#### 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 DAVID H. ARRINGTON OIL
AND GAS, INC., FOR COMPULSORY POOLING,
LEA COUNTY, NEW MEXICO

CASE NO. 13,012

CASE NO. 13,012

# ORIGINAL

## REPORTER'S TRANSCRIPT OF PROCEEDINGS

# **EXAMINER HEARING**

BEFORE: DAVID K. BROOKS, JR., Hearing ExamiRECEIVED

February 20th, 2003

Santa Fe, New Mexico

Oil Conservation Division

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID K. BROOKS, JR., Hearing Examiner, on Thursday, February 20th, 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.

\* \* \*

# I N D E X

February 20th, 2003 Examiner Hearing CASE NO. 13,012

	PAGE
APPEARANCES	3
APPLICANT'S WITNESSES:	
<u>DALE DOUGLAS</u> (Landman)	
Direct Examination by Mr. Hall	4
Examination by Examiner Brooks	9
BILL BAKER, JR. (Geologist)	
Direct Examination by Mr. Hall	10
Examination by Examiner Brooks	18
Further Examination by Mr. Hall	19
REPORTER'S CERTIFICATE	21

\* \* \*

# EXHIBITS

Applicant's	Identified	Admitted
Exhibit 1	6	9
Exhibit 2	7	9
Exhibit 3	11	-
Exhibit 4	12	-
Exhibit 5	12	-
Exhibit 6	18	-

\* \* \*

# APPEARANCES

## FOR THE APPLICANT:

MILLER, STRATVERT and TORGERSON, P.A. 150 Washington Suite 300 Santa Fe, New Mexico 87501 By: J. SCOTT HALL

\* \* \*

## ALSO PRESENT:

DAVID R. CATANACH Hearing Examiner New Mexico Oil Conservation Division 1220 South Saint Francis Drive Santa Fe, NM 87505

WILLIAM V. JONES, JR.
Petroleum Engineer
New Mexico Oil Conservation Division
1220 South Saint Francis Drive
Santa Fe, NM 87505

\* \* \*

WHEREUPON, the following proceedings were had at 1 2 11:06 a.m.: EXAMINER BROOKS: Okay, we'll go back on the 3 4 record and at this time we'll call Case Number 13,012, 5 Application of David H. Arrington Oil and Gas, Inc., for 6 compulsory pooling, Lea County, New Mexico. 7 Call for appearances. MR. HALL: Mr. Examiner, Scott Hall, Miller 8 9 Stratvert, P.A., Santa Fe, on behalf of the Applicant, David H. Arrington Oil and Gas, Inc., with two witnesses 10 11 this morning. 12 EXAMINER BROOKS: Any other appearances? 13 Very good, the witnesses will be sworn. 14 (Thereupon, the witnesses were sworn.) 15 DALE DOUGLAS, 16 the witness herein, after having been first duly sworn upon 17 his oath, was examined and testified as follows: DIRECT EXAMINATION 18 19 BY MR. HALL: 20 For the record, please state your name, sir. Q. Dale Douglas. 21 Α. Where do you live, Mr. Douglas? 22 Q. 23 Midland, Texas. Α. 24 By whom are you employed and in what capacity? Q. 25 Contract land services for David H. Arrington Oil Α.

and Gas, Inc.

- Q. And you've previously testified before the Division and had your credentials as a petroleum landman accepted as a matter of record?
  - A. Yes, they have.
- Q. Are you familiar with the lands that are the subject of this Application?
  - A. Yes, sir.

MR. HALL: We offer Mr. Douglas as a qualified petroleum landman.

EXAMINER BROOKS: So qualified.

- Q. (By Mr. Hall) Briefly tell the Examiner what Arrington seeks by this Application.
- A. Arrington seeks to pool all interests in pools spaced on 320-acre laydown gas spacing and proration units for any and all formations and/or pools developed on 320-acre spacing within that vertical extent, which presently includes but are not necessarily limited to, the North Eidson-Morrow Gas Pool; the southeast quarter to form a standard 160-acre spacing and proration unit for the 160-acre unit for any and all formations and/or pools developed on 160-acre spacing within that vertical extent; and the east half, southeast quarter to form a standard 80-acre standup oil spacing and proration unit for any and all formations and/or pools developed on 80-acre spacing within

that vertical extent; and the northeast quarter, southeast quarter to form a standard 40-acre oil spacing and proration unit for any and all formations and/or pools developed on 40-acre spacing within that vertical extent.

Said units are to be dedicated to Applicant's proposed Steve's Hopper 25 Well Number 1 to be drilled at a standard 320-acre spacing and proration unit gas well location 1980 feet from the south line and 660 feet from the east line in the northeast quarter, southeast quarter, which is Unit I, of said Section 25 to a depth sufficient to test the Atoka, Morrow and Mississippian formations.

- Q. Let's look at Exhibit 1, please, sir, if you would explain that to the Examiner.
- A. Exhibit 1 is a land plat, and on this plat, colored in yellow, is the proposed spacing unit for the Steve's Hopper well, which is the south half of Section 25. And also on that plat, in the northeast-southeast quarter, you'll see a red dot which indicates the proposed location for this well.
  - Q. What's the primary objective for the well?
  - A. The Atoka, Morrow and Mississippian formations.
- Q. Tell the Examiner about the interests you seek to pool.
- A. Ownership under this tract, David Arrington Oil and Gas, Inc., owns 98.4375 percent of the leasehold estate

under that south half. There are seven parties that own the remaining 1.5625-percent interest, and those parties are David Petroleum; McMillan Ventures, LLC; Permian Exploration Corporation; Michael A. McMillan; Keith E. McKamey; William B. Owen; and Edward H. David.

- Q. Let's refer to Exhibit 2. Is Exhibit 2 a compilation of the letters you've sent to those interest owners you just identified, seeking their participation in the well?
- A. Yes, they are. You'll see there are two letters, both dated December the 18th, sent to these parties that I just mentioned that were uncommitted to the well, proposing that they -- we propose the well seeking their participation; in the event they elected not to participate, to grant a farmout of this interest.
- Q. So looking at Exhibit 2, you have a letter dated December 18th, 2002, and that transmitted the initial AFE; is that correct?
  - A. That's correct.

- Q. And followed up by another letter dated --
- A. -- January the 31st, was a follow-up letter. We had not received a response to our initial proposals, and we sent follow-up letters, which we did not receive a response to either. And I also made a phone call to Bill Owen, who's a landman that generally represents these

folks.

- Q. You received you indication that they'll participate in the well?
  - A. None whatsoever.
- Q. Is Arrington asking for a 200-percent risk penalty against those interest owners?
  - A. Yes, we are.
- Q. Do you have another witness who will testify as to the basis of that risk?
  - A. That's correct.
- Q. Does Arrington have a lease-expiration situation with respect to the south-half unit?
- A. Yes, we do. There are leases in this south half that have a March 17th expiration date, so it's imperative that we commence operations for the drilling on or before that date or we'll lose those leases.

The same group that I had mentioned that have not committed to drill the well have acquired top leases on the majority of those leases, so it's imperative that we get our well spud by -- or operations commenced by March 17th.

- Q. And for that reason is Arrington requesting the issuance of an expedited order if possible?
  - A. If possible, we'd like to have one.
- Q. In your opinion, Mr. Douglas, did Arrington make a good faith effort to secure the voluntary participation

of the other interest owners in this well? 1 2 Yes, sir, we did. Α. 3 And were Exhibits 1 and 2 prepared by your direction? 4 5 Α. Yes, sir, they were. 6 MR. HALL: Move the admission of Exhibits 1 and 7 2. 8 That completes our direct of this witness. EXAMINER BROOKS: One and 2 are admitted. 9 10 Let's see if I have any questions here. EXAMINATION 11 BY EXAMINER BROOKS: 12 The North Eidson-Morrow is the 320-acre-spaced 13 pool, correct? 14 That's correct. 15 A. And you didn't identify any other pools. 16 there any others that affected your -- have you done a 17 search to determine that? 18 Not that I'm aware of. 19 Α. 20 The Morrow is the objective of this well? Q. 21 The Atoka, Morrow, Mississippian formations. Α. 22 And you didn't say anything, that I heard anyway, Q. 23 about overhead rates. Is that going to be covered by your other witness? 24 25 Yes, sir, it will be. Α.

EXAMINER BROOKS: Okay, thank you. 1 MR. HALL: At this time, Mr. Examiner, we'd call 2 Bill Baker to the stand. 3 4 BILL BAKER, JR., 5 the witness herein, after having been first duly sworn upon 6 his oath, was examined and testified as follows: DIRECT EXAMINATION 7 BY MR. HALL: 8 9 For the record, please state your name. Q. 10 Bill Baker, Jr. Α. Mr. Baker, where do you live and by whom are you 11 Q. 12 employed? I live in Midland, Texas, and I'm employed by 13 Α. 14 David H. Arrington Oil and Gas, Inc. 15 And what do you do for Arrington? 0. I'm an exploration geologist and exploration 16 17 manager as well. 18 Q. And you've previously testified before the 19 Division and its Examiners and had your credentials 20 established as a matter of record; is that correct? 21 Yes, sir, I have. Α. 22 Are you familiar with the Application that's Q. filed in this case? 23 24 Yes, sir, I am. Α. 25 And the well proposal? Q.

A. Yes, sir, I am.

MR. HALL: At this point, Mr. Examiner, we'd offer Mr. Baker as an expert petroleum geologist.

EXAMINER BROOKS: So qualified.

- Q. (By Mr. Hall) If you would, Mr. Baker, let's refer to Exhibit 1. If you could explain that to the Examiner, please, sir?
  - A. Exhibit Number 1, sir?
  - Q. I'm sorry, let's look at Number 3.
- A. Okay. Exhibit Number 3 is a structure map comprised of subsurface well control on the top of the Austin limestone. This limestone sits directly below the primary target, which are the Morrow sands.

Basically what this shows is that our proposed location is on the north side, or actually the northeast side, of a north-south-trending structural feature. It shows that we will be in an updip position to the key offset well that I will show later on cross-section A-A'.

I've also entered in color code down there some of the producing horizons. The principal horizon that we'll be targeting at this location is what we call the Morrow Mesa Arreguy. You'll see that that is designated by a blue-color wellspot.

We have also shown in red dry holes or wells that had shows in this Arreguy sand.

We'll show a green symbol on there, is what I call the Morrow Mesa Pardner producer. That's another stratigraphic Morrow sand in this immediate area.

O. Let's look at Exhibit 4.

A. Okay, Exhibit Number 4 is a net interval isopach of the key producing horizon that we're targeting in the Steve's Hopper, and this is the Mesa Arreguy sand. We interpret these to be kind of northwest-south-trending channel sands.

I'm going to be showing in just a moment crosssection A-A' that will show that we believe we're going to
be in the thick of this north-south-trending Arreguy sand.
We will also show that there's well control kind of to the
north and the northeast. It's pretty well open-ended to
the south, which is going to be part of the risk. We don't
know where this sand could terminate, which it could
terminate at our location, it could terminate before our
location, and simply because there's not any well control
to the south, that's going to be a big part of the risk, is
finding reservoir rock.

- Q. Let's look at your cross-section Exhibit 5, if you'd explain that, please, sir.
- A. Exhibit Number 5 is cross-section A-A'. There are three wells on here that I will discuss, along with our proposed location. And if you will look at the left-hand

side of your cross-section, Mr. Commissioner, we'll start with the Yates Petroleum Arreguy "AVP" Number 1 (Sidetract). Actually, this particular wellbore right here was a sidetrack to the next well on the cross-section, the Yates Petroleum Arreguy "AVP" Number 1.

What this basically shows, at the very top, the structural horizon that I hung it on is the top of the Morrow limestone. As you come on down you'll see a pink marker there. That's where I actually call the top of the Mesa sands. Simply a local terminology, top of the clastics.

The primary sand that we're going to be targeting will be the next sand there that I've indicated in yellow. That's the Arreguy -- what I call the Arreguy sand. In this particular wellbore here they did encounter about eight feet of the Arreguy sand with about two feet of net porosity in it, along with a stray sand a little bit further down the wellbore. They completed this well for an IPF of 848 MCF a day, 257 barrels of condensate per day, but it only produced 22 million cubic feet and 700 barrels of oil and has since been plugged and abandoned.

If you'll move just to the wellbore right next to it, this was the original well that Yates drilled, the Arreguy "AVP" Number 1. It was drilled as a vertical wellbore. The key thing that you can see here is that they

about eight to ten feet, but no net porosity whatsoever.

It was tight. We do have the mud log on it, they had a
little bit of gas show in it, but there was no reservoir.

This is what prompted them to kick the Sidetract well.

Now, if you'll continue on your cross-section, you'll see the Yates Petroleum Arreguy "AVM" Number 1.

This well was actually drilled in December of 2000. It was a re-entry where they had re-entered -- Yates had re-entered the Sun Arreguy well and deepened this well down to the top of the Mississippian. They encountered this Mesa Arreguy sand, basically had about 16 feet, 15 feet of net sand over 20 feet of gross interval. They perforated this well. They report an IFP of 1.78 million a day and 257 barrels of condensate. The well has currently cum'd about 1.5 BCF, 60,000 barrels, and it's still producing at a rate of 1.6 a day and 30 barrels of oil.

It was actually after the drilling of this well that they did the well in Section 24 and the Sidetract well. The well in 25 actually prompted them to drill to the north.

With this information, I had mapped this and actually had the sand trending from the northeast -- or excuse me, northwest to the southeast. And EOG drilled a well down there. It's not on my cross-section here. It's

called the EOG John's Hopper Number 2. You can see that back on Exhibit Number 4. And that was their principal target when they drilled that well.

But upon drilling that well, they only picked up two feet of sand, and they actually completed in a lower sand that I call the Pardner well in there. But they did pick up two feet of sand over 10 gross interval feet.

Well, with this point of control in here, what this basically does is defines the eastern boundary. And it definitely indicates that they stayed on the eastern side of it, so that channel sand must be turning and heading to the south, down towards or location.

The last well on our cross-section is our proposed well, the Steve's Hopper 25 Number 1, and there's no additional well control to the south to say where this sand may truncate, where it goes. I've carried it through there simply because, you know, the fact that EOG picked it up across the fence, the sand is there. Now, I just don't know whether I'm going to have reservoir rock when I get there.

- Q. Arrington is seeking 200-percent risk penalty in this case; is that correct?
  - A. Yes, sir, we are.
- Q. And in your opinion is there a likelihood or possibility -- well, it may not be a commercially

1 | successful well?

2

3

5

6

7

8

9

10

11

12

13

14

16

17

18

19

20

21

22

23

24

25

- A. Yes, sir. I mean, that's the risk in this well, is that we may end up with another well that's got sand with no net feet of reservoir rock.
- Q. You testified there's a lack of well data to the south.
  - A. Yes, sir.
- Q. Questionable porosity to the north on your crosssection?
  - A. Correct.
- Q. Question about the thickness you might encounter in that Arreguy sand?
- A. Obviously, yes, sir.
- Q. Anything else that might establish a risk here?
- 15 A. No, sir, I think that's it.
  - Q. Let's look at your AFE, if you'd refer back to Exhibit 1.
    - A. Okay. It's Exhibit Number 2. Exhibit Number 2 is an AFE that was proposed by our drilling and operations engineer, Mr. Chuck Sledge. This was prepared in December of 2002, basically targeting the Morrow, the Mississippian at 12,850 feet. This AFE shows a dryhole cost of \$965,450 with a completed well cost of \$1,441,950.
    - Q. All right. And what are the -- Let me ask, are those drilling rates in line with what's being charged by

other operators?

- A. Yes, sir, we've participated and seen a number of other AFEs from operators in the immediate area, and this is right in line with them.
- Q. Okay, Arrington has drilled several other Morrow wells in the area?
- A. Yes, sir, in six years we've drilled in excess of 30 wells in this immediate area, so we have what we feel is a relatively good handle on drilling costs and potential horizons and stuff like that in the area.
- Q. What drilling and producing overhead rates are you seeking in this case?
- A. We're recommending an administrative cost of \$6000 and a monthly overhead cost of \$600 a month.
- Q. All right. And those costs too, are they in line with what's being charged in this area?
  - A. Yes, sir, they are.
- Q. Does Arrington request that the order provide for an adjustment of the drilling and producing overhead rates in accordance with the current COPAS bulletin for the area?
  - A. Yes, sir, we do.
- Q. In your opinion, will granting the Application be in the interests of conservation, the prevention of waste, the protection of correlative rights?
  - A. Yes, sir, we believe so.

1	Q. Were Exhibits 3 through 5 prepared by you or at
2	your direction?
3	A. Yes, sir, they were.
4	MR. HALL: And Mr. Examiner, Exhibit Number 6 is
5	our notice affidavit.
6	We'd move the admission of Exhibits 3 through 6.
7	That concludes our direct of the witness.
8	EXAMINER BROOKS: Okay, I should have asked your
9	last witness this. Maybe you can tell me, Mr. Hall. Are
ιο	all these people owners of leaseholder interests, or are
11	there unleased mineral interests?
12	MR. HALL: They're all leased.
L3	EXAMINER BROOKS: Okay.
L4	EXAMINATION
L5	BY EXAMINER BROOKS:
L6	Q. The well that you said that they got two feet of
L7	pay, that was in this Arreguy sand?
18	A. Arreguy sand.
19	Q. Yeah, was that the well over in Section 30?
20	A. Yes, sir, that is EOG Resources John's Hopper
21	Number 2, and
22	Q. It's not on your cross-section?
23	A. Yes, sir, and the reason is, is that we had an
4	overriding royalty interest through there, so we were
5	allowed the dough, but basically what they did is, they

requested that we not show anything, hold it confidential 1 for 90 days. So for that reason I didn't have it on my 2 cross-section. 3 And when you say -- You don't have any well 4 Q. control to the south, right? 5 Not that penetrated through this horizon, no, 6 7 sir. 8 0. Okay. Do you have any seismic or anything else 9 that indicates where this direction --We do have seismic in this area, but sir, to date 10 we have not been able to adequately chase sands with 3-D 11 seismic data. It has not proven to be something -- It's a 12 great structural tool, but it has not shown to be reliable 13 14 for chasing sands. 15 EXAMINER BROOKS: Okay, I don't think I have any 16 other questions. Do either of you gentlemen? 17 18 EXAMINER CATANACH: (Shakes head) 19 MR. JONES: (Shakes head) 20 EXAMINER BROOKS: Very good. 21 MR. HALL: One quick question. 22 FURTHER EXAMINATION 23 BY MR. HALL: 24 Q. Is Arrington prepared to go out and drill to 25 perpetuate its leases?

1	A. Yes, sir, we're prepared to go out and drill as
2	soon as we can get an order.
3	MR. HALL: Nothing further, Mr. Examiner.
4	EXAMINER BROOKS: Very good. Then Case Number
5	13,012 will be taken under advisement.
6	(Thereupon, these proceedings were concluded at
7	11:25 a.m.)
8	* * *
9	
10	
11	
12	
13	
14	
15	A Company of the Comp
16	the house will the foregoing is the Example and the foregoing in the control of the foregoing in
17	heard by me on Feb 20, 1803.
18	Oil Conservation Division, Examiner
19	- 7713;Qn
20	
21	
22	
23	
24	
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 February 22nd, 2003.

STEVEN T. BRENNER

CCR No. 7

My commission expires: October 16th, 2006