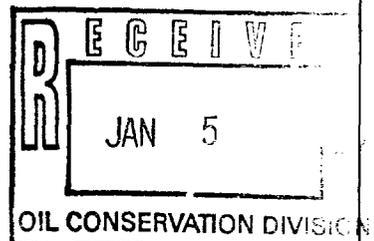


STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY)
THE OIL CONSERVATION DIVISION FOR THE)
PURPOSE OF CONSIDERING:)
APPLICATION OF ARCO PERMIAN, A UNIT OF)
ATLANTIC RICHFIELD, FOR COMPULSORY)
POOLING AND AN UNORTHODOX WELL LOCATION,)
EDDY COUNTY, NEW MEXICO)

CASE NO. 11,443

ORIGINAL



REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: MICHAEL E. STOGNER, Hearing Examiner

January 11th, 1996

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, MICHAEL E. STOGNER, Hearing Examiner, on Thursday, January 11th, 1996, at the New Mexico Energy, Minerals and Natural Resources Department, Porter Hall, 2040 South Pacheco, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

* * *

I N D E X

January 11th, 1996
 Examiner Hearing
 CASE NO. 11,443

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APPLICANT'S WITNESSES:	
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* * *

A P P E A R A N C E S

FOR THE DIVISION:

RAND L. CARROLL
Attorney at Law
Legal Counsel to the Division
2040 South Pacheco
Santa Fe, New Mexico 87505

FOR THE APPLICANT:

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

FOR LOUIS DREYFUS NATURAL GAS CORPORATION:

KELLAHIN & KELLAHIN
117 N. Guadalupe
P.O. Box 2265
Santa Fe, New Mexico 87504-2265
By: W. THOMAS KELLAHIN

* * *

1 WHEREUPON, the following proceedings were had at
2 8:36 a.m.:

3
4 EXAMINER STOGNER: At this time I'll call Case
5 Number 11,443.

6 MR. CARROLL: Application of ARCO Permian, a unit
7 of Atlantic Richfield, for compulsory pooling and an
8 unorthodox well location, Eddy County, New Mexico.

9 EXAMINER STOGNER: At this time call for
10 appearances.

11 MR. CARR: May it please the Examiner, my name is
12 William F. Carr with the Santa Fe law firm Campbell, Carr
13 and Berge.

14 We represent ARCO Permian in this matter, and I
15 have two witnesses.

16 EXAMINER STOGNER: Any other appearances?

17 MR. KELLAHIN: Mr. Examiner, I'm Tom Kellahin of
18 the Santa Fe law firm of Kellahin and Kellahin, appearing
19 this morning on behalf of Louis Dreyfus Natural Gas
20 Corporation.

21 EXAMINER STOGNER: Any other appearances?

22 Mr. Carr, is your -- I'm sorry.

23 MR. CARR: Mr. Examiner, the witnesses I will
24 present in this case are the witnesses who testified in the
25 preceding matter.

1 I would request that the record reflect that the
2 witnesses remain under oath and that the credentials as
3 expert of both Mr. Scarborough and Mr. Percy remain a
4 matter of record.

5 EXAMINER STOGNER: Let the record show that Mr.
6 Scarborough and Mr. Percy, who appeared in Case Number
7 11,442, had their credentials accepted and have been
8 previously sworn.

9 MR. CARR: At this time we call Mr. Scarborough.

10 LEE M. SCARBOROUGH,
11 the witness herein, after having been first duly sworn upon
12 his oath, was examined and testified as follows:

13 DIRECT EXAMINATION

14 BY MR. CARR:

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

16 A. Lee M. Scarborough.

17 Q. Mr. Scarborough, are you familiar with the
18 Application filed in this case on behalf of ARCO?

19 A. Yes, sir.

20 Q. Are you familiar with the proposed well and the
21 status of the subject lands?

22 A. Yes, sir.

23 Q. Would you briefly state what ARCO seeks with this
24 Application?

25 A. Pooling from the base of the Abo to the base of

1 the Morrow formation, underlying the west half of Section
2 36 for formations developed on a 320-acre spacing in
3 Township 17 South, Range 28 East.

4 Q. And again, Mr. Scarborough, in this case ARCO
5 does not seek to pool interests above the base of the ABO;
6 is that right?

7 A. That's correct.

8 Q. To what well will this acreage be dedicated?

9 A. The Dorothy 36 State Com Well Number 1, to be
10 drilled at an unorthodox location 1163 feet from the south
11 line and 1647 feet from the west line.

12 Q. Has that unorthodox location previously been
13 approved by the Oil Conservation Division?

14 A. Yes, sir.

15 Q. And is Exhibit Number 1 a copy of administrative
16 Order NSL-3607 which approves that location?

17 A. Yes, sir.

18 Q. And when was that received? December 21st?

19 A. Yes, sir.

20 Q. A date of December 21st.

21 Have you prepared exhibits for presentation in
22 this case?

23 A. Yes, I have.

24 Q. Do you have a set of those exhibits with you?

25 A. Yes, sir.

1 Q. Let's go to what has been marked as Exhibit
2 Number 2. Would you identify this, please?

3 A. This is a nine-section plat, our drill-site
4 section in the middle. It's got the unit outlined in red
5 with the location marked on it.

6 Q. Let's go to Exhibit Number 3. Would you identify
7 that, please?

8 A. Exhibit Number 3 is a plat of Section 36. The
9 outline -- the unit is outlined in red. It has the
10 location spotted on it and the ownership.

11 Q. And the primary objective of the proposed well is
12 what formation?

13 A. The Morrow.

14 Q. All right, let's go to the spreadsheet, which is
15 marked Exhibit Number 4. Can you identify that, please,
16 for Mr. Stogner?

17 A. Yes, sir, that is our working interest owner
18 breakout. It's a listing of all the working interest
19 owners, their total unit participation and tract
20 participation.

21 Q. What percentage of the acreage in this spacing
22 unit has been voluntarily committed to this well?

23 A. 88 percent.

24 Q. And which of the interest owners shown on Exhibit
25 Number 4 have decided to participate or are otherwise

1 committed?

2 A. ARCO, Amoco, Marathon, Yates Petroleum, and Sun
3 Operating, Limited.

4 Q. And what is the status of the Sun interest?

5 A. The Sun interest was a lease that we purchased.

6 Q. At this point in time, then, the only interest
7 owner who has not committed to the well is the Louis
8 Dreyfus --

9 A. Yes, sir.

10 Q. In your opinion, have you made a good-faith
11 effort to obtain the voluntary participation of all
12 interest owners in this tract?

13 A. Yes, sir.

14 Q. And when did you commence your efforts to obtain
15 this voluntary participation?

16 A. November 2nd of 1995.

17 Q. Is Exhibit Number 5 a copy of the letters that
18 have been sent by ARCO to achieve voluntary participation
19 in the well?

20 A. Yes, sir.

21 Q. And what did you offer the interest owners in
22 this well?

23 A. We offered them to join, farm out, or to purchase
24 their interest.

25 Q. Did you follow up with telephone calls --

1 A. Yes, sir.

2 Q. -- to the interest owners?

3 A. Yes, sir, we did.

4 Q. Would you identify what has been marked as ARCO
5 Exhibit Number 6?

6 A. That is our call sheet, listing the date, caller,
7 company, contact, status, phone number and remarks on each
8 of the calls that we made.

9 Q. Let's go back to the last two pages in Exhibit
10 Number 5. Is this the AFE for the Dorothy 36 State Com
11 Number 1 well?

12 A. Yes, it is.

13 Q. Was this AFE provided to Louis Dreyfus?

14 A. Yes.

15 Q. Are the totals on this AFE the same as those
16 presented in the previous case?

17 A. Yes, they are.

18 Q. Would you review the dryhole and completed well
19 cost?

20 A. Dryhole cost is \$496,800, completed well cost is
21 \$713,800.

22 Q. Are these costs in line with what has been
23 charged by other operators in the area for similar wells?

24 A. Yes, they are.

25 Q. Is Exhibit Number 7 an affidavit with attached

1 letters confirming that notice of today's hearing has been
2 provided in accordance with OCD rules?

3 A. Yes, sir.

4 Q. Have you made an estimate of the overhead and
5 administrative costs to be incurred while drilling and
6 producing this well?

7 A. Yes, sir.

8 Q. And what are they?

9 A. \$528,000 [*sic*] and \$546.

10 Q. Are these from the 1995 *Ernst & Young* survey for
11 wells to this depth in this area?

12 A. Yes, they are.

13 Q. And do you recommend that these figures be
14 incorporated into the order that results from this hearing?

15 A. Yes.

16 Q. Does ARCO seek to be designated operator of the
17 proposed well?

18 A. Yes, sir.

19 Q. Were Exhibits 1 through 7 either prepared by you
20 or compiled under your direction?

21 A. Yes, they were.

22 MR. CARR: At this time, Mr. Stogner, we would
23 move the admission into evidence of ARCO Exhibits 1 through
24 7.

25 EXAMINER STOGNER: Any objections?

1 MR. KELLAHIN: No objection.

2 EXAMINER STOGNER: Exhibits 1 through 7 will be
3 admitted into evidence.

4 MR. CARR: That concludes my direct examination
5 of Mr. Scarborough.

6 EXAMINATION

7 BY EXAMINER STOGNER:

8 Q. Those overhead charges, again?

9 A. \$5828 and \$546.

10 Q. And again on this one, how about the royalty
11 interest?

12 A. All state.

13 Q. All state. And again on this one, is it all
14 formations spaced on 320, or all formations from the base
15 of the Abo to the base of the Morrow?

16 A. It's from the base of the Morrow -- below the
17 base of the Abo.

18 Q. The same as your other one?

19 A. Yes, sir.

20 Q. Now, Dreyfus's interest is committed to the
21 drilling of the Dancer well, but not to this one; is that
22 correct?

23 A. That's correct.

24 Q. And it appears you've been talking to Dreyfus up
25 until -- What? Three days ago?

1 A. Yes, sir.

2 Q. And in a nutshell, what seems to be the holdup,
3 or what's --

4 A. They're waiting on management approval.

5 EXAMINER STOGNER: Okay. I have no other
6 questions of this witness.

7 MR. KELLAHIN: Follow-up question, Mr. Examiner.

8 EXAMINATION

9 BY MR. KELLAHIN:

10 Q. Mr. Scarborough, will ARCO afford the opportunity
11 to Dreyfus to execute the joint operating agreement that
12 you're proposing to operate this well under, in lieu of a
13 force-pooling application?

14 A. Yes, sir.

15 Q. What's the timing for the drilling of this well?

16 A. We would like to drill it January, this month.

17 Q. In sequence, would this well be drilled prior to
18 the one we just discussed in the prior case?

19 A. Yes, sir.

20 Q. Is the same rig being used for both wells?

21 A. If we can get them in line, we'd like to use the
22 same rig, yes.

23 Q. How big a drilling program do you have in line
24 with this well in this particular operation? How many
25 wells are involved?

1 A. Three.

2 Q. These two force-pooling wells and a third well?

3 A. A third well that we have not put together yet,
4 we're working on.

5 Q. Do you have a site for that well yet?

6 A. Yes, we do.

7 Q. And where is that well to be located?

8 A. It is in Section 23 to the north.

9 MR. KELLAHIN: Thank you, Mr. Examiner.

10 EXAMINER STOGNER: Any other questions?

11 MR. CARR: Nothing further.

12 EXAMINER STOGNER: You may be excused.

13 MR. CARR: At this time we call Mr. Percy.

14 DAVID B. PEARCY,

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

17 DIRECT EXAMINATION

18 BY MR. CARR:

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

20 A. David B. Percy.

21 Q. Mr. Percy, are you familiar with the Application
22 filed in this case?

23 A. Yes, I am.

24 Q. Are you also familiar with the subject area and
25 the proposed well?

1 A. Yes, I am.

2 Q. Have you made a geological study of the area
3 that's affected --

4 A. I have.

5 Q. -- by this Application?

6 Have you prepared exhibits for presentation here
7 today?

8 A. Yes, I have.

9 Q. Initially, could you identify the primary
10 objective in this well?

11 A. Again, the primary objective is Morrow sand.

12 Q. And what are the secondary objectives?

13 A. The Atoka and the Cisco formations.

14 Q. If you got a well, an oil well, at this location
15 and were required to dedicate 40 acres to it, are all
16 interests in that 40 acres committed to the well?

17 A. Yes, they are.

18 Q. And this is in the same area that was discussed
19 in the prior case; is that not correct?

20 A. That is correct, we have drilled 31 wells in this
21 six-township area.

22 Q. Let's go to Exhibit Number 8, the structure map.
23 Can you identify and review that?

24 A. This is the same structure map on top of the
25 lower Morrow marker. Again, structure on top of these

1 Morrow sands has very little to do with the good sand
2 accumulations.

3 Q. Let's go to the net pay map, Exhibit 9. Could
4 you review that for the Examiner?

5 A. This shows again the thickness of the lower
6 Morrow "C" sand, which has been an excellent producer to
7 the north in Section 25. You can see from the map that's
8 prepared that our pay interval is quite thick here. We
9 believe we can track that sand running down through Section
10 25, the corner of the -- northeast corner of Section 36,
11 and down into Sections 31 and south to Section 6.

12 What we are targeting for our well is a parallel
13 developed lower Morrow sand which we have reason to believe
14 is there, based on control to the north and south.

15 Q. Let's move to Exhibit Number 10, the cross-
16 section. Initially, Mr. Percy, you might identify the
17 line for the cross-section on the preceding exhibits since
18 there appears to be no trace for it.

19 A. That's right, the cross-section runs from the
20 well in the northeast quarter of Section 36 right at 50
21 feet of pay, runs through the proposed location, and then
22 to the west to a well in Section 35 that is just off the
23 net pay map, that's just in the blank space there.

24 Q. Basically, what does this cross-section show?

25 A. This cross-section shows that the good well on

1 the right-hand side is perforated in our lower Morrow "C"
2 interval, that our proposed well expects to find a separate
3 sand that is in that same "C" interval, and that the well
4 that's just off the map on the left-hand side, the ARCO
5 "BX", found a sand in the "C" interval, but it was a third
6 pod and not connected in any way to the other two wells.

7 Q. Let's go to Exhibit Number 11. Will you identify
8 and review that?

9 A. Exhibit 11 shows the cumulative production in BCF
10 per well. Point out the two excellent wells in Section 25
11 as well as the 7.6-BCF well in the northeast quarter of
12 Section 36 that produced these gas volumes from that lower
13 Morrow "C" sand.

14 Q. Are you prepared to make a recommendation to the
15 Examiner as to the risk penalty that should be assessed
16 against any nonparticipating interest owner?

17 A. Yes, I recommend a 200-percent penalty.

18 Q. Do you believe there's a chance that the well at
19 the proposed location, in fact, could be an uneconomical
20 well?

21 A. There's a definite chance that we would not find
22 sand here because we're dealing with that Morrow fluvial
23 environment where the sands can disappear very quickly from
24 one well to the other.

25 Q. In your opinion, will granting this Application

1 and the drilling of the proposed well be in the best
2 interest of conservation, the prevention of waste and the
3 protection of correlative rights?

4 A. Yes, it would.

5 Q. And how soon does ARCO plan to actually spud this
6 well?

7 A. We would like to spud this well within the next
8 seven days.

9 Q. So you're just -- As soon as you get approval,
10 you're ready to go?

11 A. Yes, sir.

12 Q. Were Exhibits 8 through 11 prepared by you?

13 A. Yes, they were.

14 MR. CARR: Mr. Stogner, at this time we would
15 move the admission into evidence of ARCO Exhibits 8 through
16 11 into evidence.

17 EXAMINER STOGNER: Are there any objections?

18 MR. KELLAHIN: No objection.

19 EXAMINER STOGNER: Exhibits 8 through 11 will be
20 admitted into evidence.

21 MR. CARR: That concludes my direct examination
22 of Mr. Percy.

23 EXAMINER STOGNER: Thank you, Mr. Carr.

24 Mr. Kellahin, your witness.

25 MR. KELLAHIN: Thank you, Mr. Examiner.

CROSS-EXAMINATION

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BY MR. KELLAHIN:

Q. Mr. Percy, would you turn with me to Exhibit Number 9? This is a net-pay isopach on this lower Morrow "C" sand member; is that what I'm looking at?

A. That's correct.

Q. And porosity cutoff value you've used here is a porosity of ten percent?

A. Ten percent from the density logs, that's correct.

Q. When I look at my copy, there's an area that has been blanked out with white. Did you intend to exclude that from the display, or is that a copying error?

A. What I intended to exclude was areas that are not immediately adjacent to the well.

Q. All right. So that's not a copying error?

A. No, sir.

Q. You intended this to look this way?

A. Right, mine looks the same way.

Q. All right, sir. When we're looking in Section 36 for possible well locations, this would be the first well in the section that would attempt to test the Morrow "C" sand?

A. It would not be the first well in that section. Again, the well in the northeast quarter with 50 feet of

1 sand already did find the lower Morrow there. This, in
2 fact, would be the third well in the section to look for
3 the Morrow sands.

4 Q. That well up in Unit Letter A of this section, is
5 it still producing?

6 A. That well is still capable of producing. I
7 believe it has been shut in at this time.

8 Q. Is that an ARCO-operated well?

9 A. No, sir, that is not ARCO-operated.

10 Q. What's the spacing unit dedicated to that well?

11 A. The 320 that's dedicated to that well is a
12 standup in the east half.

13 Q. All right. So the only remaining available
14 spacing unit, then, for this well is the west half?

15 A. That's correct.

16 Q. Apart from the well in Unit Letter A, how far do
17 we have to go to find the next well that's currently
18 capable of producing out of the Morrow "C" sand?

19 A. That would be the well in Section 35, which again
20 doesn't show up on that map, but you're welcome to look at
21 any other exhibits that I have here. You can see this well
22 in Section 35 is in the southwest quarter, and it would be
23 in spot letter O.

24 Q. All right. As we move south of the proposed
25 location, how far south do we have to go to get a producing

1 Morrow sand member out of the "C" zone?

2 A. We need to go down into the southeast quarter of
3 Section 1, to find another well that's produced from the
4 Morrow.

5 Q. It's the one with 16 feet on Exhibit Number 9?

6 A. That's a dryhole in the -- Excuse me, that well,
7 the 16 feet that's produced in there, is -- that 16 feet
8 from the Morrow "C" was not productive. However, there was
9 another interval of Morrow sand which did produce, and
10 that's reflected on my cum map.

11 Q. All right, sir. When I look at the cross-
12 section, you've selected which two wells to put on the
13 cross-section? I'm trying to find your line of cross-
14 section.

15 A. Yes, sir. It's again in spot A of 36, running
16 through the proposed location and off to Section 35, the
17 well there, it would be in spot O.

18 Q. All right. You've cut through perpendicular to
19 the line of the channel if you will?

20 A. Yes, I've attempted to do so.

21 Q. And your interpretation of the probable thickness
22 at your proposed location for the "C" sand member is what,
23 sir?

24 A. It could range up to 40 feet. I'm showing a
25 possibility of even 60 within this area.

1 Q. When we get within that 40-foot-or-greater
2 contour line, there is other choices for well locations in
3 the west half that would be standard. Describe for us
4 specifically why you have chosen this location, as opposed
5 to some other location within the 40-foot contour.

6 A. We felt that we wanted to get as far south as we
7 could to find the best developed sand. Again, this is a
8 case where we -- To the north you'll see the five foot of
9 sand that's there, just right on the flank of this channel.
10 Although I have mapped the possibility of 60 feet in there,
11 we're just not that sure that it could be that thick.

12 Q. Why is going south of importance to you?

13 A. We think that going south will get us away from
14 some of these other thinner wells and get us more into an
15 area that hasn't been tested adequately for the "C" sand.

16 Q. Is this one of those strategies where you're
17 trying to crowd the side bank of the channel that had the
18 greatest potential porosity values because of the way the
19 sand was moved by the stream system?

20 A. We think that that will give us the best
21 opportunity for getting the better-developed sand.

22 As you'll notice from this other semiparallel
23 sand channel that's off to the east, that there is a bend
24 here too, and we think that bend might help us to develop
25 the better point-bar developments, that's correct.

1 Q. So that's part of your strategy here for well
2 location?

3 A. Yes, sir, it is. We're just trying to tie as
4 much geological input as we can into selecting the best
5 locations.

6 MR. KELLAHIN: Thank you, Mr. Examiner.

7 EXAMINER STOGNER: Thank you, Mr. Kellahin.

8 Mr. Carr, any redirect?

9 MR. CARR: No redirect.

10 EXAMINER STOGNER: One other item, Mr. Carr.

11 I'll take administrative notice of the file on
12 Administrative Order NSL-3607. Even though this calls this
13 case as unorthodox well location, I'm assuming that --

14 MR. CARR: That portion can be dismissed. It was
15 filed prior to the administrative approval of the location.

16 EXAMINER STOGNER: Okay. I have no other
17 questions of this witness. You may be excused.

18 MR. CARR: That concludes our presentation in
19 this case.

20 EXAMINER STOGNER: Does anybody else have
21 anything further in Case Number 11,443?

22 Then this case will be taken under advisement.

23 (Thereupon, these proceedings were concluded at
24 8:58 a.m.)

25

* * *

CERTIFICATE OF REPORTER

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

I, Steven T. Brenner, Certified Court Reporter and Notary Public, HEREBY CERTIFY that the foregoing transcript of proceedings before the Oil Conservation Division was reported by me; that I transcribed my notes; and that the foregoing is a true and accurate record of the proceedings.

I FURTHER CERTIFY that I am not a relative or employee of any of the parties or attorneys involved in this matter and that I have no personal interest in the final disposition of this matter.

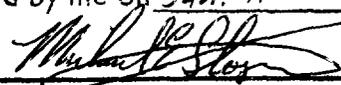
WITNESS MY HAND AND SEAL January 12th, 1996.



STEVEN T. BRENNER
CCR No. 7

My commission expires: October 14, 1998

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 11443, heard by me on Jan. 11 1996.

, Examiner
Oil Conservation Division