

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 HARVEY E. YATES COMPANY)
FOR COMPULSORY POOLING, LEA COUNTY,)
NEW MEXICO)

CASE NO. 13,999

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: WILLIAM V. JONES, Jr., Technical Examiner
DAVID K. BROOKS, Jr., Legal Examiner

September 20th, 2007

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, WILLIAM V. JONES, Jr., Technical Examiner, DAVID K. BROOKS, Jr., Legal Examiner, on Thursday, September 20th, 2007, 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.

* * *

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

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I N D E X

September 20th, 2007
 Examiner Hearing
 CASE NO. 13,999

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* * *

A P P E A R A N C E S

FOR THE DIVISION:

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FOR THE APPLICANT:

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FOR CHESAPEAKE OPERATING, INC., AND XTO ENERGY, INC.:

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 1:20 p.m.:

3
4 EXAMINER JONES: Okay, let's go back on the
5 record this morning -- or this afternoon -- and call the
6 next case, Case Number 13,999, Application of Harvey E.
7 Yates for compulsory pooling, Lea County, New Mexico.

8 Call for appearances.

9 MR. BRUCE: Mr. Examiner, Jim Bruce of Santa Fe,
10 representing the Applicant. I have two witnesses.

11 EXAMINER JONES: Other appearances?

12 MR. KELLAHIN: Mr. Examiner, I'm Tom Kellahin of
13 the Santa Fe law firm of Kellahin and Kellahin, appearing
14 this afternoon on behalf of Chesapeake Operating, Inc., and
15 TXO [sic] Energy, Inc. I have no witnesses.

16 EXAMINER JONES: XTO. No witnesses?

17 Will the other witnesses please stand to be
18 sworn?

19 (Thereupon, the witnesses were sworn.)

20 MR. BRUCE: Before I begin, Mr. Examiner -- I'm
21 going to present the case -- it does have to be continued
22 to October 3rd, because there is an error in the
23 advertisement, and it has been rescheduled with the
24 Division Secretary for October 3rd.

25 EXAMINER JONES: Okay.

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VERNON D. DYER,

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

DIRECT EXAMINATION

BY MR. BRUCE:

Q. Would you please state your name and city of residence for the record?

A. It's Vernon D. Dyer. I live in Roswell, New Mexico.

Q. Who do you work for and in what capacity?

A. Harvey E. Yates Company, and I'm a landman.

Q. Have you previously testified before the Division?

A. Yes, sir.

Q. And were your credentials as an expert petroleum landman accepted as a matter of record?

A. Yes, sir.

Q. Are you familiar with the land matters involved in this Application?

A. Yes, I am.

Q. And does your area of responsibility at Heyco include this part of southeast New Mexico?

A. Yes, it does.

MR. BRUCE: Mr. Examiner, I'd tender Mr. Dyer as an expert petroleum landman.

1 EXAMINER JONES: Any objections?

2 MR. KELLAHIN: No objection.

3 EXAMINER JONES: Mr. Dyer is qualified as an
4 expert in petroleum land matters.

5 Q. (By Mr. Bruce) Mr. Dyer, could you identify
6 Exhibit 1 for the Examiner and briefly describe what Heyco
7 seeks in this case?

8 A. It's a land plat made off Midland Map Company's
9 map, and it shows Section 18. This is in 18 South, 32
10 East. It shows -- the north half is darkened, and that's
11 the proration unit we're asking for, for a north-half well
12 to be drilled in the north -- or the east half of the
13 northwest quarter to the Morrow formation, and we're asking
14 for the 320 proration unit on the Morrow, and then the
15 northwest quarter, a 160 proration on the 160.

16 Q. Actually, the well is going to be located in the
17 southwest of the northwest, is it not?

18 A. That is correct.

19 Q. And although the Application said pooling from
20 the surface to the base of the Morrow, is there a depth
21 limitation involved?

22 A. Yes, there is. We're actually going from the
23 base of the Queen, because there's a Queen well in that
24 section operated by Chesapeake.

25 Q. Okay. So you're seeking to pool from the base of

1 the Queen to the base of the Morrow?

2 A. Yes, that is correct.

3 Q. Okay. And what is the name of the well involved?

4 A. It's the Walker 18 Fed Com Well Number 1.

5 Q. And in preparation for drilling this well, was a
6 title opinion prepared?

7 A. Yes, there was.

8 Q. And there are quite a few working interest owners
9 in this well unit, are there not?

10 A. Yes.

11 Q. Was a well proposal made to all of the working
12 interest owners?

13 A. Yes. Yes, there was.

14 Q. And is that reflected in Exhibit 2?

15 A. Yes, Exhibit 2 shows the regional well proposal
16 with just a takeoff -- or first of all it shows the well
17 proposal after the title opinion, and right behind it we
18 got a list of the working interest owners. And then behind
19 that we've got a worksheet listing all their interest, the
20 working interest owners, and listing all their interest.
21 There's 32 working interest owners.

22 And then the sheet -- the letter behind it was
23 our original letter we sent out based on the takeoff, and
24 then we have the original AFE, and then the AFE that's in
25 effect now, and it's dated 8-15 of 2007.

1 Q. Okay. In addition to these couple of letters
2 you've sent out, have you had phone conversations with any
3 of these interest owners?

4 A. Yes, I've had numerous phonecons -- well, not
5 numerous, I've had about four or five phone conversations.

6 Q. And of the working interest owners listed, what
7 does Exhibit 2A reflect?

8 A. Exhibit 2A is the list of the working interest
9 owners, and it is a tabulation of the people we have got
10 commitments from to either join or farmout under our offer
11 letter. And then there's two parties in here that we are
12 in communication with now, and -- one of them being
13 Chesapeake, and they have tentatively joined subject to the
14 operating -- approval of the operating agreement.

15 Q. Okay. So where it says signed or elects to farm
16 out, you do not seek to pool those people?

17 A. That is correct.

18 Q. Okay. All the others you seek to pool at this
19 time?

20 A. Yes.

21 Q. Now Chesapeake has signed an AFE, and have you or
22 will you provide them with a JOA?

23 A. Yes.

24 Q. And will you continue to work with Chesapeake
25 Exploration, Ltd., regarding joinder in the well?

1 A. Oh, yes.

2 Q. And when they sign a JOA, will you notify the
3 Division?

4 A. Yes.

5 Q. Okay.

6 A. I'll notify you, so you can notify the Division.

7 Q. In your opinion, have you made a good faith
8 effort to obtain the voluntary joinder of the mineral
9 interest owners in this well?

10 A. Yes, we believe we have.

11 Q. Okay. Now attached to the back of Exhibit 2 is
12 an AFE. What are the costs of the proposed well?

13 A. The dryhole cost would be \$2,026,046. A
14 completed well will be \$2,951,149, our best estimate.

15 Q. And are these costs in line with the costs of
16 other wells drilled to this depth in this part of Lea
17 County?

18 A. Yes, it is, with the fluctuation of the rigs
19 going up and down, it is.

20 Q. Do you request that Heyco be named operator of
21 the well?

22 A. Yes.

23 Q. And does Heyco recommend the maximum cost-plus-
24 200-percent risk assessment?

25 A. Yes, we do.

1 Q. What are the requested overhead rates?

2 A. It's \$8000 a month for the drilling rates and
3 \$800 a month for the producing well rates.

4 Q. And are these charges in line with the charges of
5 other Morrow wells drilled in this part of New Mexico?

6 A. Yes, my accountant assures me that's what COPAS
7 is.

8 Q. Do you request that these rates be adjusted under
9 the COPAS accounting procedure?

10 A. Yes, we do.

11 Q. Were the parties being pooled notified of this
12 hearing?

13 A. Yes, they were.

14 Q. And is that reflected -- is the written notice
15 reflected in Exhibit 3?

16 A. Yes, it is.

17 Q. And there were a couple of returned envelopes.
18 Do the addresses that you have reflect the most current
19 addresses for all of these interest owners?

20 A. Yes, they do.

21 MR. BRUCE: And finally, Mr. Examiner, Exhibit 4
22 is an affidavit of publication. And actually a new
23 affidavit was published for the October 3rd hearing,
24 because there was one additional party that did not receive
25 notice. The publication notice was against John N.

1 Benedict and Hammersmith Realty. There was also PRM 96,
2 LLC, and I did publish notice as against them --

3 THE WITNESS: Yes.

4 MR. BRUCE: -- and I will present that at the
5 subsequent hearing.

6 Q. (By Mr. Bruce) Were Exhibits 1 through 4
7 prepared by you or under your supervision or compiled from
8 company business records?

9 A. That is correct.

10 Q. And in your opinion, is the granting of this
11 Application in the interests of conservation and the
12 prevention of waste?

13 A. Yes, it is.

14 MR. BRUCE: Mr. Examiner, I move the admission of
15 Exhibits 1 through 4.

16 EXAMINER JONES: Any objection?

17 MR. KELLAHIN: No objection.

18 EXAMINER JONES: Exhibits 1 through 4 will be
19 admitted.

20 EXAMINATION

21 BY MR. KELLAHIN:

22 Q. Mr. Dyers [sic], let me ask you, sir, some
23 questions about the Chesapeake participation in the well.

24 A. Oh, okay.

25 Q. At this time, Chesapeake has signed your JOA?

1 I'm sorry, your AFE?

2 A. AFE, yes.

3 Q. And you've got that back?

4 A. Yes.

5 Q. Am I clear in understanding that Chesapeake is
6 ready to sign the JOA once the attachment to the JOA that
7 reflects the interest --

8 A. Yes.

9 Q. -- has been modified pursuant to the recent title
10 opinion?

11 A. Yes, that is correct.

12 Q. You mentioned a while ago a title opinion. Is
13 that the title opinion done by the Atwood, Malone,
14 Turner --

15 A. Yes, yes. And we furnished her a copy of that.

16 Q. And that was the August 8th title opinion?

17 A. Yes, that is correct.

18 Q. When I look at Exhibit 2 and I see the legal-size
19 spreadsheet of the interests, this two-page list --

20 A. Okay.

21 Q. -- is this list the list that you submitted to
22 the parties prior to getting the title opinion?

23 A. Yes, it is, because COG is not a member of this,
24 that belongs to Chesapeake, and the new -- the worksheet I
25 am working up now.

1 Q. That's my question. This is the old worksheet?

2 A. Right.

3 Q. And you have yet to prepare and provide
4 Chesapeake with the new worksheet based upon the title
5 opinion of August 8th, right? Is that where we are?

6 A. Well, I have to admit, I actually -- I picked up
7 the wrong sheet.

8 Q. Okay. Well, let me ask you this --

9 A. I did furnish one to Chesapeake, along with the
10 title opinion and a new worksheet.

11 Q. Okay, that's what I'm asking you.

12 A. Yes.

13 Q. We've got a title opinion that's just a few weeks
14 old.

15 A. Yes.

16 Q. Is there a worksheet that you have prepared that
17 is --

18 A. Yes --

19 Q. -- reflective --

20 A. -- yes.

21 Q. -- of the title opinion? And that's a different
22 worksheet than the one that's on this Exhibit Number 2?

23 A. Yes, I picked up the wrong one.

24 Q. So that worksheet now that you believe conforms
25 to the title opinion --

1 A. Yes.

2 Q. -- has now been furnished to Chesapeake?

3 A. Yes.

4 Q. What's the time frame to get this all done?

5 A. To get the well drilled?

6 Q. No -- Yeah, to get the well drilled and get all
7 the title stuff straightened out?

8 A. The time frame to get the title straightened out
9 is within the next two or three weeks, to get that to
10 everybody. I've already furnished it to most of them.

11 Q. And you're now waiting for them to respond and
12 then complete the paperwork so they can elect to
13 participate under the JOA?

14 A. Well, for Chesapeake, no, I'm just waiting to --
15 I'm getting together -- the operating agreement together,
16 to send to them.

17 Q. Okay.

18 A. And I think the same with XTO. We have been in
19 communications with them, talking to them.

20 Q. Is it your understanding that they had difficulty
21 with the conditions or terms of the JOA?

22 A. No.

23 Q. They were just interested in how you accounted
24 for their interest in the wellbore --

25 A. Right, right.

1 Q. -- to make sure it corresponded to what they
2 believe they had?

3 A. Well, actually, I told -- by phone conversation I
4 told a bunch of them that I was getting a title opinion
5 completed and that some of these interests would be
6 different, I'm afraid, or think they would be different.

7 Q. Help me understand how to read this spreadsheet.
8 Both the title opinion and the spreadsheet break this out
9 in terms of contract area A, B, and the title opinion talks
10 about a contract area C.

11 A. Yes.

12 Q. What is -- I just want the short answer.

13 A. Okay, I'll give you the short answer.

14 Q. What do you add up to get to the 320?

15 A. Okay, short answer is, there's different
16 ownership in area A, area B and area C. Now some of the
17 owners are all the way through, from the surface to
18 basement. But some of them are broken out in different
19 areas, it's different ownership --

20 Q. Are you talking about vertical --

21 A. -- so --

22 Q. -- are you talking about vertical or horizontal?

23 A. Horizontal, horizontal. We've got people that is
24 in the Wolfcamp that are not in the Morrow. The breakdown
25 is that from the base of the Queen to 5500 feet is one

1 zone, from 5500 feet to 100 feet below the base of the
2 Wolfcamp is a second -- is another zone. And then the C
3 zone is everything below the Wolfcamp.

4 Q. Let me ask you this. If I'm looking at Section
5 18 and the north half is the spacing unit, what of these
6 areas do I add up to get the total for a particular
7 company? Can I do it that way?

8 A. Yes, you go start with area A --

9 Q. All right, what portion of the north half of the
10 section is area A?

11 A. It is the -- horizontally. Vertically, it's not
12 different. It's the whole horizontal part. It's from
13 surface down to -- well, it's from the base of the Queen
14 down 5500 feet, through the whole part of the --

15 Q. Is the north half composed of multiple tracts?

16 A. Two tracts.

17 Q. Two tracts?

18 A. Two tracts.

19 Q. And is one tract a different letter number --
20 letter than the other?

21 A. No. It's not vertical that they're different
22 letters. The letters are for the zones going down --

23 Q. I've got you.

24 A. -- horizontally.

25 Q. So in order to get Chesapeake's interest in the

1 zone of production in the Morrow, what do I add to get
2 that --

3 A. Their interest in area A, total working interest
4 in area A --

5 Q. Uh-huh.

6 A. -- plus the total working interest in area B --

7 Q. Uh-huh. Those two numbers together?

8 A. I'm not finished, I'm turning the page.

9 Q. Sorry.

10 A. -- plus the total acreage interests in area C,
11 and then you divide that by the 320 to get their working
12 interest in the well. Because again, it's not vertical,
13 it's horizontal depths that we're getting in.

14 See, they would have -- And now I don't know, I
15 haven't looked at this that close recently because I've
16 looked at a lot of other things. It could be possible that
17 they could have, say, in zone -- in -- working in the
18 Morrow -- I'll just pick across here because it's -- they
19 could have -- well, this says -- Chesapeake says two. It
20 should be -- it's more than that. The total working
21 interest in area C, I'm sorry. Acreage and -- Say it's 25
22 in area C.

23 Then you go back up to area B, which is from 5500
24 to the base of the -- to 100 feet below the Wolfcamp, their
25 working interest could be just 12. And I'm not saying

1 that's what it is, but it could be, to give you an example.
2 And they'd go up to area A, above -- from 5500 to the base
3 of the Queen, and it could be a different number.

4 And that's why it's so hard, because some of
5 these people in here do not have any more interest in the
6 Morrow, but I went ahead and got them -- tried to get them
7 to sign the operating agreement, so if we bought them out
8 in the Morrow and we do come up to the Wolfcamp, I don't
9 have to go out at that time to get them to sign the
10 operating agreement and get all of this done. I'm trying
11 to get it all at one time.

12 Q. But you're going to send out a new spreadsheet
13 based upon the title opinion --

14 A. Yes.

15 Q. -- to the people --

16 A. Yes.

17 Q. -- and they can work it from there?

18 A. Yes, sir.

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

20 THE WITNESS: Sorry it's so confusing.

21 MR. KELLAHIN: Well, it confuses me. I still
22 don't understand, but it's all right.

23 EXAMINER JONES: Well I'm in real bad trouble,
24 then, if you guys --

25 THE WITNESS: Well, it was pretty hard trying to

1 figure it out, how to do this, too, to be honest with you.

2 EXAMINATION

3 BY EXAMINER JONES:

4 Q. That well, \$3 million -- a million here, a
5 million there, it's going to be some real money before
6 long.

7 A. Yes, it is.

8 Q. Pretty expensive.

9 A. Yes, and that's the latest one.

10 Q. Okay.

11 A. The earlier one was a little higher.

12 Q. Okay.

13 A. It's -- that's why we renewed it, because the
14 rates have gone down a little bit.

15 Q. Oh, good. There's -- budgets are running out or
16 something here for a little while.

17 A. Well, one thing, gas prices have --

18 Q. Oh.

19 A. -- really dropped, you know, \$5 this morning,
20 \$5.50 or something like that. So everybody's kind of
21 holding off on their gas --

22 Q. Okay.

23 A. -- trying to get everything in there, because the
24 \$3 million doesn't justify \$5 gas.

25 Q. Okay. So it's 321.9 acres for the 320?

1 A. Yes.

2 Q. And you've got -- you're still going from the
3 base of the Queen, and that's easy to find, I take it.
4 That's defined somewhere pretty --

5 A. Yes, there's a Queen well on there --

6 Q. Okay.

7 A. -- that -- we're using that as the base, using
8 that zone as the -- that producing zone as the Queen. So,
9 take it from there.

10 Q. Okay. And the Wolfcamp -- let's see, you're
11 going for two different deals here, a 320 and a 160,
12 basically, but not anything else. So anything that shows
13 up in those two types of spacings, oil or gas --

14 MR. BRUCE: Yeah, and I don't know what 160 would
15 be out there. I couldn't find any. Just covering the
16 bases.

17 EXAMINER JONES: And you're going to -- you said
18 you're going to continue it to the 3rd?

19 MR. BRUCE: Yes.

20 EXAMINER JONES: Of -- not November.

21 MR. BRUCE: October.

22 EXAMINER JONES: October? Can you come -- show
23 up with some -- or bring some of the COPAS evidence that
24 shows 8000? I haven't seen --

25 MR. BRUCE: We'll get that, and I can present

1 it.

2 THE WITNESS: Okay, yes, we can get that
3 information --

4 EXAMINER JONES: Okay.

5 THE WITNESS: -- because that comes from our
6 accounting department now.

7 EXAMINER JONES: Okay.

8 THE WITNESS: I claim more ignorance to that than
9 I do what I just tried to explain to him.

10 EXAMINER JONES: We -- the Morrow wells I've been
11 around, they didn't want anybody to touch them, you know.
12 They didn't make any water and they said don't touch this
13 well, you know. So the operating cost was not excessive on
14 it, you know.

15 THE WITNESS: Well, the COPAS cost is adjusted
16 every April based on three or four things and --

17 EXAMINER JONES: Okay.

18 THE WITNESS: -- one of them is the cost of
19 living and everything. And after so long if it does get
20 too high, usually the working interest partners will get
21 together and say, Listen, I know this is this much. But --
22 and we've reduced, and I've seen reduced one here recently
23 from \$660, we reduced it down to \$200 to make it --

24 EXAMINER JONES: Oh.

25 THE WITNESS: -- economical for everybody,

1 because the overhead was just getting out of hand.

2 THE WITNESS: Okay. Okay, Mr. Brooks?

3 EXAMINER BROOKS: Who was it you hadn't gotten
4 notice to?

5 MR. BRUCE: The two people, Mr. Examiner, the two
6 are John N. Benedict and PRM 96, LLC. Now the third one --
7 and I think it's a valid address, but that Hammersmith
8 Realty, Inc., they are in Alberta.

9 EXAMINER BROOKS: Yeah.

10 MR. BRUCE: And so that had to be a special --
11 you can't send it certified to them. I had to do a
12 registered, but I haven't gotten anything back.

13 EXAMINER BROOKS: Yeah. Now you've got a -- you
14 did an affidavit -- you did a publication for Benedict and
15 Hammersmith, right?

16 MR. BRUCE: Yeah, and I have amended that to
17 include that PRM 96.

18 EXAMINER BROOKS: So that's the reason for the
19 continuances for the PRM 96 --

20 MR. BRUCE: Well, there was that, but there was
21 also a mistake in the original ad.

22 EXAMINER BROOKS: Okay.

23 MR. BRUCE: It talked about -- I don't know,
24 there was -- I forget what it was. And the Division might
25 have actually taken care of it, but we needed to

1 readvertise for PRM 96 anyway.

2 EXAMINER BROOKS: Okay.

3 EXAMINER JONES: Okay. Anything else?

4 MR. BRUCE: Not from this witness.

5 EXAMINER JONES: Mr. Kellahin?

6 MR. KELLAHIN: No, sir.

7 MR. BRUCE: And Mr. Examiner, I mean generally in
8 a pooling case -- the risk penalty here I don't think is at
9 issue, but there are some issues that XTO was interested
10 in, and as a result we do have a geologist to discuss the
11 geologic -- the primary geologic prospect.

12 GORDON K. YAHNEY,

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

15 DIRECT EXAMINATION

16 BY MR. BRUCE:

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

18 A. My name is Gordon K. Yahney.

19 Q. How do you spell your last name, for the court
20 reporter?

21 A. It's spelled Y-a-h-n-e-y.

22 Q. Where do you reside?

23 A. I reside in Roswell, New Mexico.

24 Q. Who do you work for and in what capacity?

25 A. I work for Harvey E. Yates company as a

1 geologist.

2 Q. Have you previously testified before the Division
3 as a geologist?

4 A. Yes, I have.

5 Q. And were your credentials as an expert petroleum
6 geologist accepted as a matter of record?

7 A. Yes, they were.

8 Q. And are you familiar with the geology involved in
9 choosing a well location for the proposed well?

10 A. Yes, I am.

11 Q. And was the well location chosen based upon your
12 geology?

13 A. Yes, it was, geology and geophysics.

14 Q. Okay. And this -- and you are responsible at
15 Heyco for the geology in this part of southeast New Mexico,
16 I take it?

17 A. Yes, I am.

18 MR. BRUCE: Mr. Examiner, I'd tender the witness
19 as an expert petroleum geologist.

20 EXAMINER JONES: He's qualified as an expert in
21 petroleum geology.

22 Q. (By Mr. Bruce) Could you please -- rather than
23 run you through these, you've got four exhibits, and you
24 talked to me earlier. Why don't you just tell them what
25 you told me earlier?

1 A. Okay, direct you to Exhibit Number 5. Exhibit
2 Number 5 is a structural map. It's been done in time
3 instead of depth. It shows the structural position of the
4 proposed location in the southwest quarter of the northwest
5 quarter of Section 18. It's roughly about eight miles
6 south of Maljamar on the county line between Eddy and Lea
7 Counties.

8 The map you see there, we've interpreted a
9 portion of the Maljamar 3-D group shoot that was done by
10 WesternGeco, oh, about 10 years ago. The interpretation
11 off of that 3-D survey is what led to the structural map
12 that you see here.

13 In terms of the mapped horizon, it is the shale
14 between the upper and the lower Morrow formations.
15 Typically at the location the Morrow will be at about --
16 the marker will be at about 12,450 feet or -500 feet,
17 somewhere right in there.

18 In terms of the contour interval of the map, like
19 I said, it is done in time. The interval that is 10
20 milliseonds, that's roughly equivalent to 75 to 80 feet.

21 Q. And why was the location chosen in the western
22 part of the 320-acre well unit?

23 A. The location was put there for the structural
24 position. We feel that there's a good chance that there's
25 a low-relief closure there, based on the seismic, and you

1 would have preferential migration out of the lows that you
2 see on the map that are colored in blue.

3 Q. The rest of your exhibits, please.

4 A. Like I said, this location was picked on the 3-D
5 survey. On Exhibit 5 there you have a red line running
6 through the location. That is the line from the seismic
7 survey. It's line 58.

8 And on Exhibit 6 there is a cross-sectional
9 interpretation of line 58 showing the position in
10 relationship to the various deeper Penn gas-bearing
11 horizons down to the Siluro-Devonian. There is a little
12 bit of deeper faulting that is responsible for the creation
13 of the low-relief structure that we think may be present
14 there. That's depicted on the cross-section.

15 The mapped horizon is the red lower Morrow that's
16 in Exhibit 5. We felt from the interpretation of the
17 seismic line that the fault did not come up and cut that
18 particular mapped horizon.

19 Our objectives for this well are -- it's a Morrow
20 well, and we're targeting the reservoirs that we saw in
21 drilling the Pearsall 6 Federal Number 1. It's a well of
22 ours that's about two miles north of the proposed location.
23 In the immediate vicinity of the proposed Walker well there
24 is no close control or production. This is basically one
25 of the nearest producing wells to the proposed location.

1 You can see from the type log there that we have
2 about 20 to 30 feet of potential producing pays in both the
3 upper and -- or the middle Morrow and the lower Morrow that
4 are targets.

5 The production from the Pearsall 6 has been to
6 date about a 1.1 BCF and a little over 40,000 barrels of
7 oil. We expect, hopefully, typical -- you know, production
8 from our proposed location that would be typical of this.

9 I've also prepared as Exhibit 8 a map at the
10 deeper Siluro-Devonian horizon to show you the position of
11 the fault that was mapped from the seismic. It's a cut
12 that is seen on about seven seismic lines out of the
13 survey, and it doesn't appear to proceed any further to the
14 north or south than that.

15 Q. In your opinion, is the proposed location a
16 preferred geologic location for testing the Morrow?

17 A. In my opinion, yes, it is.

18 Q. And were Exhibits 5 through 8 prepared by you?

19 A. Yes, they were.

20 Q. And in your opinion is the granting of this
21 Application in the interests of conservation and the
22 prevention of waste?

23 A. Yes, sir.

24 MR. BRUCE: Mr. Examiner, I'd move the admission
25 of Heyco Exhibits 5 through 8?

1 MR. KELLAHIN: No objection.

2 EXAMINER JONES: No objection. Heyco Exhibits 5
3 through 8 will be admitted.

4 EXAMINATION

5 BY MR. KELLAHIN:

6 Q. Excuse me, would you pronounce your last name for
7 me again?

8 A. Yahney.

9 Q. Yahney?

10 A. Yahney.

11 Q. All right. Mr. Yahney, let me have you turn to
12 Exhibit Number 5.

13 A. Sure.

14 Q. You indicated that this was a 3-D seismic data
15 that Heyco had acquired maybe 10 years ago. Is that about
16 right?

17 A. Yes, it was acquired by license from WesternGeco.
18 It is the part of the Maljamar Phase 1 group shoot, 3-D
19 group shoot.

20 Q. Is this data available to other operators to
21 acquire?

22 A. It is available to license --

23 Q. Yes.

24 A. -- by other operators. Yes, it is.

25 Q. For example, Chesapeake or XTO could obtain a

1 license and acquire the data?

2 A. Yes, they could.

3 Q. Do you know if they have done that?

4 A. To my knowledge, XTO does not have this data,
5 from my conversations with their geologist, Ralph Nelson.

6 Q. Are you a geophysicist?

7 A. I have been trained as such. I was not a
8 graduate with a geophysics degree.

9 Q. So the interpretation here of the 3-D seismic
10 data is your interpretation?

11 A. Yes, it is.

12 Q. Have you had it validated with a geophysicist?

13 A. I have worked with other geophysicists on this.
14 This particular set was worked by myself and a geophysicist
15 by the name of Robin Pearson.

16 Q. Let me ask you this. From this data set, has
17 Heyco successfully drilled other Morrow wells on this
18 information?

19 A. Yes, we have.

20 Q. Is there any of those shown on this map?

21 A. No, there's not.

22 Q. Have you calibrated your data to honor the
23 subsurface data obtained from such wells?

24 A. Yes, we have.

25 Q. When I look at the -- when I look at the time-

1 structure map, can you help me understand in terms of feet
2 the distance I'm looking at in terms of the contour lines
3 when I go from one color to the next?

4 A. One color to the next is 10 milliseconds; 10
5 milliseconds at the rough, approximate depth we're at, at
6 12,500 feet, is equivalent to 75 to 80 feet.

7 Q. Okay, so any change in color within the spacing
8 unit is attributable to a change of about --

9 A. -- 75 to 80 feet of structure.

10 Q. So part of the strategy for the Walker 18 well is
11 to gain structural advantage, to be shallower structurally?

12 A. That is correct.

13 Q. What type of -- What's the depositional nature of
14 the Morrow?

15 A. The depositional nature of the Morrow is such
16 that it's often preferentially deposited in lows. In terms
17 of recoverable production, though, if you look at these
18 fields that are a combination stratigraphic-structural
19 traps or, you know, purely structural, they have better
20 producing cumulative numbers as a whole than the rest of
21 the population of wells.

22 Q. I've forgotten to look up exactly where this is
23 in terms of the Morrow production. Are we in a beach
24 environment, or is this a river channel system?

25 A. The Morrow section is characterized by a fluvial-

1 deltaic depositional system for most of southeastern New
2 Mexico. That changes with the position where you are in
3 the particular part of the Morrow section and your
4 location.

5 For this particular area, I would expect that the
6 lower Morrow interval that was shown on the type log would
7 be a fluvial-deltaic situation where you would have
8 channels. It would also, you know, have the possibility to
9 have shoreline deposits, which would be deposited
10 perpendicular to most of the depositional channels. So
11 you've got multiple processes going on here, and you've got
12 multiple fluctuations in sea level that are causing your
13 sands to be distributed around.

14 Q. I understand that. When we get to the Walker
15 location, is there another producing Morrow well that's in
16 that same channel system?

17 A. I cannot tell you that.

18 Q. This would be the first one that would penetrate
19 that?

20 A. May or may not. This could well be in the same
21 channel system as the Pearsall well to the north. That
22 would be on depositional strike to this particular
23 location.

24 Q. The Pearsall is over in Section 6, is it?

25 A. Right, it is roughly two miles north, slightly

1 east, of this particular location.

2 Q. Do you have an isopach of this area?

3 A. I have not brought an isopach today.

4 Q. What does the isopach look like?

5 A. With sparse control, it is very loosely drawn.

6 Q. How deep is the well over there in the eastern
7 edge of the spacing unit in 16?

8 A. The Zion well?

9 Q. The Zion Number 2. What's that?

10 A. The Zion Number 2 well, I believe, was a Wolfcamp
11 well. It is currently producing from the Queen. It's one
12 of two Queen wells that are in the east half of the
13 northeast quarter of Section 18.

14 Q. Let's turn to Exhibit Number 6 and help me put
15 this into perspective. I'm dealing again with time
16 components as I look at this --

17 A. That's correct.

18 Q. -- and I assume from the 3-D seismic data set
19 that you've got the ability on the computer system to
20 select a particular line that you want to display?

21 A. That's correct.

22 Q. And you've chosen line 58, was it?

23 A. Fifty-eight.

24 Q. Fifty-eight. And that was chosen by you for what
25 reason?

1 A. It goes through the wellbore --

2 Q. Yeah.

3 A. -- proposed location.

4 Q. And you wanted to orient it east-west for what
5 reason?

6 A. In terms of your structural position, your
7 critical dip component is to establish that you have
8 westerly dip on your structure, because the -- all of your
9 strata within the Delaware Basin have a regional tilt that
10 is to the east and southeast.

11 Q. Okay, let's go back to Exhibit 6. I see just
12 below the depth of the Walker well there's a projection of
13 a fault, and you're forecasting the Walker well to be
14 slightly to the west on the upthrown side of this fault?

15 A. Yes, I am.

16 Q. Have you done further seismic lines off your
17 seismic set so that you could display the location of this
18 fault line on, say, Exhibit Number 5, so we could see the
19 extent of that line as it moves across the spacing unit?

20 A. Could you repeat that?

21 Q. Well, I guess what I'm looking at, in Section --
22 in Exhibit 6 I'm simply seeing a snapshot of this fault as
23 projected on line 56, and I'm trying to see if you've
24 explored to see what the extent of this fault is as we go
25 north and south along the structure.

1 A. The extent of that fault is displayed on Exhibit
2 8.

3 Q. Okay.

4 A. That is the white marks that are on Exhibit 8.

5 Q. Okay. So let's turn to Exhibit 8 now. And when
6 you get to the northern edge of the white line --

7 A. Yes.

8 Q. -- that would be what your data set shows you to
9 be the northern extremity of this fault?

10 A. That is correct.

11 Q. And then above that line it disappears on your
12 data set?

13 A. Right, it is not visible on the data set.

14 Q. And to the south, then, the southern edge of the
15 white area represents what you believe to be the terminus
16 of the southern side of that fault?

17 A. That's correct.

18 Q. When you project the fault, you've got the
19 highest point of the fault projection as penetrating up to
20 just below the base of the lower Morrow on Exhibit Number
21 6?

22 A. On Exhibit Number 6, that fault comes up to
23 basically the base of the lower Morrow, that's correct.

24 Q. Is part of your exploration strategy to place the
25 Walker well upstructure and to the west of the fault?

1 A. That's correct.

2 Q. When I look -- can you convert this to footages
3 for me, so that I can see what you estimate to be the
4 distance -- Let me start over.

5 If you take Exhibit 6, take the projection of the
6 Walker wellbore, in red, all the way down to its base just
7 below the line that runs horizontal, that's the
8 representation of the lower Morrow, Walker penetrates the
9 top of the lower Morrow and stops at a point. What I want
10 to know is, what's the estimated distance between the base
11 of the wellbore and the top of this structure.

12 Do you see where I'm looking?

13 A. I'm having trouble following that. The --

14 Q. Do you see the top of the fault?

15 A. I see the top of the fault, I see the marking for
16 the base of the projection for the well.

17 Q. It's that distance that I'm trying to determine.

18 A. The distance between the two --

19 Q. Yes, sir.

20 A. -- is going to be somewhere in the neighborhood
21 of a couple hundred feet. We will try to -- while we're
22 drilling this, to monitor our deviation, to know where our
23 wellbore is going to be going, to make sure that we're not
24 getting in a position where we don't want to be.

25 Q. Well, that's my question. Is -- your objective

1 is to stay on the upthrown side of this fault?

2 A. That is the objective, is to stay in the positive
3 structural position.

4 Q. Based upon the quality of this type of data, is
5 there a percentage of variation in the numbers so that,
6 say, 200 feet is not enough margin of protection to avoid
7 encountering the fault?

8 A. I don't know what the answer to that is, really.

9 Q. Are the tools accurate enough that you can steer
10 clear of the fault and be on the upthrown side of the
11 fault?

12 A. You do that to the best of your ability. Without
13 going back in after you've drilled the well and running
14 some very detailed type of observations, you're not going
15 to know. And in this case we're not going to get, really,
16 to the depth of the very top of that fault.

17 Q. So in a horizontal sense, how far above the top
18 of the fault do you think you'll be when you stop?

19 A. When we TD we will probably be in the upper
20 Mississippian and will probably be at the level of the top
21 of the fault.

22 Q. Can you assign a percentage of risk associated
23 with being successfully on the upper side of the fault?

24 A. I don't know what that would be at the moment,
25 sir.

1 Q. When I compare Exhibit Number 5 with Exhibit
2 Number 8, other than the information -- well, there's quite
3 a bit of difference. What am I seeing in Exhibit 8 that's
4 different than what's in Exhibit 5?

5 A. You have a different scale.

6 Q. Uh-huh.

7 A. Exhibit 8 is done at a different scale, which
8 means it's closer in on the structure.

9 Q. So when I look at Exhibit 8, then, I can see a
10 gradation in the contour lines on the structure that are
11 not apparent to me when I look at Exhibit 5? I've got some
12 additional colors associated with Exhibit 8?

13 A. You have a little bit of additional color
14 associated with Exhibit 8, and if you look at the profile
15 of line 58 -- that's Exhibit 6 -- you see that at the
16 Siluro-Devonian level, which is Exhibit 8, you have more of
17 a rollover and more of a relief, structural relief, that is
18 mapped in this particular exhibit.

19 Q. When you look at Exhibit 8 and associated around
20 the letter Walker, there's a slightly darker green shading.
21 Do you see what I'm talking about?

22 A. Yes, I do.

23 Q. What does that represent that's different than
24 what's the next level of color?

25 A. That represents, again, an interval of 10

1 milliseonds, or roughly 75 to 80 feet of structural
2 closure which occupies the -- most of the southwest of the
3 northwest of Section 18 and runs over into the -- a little
4 bit into Section 13 and into the northwest of the
5 northwest.

6 Q. If the wellbore is moved to the north and to the
7 west, into a thicker portion of that darker shaded area,
8 farther away from this fault, does that improve the
9 location compared to where you put it?

10 A. That might improve the location slightly, but the
11 Walker is set at the minimum standoff distance from the
12 section line at 660 feet for a Morrow well.

13 Q. I think you've told me, and I've forgotten. The
14 Pearsall 8 Federal 1, the well in Section 6, was that
15 drilled on this 3-D seismic data?

16 A. Yes, it was.

17 MR. KELLAHIN: Thank you very much. No further
18 questions.

19 EXAMINATION

20 BY EXAMINER JONES:

21 Q. Mr. Yahney --

22 A. Yes, sir.

23 Q. -- I can't -- this -- who's the owners -- who
24 would be the affected owners if you did encroach over to
25 the east -- or west, I'm sorry?

1 A. We would be one of the owners in that section,
2 but there is other parties involved.

3 MR. DYER: Thirteen parties.

4 EXAMINER JONES: All leased up, though?

5 MR. DYER: Yes, it is 100 percent leased.

6 Q. (By Examiner Jones) And you didn't want to go --
7 you didn't think that moving that well a little bit further
8 would justify trying to --

9 A. Well, you would have to get all of the Section 13
10 parties to okay an unorthodox location for if you moved it
11 westward, further westward, in Section 18. The location
12 that I picked, I thought, was the best location to get to
13 this particular rather small structural feature, and it was
14 set up in that manner.

15 Q. What kind of pressures are you anticipating here
16 in this well, in the Morrow, do you hope to get?

17 A. Well, Morrow reservoir pressures at 12,500 feet
18 or so ought to be in the 4500 to 5000 foot [sic] range, I
19 would think. I don't know that I have anything here in my
20 reference material to tell me that at the moment.

21 Q. So there's no -- this Pearsall well, you don't
22 know the pressure in it?

23 A. The Pearsall well, we do -- I'm sure we have
24 pressure in it, I just don't remember what it is. It was
25 normally pressured -- roughly normally pressured for the

1 depth that it is.

2 Q. Okay.

3 A. That's -- you know what normal hydrostatic
4 pressure would be for that. I don't expect that there's
5 any depletion involved in this proposal at all. There's no
6 wells close enough that are producing to this to have any
7 depletion effects.

8 Q. Okay, that's basically what I was trying to ask,
9 I guess, but -- So that's the nearest well, the Pearsall
10 well?

11 A. It probably is not the nearest well, but it's
12 pretty close to being one of the nearest wells. There are
13 a couple other wells close -- that are about the same
14 distance away. To the east there's the Mewbourne SF 17
15 Federal Number 1 and 2, and then to the south and west
16 there's a Geronimo 1 and 2 and a Tamano 1 and 2. All of
17 those wells are operated by Mewbourne, and they're roughly
18 about a mile and a half to two miles away, basically the
19 same distance as the Pearsall well.

20 Q. Is there no prospects down in the Mississippian?
21 You show a kind of a bump there against that fault, or is
22 that just leaking faults?

23 A. I don't expect the Mississippian to be a
24 reservoir in this particular area. And this feature is
25 probably a little on the small side to try to be drilling a

1 Devonian well to.

2 Q. But you've seen these little short-extent faults
3 before, down in the -- below the Pennsylvanian?

4 A. Yes, I've seen some of these. There are some
5 other faults on this particular seismic survey. And in
6 fact, you know, about three-quarters of a mile to a mile to
7 the west here, there's a ridge that runs with ridge folding
8 and folding that goes for quite a ways. And this
9 particular area here is kind of in a regional low.

10 Q. A regional -- ?

11 A. -- low.

12 Q. -- low?

13 A. Regional on just a little bit more --

14 Q. Okay.

15 A. -- bigger scale than the local that you see the
16 maps here.

17 Q. Okay. What are you anticipating between the
18 Queen and the Morrow? Anything?

19 A. Between the Queen and the Morrow here we have
20 opportunities for Bone Spring reservoirs, primarily sands,
21 and the -- they're on the far eastern side of Section 18,
22 there was Wolfcamp production.

23 In terms of additional possibilities, when you
24 get a closure like this you could have pretty much
25 reservoirs up and down the hole.

1 Q. And so if you start seeing shows as you drill,
2 you might be -- have a hint that you are in a structure,
3 then?

4 A. Yeah, you could have a situation where you have
5 multiple horizons that would be pays.

6 EXAMINER JONES: Okay, any questions?

7 EXAMINER BROOKS: No questions.

8 EXAMINER JONES: Okay, any other questions, Mr.
9 Bruce?

10 MR. BRUCE: Nothing further, Mr. Examiner.

11 MR. KELLAHIN: (Shakes head)

12 EXAMINER JONES: Is that it for this case?

13 MR. BRUCE: That's it.

14 EXAMINER JONES: That's it.

15 We'll take Case 13,999 under advisement. Or
16 actually, I'm sorry, we are going to continue this case
17 until the 3rd of November.

18 EXAMINER BROOKS: October.

19 EXAMINER JONES: October.

20 (Thereupon, these proceedings were concluded at
21 2:00 p.m.)

22 I do hereby certify that the foregoing is
23 * * * a complete record of the proceedings in
the Examiner hearing of Case No. _____
heard by me on _____

24 _____, Examiner
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 September 25th, 2007.



STEVEN T. BRENNER
 CCR No. 7

My commission expires: October 16th, 2010