

1 STATE OF NEW MEXICO  
2 ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
3 OIL CONSERVATION DIVISION  
4 STATE LAND OFFICE BUILDING  
5 SANTA FE, NEW MEXICO

6 1 February 1989

7 EXAMINER HEARING

8 IN THE MATTER OF:

9 Application of Amerind Oil Company for CASE  
10 compulsory pooling, directional drill- 9591  
11 ing. and an unorthodox oil well locat-  
12 ion, Lea County, New Mexico.

13 BEFORE: David R. Catanach, Examiner

14  
15 TRANSCRIPT OF HEARING

16  
17 A P P E A R A N C E S

18  
19 For the Division:

20 For Amerind Oil Company: William F. Carr  
21 Attorney at Law  
22 CAMPBELL and BLACK, P. A.  
23 P. O. Box 2208  
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I N D E X

ROBERT C. LIEBROCK

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|-----------------------------------|----|
| Direct Examination by Mr. Carr    | 3  |
| Cross Examination by Mr. Catanach | 15 |

E X H I B I T S

|   |    |
|---|----|
| Amerind Exhibit One, Waivers              | 6  |
| Amerind Exhibit Two, Structural Map       | 7  |
| Amerind Exhibit Three, Cross Section A-A' | 8  |
| Amerind Exhibit Four, Vertical Section    | 11 |
| Amerind Exhibit Five, Drilling Procedure  | 11 |
| Amerind Exhibit Six, Affidavit            | 13 |

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MR. CATANACH: And we'll call Case 9591.

Application of Amerind Oil Company for compulsory pooling, directional drilling, and an unorthodox oil well location, Lea County, New Mexico.

Are there appearances in this case?

MR. CARR: May it please the Examiner, my name is William F. Carr with the law firm Campbell & Black, P. A., of Santa Fe. We represent Amerind Oil Company and I have one witness.

MR. CATANACH: Any other appearances?

Will the witness please stand and be sworn in?

(Witness sworn.)

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

DIRECT EXAMINATION

BY MR. CARR:



1 qualifications acceptable?

2 MR. CATANACH: They are.

3 Q Initially, Mr. Leibrock, as to the com-  
4 pulsory pooling portion of this case, have all the interest  
5 owners in the subject spacing unit voluntarily committed  
6 their interest to the well?

7 A Yes, they have.

8 MR. CARR: It would be appro-  
9 priate at this time, Mr. Examiner, therefore to dismiss the  
10 portion of this case that involves compulsory pooling of  
11 the subject acreage.

12 Q Mr. Leibrock, would you briefly state  
13 what Amerind seeks with the application?

14 A We seek to re-enter our MTS State No. 1  
15 Well in the Section 2 of Township 17 South, Range 37 East  
16 of Lea County, and directionally drill it to the northeast  
17 to a location which is 330 feet out of the north and east  
18 boundaries of the drilling unit.

19 Q And is Amerind requesting permission to  
20 bottom his well within 100 -- within 50 feet of that point?

21 A That's correct. Within 50 feet of the  
22 location that I mentioned.

23 Q And what pool is this well projected to?

24 A This is the Shipp Strawn Field.

25 Q Are you familiar with the rules that

1 govern development of the Shipp Strawn Pool?

2 A Yes.

3 Q What are the location requirements as  
4 set forth in those rules?

5 A The location requirements permit a well  
6 to be located within 150-foot radius of the center of a  
7 40-acre unit.

8 Q And so you --

9 A These are 80-acre proration units.

10 Q And so you're unorthodox towards the  
11 northeast corner of the proration unit.

12 A That's correct.

13 Q Have you prepared certain exhibits for  
14 introduction in this case?

15 A Yes.

16 Q Would you refer initially to what has  
17 been marked as Amerind Exhibit Number One, identify that,  
18 and review it for Mr. Catanach?

19 A Exhibit One is waivers from Bechtel,  
20 Texaco and Pennzoil, the three interest owners who are  
21 either in or adjoining the sidetrack location, and all of  
22 them have waived any objection to our proposed plan.

23 Q Which of these owners is participating  
24 in the subject well?

25 A Both Bechtel and Texaco are partici-

1 pating.

2 Q And these three represent all of the  
3 offsetting interest owners toward whom the bottom hole  
4 location is being moved.

5 A That's correct.

6 Q Would you now refer to Amerind Exhibit  
7 Number Two, identify this exhibit, and review the informa-  
8 tion contained thereon?

9 A Exhibit Two is a structure map contoured  
10 on top of the Lower Strawn lime covering a portion of the  
11 Shipp Strawn Field centered on Section 2, and the large  
12 well symbols indicate Strawn penetrations, either wells or  
13 dry holes, and the small symbols indicate shallow tests and  
14 the two green highlighted areas indicate two reservoirs  
15 within the Shipp Strawn Field that are pertinent to this  
16 case under discussion.

17 The red arrow points to the proposed  
18 sidetrack bottom hole location of our -- of our test, and  
19 just to the southwest of that arrow shows the bottom hole  
20 location of the original well.

21 Q What is the spacing unit that you pro-  
22 pose to dedicate to the well?

23 A The spacing unit is the 80-acre unit  
24 consisting of the east half of the southeast quarter of  
25 Section 2.

1           A           And under the Shipp Strawn rules this is  
2 a standard location -- I mean, I'm sorry, standard prora-  
3 tion unit?

4           A           Yes, it is.

5           Q           This exhibit also contains a line of  
6 cross section, does it not?

7           A           Right, cross section A-A', which is our  
8 next exhibit.

9           Q           Would you refer to that exhibit now and  
10 review what this exhibit shows for Mr. Catanach?

11          A           Okay. Exhibit A-A', as shown on the  
12 structure map, is a west to east cross section through five  
13 Strawn penetrations beginning on the west with the Pennzoil  
14 Byers, which is an excellent Strawn producer; the next well  
15 being the Pennzoil State 2 dry hole, which was recently  
16 side-tracked and which we'll discuss further in a moment.

17                   And then extending across to the east to  
18 the other side of Section 2 is the Amerind MTS State No. 1,  
19 which was plugged and abandoned in December of '87.

20                   Then immediately to the right of that  
21 log is our location of our sidetrack hole designated the  
22 1-X.

23                   And then ending on the east side with  
24 the Amerind -- I mean, excuse me, with the Pennzoil Price  
25 Family Trust, which is also a very good Strawn well.

1           As you'll note, this cross section, the  
2 datum that I've used is the top of the Atoka shale to show  
3 the relative thickness of the Strawn lime on each of these  
4 various tests.

5           Q           Would you compare your experience in  
6 drilling your Amerind MTS State No. 1 with the experience  
7 Pennzoil -- Pennzoil's experience in the State No. 2 Well?

8           A           Yes. First if you'll refer back to Ex-  
9 hibit Two, the structure map, showing the green highlighted  
10 area, you'll notice that the Pennzoil State 2 location was  
11 a dry hole and in fact as you'll see on the neutron density  
12 log on the cross section, there was no porosity at all in  
13 that penetration, and as you'll notice also, on the Penn-  
14 zoil Byers location, does have excellent porosity, and the  
15 indication here of mound facies or reef, whatever you wish  
16 to call it, does not extend over into the Pennzoil State 2  
17 location.

18                       However, Pennzoil subsequently side-  
19 tracked the State 2 into their 1-X location, which is not  
20 shown on this cross section. That was the -- their Case  
21 9450; also Order 8725 had to do with that case, which per-  
22 mitted them to sidetrack that location without any penalty  
23 allowable.

24                       Now let me move over to the other side  
25 and compare the Pennzoil situation with our situation on

1 the sidetrack here.

2                   As you will note, our interpretation  
3 here is that the MTS State No. 1 dry hole was in fact in a  
4 mound and there is some porosity as you'll see on the  
5 neutron density log here; however, as you'll notice on the  
6 drill stem test, some gas was recovered but the pressures  
7 were very tight and we did not think it was possible to  
8 make a commercial completion of this well, so it was plug-  
9 ged and abandoned.

10                   Now if you'll move over and refer to the  
11 Pennzoil Price Family Trust log on the righthand side,  
12 you'll notice the remarkable similarity between the log on  
13 that well and our MTS State No. 1. The Pennzoil Price,  
14 while having about the same amount of porosity, has excel-  
15 lent permeability, whereas the MTS State No. 1 had essen-  
16 tially no permeability.

17                   Since our interpretation is that we're  
18 already in the same mound, we think that it is reasonable  
19 to conclude that moving a relatively short distance toward  
20 the Price Family Trust Well will enable us to encounter  
21 much better permeability within the same mound.

22                   So just to summarize the discussion on  
23 this cross section, we think the data indicates that our  
24 original location was already in the mound whereas the  
25 Pennzoil State No. 2 original location was not, and they

1 had to actually drill into the mound to make a completion.

2 Q Mr. Leibrock, how close will the bottom  
3 hole sidetrack location for the proposed well be to the  
4 nearest producing Strawn well?

5 A If you'll notice again on the cross  
6 section, we think the bottom hole location of the 1-X will  
7 be about 1270 feet from the Pennzoil Price Well, whereas  
8 the -- over on the lefthand side of the cross section the  
9 Pennzoil Byers and the State 2 were 1200 feet apart orig-  
10 inally on the original hole, and then the sidetrack hole is  
11 only about 1000 feet from the Byers location.

12 MR. CARR: Mr. Examiner, we  
13 would request that you take administrative notice of the  
14 transcript in Case 9450, which is the application of Penn-  
15 zoil for directional drilling. It resulted in Order 8725,  
16 which we would also request you take administrative notice  
17 of.

18 MR. CATANACH: I will take  
19 administrative notice of those in the case, Mr. Carr.

20 Q Mr. Leibrock, would you now review for  
21 Mr. Catanach how you propose to re-enter and directionally  
22 drill this well, and in so doing, would you refer to Amer-  
23 ind Exhibits Four and Five?

24 A Exhibit Four is a plan and a vertical  
25 section showing the pertinent parameters involved in this

1 sidetrack operation, namely re-entering the MTS State No. 1  
2 and setting a plug at about 9600 feet, sidetrack plug, and  
3 kicking off from there and building to an average little  
4 over 16 degree angle to reach the bottom hole location plus  
5 or minus 50 feet, which was mentioned at the outset.

6 As you'll notice on the plan you -- this  
7 deviation amounts to about 582 feet from the surface loca-  
8 tion toward the northeast.

9 Q Will you now to go Exhibit Number Five  
10 and review your proposed drilling procedure?

11 A Exhibit Five is the detailed drilling  
12 procedure which we plan to use for our operation and I will  
13 not go into this in detail unless you wish to do so. I  
14 think all of the pertinent details are on here, and again  
15 referring back to the Pennzoil case, this is very similar  
16 to the way that their operation was conducted.

17 Q Mr. Leibrock, will Amerind run a direc-  
18 tional survey on this well as required by Oil Conservation  
19 Division Rule 111?

20 A Yes, a survey will be run from surface  
21 to -- to the base of the 9-5/8ths casing and then after TD  
22 is reached another survey will be run to possibly locate  
23 the bottom hole location.

24 Q Do you believe that production from this  
25 well at the proposed bottom hole location should be penal-

1 ized?

2 A No, we do not.

3 Q And why is that?

4 A Because of the similarity with the case,  
5 the Pennzoil case that was mentioned and because we think  
6 that, as we have testified in other cases, the configura-  
7 tion of these Strawn mounds do not lend themselves well to  
8 normal orthodox locations.

9 Q You also have waivers from all those who  
10 might be affected by the unorthodox location, is that  
11 correct?

12 A Yes, that's correct, also.

13 Q Would you identify what has been marked  
14 as Amerind Exhibit Number Six?

15 A Exhibit Number Six is the affidavit, Ap-  
16 plication for Directional Drilling and Unorthodox Location.

17 Q And does this provide that notice has  
18 been given of this hearing as required by Division rules?

19 A Yes, it does.

20 Q Do you believe that granting your appli-  
21 cation will be in the best interest of conservation, the  
22 prevention of waste, and the protection of correlative  
23 rights?

24 A Yes, I do.

25 Q Were Exhibits One through Six prepared

1 by you or compiled at your direction?

2 A Yes.

3 MR. CARR: At this time,  
4 Mr. Catanach, we would move the admission of Amerind Ex-  
5 hibits One through Six.

6 MR. CATANACH: Exhibits One  
7 through Six will be admitted as evidence.

8 Q Mr. Leibrock, what is the status of this  
9 well?

10 A We had a farmout deadline of January  
11 31st, which was already -- that was from Mesa, which had  
12 already been extended twice, and due to that we had to go  
13 ahead and commence operations.

14 I spoke with Mr. Lyon last week. He  
15 gave us verbal authority to proceed pending -- of course he  
16 did not make any representation as to this hearing here.

17 Q And you were advised at that time that  
18 you were proceeding at your own risk.

19 A Yes.

20 MR CARR: We therefore would  
21 request, Mr. Catanach, that the order be expedited.

22 And that concludes my direct  
23 examination of Mr. Leibrock.

24

25

## 1 CROSS EXAMINATION

2 BY MR. CATANACH:

3 Q Mr. Leibrock, you're moving toward the  
4 east and the north.

5 A Yes.

6 Q To the east you've got Pennzoil who owns  
7 all that acreage in Section 1.8 A They own all of the southwest of 1 and  
9 most of the northwest. We have a small interest in the  
10 northwest, Amerind does.11 Q And you own also the south half of the  
12 northeast quarter of Section 2?

13 A That's correct.

14 Q Do you know how successful Pennzoil was  
15 in their re-entry attempt?16 A Yes. I do not have the latest details.  
17 I do have that log if you would like to see it, and it by  
18 all indications is an excellent well.

19 Q It's not producing?

20 A Yes, it is, for about close to two  
21 months now, I think.22 Q You mentioned that a survey was going to  
23 be run down to the setting depth of the 8-5/8ths?

24 A Yes.

25 Q Where is that survey set?

1           A           It's set at 4500 feet.

2           Q           Has it already been done?

3           A           Yes, that was done yesterday. I do not  
4 have the results of it yet.

5           Q           From there what, the next survey you  
6 plan to run will be at total depth?

7           A           No, we'll be running surveys during the  
8 progress to make sure we know the azimuth and bearing of  
9 the -- of the hole as we progress.

10          Q           Why was the survey just run to 4500  
11 feet? Why wasn't it run to 96?

12          A           Okay, well, it will be run to 96. We're  
13 just running the initial one there while we're waiting on  
14 the sidetrack plug to set up and then we'll -- when we go  
15 in with the -- go in to commence the kickoff operation,  
16 we'll run a survey there also.

17          Q           Okay. Do you know anything about where  
18 the -- where approximately the -- you are at 9600 feet?  
19 Let me go into the detail.

20          A           Yes.

21          Q           The Strawn wells that I've encountered  
22 tend to drift to the north.

23          A           That's correct.

24          Q           Do you know if your wellbore has drifted  
25 to the north at about 9600 feet?



1 that's all I have. The witness may be excused.

2 Is there anything further in  
3 this case?

4 MR. CARR: Nothing further,  
5 Mr. Catanach.

6 MR. CATANACH: If not, Case  
7 9591 will be taken under advisement.

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9 (Hearing concluded.)

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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 (Commission) 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 and correct transcript of the proceedings in the Examiner hearing of Case No. 9591, heard by me on February 1 1989.

David R. Catanzano, Examiner  
Oil Conservation Division

