## 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 DIVISION OF ATLANTIC RICHFIELD COMPANY, FOR COMPULSORY POOLING AND UNORTHODOX WELL LOCATION, EDDY COUNTY, NEW MEXICO CASE NO. 11,641

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## **REPORTER'S TRANSCRIPT OF PROCEEDINGS**

EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

November 21st, 1996

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH, Hearing Examiner, on Thursday, November 21st, 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.

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INDEX November 21st, 1996 Examiner Hearing CASE NO. 11,641 PAGE APPEARANCES 3 **APPLICANT'S WITNESSES:** LEE M. SCARBOROUGH (Landman) Direct Examination by Mr. Carr 4 Examination by Examiner Catanach 11 <u>DAVID B. PEARCY</u> (Geologist) Direct Examination by Mr. Carr 13 Examination by Examiner Catanach 16 **REPORTER'S CERTIFICATE** 22 \* \* \* EXHIBITS Applicant's Identified Admitted Exhibit 1 6 11 Exhibit 2 7 11 Exhibit 3 8 11 Exhibit 4 9 11 Exhibit 5 9 11 Exhibit 6 14 16 Exhibit 7 14 16 \* \* \*

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

\* \* \*

1	WHEREUPON, the following proceedings were had at
2	9:56 a.m.:
3	EXAMINER CATANACH: Call the hearing back to
4	order, and at this time we'll call Case 11,641.
5	MR. CARROLL: Application of ARCO Permian, a
6	division of Atlantic Richfield Company, for compulsory
7	pooling and unorthodox well location, Eddy County, New
8	Mexico.
9	EXAMINER CATANACH: Are there appearances in this
10	case?
11	MR. CARR: May it please the Examiner, my name is
12	William F. Carr with the Santa Fe law firm Campbell, Carr,
13	Berge and Sheridan. We represent ARCO Permian in this
14	matter, and I have two witnesses.
15	EXAMINER CATANACH: Any other appearances?
16	Will the two witnesses please stand to be sworn
17	in?
18	(Thereupon, the witnesses were sworn.)
19	MR. CARR: At this time, we call Lee Scarborough.
20	LEE M. SCARBOROUGH,
21	the witness herein, after having been first duly sworn upon
22	his oath, was examined and testified as follows:
23	DIRECT EXAMINATION
24	BY MR. CARR:
25	Q. Would you state your name for the record, please?

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STEVEN T. BRENNER, CCR (505) 989-9317

1	A. Lee Scarborough.	
2	Q. Where do you reside?	
3	A. Midland, Texas.	
4	Q. By whom are you employed?	
5	A. ARCO Permian.	
6	Q. And what is your current position with Arco?	
7	A. Landman.	
8	Q. Mr. Scarborough, have you previously testified	
9	before this Division?	
10	A. Yes, sir.	
11	Q. At the time of that testimony, were your	
12	credentials as a petroleum landman accepted and made a	
13	matter of record?	
14	A. Yes, sir.	
15	Q. Are you familiar with the Application filed in	
16	this case?	
17	A. Yes, sir.	
18	Q. And are you familiar with the status of the lands	
19	in the subject area?	
20	A. Yes, sir.	
21	MR. CARR: Are the witness's qualifications	
22	acceptable?	
23	EXAMINER CATANACH: Yes, they are.	
24	Q. (By Mr. Carr) Could you briefly state what ARCO	
25	seeks in this matter?	

1	A. Pooling the following acreage in Section 34,
2	Township 17 South, Range 28 East: west half of formations
3	developed on 320-acre spacing, southwest of formations
4	developed on 160-acre spacing, south half, southwest for
5	formations developed on 80-acre spacing, and the southeast,
6	southwest for formations developed on 40-acre spacing.
7	Q. And to what well do you propose to dedicate these
8	spacing units?
9	A. Galileo 34 State Com Well Number 1.
10	Q. And what is the location proposed for that well?
11	A. Unorthodox location, 1017 feet from the south
12	line, 1379 feet from the west line.
13	Q. And you are proposing to pool from the surface to
14	the base of the Abo; is that correct?
15	A. Yes, sir.
16	Q. Have you prepared certain exhibits for
17	introduction in this case?
18	A. Yes, sir.
19	Q. Would you refer to what has been marked for
20	identification as ARCO Exhibit Number 1.
21	A. Yes.
22	Q. And what is that?
23	A. It is a land map showing the proration unit and
24	the proposed well location and tract numbers.
25	Q. What is the primary objective in the proposed

1	well?
2	A. We're drilling this well to the Morrow.
3	Q. Okay.
4	A. The primary objective, however, is the Atoka.
5	Q. And you want to pool from the surface to the base
6	of the Morrow?
7	A. Yes.
8	Q. Let's go to Exhibit Number 2. Can you review
9	that for Mr. Catanach?
10	A. Exhibit Number 2 is the ownership breakdown for
11	the proration unit.
12	Q. What percentage of the acreage in a 320-acre unit
13	has been voluntarily committed to this well?
14	A. Approximately 90 percent.
15	Q. Are there owners in this acreage that you have
16	been unable to locate?
17	A. No, sir.
18	Q. And how many interest owners have you identified
19	who will be subject to the pooling order?
20	A. Two.
21	Q. And who are they?
22	A. Yates Petroleum and the Moore Trust.
23	Q. Could you briefly review for Mr. Catanach the
24	current status of your negotiations with Yates Petroleum
25	Corporation?

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1	A. I have a verbal approval from Yates on October
2	22nd that they will participate in the well.
3	Q. So you anticipate that actually this compulsory
4	pooling order will only pool the interests of the Moore
5	Trust?
6	A. Yes, sir.
7	Q. Have you made a good-faith effort to obtain the
8	voluntary participation of the Moore Trust?
9	A. Yes, sir.
10	Q. And could you review for the Examiner those
11	efforts?
12	A. On 8-28-96, we sent letters offering an
13	opportunity to participate or to farm out their interest.
14	Q. How recently have you been in communication with
15	representatives of the Moore Trust?
16	A. That would be on November 13th.
17	Q. And what was their last word to you on whether or
18	not they will participate in the well?
19	A. They are reviewing our operating agreement at
20	this time.
21	Q. Is Exhibit Number 3 copies of letters to the
22	Moore Trust reflecting your efforts to obtain their
23	voluntary participation in the well?
24	A. Yes, sir.
25	Q. Mr. Scarborough, is it possible that you might

1	have everyone voluntarily in?
2	A. Yes.
3	Q. And if that occurs, would you immediately notify
4	the Division
5	A. Yes, sir.
6	Q so that this case could be dismissed?
7	A. I will.
8	Q. What is Exhibit Number 4?
9	A. It is the AFE for the well.
10	Q. And Would you review the totals as reflected on
11	this AFE?
12	A. It reflects a dryhole cost of \$450,300, completed
13	well cost of \$643,600.
14	Q. Are these costs consistent with what ARCO has
15	incurred drilling similar wells in the area?
16	A. Yes, sir.
17	Q. Is Exhibit Number 5 an affidavit confirming that
18	notice of this hearing, in fact, has been provided to the
19	Moore Trust and Yates and other interest owners who have
20	subsequently joined in this effort?
21	A. Yes, sir.
22	Q. Have you made an estimate of the overhead and
23	administrative costs incurred while drilling the well and
24	then while producing it if it is successful?
25	A. Yes, sir.

1	Q. And what are those figures?
2	A. \$6000 drilling well rate and \$600 producing well
3	rate.
4	Q. And what is the source of these figures?
5	A. Those come from the Ernst and Young survey which
6	has been adjusted to accurately reflect our costs, and
7	they're also the same as Nearburg's costs for similar wells
8	in the area.
9	Q. These are in line with actual costs incurred by
10	ARCO for operating properties in the area?
11	A. Yes, sir.
12	Q. Do you recommend these figures being incorporated
13	into the Order that results from today's hearing?
14	A. Yes, sir.
15	Q. Does ARCO seek to be designated operator of the
16	well?
17	A. Yes, we do.
18	Q. Will ARCO be calling a geological witness to
19	review the risk associated with the development of this
20	acreage?
21	A. Yes, sir.
22	Q. Were Exhibits 1 through 5 either prepared by you
23	or compiled at your direction?
24	A. Yes, they were.
25	MR. CARR: Mr. Catanach, at this time we would

move the admission into evidence of ARCO Exhibits 1 through 1 2 5. EXAMINER CATANACH: Exhibits 1 through 5 will be 3 admitted as evidence. 4 5 MR. CARR: And that concludes my direct 6 examination of Mr. Scarborough. 7 EXAMINATION 8 BY EXAMINER CATANACH: 9 0. Mr. Scarborough, you've got a verbal from Yates, 10 and what is the status on the Moore interests? You're still negotiating with them? 11 12 Yes, sir. Α. 13 And they may voluntarily commit? Q. 14 Α. We hope they will, yes, sir. Okay. The Application, you're seeking to pool 15 0. from the surface to the base of the Morrow formation? 16 17 Α. Yes, sir. EXAMINER CATANACH: Okay. Your advertisement for 18 this case, Mr. Carr, says from the surface to the base of 19 20 the Atoka formation. 21 MR. CARR: That's right. 22 EXAMINER CATANACH: We're going to need to correct that, I think. 23 24 MR. CARR: I think so. I think you'll need to... 25 MR. PEARCY: That's the way it should have been

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1	stated, from base of Abo to the base of the Morrow.
2	MR. CARR: Well, we'll have to just re-advertise
3	that to pick that up, then. We'll amend the Application to
4	cover that.
5	EXAMINER CATANACH: Okay, so actually what you're
6	pooling is from the base of the Morrow I mean, from the
7	base of the Abo to the base of the Morrow?
8	MR. CARR: To the base of the Morrow.
9	EXAMINER CATANACH: Okay, in any case that's
10	going to have to be readvertised
11	MR. CARR: It will.
12	EXAMINER CATANACH: before we can do anything
13	on it, so
14	Q. (By Examiner Catanach) ARCO has got all the
15	interest in the southwest quarter covering the other three
16	proration units?
17	A. Yes, sir.
18	Q. Okay. You're also seeking to pool an 80-acre
19	unit, Mr. Scarborough. Do you know if there's any 80-acre
20	pools in this area?
21	A. I do not, no.
22	Q. The Your drilling costs, has ARCO drilled
23	wells to similar depth in this area recently?
24	A. Yes, sir.
25	Q. And these are in line with those drilling costs?

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1	A. Yes, sir.
2	EXAMINER CATANACH: I have no further questions
3	of the witness.
4	MR. CARR: Mr. Catanach, at this time we call
5	Dave Pearcy.
6	DAVID PEARCY,
7	the witness herein, after having been first duly sworn upon
8	his oath, was examined and testified as follows:
9	DIRECT EXAMINATION
10	BY MR. CARR:
11	Q. Would you state your name for the record, please?
12	A. David Pearcy.
13	Q. And where do you reside?
14	A. Midland, Texas.
15	Q. By whom are you employed?
16	A. By ARCO Permian.
17	Q. What is your position with ARCO Permian?
18	A. Senior geologist.
19	Q. Have you previously testified before the Oil
20	Conservation Division?
21	A. Yes, I have.
22	Q. And at that time were your credentials as a
23	petroleum geologist accepted and made a matter of record?
24	A. They were.
25	Q. Are you familiar with the Application filed in

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this case? 1 2 Α. Yes. 3 Q. And have you made a geological study of the area that is the subject of this Application? 4 5 Α. I have. MR. CARR: Are the witness's qualifications 6 7 acceptable? EXAMINER CATANACH: Yes, they are. 8 (By Mr. Carr) Mr. Pearcy, let's go to what has 9 Q. 10 been marked ARCO Exhibit Number 6. I would ask you to identify that for Mr. Catanach and review the information 11 on this exhibit. 12 This exhibit shows the cumulative gas production 13 Α. 14 from Atoka and Morrow wells in the vicinity of the Galileo well. 15 16 Are there dryholes in the immediate area? ο. Yes, there are numerous dryholes in the area. 17 Α. I want to point out that the Atoka primary 18 19 objective has produced from several wells which are on the 20 eastern half of the map, although these cums have been 21 generally small. That's still what we're hoping that we 22 might get a BCF or more out of at the proposed location. 23 Q. Let's go to Exhibit Number 7. Can you review that? 24 25 Exhibit 7 is a net sand map of this basal Atoka Α.

sand, is our primary objective, showing the proposed 1 location there in the southwest quarter of Section 34, and 2 3 that this unorthodox location will be necessary in order to tap into this sand pod, that you see is quite restricted. 4 And have you identified this pod by using seismic 5 Q. information? 6 7 Α. That is correct. 8 In your opinion, are there other similar pods in Q. 9 the immediate vicinity? 10 Α. It looks like there are several pods, again from 11 these wells that have produced just east. You can see that 12 we're getting similar sand thicknesses to what we anticipate in those wells in Section 35 and in 26 and just 13 14 on the north end there in Section 23, some sands which 15 generally are 15 feet or less. 16 Are you prepared to make a recommendation to the 0. 17 Examiner concerning the risk that should be assessed against any interest owner that doesn't voluntarily commit 18 19 to the well? 20 Α. Yes, I am. 21 Q. And what do you recommend? I recommend the full 200-percent penalty. 22 Α. 23 0. Do you believe that there is a chance at this 24 location that ARCO could drill a well that would not be an 25 economic success?

1	A. As shown by the offsetting wells, many of which
2	are dryholes, yes.
3	Q. In your opinion, will granting of this
4	Application and the drilling of the proposed well be in the
5	best interest of conservation, the prevention of waste and
6	the protection of correlative rights?
7	A. Yes.
8	Q. How soon does ARCO hope to actually drill the
9	well?
10	A. Within 30 to 45 days.
11	Q. Were Exhibits 6 and 7 prepared by you?
12	A. Yes, they were.
13	MR. CARR: At this time, Mr. Catanach, we move
14	the admission into evidence of ARCO Exhibits 6 and 7.
15	EXAMINER CATANACH: Exhibits 6 and 7 will be
16	admitted as evidence.
17	MR. CARR: And that concludes my examination of
18	Mr. Pearcy.
19	EXAMINATION
20	BY EXAMINER CATANACH:
21	Q. Mr. Pearcy, we're using 3-D seismic or just 2-D
22	seismic?
23	A. That is 3-D seismic.
24	Q. 3-D. Have you utilized 3-D seismic to identify
25	these sandbodies in this area?

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1	A. This Atoka sand is a 3-D objective, and as you
2	can see, there's not much in the way of subsurface to tell
3	us the sand is there. So we're beginning to hope we can
4	locate these, and this will be a first test of that idea
5	for the Atoka.
6	Q. Do you believe the resolution of your 3-D seismic
7	data is accurate enough to where you can map these the
8	extent of these sands, the 5 to 10 feet?
9	A. Well, we hope so, sir. We're seeing something
10	that looks like an anomaly in this area, which we will soon
11	find out if we can drill the well.
12	But we don't want to drill at a location that's
13	going to be less than optimum.
14	Q. So what your objective is, you're trying to drill
15	basically in the middle of this anomaly?
16	A. Yes, that's right.
17	Q. And you believe by moving north to a standard
18	location, you're increasing or you're increasing the
19	risk of not encountering
20	A. We certainly believe so.
21	Q. There's no offset Atoka production to the south.
22	A. Nothing
23	Q. Have there been any
24	A to the south, within the scope of this map.
25	It looks like all the other production has been primarily

1 off there, to the east side.

2	I see one well on the southwest which tested
3	water from the Atoka, and there is another well directly
4	west, about four miles from the proposed location, which
5	also tested a little bit of gas but never produced
6	anything.
7	Q. Do you believe that there ultimately may be any
8	Atoka production to the south in Sections 3 and 4?
9	A. It's hard to tell. You see on the basal Atoka
10	sand map that we're showing that there is a potential
11	location that we've discussed in that area, although that
12	primary objective is for the Morrow. We'll see.
13	Q. Is that ARCO's acreage in Section 3?
14	A. We In which section, sir?
15	Q. Three?
16	A. Three, we have an interest in the acreage in
17	Section 3. There are others as well.
18	EXAMINER CATANACH: Okay, Mr. Carr, with regards
19	to the unorthodox location
20	MR. CARR: Yes.
21	EXAMINER CATANACH: who did you guys give
22	notice to?
23	MR. CARR: We gave notice to the owners in the
24	tract and also the offsets. I can't I maybe able to
25	identify who they are.

1	But we did give notice to the parties toward whom
2	we were moving the well.
3	THE WITNESS: I know the east half of Section 3
4	is operated by Devon, that they were notified.
5	Q. (By Examiner Catanach) East half of Section 3 is
6	Devon?
7	A. East half of Section 3, Devon operates that
8	Morrow gas well.
9	MR. CARR: On the affidavit, Mr. Catanach, we've
10	got the parties to whom notice was given, and that included
11	the offset operators, the affected parties under Rule 104,
12	as well as the Moore Trust and Yates, who are in the
13	spacing unit.
14	And I can't tell you tract by tract, but I can
15	provide you that if you would like.
16	EXAMINER CATANACH: Okay, I need to see that.
17	MR. CARR: Okay.
18	Q. (By Examiner Catanach) Mr. Pearcy, you're going
19	to drill down to the Morrow and test it. What are the
20	prospects in the Morrow?
21	A. We think they're rather dim at this location,
22	just based on the lack of any significant Morrow sands that
23	appear to be on trend. Of course, there could be something
24	we stumble into, but based on what we see from the
25	subsurface as well as the 3-D, we're not optimistic at all.

Just good practice, though, to drill on through 1 2 the Morrow. 3 What are the -- Are the secondary objectives in Q. 4 the well pretty good, or how would you rate those? 5 Rather speculative. In addition to the Morrow, Α. 6 there would be the uphole possibilities in the Strawn, 7 Cisco and Canyon, perhaps in the Wolfcamp. We have had Wolfcamp shows in some of the other surrounding wells. 8 And we just feel that Atoka plus those other 9 10 possibilities make it a viable well to be drilled. EXAMINER CATANACH: I believe that's all I have 11 12 of the witness. 13 MR. CARR: That concludes our presentation in this case. 14 15 We will provide you with the identification of 16 who has those offsetting tracts. 17 EXAMINER CATANACH: Okay. MR. CARR: And we will also provide an amended 18 19 advertisement, for the 19th. EXAMINER CATANACH: It would be for the 19th of 20 December. 21 22 MR. CARR: Okay. EXAMINER CATANACH: Mr. Carr, can you also check 23 to see if there are any 80-acre pools in this area? 24 25 MR. CARR: I'm sorry?

1	EXAMINER CATANACH: Check to see if there are any
2	80-acre pools
3	MR. CARR: Yeah.
4	EXAMINER CATANACH: in this area.
5	Okay. Is there anything else?
6	There being nothing further, Case Number 11,641
7	will be readvertised for the December 19th hearing.
8	(Thereupon, these proceedings were concluded at
9	10:15 a.m.)
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## CERTIFICATE OF REPORTER

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

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

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

WITNESS MY HAND AND SEAL November 27th, 1996.

STEVEN T. BRENNER CCR No. 7

My commission expires: October 14, 1998

I de herden cort Examiner JANE ON Cit Co.

STEVEN T. BRENNER, CCR (505) 989-9317

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