morrow formation plus a reasonable percentage of such costs as a charge for the risk involved in the drilling of said well to the Morrow.

(20) That considering the geological and engineering evidence presented at the hearing, 100 percent of reasonable well costs is an adequate and appropriate charge for the risk involved in drilling said well to the Morrow formation.

(21) That should Dow elect to pay its share of estimated well costs from the surface to the Morrow, but elect not to pay its share of estimated well costs from the base of the Morrow pay down through the Devonian pay, it should have its share of well costs for drilling from the Morrow to the Devonian withheld from production from the Devonian formation plus a reasonable percentage thereof as a charge for the risk involved in the drilling of said well from the Morrow to the Devonian.

(22) That considering the geological and engineering evidence presented at the hearing, 200 percent of reasonable well costs from the Morrow to the Devonian is an adequate and

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Case No. 7499

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appropriate charge for the risk involved in drilling said well from the Morrow to the Devonian.

(23) That should Dow elect to participate in either of the above-described modes of participation, its payment of its share of estimated well costs for that mode should be made to Amoco in accordance with some customary and mutually agreeable system for billing and payment which is common to the industry; that should Dow so elect to participate and pay its share of estimated well costs for the mode selected, it should remain liable for operating costs but should not be liable for risk charges for that mode of participation. Reasonable drilling and completion costs advanced by Amoco beyond the mode selected and prepaid by Dow should be subject to the risk factors described above and withheld from production from the appropriate formation together with operating costs.

(24) That within 90 days following completion of the well, the operator should furnish the Division and Dow an itemized schedule of actual well costs for drilling and completion of the well, broken down into two segments: from the surface through the Morrow pay, and from the base of the Morrow pay through the Devonian pay; that if no objection to such actual well costs is received by the Division, and the Division has not objected to such actual well costs within 45 days following receipt of said schedule, the actual costs should be considered reasonable costs; provided however, that if there is an objection to actual well costs within said 45-day period, the Division should determine reasonable well costs after public notice and hearing.

(25) That within 60 days following determination of reasonable well costs, should Dow have paid its share of estimated well costs for either of the above-described modes of participation, it should pay to Amoco any amount that its share of reasonable well costs for that mode exceed paid estimated well costs and should receive from Amoco any amount that paid estimated well costs exceed reasonable well costs for that mode.

(26) That the terms and provisions of this order relating to participation or non-participation in the drilling of the subject well to the Morrow formation should be applicable to the drilling to and completion of the well in possible pay zones above the Morrow; that the terms and provisions of this order relating to participation or non-participation in the drilling of the subject well from the base of the Morrow pay through the Devonian pay should be applicable to the drilling to and completion of the well in possible pay zones between the base of the Morrow and the top of the Devonian.

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(27) That \$4200.00 per month while drilling and \$420.00 per month while producing should be fixed as reasonable charges for supervision (combined fixed rates); that the operator should be authorized to withhold from production the proportionate share of such supervision charges attributable to each non-consenting working interest, and in addition thereto, the operator should be authorized to withhold from production the proportionate share of actual expenditures required for operating the subject well, not in excess of what are reasonable, attributable to each non-consenting working interest.

(28) That all proceeds from production from the subject well which are not disbursed for any reason should be placed in escrow in Lea County, New Mexico, to be paid to the true owner thereof upon demand and proof of ownership.

(29) That upon the failure of the operator of said pooled unit to commence drilling of the well to which said unit is dedicated on or before November 1, 1982, the order pooling said unit should become null and void and of no effect whatsoever.

(30) That although the application in this case was for pooling of the S/2 of Section 3, Township 23 South, Range 34 East, NMPM, Lea County, New Mexico, to form a 320-acre gas spacing and proration unit to be dedicated to a well to be drilled at a standard location thereon 660 feet from the South line and 1980 feet from the East line of said Section 3, the Division Director should have authority to approve an alternative location for the unit well without hearing upon application of Amoco, provided all applicable provisions of Rule 104 of the Division Rules and Regulations are met, and provided that such location has been submitted to Dow along with the itemized schedules of well costs specified in Finding Nos. (12) through (15) above.

IT IS THEREFORE ORDERED:

(1) That all mineral interests, whatever they may be, from the top of the Wolfcamp formation through the base of the Devonian formation underlying the S/2 of Section 3, Township 23 South, Range 34 East, NMPM, Antelope Ridge Area, Lea County, New Mexico, are hereby pooled to form a standard 320-acre gas spacing and proration unit to be dedicated to a well to be drilled 660 feet from the South line and 1980 feet from the East line of said Section 3 or at such other location on said unit as the Division Director may approve.

PROVIDED HOWEVER, that the operator of said unit shall commence the drilling of said well on or before the first day of November, 1982, and shall thereafter continue the drilling of

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Case No. 7499  
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said well with due diligence to a depth sufficient to test the Devonian formation;

PROVIDED FURTHER, that in the event said operator does not commence the drilling of said well on or before the first day of November, 1982, Order (1) of this order shall be null and void and of no effect whatsoever, unless said operator obtains a time extension from the Division for good cause shown.

PROVIDED FURTHER, that should said well not be drilled to completion, or abandonment, within 180 days after commencement thereof, said operator shall appear before the Division Director and show cause why Order (1) of this order should not be rescinded.

(2) That Amoco Production Company is hereby designated the operator of the subject well and unit.

(3) That after the effective date of this order and within 60 days prior to commencing said well, the operator shall furnish the Division and each known working interest owner in the subject unit itemized schedules of estimated well costs as follows:

- A. A cost estimate for a normal single Morrow test well to the anticipated Morrow completion depth (13,500 - feet).
- B. A cost estimate for a normal single Devonian test well to the anticipated Devonian completion depth (14,900 - feet).
- C. A cost estimate for a Morrow-Devonian dual completion at the above depths.

(4) That the cost estimate prescribed in Order No. (3) A above shall include only normal drilling, testing, and completion costs with a suitably sized drilling rig and normal mud, logging, and testing charges and casing and cementing costs for a single Morrow completion without anticipation of drilling beyond the expected Morrow completion depth.

(5) That the cost estimate prescribed in Order No. (3) B above shall include only normal drilling, testing, and completion costs with a suitably sized drilling rig and normal mud, logging, and testing charges and casing and cementing costs for a single Devonian completion without anticipation of an upper pay (Morrow) being present or requiring testing.

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Case No. 7499  
Order No. R-7032

(6) That the cost estimate prescribed in Order No. (3) C above shall include normal drilling, testing, and completion costs with a suitably sized drilling rig and normal mud, logging, and testing charges and casing and cementing costs for a Morrow-Devonian dual completion.

(7) That within 30 days from the date the above-described schedules of estimated well costs are furnished to it, Dow shall make its election as to whether to participate in the subject well.

(8) That if it elects to participate, Dow shall have the opportunity of choosing its mode of participation, i.e., whether to participate in drilling to and completing in the Morrow only, or to participate in drilling to and completing in both the Morrow and Devonian.

(9) That if it elects to participate, Dow shall be afforded the opportunity of paying its share of estimated well costs for the mode selected in lieu of paying its share of reasonable well costs out of production.

(10) That should Dow elect not to pay its share of estimated well costs from the surface down through the Morrow pay, it shall have its share of reasonable well costs for said formation withheld from production from the Morrow formation plus 100 percent thereof as a charge for the risk involved in the drilling of said well to the Morrow.

(11) That should Dow elect to pay its share of estimated well costs from the surface to the Morrow, but elect not to pay its share of estimated well costs from the base of the Morrow pay down through the Devonian pay, it shall have its share of well costs for drilling from the Morrow to the Devonian withheld from production from the Devonian formation plus 200 percent thereof as a charge for the risk involved in the drilling of said well from the Morrow to the Devonian.

(12) That should Dow elect to participate in either of the above-described modes of participation, its payment of its share of estimated well costs for that mode shall be made to Amoco in accordance with some customary and mutually agreeable system for billing and payment which is common to the industry; that should Dow so elect to participate and pay its share of estimated well costs for the mode selected, it shall remain liable for operating costs but shall not be liable for risk charges for that mode of participation. Reasonable drilling and completion costs advanced by Amoco beyond the mode selected and prepaid by Dow shall be subject to the risk factors described above and



-9-

Case No. 7499  
Order No. R-7032

withheld from production from the appropriate formation together with operating costs.

(13) That within 90 days following completion of the well, the operator shall furnish the Division and Dow an itemized schedule of actual well costs for drilling and completion of the well, broken down into two segments: from the surface through the Morrow pay adjusted downward for any extra up-hole charges and costs per Finding No. (11), and from the base of the Morrow pay through the Devonian pay including any extra up-hole charges and costs per Finding No. (11); that if no objection to such actual well costs is received by the Division and the Division has not objected to such actual well costs within 45 days following receipt of said schedule, the actual costs shall be considered reasonable costs; provided however, that if there is an objection to actual well costs for either or both segments within said 45-day period, the Division shall determine reasonable well costs for each segment after public notice and hearing.

(14) That within 60 days following determination of reasonable well costs, should Dow have paid its share of estimated well costs for either of the above-described modes of participation, it shall pay to Amoco any amount that its share of reasonable well costs for that mode exceed paid estimated well costs and shall receive from Amoco any amount that paid estimated well costs exceed reasonable well costs for that mode.

(15) That Amoco is hereby authorized to withhold the following costs and charges from production:

- (A) The pro rata share of reasonable well costs attributable to Dow if Dow has not paid its share of estimated well costs in accordance with the provisions for pre-payment as set forth in this order.
- (B) As a charge for the risk involved in the drilling of the well, the percentage specified elsewhere herein of the pro rata share of reasonable well costs attributable to Dow if Dow has not paid its share of estimated well costs in accordance with the provisions for pre-payment as set forth in this order.

(16) That the terms and provisions of this order relating to participation or non-participation in the drilling of the subject well to the Morrow formation shall be applicable to the

-10-

Case No. 7499

Order No. R-7032

drilling to and completion of the well in possible pay zones above the Morrow; that the terms and provisions of this order relating to participation or non-participation in the drilling of the subject well from the base of the Morrow pay through the Devonian pay, shall be applicable to the drilling to and completion of the well in possible pay zones between the base of the Morrow and the top of the Devonian.

(17) That \$4200.00 per month while drilling and \$420.00 per month while producing are hereby fixed as reasonable charges for supervision (combined fixed rates); that the operator is hereby authorized to withhold from production the proportionate share of such supervision charges attributable to each non-consenting working interest, and in addition thereto, the operator is hereby authorized to withhold from production the proportionate share of actual expenditures required for operating such well, not in excess of what are reasonable, attributable to each non-consenting working interest.

(18) That any unsevered mineral interest shall be considered a seven-eighths ( $7/8$ ) working interest and a one-eighth ( $1/8$ ) royalty interest for the purpose of allocating costs and charges under the terms of this order.

(19) That any well costs or charges which are to be paid out of production shall be withheld only from the working interest's share of production, and no costs or charges shall be withheld from production attributable to royalty interests.

(20) That all proceeds from production from the subject well which are not disbursed for any reason shall immediately be placed in escrow in Lea County, New Mexico, to be paid to the true owner thereof upon demand and proof of ownership; that the operator shall notify the Division of the name and address of said escrow agent within 30 days from the date of first deposit with said escrow agent.

(21) That although the application in this case was for pooling of the S/2 of Section 3, Township 23 South, Range 34 East, NMPM, Lea County, New Mexico, to form a 320-acre gas spacing and proration unit to be dedicated to a well to be drilled at a standard location thereon 660 feet from the South line and 1980 feet from the East line of said Section 3, the Division Director shall have authority to approve an alternative location for the unit well without hearing upon application of Amoco, provided all applicable provisions of Rule 104 of the Division Rules and Regulations are met, and provided that such location has been submitted to Dow along with the itemized schedules of well costs required in Orders Nos. (3) through (6) above.

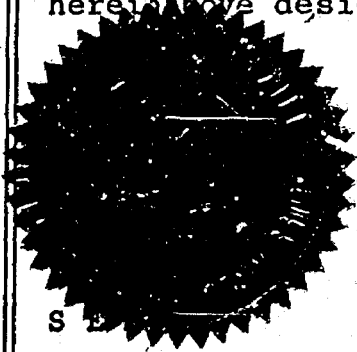
-11-

Case No. 7499

Order No. R-7032

(22) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.



STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

*Joe D. Ramey*  
JOE D. RAMEY,  
Director

Single  
Marrow

Single  
Devonian

Marrow-Devonian  
dual compl

extra chgs  
for upper  
portion because  
of Devonian delay

Marrow  
completion

Marrow

extra charges  
for deeper drilling,  
casing, etc

Devonian  
completion

Devonian

DOW CHEMICAL CO  
1123 WILCO BLDG  
MIDLAND TX 79701



Mailgram



4-0351769078002 03/19/82 ICS IPMRNGZ CSP ABQA  
2 9156825772 MGM TDBN MIDLAND TX 03-19 0152P CST

OIL CONSERVATION DIVISION, ATTN DAN NUTTER  
BOX 2088  
SANTA FE NM 87501

THIS IS A CONFIRMATION COPY OF A TELEGRAM ADDRESSED TO YOU  
RE: CASE 7499

AMOCO VERSES DOW FORCE POOLING

DOW REQUEST PERMISSION TO ENTER NEW TESTIMONY AND EXHIBITS INTO THE  
RECORD AT THE HEARINGS TO BE HELD 3-31-82.

DOW CHEMICAL

1459 EST

MGMCOMP MGM

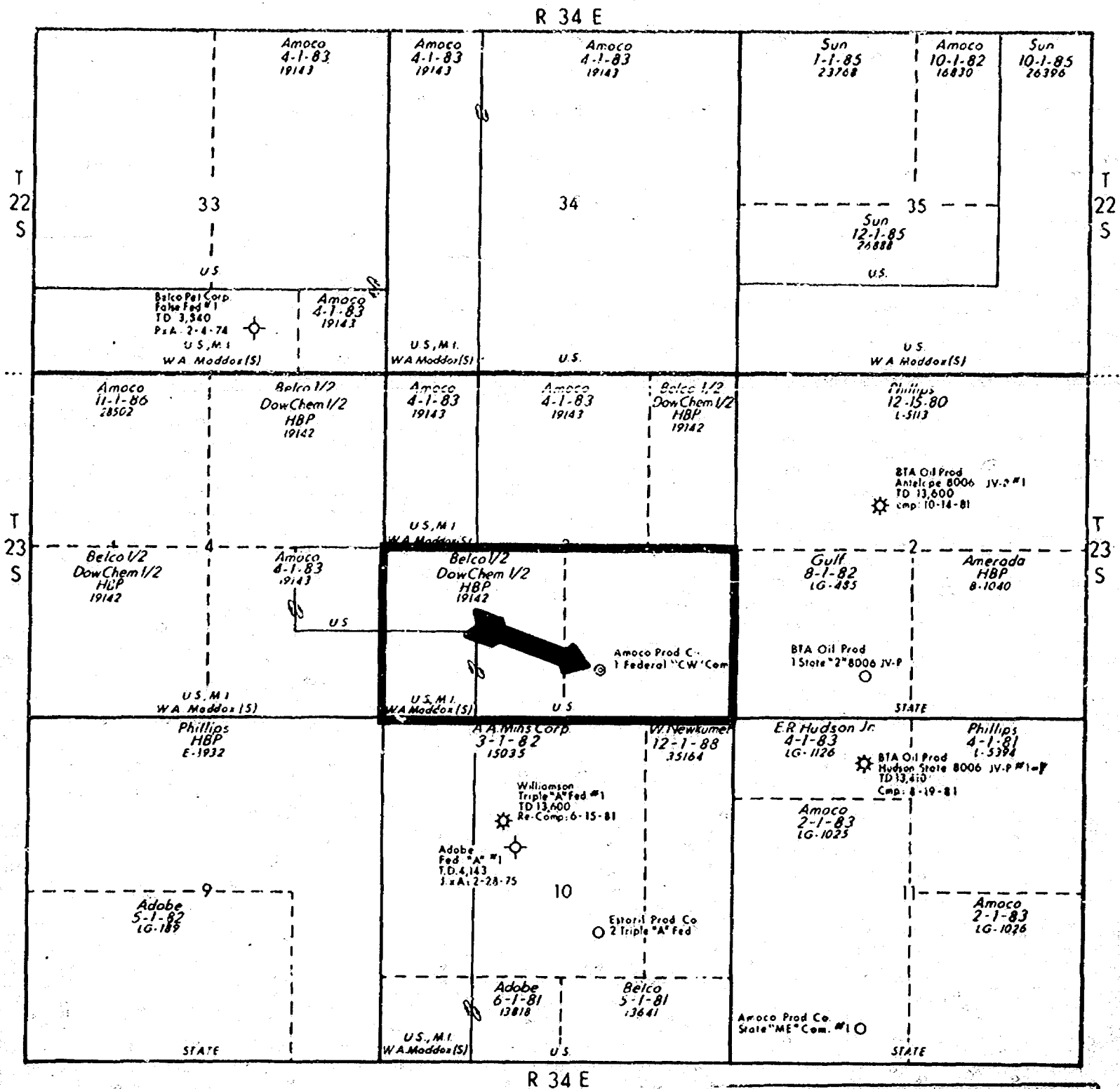
*Rec'd 10/32  
Confirms telephone  
conversation  
of 3/19 w/  
heark  
Martin &  
Dow*

*[Signature]*

TO REPLY BY MAILGRAM, SEE REVERSE SIDE FOR WESTERN UNION'S TOLL - FREE PHONE NUMBERS

# Proposed Federal "CW" Com Well No. 1

## Lea County, New Mexico



January 13, 1982

Re: EA 51,995  
North Antelope Area  
Federal "Ch" Com Well No. 1  
Lea County, New Mexico

The Dow Chemical Company  
1123 Wilco Building  
Midland, TX 79701

Attention: Mr. Mark Martin

Gentlemen:

Amoco Production Company hereby proposes the formation of a one (1) section working interest area, consisting of 640.24 acres, for the drilling of an approximate 14,900' dually completed Morrow-Devonian Formation test. The proposed unit will cover rights from the surface to the base of the Devonian Formation in Section 3, T-23-S, R-34-E, N.M.P.M., Section Lea County, New Mexico. Estimated gross dry hole and producer costs are \$3,416,000.00 and \$4,203,000.00, respectively.

Ownership within the proposed unit appears to be as follows:

<u>Parties</u>	<u>Acres</u>	<u>Percentage</u>
Amoco	400.09	62.4906
Belco and Dow ( $\frac{1}{2}$ interest each)	240.15	37.5094
	<u>640.24</u>	

As an alternative to joining the proposed unit, Amoco will accept farm-ins to the unit, with the farming party to retain a proportionate 1/16 overriding royalty, with the option at well payout to convert to a proportionate 40% working interest. Production will earn Amoco an assignment of 100% working interest in the proration unit and 60% working interest in the balance of the contract area.

Enclosed for your review are two copies of an AFE for the drilling and testing of the subject well. In the event you elect to join, please execute and return one copy for our files. An operating agreement will be forwarded for your execution upon a favorable response from you.

BEFORE EXAMINER NUTTER  
OIL CONSERVATION DIVISION

Amoco EXHIBIT NO. 2

CASE NO. 7499

The Dow Chemical Company  
January 13, 1982  
Page 2

This well is scheduled for late February, therefore, your early consideration of the proposal will be appreciated. Should you have any questions or if I may be of any assistance, please call me at (713) 652-4463.

This proposal was made to Belco on November 5, 1981. Belco indicated that they represent Dow. If this is so, please confirm this in writing.

Very truly yours,

Philip Daniel Vasquez  
Landman

PDV/dg  
782/II

Enclosures



February 5, 1982

Re: EA 61,995  
Federal "CW" Com. Well No. 1  
North Antelope Ridge Area  
Lea County, New Mexico

Belco Petroleum Corporation  
411 Petroleum Building  
Midland, TX 79701

Attention: Mary Ward

The Low Chemical Company  
1123 Wilco Building  
Midland, TX 79701

Attention: Mark Martin

Gentlemen:

Amoco Production Company hereby agrees to show you our geological information on the above referenced well contingent upon your company committing to either join in, or farm out your interest in Section 3, T-23-S, R-34-E N.M.P.M. to Amoco for the drilling of such well, under our previously proposed terms.

Amoco will show this information in Midland, Texas at a mutually agreeable time and place to the parties involved.

If agreeable, please evidence your commitment to these terms by signing, dating, and returning one copy of this letter by February 15, 1982.

BEFORE EXAMINER NUTTER	
OIL CONSERVATION DIVISION	
<u>Amoco</u>	EXHIBIT NO. <u>3</u>
CASE NO. <u>74 11</u>	

Belco Petroleum Corporation  
The Dow Chemical Company  
February 5, 1982  
Page 2

Please call Philip Vasquez if you have any questions, at (713) 654-4403.

Yours very truly,

J.D.W.

S. A. Reinert

PDV/ve  
5/2903

Agreed to and accepted this \_\_\_\_\_ day of February, 1982.

BELCO PETROLEUM CORPORATION

THE DOW CHEMICAL COMPANY

By \_\_\_\_\_

By \_\_\_\_\_

cc: V. H. Peoples - Jefferson Building, Room 1335-A  
R. L. Couch - Jefferson Building, Room 1213-A

PS Form 3811, Jan. 1976

**SENDER:** Complete items 1, 2, and 3.  
Add your address in the "RETURN TO" space on reverse.

1. The following service is requested (check one.)  
☒ Show to whom and date delivered.....  
☐ Show to whom, date and address of delivery.....  
☐ RESTRICTED DELIVERY  
 Show to whom and date delivered.....  
☐ RESTRICTED DELIVERY.  
 Show to whom, date, and address of delivery.\$\_\_\_\_  
 (CONSULT POSTMASTER FOR FEES)

2. ARTICLE ADDRESSED TO:  
 Belco Petroleum Corp. (Attn:  
 411 Petroleum Bldg. Scott  
 Midland, TX 79701 Cramer)

3. ARTICLE DESCRIPTION:  
 REGISTERED NO. CERTIFIED NO. INSURED NO.  
 P333 396 749  
 (Always obtain signature of addressee or agent)

I have received the article described above.  
 SIGNATURE ☐ Addressee ☐ Authorized agent  
*Lisa Pettitt*  
 DATE OF DELIVERY  
 2/1/82

4. ADDRESS (Complete only if requested)

5. UNABLE TO DELIVER BECAUSE: CLERK'S INITIALS

★GPO : 1979-288-848

**P 333 396 749**  
**RECEIPT FOR CERTIFIED MAIL**

NO INSURANCE COVERAGE PROVIDED—  
 NOT FOR INTERNATIONAL MAIL  
 (See Reverse)

SENT TO  
 Belco Petroleum Corp.  
 411 Petroleum Bldg.  
 P.O. STATE AND ZIP CODE  
 Midland, TX 79701

CONSULT POSTMASTER FOR FEES	POSTAGE	\$
	CERTIFIED FEE	¢
	SPECIAL DELIVERY	¢
	RESTRICTED DELIVERY	¢
	OPTIONAL SERVICES	
RETURN RECEIPT SERVICE	SHOW TO WHOM AND DATE DELIVERED	¢
	SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY	¢
	SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	¢
	SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	¢
TOTAL POSTAGE AND FEES		\$
MARK OR DATE 1-27-82 1:00 PM Attn: Scott Cramer		

PS Form 3800, Apr. 1976

200-550-0701: 0-5-77

UNITED STATES POSTAL SERVICE  
OFFICIAL BUSINESS

SENDER INSTRUCTIONS

Print your name, address, and ZIP Code in the space below.

- Complete Items 1, 2, and 3 on the reverse.
- Attach to front of article if space permits, otherwise affix to back of article.
- Endorse article "Return Receipt Requested" adjacent to number.

PENALTY FOR PRIVATE  
USE TO AVOID PAYMENT  
OF POSTAGE, \$300



RETURN  
TO



AMOCO PRODUCTION COMPANY  
(Name of Sender)

P. O. BOX 3092 (Attn: Philip Vasquez)  
(Street or P.O. Box)

Houston, TX 77001  
(City, State, and ZIP Code)

- STICK POSTAGE STAMPS TO ARTICLE TO COVER FIRST CLASS POSTAGE.  
CERTIFIED MAIL<sup>®</sup>, AND CHARGES FOR ANY SELECTED OPTIONAL SERVICES.  
(front)
1. If you want this receipt, postmarked, stick the gummed stub on the left portion of the address side of the article, leaving the receipt attached, and present the article at a post office service window or hand it to your rural carrier. (no extra charge)
  2. If you do not want this receipt postmarked, stick the gummed stub on the left portion of the address side of the article, date, detach and retain the receipt, and mail the article.
  3. If you want a return receipt, write the certified mail number and your name and address on a return receipt card, Form 3811, and attach it to the front of the article by means of the gummed ends if space permits. Otherwise, affix to back of article. Endorse front of article RETURN RECEIPT REQUESTED adjacent to the number.
  4. If you want delivery restricted to the addressee, or to an authorized agent of the addressee, endorse RESTRICTED DELIVERY on the front of the article.
  5. Enter fees for the services requested in the appropriate spaces on the front of this receipt. If return receipt is requested, check the applicable blocks in Item 1 of Form 3811.
  6. Save this receipt and present it if you make inquiry.
- \*GPO: 1980 331-003

STICK POSTAGE STAMPS TO ARTICLE TO COVER FIRST CLASS POSTAGE.  
 CERTIFIED MAIL <sup>fee</sup> AND CHARGES FOR ANY SELECTED OPTIONAL SERVICES. (front)

1. If you want this receipt postmarked, stick the gummed stub on the left portion of the address side of the article, leaving the receipt attached, and present the article at a post office service window or hand it to your rural carrier. (no extra charge)
2. If you do not want this receipt postmarked, stick the gummed stub on the left portion of the address side of the article, date, detach and retain the receipt, and mail the article.
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4. If you want delivery restricted to the addressee, or to an authorized agent of the addressee, endorse RESTRICTED DELIVERY on the front of the article.
5. Enter fees for the services requested in the appropriate spaces on the front of this receipt. If return receipt is requested, check the applicable blocks in Item 1 of Form 3811.
6. Save this receipt and present it if you make inquiry.

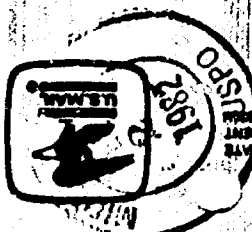
GPO: 1980 331-003

AMOCO PRODUCTION COMPANY  
 (Name of Sender)  
 P. O. BOX 3092 (Attn: Philip Vasquez)  
 (Street or P.O. Box)  
 Houston, TX 77001  
 (City, State, and ZIP Code)



RETURN TO

**SENDER INSTRUCTIONS**  
 Print your name, address, and ZIP Code in the space below.  
 • Complete items 1, 2, and 3 on the reverse.  
 • Attach to front of article if space permits.  
 • Otherwise affix to back of article.  
 • Endorse article "Return Receipt Requested" adjacent to number.



USE TO AVOID PAYMENT OF POSTAGE PENALTY FOR POSTAGE

UNITED STATES POSTAL SERVICE

Official Business

PS Form 3811, 1982-598-548



**Amoco Production Company (USA)**

500 Jefferson Building  
P.O. Box 3092  
Houston, Texas 77001

February 3, 1982

"CW"

File: JCA-986.51NM-029

Re: Compulsory Pooling  
S/2 Section 3, T-23-S, R-34-E  
Lea County, New Mexico

State of New Mexico  
Energy and Minerals Department  
Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87501

Attn: Mr. Joe D. Ramey

Amoco Production Company respectfully requests a hearing for compulsory pooling of all mineral interest in the Wolfcamp, Pennsylvanian, Mississippian and Devonian Formations underlying the S/2 of Section 3, T-23-S, R-34-E, Lea County, New Mexico. The subject acreage will be dedicated to a well to be drilled as a Devonian test at an orthodox location. Also, to be considered will be the cost of drilling and completing said well, the allocation of cost thereof as well as actual operating cost, charges for supervision and a charge for risks involved in drilling said well. Amoco will ask to be designated as operator of the well.

Please place this item on the Examiners Hearing Docket of March 3, 1982. Attached are the copies of a land plat of the subject area. The only operators affected by the hearing, other than Amoco Production Company are listed below and being furnished a copy of this letter:

Belco Petroleum Corp.  
411 Petroleum Bldg.  
204 W. Texas  
Midland, Texas 79701

The Dow Chemical Co.  
1123 Wilco Bldg.  
Midland, Texas 79701

The United States of America is the lessor.

Please direct any question to Mr. Jim Allen, telephone (713) 652-5497.

Yours very truly,

O/S R. A. Smith JCA

R. G. Smith  
Regional Engineering Manager-West

JCA/1rd

[illegible]

BEFORE EXAMINER NUTTER  
OIL CONSERVATION DIVISION  
Amaco EXHIBIT NO. 4  
CASE NO. 7497

File: JCA-986.51NM-029  
Page Two  
February 3, 1982

cc: Belco Petroleum Corp.  
411 Petroleum Bldg.  
204 W. Texas  
Midland, TX 79701

The Dow Chemical Co.  
1123 Wilco Bldg.  
Midland, TX 79701

U. S. Geological Survey  
P.O. Box 26124  
Albuquerque, NM 87125

Attn: Mr. Gene F. Daniel

bcc: S. J. Okerson - Hobbs  
D. M. Basinger - Jeff. 1822-C  
C. A. Mote - Jeff. 1604  
P. D. Vasquez - Jeff. 1905-A ✓  
W. C. Sanford - Jeff. 1329



## DOW CHEMICAL U.S.A.

February 26, 1982

OIL & GAS DIVISION  
SUITE 1123, WILCO BUILDING  
MIDLAND, TEXAS 79701

Amoco Production Company  
500 Jefferson Building  
P.O. Box 3092  
Houston, Texas 77001

Telecopier # 713- 652-4395

Attention: Phillip Vasquez

Re: North Antelope Area  
Federal "CW" Comm Well #1  
Lea County, New Mexico  
(Your RA 51,995)

Dear Phillip:

As you know, we have had numerous telephone conversations concerning Amoco's proposal to drill a 14,900' Devonian test on a proration unit including the S/2, Sec 3, 23S-34E. You first started talking with Belco in November, 1981, however, due to misinformation, Dow was not contacted until 1-13-82. Dow is interested in seeing a well drilled in this section and we are very interested in trying to work out some arrangement where we can participate in said well. It is therefore suggested that Amoco ask for a 30 day continuance of their compulsory pooling hearing which is case #7499 on the docket for Wednesday March 3, 1982, before the Oil Conservation Division of New Mexico. It is felt that if Amoco would ask for a 30 day continuance that a suitable agreement could be worked out whereby the hearing would not be necessary.

As you know, Belco and Dow have both been reluctant to participate in a Devonian test. I believe that both Belco and Dow would agree to join in a Morrow test. Dow feels that the Devonian possibilities in this area are very risky and that the mechanical problems involved in drilling through the Strawn, Atoka and Morrow to the Devonian could be very costly and would very likely run in excess of your AFE costs. We have suggested a joint meeting between the three parties including the geologists and engineers to discuss the various possibilities involved. Amoco has refused to join in said meeting unless we would agree to certain terms beforehand, which we are unwilling to do. I understand that Belco has indicated to you their willingness to Farmout, but still feel they would favor participating in a Morrow test and feel that Dow would do likewise.

AN OPERATING UNIT OF THE DOW CHEMICAL COMPANY

BEFORE EXAMINER NUTTER  
OIL CONSERVATION DIVISION

Amoco EXHIBIT NO. 5  
CASE NO. 7499



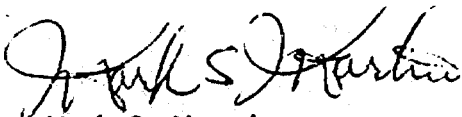
Amoco Production Company  
Re: North Antelope Area  
February 26, 1982  
Page -2-

Your unit approach as outlined in the January letter concerning all of section 3 seems to be the logical approach to use for the drilling to any formation in this section and we would like to discuss these aspects further. Another possibility would be for all parties to participate in drilling to the Morrow and then any parties wishing to deepen the well to the Devonian do so at their own cost and expense. As a last resort it would be recommended from this office that Dow Farmout on the basis of a 1/16 override convertible to a 50% back in at payout. These Farmout terms are certainly justified due to the increased activity in the area and the exceptionally good wells which have recently been completed.

I appreciate Amoco's patience in this matter however, please consider the short time that we have had to consider the different possibilities in this very costly project. Please give our request due consideration and we are hoping that you will obtain the continuance requested.

If anything further is needed from us please advise.

Very truly yours,



Mark S. Martin  
Area Manager

xc: State of New Mexico  
Energy and Mineral Department  
Oil Conservation Division  
P.O. Box 2088  
Sante Fe, New Mexico 87501

Re: March 3, 1982 Hearing  
Case #7499

Attention: Daniel S. Nutter

BEFORE EXAMINER NUTTER  
OIL CONSERVATION DIVISION  
Amoco EXHIBIT NO. 12  
CASE NO. 7499

## INTANGIBLES

PRODUCER

Gross

1,710,000	1,450,000
-----------	-----------

Contingencies & taxes	220,000	175,000
-----------------------	---------	---------

**944,000**

**2,394,000**

Ballhead + liner ladders + PRR	229,000	33,000
--------------------------------	---------	--------

**1,222,000**

**3,616,000**

BEFORE EXAMINER NUTTER  
OIL CONSERVATION DIVISION  
Amoco EXHIBIT NO. 12  
CASE NO. 2499

INTANGIBLES	PRODUCER	gross	DRY HOLE

Drilling Cost (Footage) _____ Ft. @ _____ MIRURD	50,000	50,000
Day Work & Drill Pipe Rental 125 Days @ \$ 8000	1,000,000	1,000,000
Cable Tools or Comp. Unit 30 Days @ \$ _____	60,000	-----
Surveys _____	100,000	100,000
Mud _____ (OIL ) _____	250,000	250,000
Stimulations, Size _____	200,000	-----
Roads & Bridges _____ Grading _____	50,000	50,000
	1,710,000	1,450,000
<b>OTHER:</b>		
Coring Equipment _____		
Perforating _____ Shots _____	30,000	-----
Scratchers and Centralizers _____		
Company Labor \$400/day	62,000	50,000
Contract Labor Mudlogger @ \$400/day	42,000	42,000
Fuel and Water _____	85,000	85,000
Digging Pits _____ Filling Pits _____	3,000	3,000
Trucking _____	35,000	30,000
Cementing Services _____		
Cement for Casing _____ Sacks _____	131,000	126,000
Guide Shoes, Float Shoes and Collars _____		
Bits and Reamers _____	46,000	46,000
Drill Stem Tests _____ No. Tests _____	12,000	12,000
Miscellaneous Rentals \$3000/day	390,000	375,000
Contingencies & taxes	220,000	175,000
<b>Total Other</b>	<b>1,056,000</b>	<b>944,000</b>
<b>Total Intangibles</b>	<b>2,766,000</b>	<b>2,394,000</b>
<b>WELL EQUIPMENT - TANGIBLES</b>		
Casing - Surface - Size 20" 13 3/8" Ft. 2200 5350	148,000 240,000	148,000 240,000
Casing - Intermediate - Size 9 5/8 7 5/8 L Ft. 11300' 3500'	663,000 138,000	663,000 138,000
Casing - Oil String - Size 4 1/2 Ft. 1500'	23,000	-----
Tubing - Size 2 7/8 Ft. 28,400'	202,000	-----
Wellhead + liner hangers + PBR	229,000	33,000
<b>Total Well Equipment</b>	<b>1,643,000</b>	<b>1,222,000</b>
<b>Totals</b>	<b>4,409,000</b>	<b>3,616,000</b>

Dockets Nos. 8-82 and 9-82 are tentatively set for March 16 and March 31, 1982. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - MARCH 3, 1982

9 A.M. - OIL CONSERVATION DIVISION CONFERENCE ROOM  
STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

The following cases will be heard before Eaniel S. Nutter, Examiner, or Richard L. Stamets, Alternate Examiner:

CASE 7469: (Continued from February 3, 1982, Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Division on its own motion to permit H. M. Bailey & Associates, Commercial Union Insurance Company, and all other interested parties to appear and show cause why the following wells on the H. M. Bailey Lease, Township 21 South, Range 1 West, Dona Ana County, should not be plugged and abandoned in accordance with a Division-approved plugging program: In Section 10: Nos. 9 in Unit A; 9, 11, 12, and 13 in Unit B, 10 and 14 in Unit C; and No. 15 in Unit C of Section 9.

CASE 7494: Application of Bass Enterprises Production Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the Humble City Unit Area, comprising 800 acres, more or less, of State lands in Township 17 South, Range 37 East.

CASE 7495: Application of Gulf Oil Corporation for simultaneous dedication and an unorthodox location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the simultaneous dedication of a previously approved 320-acre non-standard Eumont proration unit comprising the E/2 of Section 25, Township 19 South, Range 36 East, to its Graham State Wells Nos. 8 in Unit J and 9 at an unorthodox location 990 feet from the North line and 1980 feet from the East line of said Section 25.

CASE 7496: Application of Viking Petroleum, Inc. for an unorthodox location, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of an Abo gas well to be drilled 62 feet from the South line and 1984 feet from the East line of Section 29, Township 5 South, Range 24 East, the SE/4 of said Section to be dedicated to the well.

CASE 7476: (Continued from February 3, 1982, Examiner Hearing)

Application of Jack J. Grynberg for compulsory pooling, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests down through and including the Abo formation, underlying two 160-acre gas spacing units, being the NE/4 and SE/4, respectively, of Section 12, Township 5 South, Range 24 East, each to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said wells and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the wells and a charge for risk involved in drilling said wells.

CASE 7497: Application of Parabo, Inc. for an oil treatment plant permit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority for the construction and operation of an oil treating plant for the purpose of treating and reclaiming sediment oil at its salt water disposal site in the SE/4 of Section 29, Township 21 South, Range 30 East.

CASE 7458: (Continued from January 6, 1982, Examiner Hearing)

Application of Marks & Garner Production Company for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of salt water into the Bough C formation in the perforated interval from 9596 feet to 9616 feet in its Betenbough Well No. 2, located in Unit M of Section 12, Township 9 South, Range 35 East.

CASE 7498: Application of Dwayne E. Hamilton for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp through Devonian formations underlying the S/2 of Section 5, Township 16 South, Range 35 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.

Page 2

Examiner Hearing - WEDNESDAY - MARCH 3, 1982

**CASE 7499:** Application of Amoco Production Company for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp through Devonian formations underlying the S/2 of Sect'on 3, Township 23 South, Range 34 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.

**CASE 7073:** (Continued from February 17, 1982, Examiner Hearing)

In the matter of Case 7073 being reopened pursuant to the provisions of Order No. R-6558, which order promulgated special rules for the South Elkins-Fusselman Pool in Chaves County, including provisions for 80-acre spacing units and a limiting gas-oil ratio of 3000 to one. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing units with a limiting gas-oil ratio of 2000 to one.

**CASE 7074:** (Continued from February 17, 1982, Examiner Hearing)

In the matter of Case 7074 being reopened pursuant to the provisions of Orders Nos. R-6565 and R-6565-B, which created the South Elkins-Fusselman Gas Pool in Chaves County. All interested parties may appear and present evidence as to the exact nature of the reservoir, and more particularly, as to the proper rate of withdrawal from the reservoir if it is determined that said pool is producing from a retrograde gas condensate reservoir.

**CASE 7500:** Application of Read & Stevens, Inc. for an exception to the maximum allowable base price provisions of the New Mexico Natural Gas Pricing Act, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order of the Division prescribing the price allowed for production enhancement gas under Section 107 of the Natural Gas Policy Act as the maximum allowable base price if production enhancement work which qualifies under the NGPA is performed on its Hackberry Hills Unit Well No. 4 located in Section 22, Township 22 South, Range 26 East, Eddy County, New Mexico.

**CASE 7485:** (Continued from February 17, 1982, Examiner Hearing)

Application of Berge Exploration for compulsory pooling, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Abo formation underlying two 160-acre proration units, the first being the NW/4 and the second being the SW/4 of Section 27, Township 7 South, Range 26 East, each to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said wells and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the wells and a charge for risk involved in drilling said wells.

**CASE 7501:** In the matter of the hearing called by the Oil Conservation Division on its own motion for an order creating and extending certain pools in Chaves, Eddy and Lea Counties, New Mexico.

(a) CREATE a new pool in Lea County, New Mexico, classified as an oil pool for Wolfcamp production and designated as the North Caprock-Wolfcamp Pool. The discovery well is The Petroleum Corporation Landlady Well No. 1 located in Unit J of Section 8, Township 12 South, Range 32 East, NMPM. Said pool would comprise:

TOWNSHIP 12 SOUTH, RANGE 32 EAST, NMPM  
Section 8: SE/4

(b) CREATE a new pool in Lea County, New Mexico, classified as an oil pool for Morrow production and designated as the Feather-Morrow Pool. The discovery well is the Santa Fe Energy Company State UTP Well No. 1 located in Unit J of Section 21, Township 15 South, Range 32 East, NMPM. Said pool would comprise:

TOWNSHIP 15 SOUTH, RANGE 32 EAST, NMPM  
Section 21: SE/4

(c) CREATE a new pool in Lea County, New Mexico, classified as an oil pool for Abo Reef production and designated as the Garrett-Abo Reef Pool. The discovery well is the Marathon Oil Company Delmont L. Hatfield Well No. 1 located in Unit J of Section 23, Township 16 South, Range 38 East, NMPM. Said pool would comprise:

TOWNSHIP 16 SOUTH, RANGE 38 EAST, NMPM  
Section 23: SE/4

(d) CREATE a new pool in Lea County, New Mexico, classified as a gas pool for Strawn and Atoka production and designated as the Pronghorn Strawn-Atoka Gas Pool. The discovery well is the Yates Petroleum Corporation Pronghorn Unit Well No. 1 located in Unit G of Section 6, Township 23 South, Range 33 East, NMPM. Said Pool would comprise:

TOWNSHIP 23 SOUTH, RANGE 33 EAST, NMPM  
Section 6: N/2

(e) CREATE a new pool in Lea County, New Mexico, classified as an oil pool for Paddock production and designated as the Skaggs-Paddock Pool. The discovery well is the Conoco Inc. SEMU Burger Well No. 107 located in Unit J of Section 19, Township 20 South, Range 38 East, NMPM. Said pool would comprise:

TOWNSHIP 20 SOUTH, RANGE 38 EAST, NMPM  
Section 19: SE/4

(f) EXTEND the Angell Ranch Atoka-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 27 EAST, NMPM  
Section 2: S/2  
Section 11: N/2

(g) EXTEND the Atoka-Yeso Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 26 EAST, NMPM  
Section 26: E/2 NW/4 and E/2 SW/4

(h) EXTEND the Austin-Mississippian Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 14 SOUTH, RANGE 36 EAST, NMPM  
Section 18: S/2

(i) EXTEND the Boyd-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 25 EAST, NMPM  
Section 3: E/2

(j) EXTEND the Bunker Hill-Penrose Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 16 SOUTH, RANGE 31 EAST, NMPM  
Section 14: S/2 SW/4  
Section 23: N/2 N/2  
Section 24: S/2 NW/4 and NE/4 NW/4

(k) EXTEND the South Carlsbad-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 26 EAST, NMPM  
Section 36: S/2

(l) EXTEND the Chaveroo-San Andres Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 8 SOUTH, RANGE 33 EAST, NMPM  
Section 10: W/2  
Section 15: W/2

(m) EXTEND the Dark Canyon-Pennsylvanian Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 25 EAST, NMPM  
Section 31: N/2

- (n) EXTEND the Drinkard Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 37 EAST, NMPM  
 Section 12: E/2

TOWNSHIP 21 SOUTH, RANGE 38 EAST, NMPM  
 Section 7: NW/4

- (o) EXTEND the North Eldson-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 16 SOUTH, RANGE 35 EAST, NMPM  
 Section 6: Lots 3, 4, 5, 6, 11, 12, 13, 14, and SW/4

- (p) EXTEND the Happy Valley-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 22 SOUTH, RANGE 26 EAST, NMPM  
 Section 20: S/2

- (q) EXTEND the Herradura Bend-Delaware Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 22 SOUTH, RANGE 28 EAST, NMPM  
 Section 29: NW/4 SW/4

- (r) EXTEND the Hobbs-Blaine Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 38 EAST, NMPM  
 Section 34: W/2

TOWNSHIP 19 SOUTH, RANGE 38 EAST, NMPM  
 Section 3: NW/4

- (s) EXTEND the Jalmat Yates-Seven Rivers Oil and Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 22 SOUTH, RANGE 35 EAST, NMPM  
 Section 26: NE/4

- (t) EXTEND the South Kemnitz Atoka-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 16 SOUTH, RANGE 34 EAST, NMPM  
 Section 30: W/2

- (u) EXTEND the North Loving-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 28 EAST, NMPM  
 Section 20: E/2  
 Section 21: All  
 Section 22: S/2  
 Section 27: All  
 Section 28: All  
 Section 29: All

- (v) EXTEND the Northeast Lovington-Pennsylvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 16 SOUTH, RANGE 37 EAST, NMPM  
 Section 7: SW/4

- (w) EXTEND the North Lusk-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM  
 Section 35: All

Page 5  
Examiner Hearing - WEDNESDAY - MARCH 3, 1982

- (x) EXTEND the Oil Center-Glorieta Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 36 EAST, NMPM  
Section 11: NW/4

- (y) EXTEND the San Simon-Wolfcamp Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 22 SOUTH, RANGE 35 EAST, NMPM  
Section 5: NW/4

- (z) EXTEND the Sand Ranch-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 10 SOUTH, RANGE 29 EAST, NMPM  
Section 26: All

- (aa) EXTEND the Tomahawk-San Andres Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 8 SOUTH, RANGE 32 EAST, NMPM  
Section 6: SW/4  
Section 7: NW/4

- (bb) EXTEND the Travis-Upper Pennsylvanian Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 28 EAST, NMPM  
Section 12: S/2 SE/4

- (cc) EXTEND the Tulk-Pennsylvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 14 SOUTH, RANGE 32 EAST, NMPM  
Section 35: SW/4

- (dd) EXTEND the Turkey Track-Seven Rivers-Queen-Grayburg Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 29 EAST, NMPM  
Section 22: SE/4 SW/4

- (ee) EXTEND the North Young-Bone Spring Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM  
Section 8: S/2  
Section 9: W/2





DOW CHEMICAL U.S.A.

February 26, 1982

OIL & GAS DIVISION  
SUITE 1123, WILCO BUILDING  
MIDLAND, TEXAS 79701

State of New Mexico  
Energy and Mineral Department  
Oil Conservation Division  
P.O. Box 2088  
Santa Fe, New Mexico 87501

Attention: Daniel S. Nutter

Re: Case #7499  
Docket Wednesday March 3, 1982  
Compulsory Pooling Hearing  
Amoco vs. Dow, et al  
Antelope Ridge Area  
S/2, Sec 3, 23S-34E  
Lea County, New Mexico

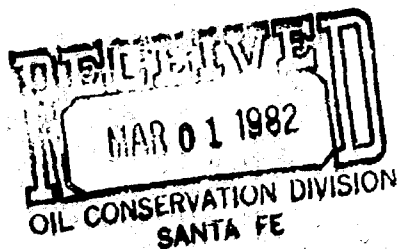
Dear Mr. Nutter:

Please review the xerox copies of correspondence concerning the above captioned case prior to the hearing. See if you don't agree that due to the time frame involved that it would not be reasonable to grant a 30 day continuance of this hearing. It is believed that during the interim Dow and Amoco could resolve their differences and perhaps no hearing would be necessary. Please consider this letter as our formal request for continuance.

If you have any questions or further information is needed please do not hesitate to call me collect at (915) 683-6151.

Yours very truly,

  
Mark S. Martin  
Area Manager



AN OPERATING UNIT OF THE DOW CHEMICAL COMPANY



DOW CHEMICAL U.S.A.

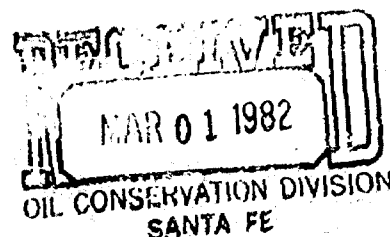
February 26, 1982

OIL & GAS DIVISION  
SUITE 1123, WILCO BUILDING  
MIDLAND, TEXAS 79701

Amoco Production Company  
500 Jefferson Building  
P.O. Box 3092  
Houston, Texas 77001

Attention: Phillip Vasquez

Re: North Antelope Area  
Federal "CW" Comm Well #1  
Lea County, New Mexico  
(Your EA 51,995)



Dear Phillip:

As you know, we have had numerous telephone conversations concerning Amoco's proposal to drill a 14,900' Devonian test on a proration unit including the S/2, Sec 3, 23S-34E. You first started talking with Belco in November, 1981, however, due to misinformation, Dow was not contacted until 1-13-82. Dow is interested in seeing a well drilled in this section and we are very interested in trying to work out some arrangement where we can participate in said well. It is therefore suggested that Amoco ask for a 30 day continuance of their compulsory pooling hearing which is case #7499 on the docket for Wednesday March 3, 1982, before the Oil Conservation Division of New Mexico. It is felt that if Amoco would ask for a 30 day continuance that a suitable agreement could be worked out whereby the hearing would not be necessary.

As you know, Belco and Dow have both been reluctant to participate in a Devonian test. I believe that both Belco and Dow would agree to join in a Morrow test. Dow feels that the Devonian possibilities in this area are very risky and that the mechanical problems involved in drilling through the Strawn, Atoka and Morrow to the Devonian could be very costly and would very likely run in excess of your AFE costs. We have suggested a joint meeting between the three parties including the geologists and engineers to discuss the various possibilities involved. Amoco has refused to join in said meeting unless we would agree to certain terms beforehand, which we are unwilling to do. I understand that Belco has indicated to you their willingness to Farmout, but still feel they would favor participating in a Morrow test and feel that Dow would do likewise.

AN OPERATING UNIT OF THE DOW CHEMICAL COMPANY

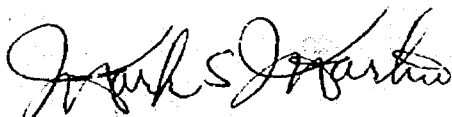
Amoco Production Company  
Re: North Antelope Area  
February 26, 1982  
Page -2-

Your unit approach as outlined in the January letter concerning all of section 3 seems to be the logical approach to use for the drilling to any formation in this section and we would like to discuss these aspects further. Another possibility would be for all parties to participate in drilling to the Morrow and then any parties wishing to deepen the well to the Devonian do so at their own cost and expense. As a last resort it would be recommended from this office that Dow Farmout on the basis of a 1/16 override convertible to a 50% back in ad payout. These Farmout terms are certainly justified due to the increased activity in the area and the exceptionally good wells which have recently been completed.

I appreciate Amoco's patience in this matter however, please consider the short time that we have had to consider the different possibilities in this very costly project. Please give our request due consideration and we are hoping that you will obtain the continuance requested.

If anything further is needed from us please advise.

Very truly yours,

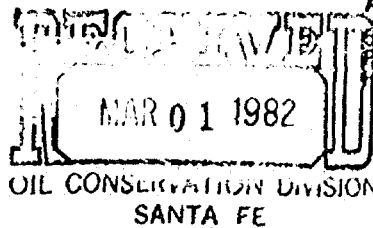


Mark S. Martin  
Area Manager

xc: State of New Mexico  
Energy and Mineral Department  
Oil Conservation Division  
P.O. Box 2088  
Sante Fe, New Mexico 87501

Re: March 3, 1982 Hearing  
Case #7499

Attention: Daniel S. Nutter



Amoco Production Company (USA)

800 Jefferson Building  
P.O. Box 3092  
Houston, Texas 77001

February 5, 1982

Re: EA 51,995  
Federal "CW" Com Well No. 1  
North Antelope Ridge Area  
Lea County, New Mexico

Belco Petroleum Corporation  
411 Petroleum Building  
Midland, TX 79701

Attention: Mary Ward

The Dow Chemical Company  
1123 Wilco Building  
Midland, TX 79701

Attention: Mark Martin

Gentlemen:

Amoco Production Company hereby agrees to show you our geological information on the above referenced well contingent upon your company committing to either join in, or farm out your interest in Section 3, T-23-S, R-34-E N.M.P.M. to Amoco for the drilling of such well, under our previously proposed terms.

Amoco will show this information in Midland, Texas at a mutually agreeable time and place to the parties involved.

If agreeable, please evidence your commitment to these terms by signing, dating, and returning one copy of this letter by February 15, 1982.

Belco Petroleum Corporation  
The Down Chemical Company  
February 5, 1982  
Page 2

Please call Philip Vasquez if you have any questions, at (713) 654-4463.

Yours very truly,

*S. A. Reinert*

S. A. Reinert

PDV/ve  
5/2908

Agreed to and accepted this \_\_\_\_\_ day of February, 1982.

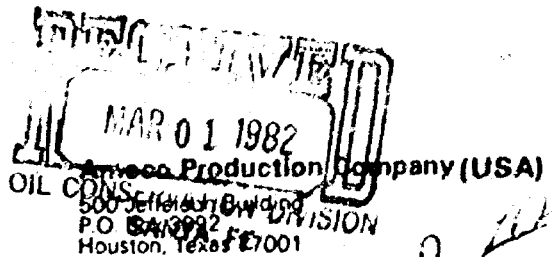
BELCO PETROLEUM CORPORATION

THE DOW CHEMICAL COMPANY

By \_\_\_\_\_

By \_\_\_\_\_

cc: V. M. Peeples - Jefferson Building, Room 1335-A  
R. L. Couch - Jefferson Building, Room 1813-A



February 3, 1982

File: JCA-986.51NM-02S

Re: Compulsory Pooling  
S/2 Section 3, T-23-S, R-34-E  
Lea County, New Mexico

State of New Mexico  
Energy and Minerals Department  
Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87501

Attn: Mr. Joe D. Ramey

Amoco Production Company respectfully requests a hearing for compulsory pooling of all mineral interest in the Wolfcamp, Pennsylvanian, Mississippian and Devonian Formations underlying the S/2 of Section 3, T-23-S, R-34-E, Lea County, New Mexico. The subject acreage will be dedicated to a well to be drilled as a Devonian test at an orthodox location. Also, to be considered will be the cost of drilling and completing said well, the allocation of cost thereof as well as actual operating cost, charges for supervision and a charge for risks involved in drilling said well. Amoco will ask to be designated as operator of the well.

Please place this item on the Examiners Hearing Docket of March 3, 1982. Attached are the copies of a land plat of the subject area. The only operators affected by the hearing, other than Amoco Production Company are listed below and being furnished a copy of this letter:

Belco Petroleum Corp.  
411 Petroleum Bldg.  
204 W. Texas  
Midland, Texas 79701

The Dow Chemical Co.  
1123 Wilco Bldg.  
Midland, Texas 79701

The United States of America is the lessor.

Please direct any question to Mr. Jim Allen, telephone (713) 652-5497.

Yours very truly,

*O/S R. G. Smith*  
*JCA*

R. G. Smith  
Regional Engineering Manager-West

JCA/lrd

File: JCA-986.51NM-029  
February 3, 1982  
Page Two

cc: Belco Petroleum Corp.  
411 Petroleum Bldg.  
204 W. Texas  
Midland, TX 79701

The Dow Chemical Co.  
1123 Wilco Bldg.  
Midland, Texas 79701

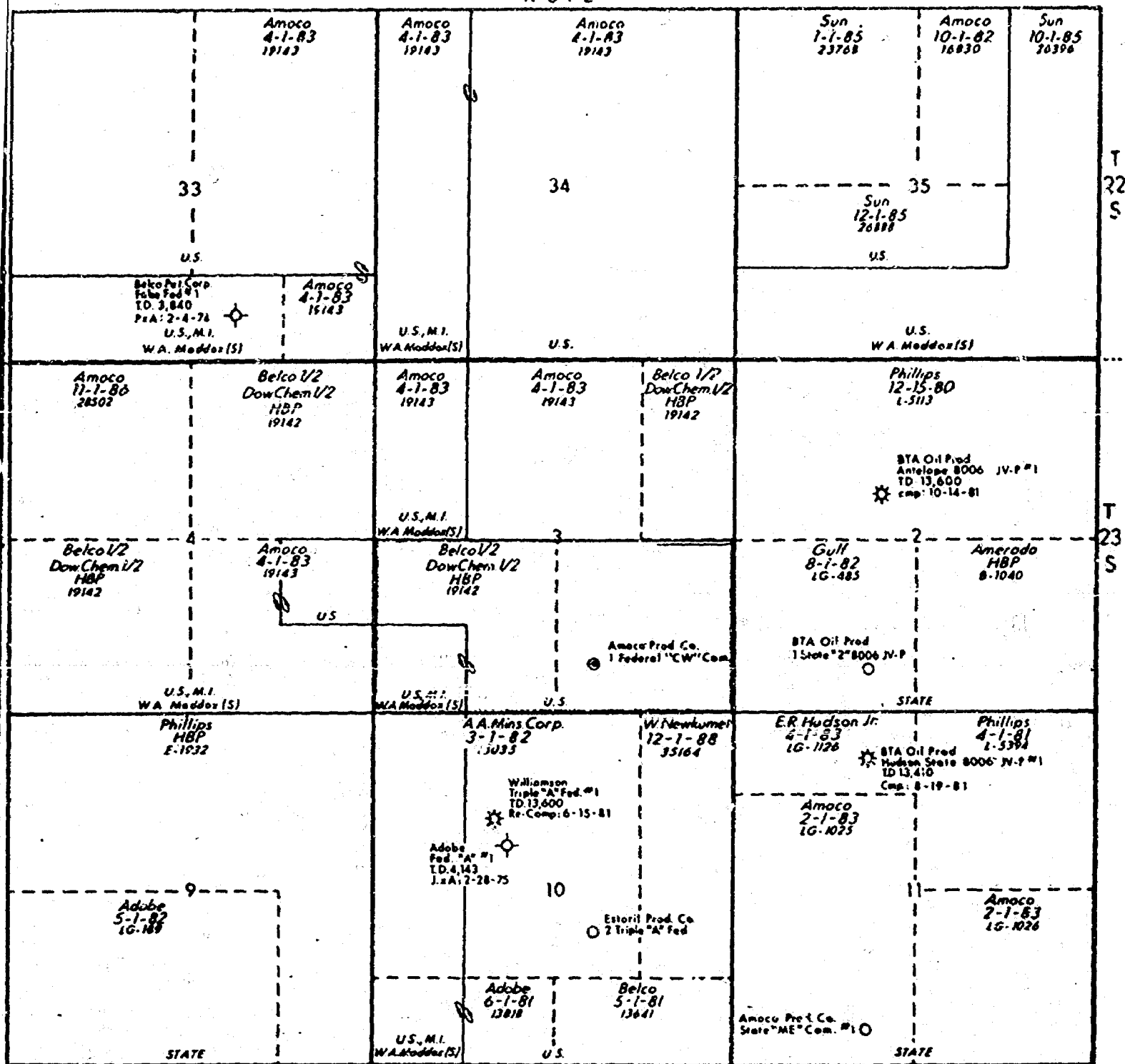
U. S. Geological Survey  
P.O. Box 26124  
Albuquerque, NM 87125

Attn: Mr. Gene F. Daniel

# Proposed Federal "CW" Well No.1

## Lea County, New Mexico

R 34 E



R 34 E

KEY:

- ★ PRODUCING WELL
- ✱ DRY HOLE
- PROPOSED LOCATION
- DRILLING WELL

0' 2000' 4000'

SCALE: 1"=2,000'





January 13, 1982

Amoco Production Company(USA)  
500 Jefferson Building  
P.O. Box 3092  
Houston, Texas 77001  
MAR 01 1982  
OIL CONSERVATION DIVISION  
SANTA FE

LB *[initials]*  
Look over +  
give me your  
Rec  
*[signature]*

Re: EA 51,995  
North Antelope Area  
Federal "CW" Com Well No. 1  
Lea County, New Mexico

The Dow Chemical Company  
1123 Wilco Building  
Midland, TX 79701

Attention: Mr. Mark Martin

Gentlemen:

Amoco Production Company hereby proposes the formation of a one (1) section working interest area, consisting of 640.24 acres, for the drilling of an approximate 14,900' dually completed Morrow-Devonian Formation test. The proposed unit will cover rights from the surface to the base of the Devonian Formation in Section 3, T-23-S, R-34-E, N.M.P.M., Section Lea County, New Mexico. Estimated gross dry hole and producer costs are \$3,416,000.00 and \$4,203,000.00, respectively.

Ownership within the proposed unit appears to be as follows:

<u>Parties</u>	<u>Acres</u>	<u>Percentage</u>
Amoco	400.09	62.4906
Belco and Dow ( $\frac{1}{2}$ interest each)	240.15	37.5094
	<u>640.24</u>	

As an alternative to joining the proposed unit, Amoco will accept farm-ins to the unit, with the farming party to retain a proportionate 1/16 overriding royalty, with the option at well payout to convert to a proportionate 40% working interest. Production will earn Amoco an assignment of 100% working interest in the proration unit and 60% working interest in the balance of the contract area.

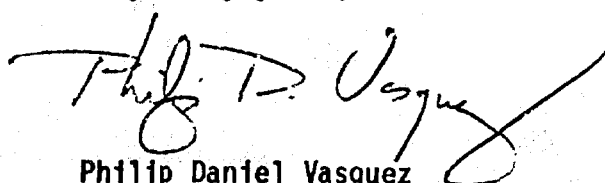
Enclosed for your review are two copies of an AFE for the drilling and testing of the subject well. In the event you elect to join, please execute and return one copy for our files. An operating agreement will be forwarded for your execution upon a favorable response from you.

The Dow Chemical Company  
January 13, 1982  
Page 2

This well is scheduled for late February, therefore, your early consideration of the proposal will be appreciated. Should you have any questions or if I may be of any assistance, please call me at (713) 652-4463.

This proposal was made to Belco on November 5, 1981. Belco indicated that they represent Dow. If this is so, please confirm this in writing.

Very truly yours,



Philip Daniel Vasquez  
Landman

PDV/dg  
782/N

Enclosures

P  
WU AGT SANA

INFOMASTER 1-037534M060 03/01/82

ICS IPMKAKD KSC

02822 03-01 0603P CST

TVX 9109350511 WU AGT SANA

4-054115S060 03/01/82

ICS IPMBNGZ CSP

7139324700 TDRN HOUSTON TX 140 03-01 0537P EST

PMS NEW MEXICO OIL CONSERVATION COMMISSION RPT DLY MGM, FON 505827243  
4

STATE LAND OFFICE BLDG 310 OLD SANTA FE TRAIL

SANTA FE NM 87501

RE: EXAMINER HEARING MARCH 3 COMPULSORY POOLING CASE NO. 7499.

AMOCO PRODUCTION COMPANY IS REQUESTING AN ORDER TO POOL ALL MINERAL INTERESTS IN THE WOLFCAMP THROUGH DEVONIAN FORMATIONS UNDERLYING THE S/2 SEC. 3, T-23-S, R-34-E, LEA COUNTY NEW MEXICO. SAID TOOLING CASE 7499 IS TO BE HEARD ON MARCH 3. BELCO PETROLEUM, UPON REPRESENTATION BY AMOCO PRODUCTION THAT AMOCO HAS AGREED TO THE TERMS OF BELCO'S FARMOUT TO IT COVERING BELCO'S INTEREST IN THE SOUTH HALF SECTION 3, WILL NOT PROTEST THIS COMPULSORY POOLING HEARING. HAD AMOCO NOT ACCEPTED SAID FARMOUT BELCO WOULD BE IN ATTENDANCE TO PROTEST. BELCO REQUESTS THE COMMISSION TO NOTE IN THE RECORD FOR THIS CASE THAT BELCO IS NOT MAKING AN APPEARANCE IN PROTEST, ON THE VERBAL ASSURANCE FROM AMOCO PRODUCTION COMPANY THAT THE BELCO FARMOUT LETTER DATED FEBRUARY 26 1982 WAS ACCEPTABLE TO AMOCO.

BELCO PETROLEUM

BY JAMES PATRICK MILLER

DIVISION ATTORNEY

10000 OLD KATY RD SUITE 100

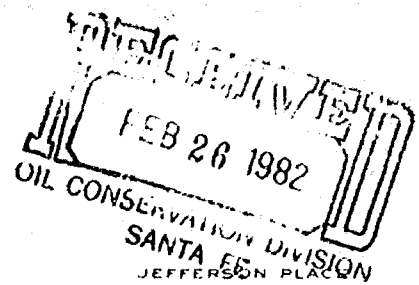
HOUSTON TX 77 55

1905 EST

*Recd  
March 2, 1982*

CAMPBELL, BYRD & BLACK, P.A.  
LAWYERS

JACK M. CAMPBELL  
HARL D. BYRD  
BRUCE D. BLACK  
MICHAEL B. CAMPBELL  
WILLIAM F. CARR  
BRADFORD C. BERGE  
WILLIAM G. WARDLE



SUITE 1 - 110 NORTH GUADALUPE  
POST OFFICE BOX 2208  
SANTA FE, NEW MEXICO 87501  
TELEPHONE: (505) 988-4421  
TELECOPIER: (505) 983-6043

February 23, 1982

Mr. Joe D. Ramey  
Director  
Oil Conservation Division  
New Mexico Department of  
Energy and Minerals  
Post Office Box 2088  
Santa Fe, New Mexico 87501

Re: Case 7499: Application of Amoco Production  
Company for Compulsory Pooling, Lea County,  
New Mexico

Dear Mr. Ramey:

Enclosed for filing in the above-referenced case is our  
Entry of Appearance on behalf of Amoco Production Company.

Your attention to this matter is appreciated.

Very truly yours,

A handwritten signature in cursive script, appearing to read "William F. Carr".

William F. Carr

WFC:lr

Enclosure

cc: Mr. Clyde Mote

RECEIVED  
FEB 26 1982  
OIL CONSERVATION DIVISION  
SANTA FE

BEFORE THE  
OIL CONSERVATION DIVISION  
NEW MEXICO DEPARTMENT OF ENERGY AND MINERALS

IN THE MATTER OF THE APPLICATION  
OF AMOCO PRODUCTION COMPANY FOR  
COMPULSORY POOLING, LEA COUNTY,  
NEW MEXICO.

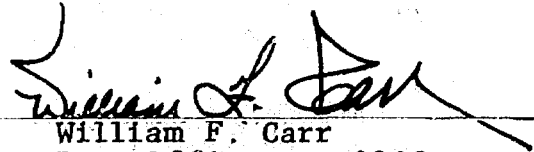
CASE 7499

ENTRY OF APPEARANCE

Comes now Campbell, Byrd & Black, P.A. and hereby enters  
its appearance in the above-styled cause for Amoco Production  
Company.

CAMPBELL, BYRD & BLACK, P.A.

By



William F. Carr  
Post Office Box 2208  
Santa Fe, New Mexico 87501  
Attorneys for Amoco Production  
Company



**Amoco Production Company (USA)**

500 Jefferson Building  
P.O. Box 3092  
Houston, Texas 77001

February 3, 1982

File: JCA-986.51NM-029

Re: Compulsory Pooling  
S/2 Section 3, T-23-S, R-34-E  
Lea County, New Mexico

*Case 7499*

State of New Mexico  
Energy and Minerals Department  
Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87501

Attn: Mr. Joe D. Ramey

Amoco Production Company respectfully requests a hearing for compulsory pooling of all mineral interest in the Wolfcamp, Pennsylvanian, Mississippian and Devonian Formations underlying the S/2 of Section 3, T-23-S, R-34-E, Lea County, New Mexico. The subject acreage will be dedicated to a well to be drilled as a Devonian test at an orthodox location. Also, to be considered will be the cost of drilling and completing said well, the allocation of cost thereof as well as actual operating cost, charges for supervision and a charge for risks involved in drilling said well. Amoco will ask to be designated as operator of the well.

Please place this item on the Examiners Hearing Docket of March 3, 1982. Attached are the copies of a land plat of the subject area. The only operators affected by the hearing, other than Amoco Production Company are listed below and being furnished a copy of this letter:

Belco Petroleum Corp.  
411 Petroleum Bldg.  
204 W. Texas  
Midland, Texas 79701

The Dow Chemical Co.  
1123 Wilco Bldg.  
Midland, Texas 79701

The United States of America is the lessor.

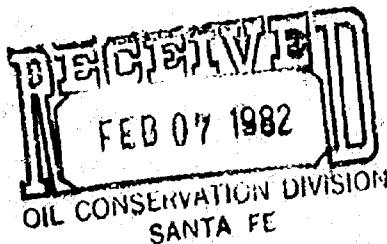
Please direct any question to Mr. Jim Allen, telephone (713) 652-5497.

Yours very truly,

*R. G. Smith*

R. G. Smith  
Regional Engineering Manager-West

JCA/lrd



File: JCA-986.51NM-029  
February 3, 1982  
Page Two

cc: Belco Petroleum Corp.  
411 Petroleum Bldg.  
204 W. Texas  
Midland, TX 79701

The Dow Chemical Co.  
1123 Wilco Bldg.  
Midland, Texas 79701

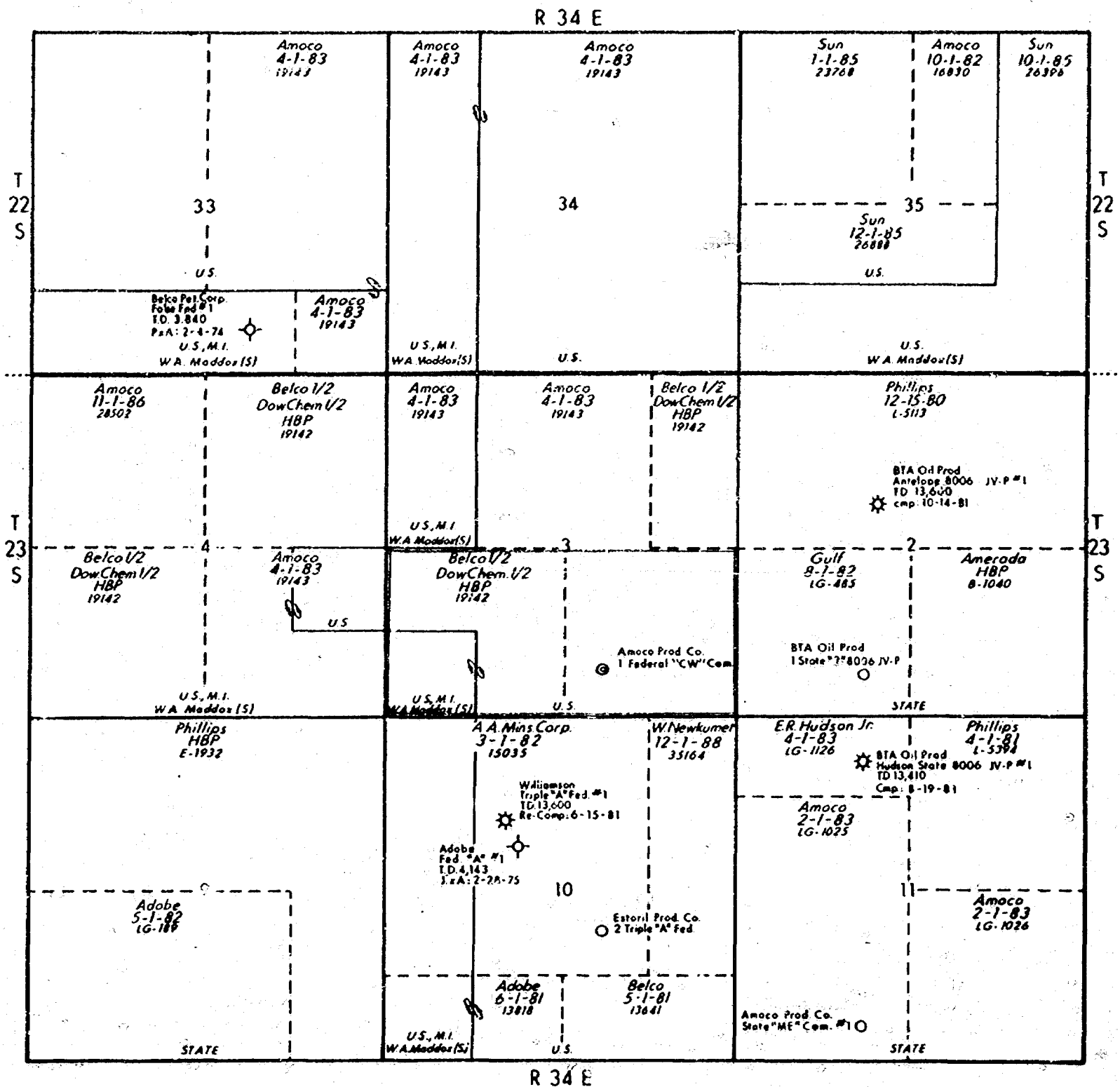
U. S. Geological Survey  
P.O. Box 26124  
Albuquerque, NM 87125

Attn: Mr. Gene F. Daniel



# Proposed Federal "CW" Well No.1

## Lea County, New Mexico



KEY:

- ★ PRODUCING WELL
- ◈ DRY HOLE
- PROPOSED LOCATION
- DRILLING WELL

0' 2000' 4000'

SCALE: 1"=2,000'



DAN  
Amoco

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
DIVISION FOR THE PURPOSE OF  
CONSIDERING:

*JAR*

CASE NO. 7499

Order No. R- 7032

*ALL*  
APPLICATION OF AMOCO PRODUCTION  
COMPANY FOR COMPULSORY POOLING,  
LEA COUNTY, NEW MEXICO.

*[Signature]*  
*N/PP*

ORDER OF THE DIVISION

*M.S.*

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on March 31, 1982,  
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this \_\_\_\_\_ day of July, 1982, the Division  
Director, having considered the testimony, the record, and the  
recommendations of the Examiner, and being fully advised in the  
premises,

FINDS:

(1) That due public notice having been given as required  
by law, the Division has jurisdiction of this cause and the  
subject matter thereof.

(2) That the applicant, Amoco Production Company, seeks an order pooling all mineral interests in the Wolfcamp through Devonian formations underlying the S/2 of Section 3, Township 23 South, Range 34 East, NMPM, Antelope Ridge Area, Lea County, New Mexico, to be dedicated to a well to be drilled at a standard location thereon 660 feet from the South line and 1980 feet from the East line of said Section 3.

(3) That the applicant owns an oil and gas lease on the SE/4 of said Section 3, and has taken a farmout on an undivided 50 percent working interest in the SW/4 of said Section 3, thereby controlling 75 percent of the working interest in the proposed spacing and proration unit and having the right to drill thereon, which it proposes to do.

(4) That Dow Chemical U.S.A. is the owner of a 50 percent undivided working interest in the SW/4 of said Section 3, and appeared at the hearing in opposition to Amoco's proposal to pool the S/2 of Section 3 and drill a 14,900-foot well to test the Devonian formation underlying said lands.

(5) That this case originally came on for hearing on March 3, 1982, at which time both sides presented testimony; that the case was then continued to the March 31, 1982, hearing in order to give the parties to the hearing additional time in which to negotiate and resolve their differences.

(6) That during the interim period between hearings there were apparently good faith efforts made to arrive at an amicable solution, but certain differences between the parties remain.

(7) That both parties agree, and the geological evidence tends to confirm, that the Pennsylvanian formation, particularly

the Morrow section, underlying the proposed spacing and proration unit is a good prospect for obtaining commercial production.

(8) That the geological evidence concerning the Devonian prospect is somewhat less conclusive, but the evidence appears to preponderate towards the view that prospects for commercial production from the Devonian formation are much more uncertain than such prospects for the Pennsylvanian, and that Dow is justified in not desiring to participate in going to the Devonian.

(9) That to avoid the drilling of unnecessary wells, to protect correlative rights, and to afford to the owner of each interest in said unit the opportunity to recover or receive without unnecessary expense his just and fair share of the gas ~~underlying the subject lands~~ <sup>in said pool</sup>, the subject application should be approved by pooling all mineral interests, whatever they may be, within said unit, and Amoco should be designated operator of the subject well and unit, provided however, that Dow should be given the opportunity to participate in the drilling of the subject well on a split-risk basis, i.e., (1) to participate in drilling and completion costs to the Morrow formation without penalty or to go non-consent to the Morrow and participate in the Morrow subject to a <sup>certain</sup> charge for the risk involved <sup>in drilling</sup> to said formation, and (2), to participate in the additional drilling and completion costs from the Morrow to the Devonian without penalty or to go non-consent from the Morrow to the Devonian and participate in the Devonian subject to a separate and different charge for the risk involved in the additional drilling.

(10) That it is the intent of this order to break the drilling of the subject well down into two separate and

distinctive phases: (1) from the surface of the ground through the Morrow pay; and (2) from the base of the Morrow pay through the Devonian pay; to provide alternative selections to the poolee, Dow; and to provide cost accounting for a single Morrow completion vs. a single Devonian completion or a Morrow-Devonian dual completion.

(11) To the above ends, all charges and costs which would be directly attributable to a single Morrow completion should be charged to the Morrow zone and subject to the Morrow risk factor provided herein, if applicable, and paid out of Morrow production only; all charges and costs which would be directly attributable to the drilling of a single Devonian completion from the base of the Morrow pay through the Devonian pay as well as any extra up-hole charges and costs resulting from drilling the well to the Devonian above and beyond what would normally be spent drilling to the Morrow only (such as extra hole size, extra casing and cementing, rig charges, etc.) should be charged to the Devonian zone and subject to the Devonian risk factor provided herein, if applicable, and paid out of Devonian production only; all common charges to a Morrow-Devonian dual (including the separation packer, dual Christmas tree, etc.) shall be split between the two zones and each portion made subject to the risk factor for that zone and paid out of production from that zone.

(12) That after the effective date of this order and within 60 days prior to commencing the subject well, Amoco should furnish the Division and Dow itemized schedules of estimated well costs as follows:

- A. A cost estimate for a normal single Morrow test well to the anticipated Morrow completion depth

(13,500 <sup>+</sup> feet).

B. A cost estimate for a normal single Devonian test well to the anticipated Devonian completion depth (14,900 <sup>+</sup> feet).

C. A cost estimate for a Morrow-Devonian dual completion at the above depths.

(13) That the cost estimate prescribed in Finding No. (12) A above should include only normal drilling, testing, and completion costs with a suitably sized drilling rig and normal mud, logging, and testing charges and casing and cementing costs for a single Morrow completion without anticipation of drilling beyond the expected Morrow completion depth.

(14) That the cost estimate prescribed in Finding No. (12) B above should include only normal drilling, testing, and completion costs with a suitably sized drilling rig and normal mud, logging, and testing charges and casing and cementing costs for a single Devonian completion without anticipation of an upper pay (Morrow) being present or requiring testing.

(15) That the cost estimate prescribed in Finding No. (12) C above should include normal drilling, testing, and completion costs with a suitably sized drilling rig and normal mud, logging, and testing charges and casing and cementing costs for a Morrow-Devonian dual completion.

(16) That within 30 days from the date the above-described schedules of estimated well costs are furnished to it, Dow should make its election as to whether to participate in the subject well.

(17) That if it elects to participate, Dow should have the opportunity of choosing its mode of participation, i.e., whether to participate in drilling to and completing in the Morrow only, or to participate in drilling and completing in both the Morrow and Devonian.

(18) That if it elects to participate, Dow should be afforded the opportunity of paying its share of estimated well costs for the mode selected in lieu of paying its share of reasonable well costs out of production.

(19) That should Dow elect not to pay its share of estimated well costs from the surface down through the Morrow pay, it should have its share of reasonable well costs for said formation withheld from production from the Morrow formation plus a reasonable percentage of such costs as a charge for the risk involved in the drilling of said well to the Morrow.

(20) That considering the geological and engineering evidence presented at the hearing, 100 percent of reasonable well costs is an adequate and appropriate charge for the risk involved in drilling said well to the Morrow formation.

(21) That should Dow elect to pay its share of estimated well costs from the surface to the Morrow, but elect not to pay its share of estimated well costs from the base of the Morrow pay down through the Devonian pay, it should have its share of well costs for drilling from the Morrow to the Devonian withheld from production from the Devonian formation plus a reasonable percentage thereof as a charge for the risk involved in the drilling of said well from the Morrow to the Devonian.

(22) That considering the geological and engineering evidence presented at the hearing, 200 percent of reasonable well costs from the Morrow to the Devonian is an adequate and appropriate charge for the risk involved in drilling said well from the Morrow to the Devonian.

(23) That should Dow elect to participate in either of the above-described modes of participation, its payment of its share of estimated well costs for that mode should be made to Amoco in accordance with some customary and mutually agreeable system for billing and payment which is common to the industry; that should Dow so elect to participate and pay its share of estimated well costs for the mode selected, it should remain liable for operating costs but should not be liable for risk charges for that mode of participation. Reasonable drilling and completion costs advanced by Amoco beyond the mode selected and prepaid by Dow should be subject to the risk factors described above and withheld from production from the appropriate formation together with operating costs.

(24) That within 90 days following completion of the well, the operator should furnish the Division and Dow an itemized schedule of actual well costs for drilling and completion of the well, broken down into two segments: from the surface through the Morrow pay, and from the base of the Morrow pay through the Devonian pay; that if no objection to such actual well costs is received by the Division, and the Division has not objected to such actual well costs within 45 days following receipt of said schedule, the actual costs should be considered reasonable costs; provided however, that if there is an objection to actual well costs within said 45-day period, the Division should determine reasonable well costs after public notice and hearing.

(25) That within 60 days following determination of reasonable well costs, should Dow have paid its share of estimated well costs for either of the above-described modes of participation, it should pay to Amoco any amount that its share of reasonable well costs for that mode exceed paid estimated well costs and should receive from Amoco any amount that paid estimated well costs exceed reasonable well costs for that mode.

(26) That the terms and provisions of this order relating to participation or non-participation in the drilling of the subject well to the Morrow formation should be applicable to the drilling to and completion of the well in possible pay zones above the Morrow; that the terms and provisions of this order relating to participation or non-participation in the drilling of the subject well from the base of the Morrow pay through the Devonian pay should be applicable to the drilling to and completion of the well in possible pay zones between the base of the Morrow and the top of the Devonian.

(27) That \$4200.00 per month while drilling and \$420.00 per month while producing should be fixed as reasonable charges for supervision (combined fixed rates); that the operator should be authorized to withhold from production the proportionate share of such supervision charges attributable to each non-consenting working interest, and in addition thereto, the operator should be authorized to withhold from production the proportionate share of actual expenditures required for operating the subject well, not in excess of what are reasonable, attributable to each non-consenting working interest.

(28) That all proceeds from production from the subject well which are not disbursed for any reason should be placed in



escrow in Lea County, New Mexico, to be paid to the true owner thereof upon demand and proof of ownership.

(29) That upon the failure of the operator of said pooled unit to commence drilling of the well to which said unit is dedicated on or before November 1, 1982, the order pooling said unit should become null and void and of no effect whatsoever.

(30) That although the application in this case was for pooling of the S/2 of Section 3, Township 23 South, Range 34 East, NMPM, Lea County, New Mexico, to form a 320-acre gas spacing and proration unit to be dedicated to a well to be drilled at a standard location thereon 660 feet from the South line and 1980 feet from the East line of said Section 3, the Division Director should have authority to approve an alternative location for the unit well without hearing upon application of Amoco, provided all applicable provisions of Rule 104 of the Division Rules and Regulations are met, and provided that such location has been submitted to Dow along with the itemized schedules of well costs specified in Finding Nos. (12) through (15) above.

IT IS THEREFORE ORDERED:

(1) That all mineral interests, whatever they may be, from the top of the Wolfcamp formation through the base of the Devonian formation underlying the S/2 of Section 3, Township 23 South, Range 34 East, NMPM, Antelope Ridge Area, Lea County, New Mexico, are hereby pooled to form a standard 320-acre gas spacing and proration unit to be dedicated to a well to be drilled 660 feet from the South line and 1980 feet from the East line of said Section 3 or at such other location on said unit as the Division Director may approve.

PROVIDED HOWEVER, that the operator of said unit shall commence the drilling of said well on or before the first day of November, 1982, and shall thereafter continue the drilling of said well with due diligence to a depth sufficient to test the Devonian formation;

PROVIDED FURTHER, that in the event said operator does not commence the drilling of said well on or before the first day of November, 1982, Order (1) of this order shall be null and void and of no effect whatsoever, unless said operator obtains a time extension from the Division for good cause shown.

PROVIDED FURTHER, that should said well not be drilled to completion, or abandonment, within 180 days after commencement thereof, said operator shall appear before the Division Director and show cause why Order (1) of this order should not be rescinded.

(2) That Amoco Production Company is hereby designated the operator of the subject well and unit.

(3) That after the effective date of this order and within <sup>60</sup>~~90~~ days prior to commencing said well, the operator shall furnish the Division and each known working interest owner in the subject unit itemized schedules of estimated well costs as follows:

A. A cost estimate for a normal single Morrow test well to the anticipated Morrow completion depth (13,500 <sup>+</sup> feet).

B. A cost estimate for a normal single Devonian test well to the anticipated Devonian completion

depth (14,900 <sup>+</sup> feet).

C. A cost estimate for a Morrow-Devonian dual completion at the above depths.

(4) That the cost estimate prescribed in ~~Finding~~ <sup>Order</sup> No. ~~(10)A~~ <sup>(3)A</sup> above shall include only normal drilling, testing, and completion costs with a suitably sized drilling rig and normal mud, logging, and testing charges and casing and cementing costs for a single Morrow completion without anticipation of drilling beyond the expected Morrow completion depth.

(5) That the cost estimate prescribed in ~~Finding~~ <sup>Order</sup> No. ~~(10)B~~ <sup>(3)B</sup> above shall include only normal drilling, testing, and completion costs with a suitably sized drilling rig and normal mud, logging, and testing charges and casing and cementing costs for a single Devonian completion without anticipation of an upper pay (Morrow) being present or requiring testing.

(6) That the cost estimate prescribed in ~~Finding~~ <sup>Order</sup> No. ~~(10)C~~ <sup>(3)C</sup> above shall include normal drilling, testing, and completion costs with a suitably sized drilling rig and normal mud, logging, and testing charges and casing and cementing costs for a Morrow-Devonian dual completion.

(7) That within 30 days from the date the above-described schedules of estimated well costs are furnished to it, Dow shall make its election as to whether to participate in the subject well.

(8) That if it elects to participate, Dow shall have the opportunity of choosing its mode of participation, i.e., whether to participate in drilling to and completing in the Morrow only,

or to participate in drilling<sup>to</sup> and completing in both the Morrow and Devonian.

(9) That if it elects to participate, Dow shall be afforded the opportunity of paying its share of estimated well costs for the mode selected in lieu of paying its share of reasonable well costs out of production.

(10) That should Dow elect not to pay its share of estimated well costs from the surface down through the Morrow pay, it shall have its share of reasonable well costs for said formation withheld from production from the Morrow formation plus 100 percent thereof as a charge for the risk involved in the drilling of said well to the Morrow.

(11) That should Dow elect to pay its share of estimated well costs from the surface to the Morrow, but elect not to pay its share of estimated well costs from the base of the Morrow pay down through the Devonian pay, it shall have its share of well costs for drilling from the Morrow to the Devonian withheld from production from the Devonian formation plus 200 percent thereof as a charge for the risk involved in the drilling of said well from the Morrow to the Devonian.

(12) That should Dow elect to participate in either of the above-described modes of participation, its payment of its share of estimated well costs for that mode shall be made to Amoco in accordance with some customary and mutually agreeable system for billing and payment which is common to the industry; that should Dow so elect to participate and pay its share of estimated well costs for the mode selected, it shall remain liable for operating costs but shall not be liable for risk charges for that mode of participation. Reasonable drilling and completion

costs advanced by Amoco beyond the mode selected and prepaid by Dow shall be subject to the risk factors described above and withheld from production from the appropriate formation together with operating costs.

(13) That within 90 days following completion of the well, the operator shall furnish the Division and Dow an itemized schedule of actual well costs for drilling and completion of the well, broken down into two segments: from the surface through *adjusted downward. for any extra up-hole charges and costs per Finding No. (11),* the Morrow pay, and from the base of the Morrow pay through the *including any extra up-hole charges and costs per Finding No. (11);* Devonian pay, that if no objection to such actual well costs is received by the Division and the Division has not objected to such actual well costs within 45 days following receipt of said schedule, the actual costs shall be considered reasonable costs; provided however, that if there is an objection to actual well costs *for either one or both segments* within said 45-day period, the Division shall determine *for each well segment* reasonable well costs after public notice and hearing.

(14) That within 60 days following determination of reasonable well costs, should Dow have paid its share of estimated well costs for either of the above-described modes of participation, it shall pay to Amoco any amount that its share of reasonable well costs for that mode exceed paid estimated well costs and shall receive from Amoco any amount that paid estimated well costs exceed reasonable well costs for that mode.

(15) That Amoco is hereby authorized to withhold the following costs and charges from production:

- (A) The pro rata share of reasonable well costs attributable to Dow if Dow has not paid its share of estimated well costs in accordance with the provisions

for pre-payment as set forth in this order.

(B) As a charge for the risk involved in the drilling of the well, the percentage specified elsewhere herein of the pro rata share of reasonable well costs attributable to Dow if Dow has not paid its share of estimated well costs in accordance with the provisions for pre-payment as set forth in this order.

(16) That the terms and provisions of this order relating to participation or non-participation in the drilling of the subject well to the Morrow formation shall be applicable to the drilling to and completion of the well in possible pay zones above the Morrow; that the terms and provisions of this order relating to participation or non-participation in the drilling of the subject well from the base of the Morrow pay through the Devonian pay shall be applicable to the drilling to and completion of the well in possible pay zones between the base of the Morrow and the top of the Devonian.

(17) That \$4200.00 per month while drilling and \$420.00 per month while producing are hereby fixed as reasonable charges for supervision (combined fixed rates); that the operator is hereby authorized to withhold from production the proportionate share of such supervision charges attributable to each non-consenting working interest, and in addition thereto, the operator is hereby authorized to withhold from production the proportionate share of actual expenditures required for operating such well, not in excess of what are reasonable, attributable to each non-consenting working interest.

(18) That any unsevered mineral interest shall be considered a seven-eighths (7/8) working interest and a one-eighth (1/8) royalty interest for the purpose of allocating costs and charges under the terms of this order.

(19) That any well costs or charges which are to be paid out of production shall be withheld only from the working interest's share of production, and no costs or charges shall be withheld from production attributable to royalty interests.

(20) That all proceeds from production from the subject well which are not disbursed for any reason shall immediately be placed in escrow in Lea County, New Mexico, to be paid to the true owner thereof upon demand and proof of ownership; that the operator shall notify the Division of the name and address of said escrow agent within 30 days from the date of first deposit with said escrow agent.

(21) That although the application in this case was for pooling of the S/2 of Section 3, Township 23 South, Range 34 East, NMPM, Lea County, New Mexico, to form a 320-acre gas spacing and proration unit to be dedicated to a well to be drilled at a standard location thereon 660 feet from the South line and 1980 feet from the East line of said Section 3, the Division Director <sup>shall</sup> ~~should~~ have authority to approve an alternative location for the unit well without hearing upon application of Amoco, provided all applicable provisions of Rule 104 of the Division Rules and Regulations are met, and provided that such location has been submitted to Dow along with the itemized schedules of well costs required in Orders Nos. (3) through (6) above.

(22) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO

OIL CONSERVATION DIVISION

JOE D. RAMEY,

Director

S E A L