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:

CASE NO. 13,081

APPLICATION OF DAVID H. ARRINGTON OIL AND GAS, INC., FOR COMPULSORY POOLING AND UNORTHODOX WELL LOCATIONS, LEA COUNTY, NEW MEXICO

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

RECEIVED

BEFORE: DAVID R. CATANACH, Hearing Examiner

SEP - 4 20**0**3

Oil Conservation Division

August 21st, 2003

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH,
Hearing Examiner, on Thursday, August 21st, 2003, at the
New Mexico Energy, Minerals and Natural Resources
Department, 1220 South Saint Francis Drive, Room 102, Santa
Fe, New Mexico, Steven T. Brenner, Certified Court Reporter
No. 7 for the State of New Mexico.

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APPEARANCES

FOR THE DIVISION:

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FOR THE APPLICANT:

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Santa Fe, New Mexico 87504-2208
By: WILLIAM F. CARR

* * *

1	WHEREUPON, the following proceedings were had at
2	9:02 a.m.:
3	EXAMINER CATANACH: Call Case 13,081, Application
4	of David H. Arrington Oil and Gas, Incorporated, for
5	compulsory pooling and unorthodox well locations, Lea
6	County, New Mexico.
7	Call for appearances.
8	MR. CARR: May it please the Examiner, my name is
9	William F. Carr with the Santa Fe office of Holland and
10	Hart, L.L.P. We represent David H. Arrington Oil and Gas,
11	Inc., in this matter, and I have two witnesses.
12	EXAMINER CATANACH: Additional appearances?
13	Okay, will you swear in the witnesses?
14	(Thereupon, the witnesses were sworn.)
15	MR. CARR: At this time we call Dale Douglas.
16	DALE DOUGLAS,
17	the witness herein, after having been first duly sworn upon
18	his oath, was examined and testified as follows:
19	DIRECT EXAMINATION
20	BY MR. CARR:
21	Q. Would you state your name for the record?
22	A. Dale Douglas.
23	Q. Mr. Douglas, where do you reside?
24	A. Midland, Texas.
25	Q. By whom are you employed?

I'm an independent contractor. 1 A. 2 Q. What is your relationship with David H. Arrington 3 Oil and Gas, Inc.? 4 Α. I provide land-consulting services to Mr. 5 Arrington. Have you previously testified before the New 6 0. 7 Mexico Oil Conservation Division? Yes, sir, I have. 8 At that time, were your credentials as an expert 9 Q. 10 in petroleum land matters accepted and made a matter of record? 11 12 Α. Yes, they were. Are you familiar with the Application filed in 13 Q. this case? 14 Yes, sir. 15 A. 16 Are you familiar with the status of the lands Q. that are the subject of this Application? 17 18 A. Yes, sir. 19 In fact, you've testified in this case actually 20 twice before, have you not? 21 Α. That's correct. MR. CARR: Are Mr. Douglas's qualifications 22 acceptable? 23 24 EXAMINER CATANACH: They are. 25 Q. (By Mr. Carr) Could you briefly summarize for

Mr. Catanach what it is that Arrington seeks with this Application?

A. Arrington seeks an order pooling all minerals from the surface to the base of the Morrow formation under the west half equivalent of Irregular Section 31, Township 15 South, Range 36 East, Lea County, New Mexico, in the following manner: Lots 1, 2, 3, 4 and the east half of the west half, which is the west-half equivalent, for all formations developed on 320-acre spacing, the southwest quarter equivalent for all formations developed on 160-acre spacing, the southwest quarter of the northwest quarter for all formations developed on 40-acre spacing, to be dedicated to our proposed Royal Stimulator Number 2, to be drilled at a standard surface location of 2235 feet from the north line and 330 feet from the west line of Section 31.

At a depth of 8800 feet the well will be directionally drilled to a depth sufficient to test the Wolfcamp formation at an unorthodox location 2471 feet from the north line and 527 feet from the west line of the section.

The well will then be drilled in a southeasterly direction, intersecting the Strawn formation at an unorthodox location of 2305 feet from the south line and 888 feet from the west line of Section 31, and then the

Atoka formation at an unorthodox bottomhole location in the Atoka-Morrow formation at a point 2192 feet from the south line and 1038 feet from the west line.

The well will intersect the Morrow formation, which is the primary target, at a standard location of 1979 feet from the south line and 1218 feet from the west line, and then continue drilling to a standard bottomhole location 1900 feet from the south line and 1300 feet from the west line of the section.

- Q. Now, because of the irregular section, we have slightly more acres than allowed in each of the spacing units, correct?
 - A. That's correct.

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- Q. They still fall within the tolerance and will be standard units?
 - A. Correct, the --
- Q. Do you know the number of acres in the 320-acrespaced pool?
 - A. It's 320.56 acres.
- Q. And in the 160-acre pool
- A. The 160-acre pool is 160.13 acres.
- 22 Q. And as to 40-acre pool?
- 23 A. 40.17 acres.
- Q. This acreage has previously been pooled for this well, has it not?

- A. Yes, it has. It was previously pooled under Case

 Number 12,752 with Order Number R-11,690, also in Case

 Number 12,858 with Order Number 11,776, and these orders

 expired under their own terms, and this is an amended

 Application primarily to show the unorthodox well locations

 in these various formations.
 - Q. At all times the objective has been the Morrow, correct?
 - A. That is correct.

- Q. And the costs for drilling a well of this nature, directionally drilling as you propose, are substantial?
 - A. That is correct.
- Q. And after they'd been previously approved, that has been one of the factors that has resulted in the delays in proceeding under the prior orders, and that has recently expired?
 - A. That's correct.
- Q. Let's go to what's been marked Exhibit Number 1. Would you identify that and review it for Mr. Catanach?
- A. Yes, sir, the Exhibit 1 is a land plat identifying the lands that we're seeking to pool. The red outline is the proposed west-half equivalent of Section 31.

 Lots 1 through 4 start in the northwest quarter and run down the west boundary of that standup 320-acre unit.

Also shown on the map, there are two red circles,

one with the surface location and the second being the bottomhole location for this proposed well.

- Q. What is the status of the lands in the west half of Irregular Section 31?
 - A. All of this acreage is fee acreage.
- Q. Now, you stated the primary objective was the Morrow formation. Are there secondary targets in this well?
- A. Yes, there are. The other secondary targets are the Atoka formation which would also be on a 320-acre spacing, and the Wolfcamp formation which would be on 40-acre spacing.
- Q. The Strawn has been included, but that is not really a secondary target?
 - A. No.

- Q. That will be reviewed by Mr. Baker?
- A. That's correct.
- Q. Let's go to what is marked Arrington Exhibit
 Number 2. Would you identify and review this?
- A. Yes, sir, Exhibit Number 2 is a breakdown of the ownership, the mineral ownership, in the west half of this section, and these are the parties which we have not been able to seek -- or to obtain a voluntary agreement for the drilling of this well.

Each of these parties that we have listed, in the

right-hand column we also list the lands where their mineral ownership is and how many net mineral acres each of these parties own.

- Q. So for the estate of Rada Jackson and the unknown heirs of Thelma Champion and Mattie Pou, they have interests in Lots 1 and 2 in the east half of the northwest, and their interest is what, 12 --
- A. It's twelve-tenths [sic] of an acre, of a net mineral acre.
- Q. Okay. And then you go down through, and these are just the interest owners who are not committed?
- A. That's correct. The total number of acres of these 7 parties is 2.2 acres.
- Q. And so what percent of the working interest are we here attempting to pool today?
 - A. It's .68 percent, less than 1 percent.
- Q. Are there owners on this list who you've been unable to locate?
 - A. Yes, several of the folks we've been unable to locate. Some of them we have been able to locate and there are some family issues that are unsolvable, and they are unwilling to execute leases.
 - Q. Could you summarize for Mr. Catanach the efforts that have been made to locate and obtain the voluntary participation of each of these interest owners?

A. Yes, sir, our first contact was in August, August 15th of 2001. I will point out that the mineral ownership under this west half of 31 is quite complex, being that close to the City of Lovington. We have a lot of city lots and whatnot.

We acquired leases on the majority of the owners.

There was another company -- two other companies involved,

Chesapeake and AnSon, in which we have since gained their voluntary joinder.

The folks that we have been unable to locate, we've used most of the resources available to us, public records, Internet searches and what not. We've found either parties or family members of the majority of these people but have been unable to reach an agreement with them.

- Q. Is Exhibit Number 3 a copy of the August, 2001, letter when you initially contacted the interest owners?
 - A. Yes, it is.

- Q. And since that time you've been following up by telephone or personal contacts?
- A. Yes, sir, with all of the parties that are listed on this.
 - Q. And when were your most recent contacts with these individuals?
 - A. The ones that we've been able to locate within

the last two weeks, we've made phone calls to all of those parties and have left messages, detailed messages, on answering machines and with other family members, only one of whom has bothered to respond to the call.

- Q. Has any interest owner who cannot be located and is pooled -- will the share of any proceeds attributable to those interests be escrowed in the bank in Lea County, New Mexico?
 - A. Yes, sir, they will.

- Q. Let's go to what has been marked as Arrington Exhibit Number 4. Would you identify that, please?
- A. Yes, sir, Arrington Exhibit Number 4 is the AFE for the drilling of this well, which sets forth the anticipated cost.
- Q. And what are the dryhole and completed well costs?
- A. The estimated dryhole costs for this well are \$1,457,000, and the completed well cost is \$1,979,000.
- Q. And have you made an estimate of the overhead and administrative costs to be incurred while drilling the well and also while producing it if it is successful?
- A. Yes, sir, we have, and the rates that we would propose are \$6000 a month for the drilling well rate and \$600 a month for the producing well rate.
 - Q. Are these the rates that were approved in the

1 prior pooling order? 2 Α. Yes, sir, they were. And these are the figures that are included in 3 0. the joint operating agreement for this well? 4 A. That's correct. 5 Have they been accepted by Chesapeake? 6 Q. 7 That's correct, they have. Α. 8 Q. And AnSon? (Nods) 9 Α. Are these costs also in line with what's charged 10 Q. for similar wells, to the extent there is a similar well in 11 the area? 12 As far as the drilling and overhead rates, yes, 13 Α. 14 they are. 15 And do you recommend that these figures be Q. incorporated into the order that results from today's 16 17 hearing? 18 Α. Yes, sir, we do. Would you identify what's been marked as 19 Q. Arrington Exhibit Number 5? 20 Arrington Exhibit Number 5 is the form -- COPAS 21 Α. accounting procedure, it's the 1984 onshore form, which is 22 23 also attached to the joint operating agreement that we have in place with Chesapeake. 24

25

Q.

And does this accounting procedure provide for

the periodic adjustment of the overhead charges?

A. Yes, it does.

- Q. Do you request that the order that results from today's hearing provide for the same sort of adjustment in the overhead charges that are set by the order?
 - A. Yes, we do.
- Q. Is Arrington Exhibit Number 6 an affidavit confirming that notice of today's hearing has been provided to the interest owners subject to the pooling to the extent we can locate them, in accordance with the Rules of the Oil Conservation Division?
 - A. Yes, they do.
 - Q. And to whom was notice given?
- A. The notice was given to all interest owners subject to the pooling for the pooling portion of the case, and it was also submitted to the -- for the unorthodox-location portion of the case, it was submitted to all the offset working interest owners.
 - Q. To those who haven't joined in the well?
- A. That's correct.
- Q. Does Mr. Arrington seek to be designated operator of the proposed well?
- A. Yes, he does.
- Q. Were Exhibits 1 through 6 prepared by you or compiled under your direction and supervision?

1 Α. Yes, they were. MR. CARR: May it please the Examiner, at this 2 time we would move the admission of David H. Arrington Oil 3 and Gas, Inc., Exhibits 1 through 6. 4 EXAMINER CATANACH: Exhibits 1 through 6 are 5 admitted. 6 MR. CARR: And that concludes my direct 7 examination of Mr. Douglas. 8 9 **EXAMINATION** BY EXAMINER CATANACH: 10 Mr. Douglas, can you identify for me which 11 Q. parties you have been able to locate? 12 Yes, I can. The ones that we have been able to 13 Α. locate, if you'll look at Exhibit Number 2 where I have the 14 parties listed --15 Uh-huh. 16 Q. -- I'll just go through each one of those. 17 The Estate of Rada Jackson, it's our belief that the heirs are 18 Thelma Champion and Mattie Pou. We have located those two 19 ladies, they refuse to execute a lease. 20 Jerry Billington we have located. We actually 21 22 even spoke to him yesterday, and there's a 50-50 chance we're going to get him leased. 23 Robert Freck and Shawn Freck, we have been unable 24 to speak to them. We've spoken to family members who have 25

told us that they don't know how to find them either. They know where to find one, he's incarcerated, but the other one they have no way of locating.

The Estate of Thelma Ann Turner and the Unknown Heirs we have not contacted -- we have not been able to locate, rather.

James E. Bailey is the same.

And we have located Vera Selman. She disputes the fact that she owns this interest and does not want to execute a lease.

- Q. Okay, these are the same parties that have been pooled twice before?
 - A. Yes, they have.

- Q. And in all that time period when these orders were in effect, did you make any progress toward securing voluntary agreement with these parties?
- A. With these parties, no. There were several other parties that we had also pooled in the prior orders that we have since been able to reach an agreement with.
 - Q. Okay, so these are the remainders that --
 - A. That's correct.
 - Q. You anticipate maybe the Billington --
- A. My guess is that there's a chance we'll acquire a lease from Mr. Billington, also Robert Freck. The others I don't expect that we'll make a deal with.

- 1 0. Now, you have contacted Robert Freck? 2 No, we've talked to his family members. It's a Α. 3 convoluted mess. Some people will talk to you, some people 4 won't, and we've been -- The trail is getting warmer, put 5 it that way. 6 0. Okay so you might reach an agreement with him? 7 Α. Yes. 8 And all of these parties, you've tried to contact Q. 9 these parties, did you say, about two weeks ago? 10 Α. No, during this entire time period when this project got put back on the front burner, we attempted to 11 start contacting them at that time. We've only located Mr. 12 Billington -- We've known where he is, he actually would 13 14 sign green cards and send them back but he would never respond to us, and it's been only within the last couple 15 weeks that he responded. 16 17 Okay, when you say this was put back on the front Q. burner, when was that, approximately? 18 19 Α. Six months ago. 20 That's after the second order had already Q. 21 expired? 22 Α. Yes. Yes, sir. Okay. Now, this is a new drill; is that right? 23 Q.

Now, with regards to the notice, you've attempted

That's correct.

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Α.

Q.

to notify all the parties that are being pooled, and then you mentioned something about the unorthodox location or the owners who are affected by the unorthodox location.

Can you elaborate on who you notified for that?

A. All of the parties that are listed on the -- Let me go back to Exhibit 2. All of the parties that are listed, that encompass acreage in the southwest quarter -- As a matter of fact, all of these parties were noticed with the Application of both the pooling and the unorthodox location. The other parties that were affected by the unorthodox location, which would be the offset operators, would be Arrington, Chesapeake and AnSon, all of which have voluntarily agreed to drill this well.

- Q. Now, does the location encroach on the outside boundaries of the proration unit?
 - A. No, sir.

MR. CARR: It does not.

EXAMINER CATANACH: Okay, so there are no outside interest owners?

MR. CARR: And if it was a well developed on less than the 320 acres, there might be encroachment toward the center of the west half. And so all the working interest was in, but there were a few mineral interest owners that were slightly different on each side of the line, so we notified all of those who hadn't joined.

1 THE WITNESS: Yes, the ownership in the northwest 2 quarter is different than the ownership in the southwest 3 quarter, which constitutes the requirement. EXAMINER CATANACH: Okay, I think that's all I 4 have. Mr. Douglas may be excused. 5 MR. CARR: Mr. Catanach, at this time we would 6 7 call Bill Baker. Mr. Baker was going to testify as to risk penalty, but he's also providing a drilling plan for the 8 well and has maps on the subject horizons, and I think 9 because we were called back to really explain why the well 10 was being proposed as it is, that it's appropriate that we 11 include portions of his testimony. 12 BILL BAKER, JR., 13 14 the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows: 15 DIRECT EXAMINATION 16 BY MR. CARR: 17 Would you state your name for the record, please? 18 0. Bill Baker, Jr. 19 Α. Mr. Baker, where do you reside? 20 Q. 21 Α. Midland, Texas. By whom are you employed? 22 Q. David H. Arrington Oil and Gas, Inc. 23 Α. What is your position with David H. Arrington Oil 24 Q.

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and Gas, Inc.?

- 1 Α. Exploration manager. 2 Have you previously testified before the New Q. Mexico Oil Conservation Division? 3 Yes, sir, I have. 4 5 At the time of that testimony were your Q. 6 credentials as an expert in petroleum geology accepted and 7 made a matter of record? 8 Yes, sir, they were. Are you familiar with the Application filed in 9 0. this case on behalf of Mr. Arrington? 10 Yes, sir, I am. 11 Α. And are you familiar with the proposed well, the 12 Q. horizontal drilling and the formations that are the subject 13 of this case? 14 15 Α. Yes, sir, I am. 16 MR. CARR: Are Mr. Baker's qualifications 17 acceptable? 18 EXAMINER CATANACH: They are. (By Mr. Carr) Mr. Baker, let's go to Exhibit 7 19 20 and let's review it at the same time we look at Exhibit 21 I'd like you to take those out, identify them and then review the information on these exhibits for Mr. 22
 - A. Okay. Mr. Carr and Mr. Catanach, what I'd like to do is look at Exhibits 7 and 8 simultaneously. What

Catanach.

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we're going to be looking at here is a well profile schematic, along with the well profile data sheet that Baker INTEQ has supplied to us for this directional well.

On Exhibit Number 7 you will see our proposed 320-acre proration unit is outlined in yellow, being the west half of Section 31. I've also identified where the surface location is, which is 2235 from the north and 330 feet from the west line. This is designated by a red triangle. And then what I have proceeded to do was spot where we would encounter prospective pay horizons or known other major geological formations en route to our bottomhole location, which is located approximately 1900 feet from the south line and 1300 feet from the west line. And you'll see this designated with a red circle down in the southwest quarter.

I have also shown which is one of our secondary targets, being the Wolfcamp, along this directional route. We will encounter it at approximately 527 feet from the west line and 169 feet from that center line right there. So we'll be unorthodox there approximately 161 feet. But it's unorthodox to ourselves on the inner, inner line right there.

If you move on into the southwest quarter, I've shown where we'll encounter the Strawn formation. And while we do not believe the Strawn is a secondary target in

this area, via the seismic that we have along with subsurface well control, because it is a producing horizon in the area, we have shown where this bottomhole -- or this location would intersect it, and that's 888 feet from the west line and 335 feet from that center line. If this were a wildcat 40, I believe that would be an orthodox location. If it was put into a pool, which I think the West Lovington Pool is the nearest pool, then it would be an unorthodox location to the inner line on 80s.

- Q. But the West Lovington-Strawn Pool is more than --
- A. Yes, sir.

- Q. -- a mile --
- A. Right.
- 15 Q. -- two miles away?
 - A. Right, so we're saying it would be a wildcat.

Then you move on to the Atoka formation, and this would be 1038 feet from the west line and 2192 from the south line, and it is a secondary target as well.

And then to the standard location in the Morrow, which is our primary target, and this will be 1218 feet from the west line and 1979 from the south line.

Our plan on this will be to drill a vertical hole to an approximate depth of about 8580 feet. At that time we will begin a 2.5-degree-per-100-foot inclination and

build to a maximum of 20-degree angle. And then we will hold this angle all the way down to the top of the Mississippian and then really start to kind of drop out angle and just TD the well at that legal location, which is 1900 from the south and 1300 feet from the west line.

Part of the reason for this directional well is that we're basically drilling under the City of Lovington. Our surface location is located right outside the city in a field, but as you move to the southwest and the southwest quarter there are little ranchettes and some trailer houses and some houses in the subdivision right there. So that necessitates the reason for the directional well.

- Q. Let's go to Exhibit Number 9, the structure map and the arbitrary seismic line, and I'd ask you to review this information for Mr. Catanach.
- A. Okay. What I'd like to do over the next several exhibits, Mr. Catanach, is show you our geological picture for the primary target, of which will be the Morrow clastic system along with the Austin Morrow clastics and/or the limestone.

What we're basically looking to do is drill into a graben system. It is our belief that this graben system was a low at time of deposition of the Morrow sands, therefore that would be the place most conducive for sands to have been accumulated.

What I am showing here is a structure map on the top of the Austin lime. It is indicating a very narrow little graben system that we have in here and that our proposed bottomhole location will be testing the maximum deepest portion of the graben system.

I have arbitrary seismic line A-A' on here, which is located on the right-hand side. I have shown where the surface location is, and then you'll see that kind of a green mark on there is our proposed well.

As we traverse down through the different formations, I have marked the formations on the right-hand side. You'll see where we will encounter the Strawn, what I call the Strawn B lime. You'll see where we encounter the Atoka, what we call the Brunson, which is the Atoka gas interval that's productive out in this area, along with the top of the Morrow, the top of the Austin and the top of the Chester.

And this is a well-known system and exploratory tactic back to the west. It should be noted, and on my next exhibit I'll show you that we're probably five miles from the nearest production out of this horizon, so this is a wildcat, very exploratory.

Q. When we look at the arbitrary seismic line, the gas symbols on the projected wellbore are, in fact, what you believe to be the primary targets in this well; is that

right?

A. Yes, sir. As I mentioned, the Atoka-Brunson is a known pay horizon located back over in 16-35. The Morrow sand systems I'm going to show an arbitrary -- or, excuse me, a type log that will show the sand systems for the Morrow and the Austin on one of my next exhibits.

- Q. Okay. Go to Exhibit 10. What is this?
- A. Okay, Exhibit 10 is really a land plat that kind of gives you an idea of how close we are to the nearest analogue. What I have shown here is basically where our Royal Stimulator 31 is located, along with this little graben system.

And then I've shown the nearest graben system
that is similar to this, which is located back over in
Section 2 of 16-35. And you'll see where I have an orange
arrow there with a well called the Yates Gallagher Number

1. That is our type log for this type of a ditch or graben
system. But this basically indicates that we're probably
four to five miles from the nearest production in the area.

- Q. Okay, Exhibit Number 11, that is the type log, the log from the Yates Gallagher --
 - A. Yes, sir.
 - Q. -- ATJ State well --
- A. Yes, sir, basically Exhibit 11 shows what we hope to encounter, or something similar. The Yates Petroleum

Gallagher well was drilled in a similar graben system. The section thickened up, and within that thick section they encountered what we call the Mesa Morrow sand, very prolific producer in that particular well.

They also encountered what we call the Austin Morrow, which was a Mississippian channel field. That was also a very prolific producer.

And then they also encountered a Chester lime that at today's gas prices would be a commercial producing pay horizon as well. And this is what we're attempting -- hoping to encounter at our location.

- Q. All right, let's go to the Wolfcamp. Let's go to Exhibit Number 12. Would you identify and review this?
- A. Okay, if we move to Exhibit 12, this is a structure map on the top of the lower Wolfcamp beta marker, and this is basically one of our secondary targets, Mr. Catanach, and this is the one that we will be unorthodox to on our center line. This is also the pay horizon that we ended up making a small well out of there in the northwest quarter under our Royal Stimulator Number 1.

And what you'll see is that -- believe that this little lower Wolfcamp zone, there's kind of a little structure has developed in there on a nose, and that's probably what has trapped the oil in there as well, in these little producing carbonates, and it looks like we're

going to be slightly high to our Royal Stimulator Number 1.

- Q. Exhibit Number 13, an isopach map.
- A. Yes, sir, and really this is kind of a three-well isopach, there's not much well control in the area. But this is our isopach of what we call the Step-Brother pay, which is just a local name that we labeled this particular Wolfcamp interval with. You can see these are very narrow little shelf-margin porosity bands, probably about a quarter mile wide, they get up to about 30 to 40 foot thick.
- Q. There's a trace on this exhibit for cross-section A-A'?
 - A. Correct, yes, sir.
 - Q. That's Exhibit 14?
 - A. Yes, sir.

- Q. Could you review that for Mr. Catanach?
- A. This is cross-section A-A'. Basically this is showing what we anticipate to be where we will encounter the top of the Beta marker and the top of the Step-Brother.

It shows the Mallard Petroleum well on the left-hand side, the Bartholomew. You can see here that this well had kind of rolled back over on the structure. the Step-Brother pay, which is the pay horizon in the Royal Stimulator Number 1, is tight and not present in this particular well.

As you move across the cross-section you see where we hope to encounter the Step-Brother pay in the Royal Stimulator Number 2. And as I indicated, I think we're going to be probably 40 to 50 feet high structurally to the Royal Stimulator 31 Number 1, which is the next log on the cross-section. This was the interval that we ended up making our well out of. We never got down in our Royal Stimulator 31 Number 1 because we encountered the actual Townsend Reef right underneath this and stuck our directional tools, ended up having to plug the well back and actually produced this little Wolfcamp interval in here.

You can see it came on about 106 barrels of oil a day, but it also produced 22 barrels of water per day. The well has cum'd about 16,000 barrels. It's currently producing at about 10 barrels of oil per day and about 70 barrels of water per day. And obviously what our hope is, is to get up out of that water and still maintain some porosity and have a commercial well.

The very last well on the cross-section is the Mattie Burns Number 1. This well shows that it did have a little bit of the Step-Brother carbonate in it, but it is tight. It is also in the most downdip position.

Q. Does Arrington request the imposition of a 200percent risk charge to be imposed against those interests

who don't voluntarily join in the well? 1 2 Α. Yes, sir, we do. In your opinion, will approval of this 3 0. Application and the drilling of this well be in the best 4 5 interest of conservation, the prevention of waste and the protection of correlative rights? 6 Yes, sir. 7 Α. Is Mr. Arrington ready to go forward with the 8 Q. drilling of this well at this time? 9 Yes, sir, we finally are. 10 A. Were Exhibits 7 through 14 prepared by you or Q. 11 compiled under your direction? 12 Α. Yes, sir, they were. 13 MR. CARR: May it please the Examiner, at this 14 time we'd move the admission into evidence of Arrington 15 Exhibits 7 through 14. 16 17 EXAMINER CATANACH: Exhibits 7 through 14 are 18 admitted. MR. CARR: And that concludes my direct 19 examination of Mr. Baker. 20 21 **EXAMINATION** BY EXAMINER CATANACH: 22 So Mr. Baker, the primary objective is the 23 Q. Morrow? 24 25 Yes, sir. Α. Those Mesa and Austin Morrow systems

that the Gallagher had in it, those are going to be the primary targets.

- Q. And the closest production in the Morrow is to the west, in the Yates Gallagher well?
 - A. Yes, sir.

- Q. Where's your well in relation to the -- Do you remember the Ocean well that blew out --
 - A. Yes, sir, I do.
 - Q. -- in this area?
- A. I'm trying to see if I have a map. If you take that Exhibit Number 10 that showed the two little graben systems, the Ocean Gallagher well, which is also in a graben very similar to this one, would be located down here in Section 10. This 16-35 area has been very well developed around this graben system, and it's actually headed north. But at this time nobody has taken it east yet, this concept.
 - Q. Now, are they producing in the Morrow as well?
 - A. The Ocean well, sir?
 - Q. The Ocean and the -- well, the Yates well is.
- A. The Yates well is producing out of both the Mesa and -- They call this Austin interval down here Morrow as well. It's our belief that this is actually eroded Austin material, Mississippian material, that was dumped in that graben system. This is the stratigraphic interval that was

in the Ocean well that blew out.

- Q. Okay. So do you anticipate anything -- obtaining any production from the Chester?
- A. There's a possibility. The Chester is extremely erratic in this area. It appears like the Chester production that I have seen in this area was mostly deposited on some type of a localized high that may have been subsequently, you know, downthrown, but that was where the leaching of the limestone was preserved and some porosity was preserved. We don't always target it as a primary objective, because it's so erratic and spotty. Obviously my hope is that we'll find some there as well, because it can yield a half a B to a BCF when you find it.
- Q. So that's the reason you're taking it down to the Mississippian?
- A. That, and we also like to tag the top of the Mississippian for our seismic, yes, sir. We'll do a synthetic and we want to make sure our seismic ties.
- Q. And you're basing this off of 3-D seismic that you've --
 - A. Yes, sir.
 - Q. -- run in this area?
- 23 A. Yes, sir.
 - Q. Okay. So the Wolfcamp -- The well that you've got already in the northwest quarter, that's a Wolfcamp Oil

Producer? 1 2 Α. Yes, sir, it is. So this has already been defined as an oil pool 3 0. 4 and spaced on 40 acres? 5 Yes, sir, and that -- Mr. Carr, was that the 6 Cauldale? Did we end up putting that in the Cauldale Pool 7 or -- I don't recall --8 MR. CARR: I can look that up, it's --9 THE WITNESS: -- which pool it is, sir. sir. 10 11 Q. (By Examiner Catanach) So if you do get a Wolfcamp producer, you're going to be too close to that 12 13 centerline --Correct, sir. 14 Α. -- and encroach to the south? Okay. Q. 15 Yes, sir. 16 Α. 17 Strawn, really not a lot of potential in this Q. area? 18 Once again, the seismic, sir, does not indicate 19 any type of a buildup of any sort, and there is no Strawn 20 producers within a mile and a half. Obviously with Mother 21 22 Nature, you never know. But nothing that we have in our 23 data set indicates it is a target here.

Due west, due west.

West Lovington-Strawn is to the south and --

24

25

Q.

Α.

Q. Due west here, okay.

- A. Due west of us, yes, sir.
- Q. And the Atoka, what do you think about the Atoka?
- A. The Atoka -- actually, depositionally it shows on our seismic, if you'll look at that Exhibit Number 9. It was low as well, and you'll see a thick in there. My hope is that we'll have some sand in that thick. Theoretically, if the Morrow was following this lower system, you would want to believe that the Atoka clastics would have followed suit and followed that depositional low as well. If you get the Atoka, it's known that the Atoka is a 3- to 5-BCF well, so we have a lot of hope for the Atoka as well.
 - Q. What's the plan as far as completing this well?
- A. Well -- And that's a good question. Generally our engineers would address that, but we would probably -- if we encountered both Austin and the Morrow system down there we would probably do basically what Yates did in their original well, and that was complete those two intervals together as, quote, unquote, a Morrow and produce them. And as long as we're in a noncompetitive situation, i.e., somebody doesn't offset us in another direction, I would probably set there on any Atoka reserves until the Morrow was depleted.
- Q. Okay. Now, you guys are going to run a directional survey?

1	A. Yes, sir, with a Baker on there, there'll be a
2	continuous survey, run the whole time, and we'll be
3	steering it.
4	Q. Okay.
5	A. So that will be something that will be supplied
6	to the Commission as well, the OCD.
7	Q. So those depths that you've got marked, those of
8	course are not going to be exact?
9	A. No, sir, that's kind of what we're projecting,
10	you know.
l1	Q. That's what Baker's projected or
12	A. Yes, sir. Basically, Baker took our anticipated
13	tops, and then they developed that schematic plan.
14	Q. Okay.
l5	A. I would say down through the Wolfcamp we have a
16	fairly good hole because of that subsurface well control.
17	After that, you're guessing, yes, sir.
18	Q. I was going to say, what are you basing that on?
19	A. Nothing.
20	(Laughter)
21	EXAMINER CATANACH: Okay, I believe that's all I
22	have of this witness, Mr. Carr.
23	MR. CARR: Mr. Catanach, the only pool that this
24	well will encounter, the only existing pool is the Caudell-
25	Permo-Upper Pennsylvanian Pool. Everything else is

1	Wildcat.
2	EXAMINER CATANACH: Is that the Wolfcamp Pool?
3	MR. CARR: The 40-acre Yes, I believe so,
4	right.
5	EXAMINER CATANACH: So it sounds old, it sounds
6	like an old pool.
7	MR. CARR: It's also within a mile of the
8	Townsend-Permo-Upper Penn Pool, but it would be actually
9	within the boundaries of the Caudell.
10	EXAMINER CATANACH: Okay, thank you, Mr. Carr.
11	MR. CARR: Yes, sir. And that concludes our
12	presentation in this case.
13	EXAMINER CATANACH: All right. There being
14	nothing further, Case 13,081 will be taken under
15	advisement.
16	Let's go ahead and take a break here, 15 minutes.
17	(Thereupon, these proceedings were concluded at
18	9:43 a.m.)
19	* * *
20	
21	of de hereby certify that the foregoing in
22	the Examiner hearing of Case No. 1309.
23	heard by me on Again
24	Oil Conservation Division
25	Oil Conservation District

CERTIFICATE OF REPORTER

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

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

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

WITNESS MY HAND AND SEAL August 22nd, 2003.

STEVEN T. BRENNER

CCR No. 7

My commission expires: October 16th, 2006