

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. 14,000

APPLICATION OF HARVEY E. YATES COMPANY)
 FOR EXPANSION OF A UNIT AREA, OTERO)
 COUNTY, NEW MEXICO)

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGSEXAMINER 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

OCD Exhibit C
 De Novo Case 14000
 Application of HEYCO

2007 OCT 3 PM 1:53
 RECEIVED

I N D E X

September 20th, 2007
 Examiner Hearing
 CASE NO. 14,000

	PAGE
APPEARANCES	3
APPLICANT'S WITNESSES:	
<u>VERNON D. DYER</u> (Landman)	
Direct Examination by Mr. Bruce	4
Examination by Examiner Jones	8
Examination by Examiner Brooks	14
<u>GORDON K. YAHNEY</u> (Geologist)	
Examination by Examiner Jones	17
REPORTER'S CERTIFICATE	28

* * *

E X H I B I T S

Applicant's	Identified	Admitted
Exhibit 1	5	8
Exhibit 2	5	8
Exhibit 3	5	8
Exhibit 4	6	8
Exhibit 5	6	8
Exhibit 6	7	8

* * *

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 EXPANSION OF A UNIT AREA, OTERO)
COUNTY, NEW MEXICO)

CASE NO. 14,000

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

OCD Exhibit C
De Novo Case 14000
Application of HEYCO

RECEIVED
2007 OCT 3 PM 1:53

I N D E X

September 20th, 2007
 Examiner Hearing
 CASE NO. 14,000

	PAGE
APPEARANCES	3
APPLICANT'S WITNESSES:	
<u>VERNON D. DYER</u> (Landman)	
Direct Examination by Mr. Bruce	4
Examination by Examiner Jones	8
Examination by Examiner Brooks	14
<u>GORDON K. YAHNEY</u> (Geologist)	
Examination by Examiner Jones	17
REPORTER'S CERTIFICATE	28

* * *

E X H I B I T S

Applicant's	Identified	Admitted
Exhibit 1	5	8
Exhibit 2	5	8
Exhibit 3	5	8
Exhibit 4	6	8
Exhibit 5	6	8
Exhibit 6	7	8

* * *

A P P E A R A N C E S

FOR THE DIVISION:

DAVID K. BROOKS, JR.
Assistant General Counsel
Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

FOR THE APPLICANT:

JAMES G. BRUCE
Attorney at Law
P.O. Box 1056
Santa Fe, New Mexico 87504

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 2:00 p.m.:
3

4 EXAMINER JONES: And let's call Case 14,000,
5 Application of Harvey E. Yates Company for expansion of a
6 unit area, Otero County, New Mexico.

7 Call for appearances.

8 MR. BRUCE: Mr. Examiner, Jim Bruce of Santa Fe,
9 representing the Applicant. I have one witness. And if
10 the record could reflect, the witness is Vernon Dyer who
11 was previously sworn and qualified.

12 EXAMINER JONES: Okay.

13 VERNON D. DYER,
14 the witness herein, having been previously duly sworn upon
15 his oath, was examined and testified as follows:

16 DIRECT EXAMINATION

17 BY MR. BRUCE:

18 Q. Mr. Dyer, what the heck are we here for today?

19 A. We have received approval from the BLM and the
20 State Land Office to expand the existing unit, Bennett
21 Ranch Unit, to be more conformed to the type of production
22 we find.

23 Q. Okay. And how long ago was this unit originally
24 formed?

25 A. In 1997.

1 Q. And did the order that approved the unit, which
2 was R-10,527, require that if the unit was expanded, that
3 the operator come back in and seek Division approval?

4 A. That is correct.

5 Q. Okay. What does Exhibit 1 reflect?

6 A. That is the -- a map of the unit, and it shows
7 the old unit and the new expanded part, the expanded part
8 being more of the square going from Section 1 to Section 3
9 -- or Section 27, I'm sorry -- and then across, and then
10 down across the bottom of the State line, and going up the
11 side, Section 31, 30, 18, the over again to the corner --
12 southeast corner of 12, and then back up to the top.

13 Q. Okay. That is the Texas state line down at the
14 very bottom?

15 A. Yes, that is the Texas state line at the very
16 bottom.

17 Q. Does Exhibit 2 reflect the original acreage in
18 the unit?

19 A. Yes, it does.

20 Q. And does Exhibit 3 reflect the -- what would be
21 the expanded -- the total acreage in the expanded unit?

22 A. Yes, that would be it.

23 Q. Is all of the land in the unit as expanded
24 federal or state land?

25 A. Yes, it is.

1 Q. And you did obtain approval, preliminary approval
2 from both the Commissioner of Public Lands and the Bureau
3 of Land Management regarding this expansion?

4 A. Preliminary from the State Lands as subject to
5 the OCD hearing, and then from the BLM it's just straight
6 approval.

7 Q. Okay, that's final approval?

8 A. That's final approval, yes.

9 Q. But the BLM does also require you to come up and
10 get approval from the OCD?

11 A. Yes, they request that we come up and get -- to
12 the OCD.

13 Q. Okay. And the State and BLM approvals are
14 Exhibits 4 and 5, are they not?

15 A. That is correct.

16 Q. The reason for the expansion, could you summarize
17 for the Examiner?

18 A. Yes, when we originally put this together in '97
19 and we were basing it on oil production on 40-acre spacing,
20 the two existing wells we have were both gas wells on 640
21 spacing. So we have increased it to allow us to have our
22 640 spacing on all of the wells that will be drilled.

23 Q. Okay, so this expansion would allow you to
24 dedicate an entire section to each well that may be drilled
25 in the unit?

1 A. That is correct.

2 Q. And that is the basic reason for the expanded
3 unit?

4 A. Yes, that is.

5 Q. And without going into too much detail has this
6 been a long, hard road for you getting wells drilled in
7 this unit?

8 A. Yes. And I can explain if you want to, but it
9 would be -- it's so numerous I don't know where to start.

10 Q. And was notice given to both the Commissioner of
11 Public Lands and the Bureau of Land Management regarding
12 this Application?

13 A. Yes, it was.

14 Q. And is that reflected in Exhibit 6?

15 A. Yes, it is.

16 Q. In your opinion, is the granting of this
17 Application in the interests of conservation and the
18 prevention of waste?

19 A. Yes, I do believe that.

20 Q. And were Exhibits 1 through 6 either prepared by
21 you or under your direction or compiled from company
22 business records?

23 A. That is correct.

24 MR. BRUCE: Mr. Examiner, I'd move the admission
25 of Exhibits 1 through 6.

1 EXAMINER JONES: Exhibits 1 through 6 will be
2 admitted.

3 EXAMINATION

4 BY EXAMINER JONES:

5 Q. Mr. Dwyer, these -- or, I'm sorry, Dyer. Is this
6 a statutory unit or a regulatory -- or an exploration unit?

7 A. It is an exploration unit.

8 Q. And is it oil or is it gas?

9 A. It is gas.

10 Q. Gas.

11 A. The existing wells we have are gas wells, yes.

12 Q. Just repeating what you said earlier, I'm sorry.

13 A. Oh, that's okay. I'm at the age I repeat a lot
14 of times.

15 Q. Are you familiar with that order, that R-10,537?
16 It said -- Was there findings in there for why that OCD
17 approval should be required for expanding the unit?

18 A. I don't know of any reason why they did it in the
19 deal. I'm assuming that it's so they can keep track of
20 what's going on. I mean, they're the controlling entity
21 for the producing well, so...

22 Q. Okay. And can you tell me a little bit about the
23 drilling out there so far? How many wells and what -- what
24 have you found and --

25 A. We've actually drilled three. The first one we

1 lost the hole to -- immediately, and then skidded the well
2 and drilled the 1Y. So we have two wells out there, one
3 producing from the Morrow -- from the Mississippian --
4 Mississippian, and one from the Canyon.

5 The drilling of the wells out there has been very
6 difficult due to government interference, for lack of a
7 better word. State, federal and county.

8 Q. That first well, it was skidded -- How deep did
9 you get before it was skidded?

10 A. We drilled to the -- he's the geologist, he can
11 tell you all that. But we drilled to the basement.

12 MR. YAHNEY: Would you like me to answer here?

13 EXAMINER JONES: You know what, I should --

14 MR. YAHNEY: I'm a little more familiar with some
15 of the geology than Vernon.

16 EXAMINER JONES: Yeah, let me concentrate on
17 questions more related to land first, and then --

18 MR. YAHNEY: Okay.

19 EXAMINER JONES: -- maybe we can get Mr.

20 Yahney --

21 THE WITNESS: The difficulty -- I do know some of
22 the difficulty out there. One of the difficulties is, it's
23 way underpressured reservoirs, and if you drill with
24 anything -- unless you drill with air, you're going to mask
25 everything and you'll never find it, and that's what's

1 happened out there most of the time.

2 Q. (By Examiner Jones) You don't see it when you're
3 drilling --

4 A. Well, the mud covers it up, so it's -- pressures.
5 It's underpressured reservoirs. And Gordon can explain
6 that much better than I can.

7 Q. Now, does this -- Let me get this straight. The
8 BLM requests OCD approval, but the State Land Office
9 requires it?

10 MR. BRUCE: That's under State Land Office
11 regulation, they do --

12 THE WITNESS: Yes.

13 MR. BRUCE: -- require -- It's not in the unit
14 agreement, it's -- well, it may be in the unit agreement,
15 but under State Land Office regulations they do require
16 that any creation or expansion of any type of unit have OCD
17 approval.

18 Q. (By Examiner Jones) Okay, and you could probably
19 answer the stips for the BLM on drilling. What --

20 A. On the first two wells there was stips.

21 Q. Pardon?

22 A. On the first two wells there was no stips.

23 Q. Okay, there wasn't any stipulations on --

24 A. No.

25 Q. -- on the drilling?

1 And then they changed it?

2 A. They're in the process of trying to change them,
3 yes.

4 Q. But they're not yet, they're -- haven't
5 changed --

6 A. Well, we don't know, we haven't got the new APD
7 yet. It's still tied up in the courts and through the
8 state government has filed suit against it, so we're
9 waiting.

10 Q. The unit itself -- the unit requires probably so
11 many wells to be drilled within a certain amount of time --

12 A. Yes, they do.

13 Q. -- and what happens if you can't get those
14 drilled because of --

15 A. Then it can -- Then the unit contracts down to
16 the existing participating areas that are in effect at that
17 time.

18 Q. Okay. What about on state land -- State Land
19 Office lands? What kind of -- Do they have any
20 stipulations on the drilling requirements?

21 A. We haven't drilled any on state land yet, so
22 we --

23 Q. So you don't?

24 A. -- we don't -- haven't seen any extra.

25 Q. Okay.

1 A. We've really been delayed. The first well was
2 discovered in '97, so we're still trying to get everything
3 done.

4 Q. What about right-of-way for getting gas out of
5 there?

6 A. The -- When we discovered the well, the resource
7 management plan for this area did not have any provisions
8 for the producing of oil or gas or the transporting of oil
9 and gas. So after we discovered the well, they immediately
10 had to shut everything down and go into a resource
11 management plan, which under BLM law, regulations, they
12 have to get it where they can -- get it where we can
13 actually produce the gas, and then transport it.

14 So up until the resource management plan was
15 issued to the public in -- a few years ago, a year ago, two
16 thousand- -- I don't have my timeline with me, I apologize.

17 MR. YAHNEY: 2005, basically.

18 THE WITNESS: 2005, January of 2005. There was
19 no -- we could not transport or produce the gas that was
20 out there.

21 The minute that was issued, the new RMP was
22 issued of record, record of decision, the Governor of New
23 Mexico had a 60-day or a 30-day resource -- a comment
24 period. He made his comments, it was taken in.

25 The BLM rejected all the comments and said it

1 wasn't right, and they went ahead and reissued it again.
2 And at that time the Attorney General, under the Governor's
3 instructions from the -- New Mexico, filed a suit against
4 the existing RMP that was approved by the judge, and it has
5 been set aside, and now we're still -- Judge Black here is
6 still handling the court case, and they're still in
7 negotiations between the Attorney General, the
8 environmental groups and the BLM on trying to get the case
9 settled.

10 And until something is done, we're sitting out
11 there with two perfectly good natural gas wells that cannot
12 be produced.

13 Q. (By Examiner Jones) Okay. And --

14 A. And the people of the United States is what's
15 losing here. It's not us. Because the gas is not coming
16 on, and the revenue is not being paid to the State or to
17 the federal government.

18 Q. Was there any lease expirations that was
19 prompting the adjustment of this unit at this time?

20 A. No, the lease expiration, we've already -- the --
21 all the leases that was out there has already been expired
22 on us, because we couldn't do anything with them. And we
23 have negotiated with the BLM to put a lot of our
24 obligations in suspense while the lawsuit is going on
25 because we have no control over it.

1 So we've got -- all the leases that's in that
2 area now is in suspense, except for two -- or except for
3 one leased on three sections, which we bought at the July,
4 2005, land sale for the BLM, and it has not been issued yet
5 because it has also been put up into the lawsuit filed by
6 the Attorney General.

7 Q. Okay.

8 A. And those leases have not been issued, so there's
9 no time running yet.

10 Q. Okay. That Canyon, was it -- is that gas too?

11 A. Yes.

12 Q. Basically Pennsylvanian, Mississippian gas.
13 Okay.

14 A. Dry gas too.

15 EXAMINER JONES: Pretty dry gas. Okay, I think
16 that's all the questions for your land witness.

17 MR. BRUCE: Do you want me to put Mr. Yahney --

18 EXAMINER JONES: If you don't mind.

19 EXAMINER BROOKS: Well, I'd like to ask a couple
20 questions.

21 EXAMINER JONES: Okay, go ahead. Sorry, Mr.
22 Brooks.

23 EXAMINATION

24 BY EXAMINER BROOKS:

25 Q. This is -- it looks like the acreage totals add

1 up, this is all federal or state land?

2 A. Yes, sir.

3 Q. No private lands?

4 A. Not at all.

5 Q. And all the tracts within the expanded unit will
6 be committed to the unit?

7 A. Yes, sir.

8 Q. Is Heyco the only working interest owner
9 involved?

10 A. No, there's -- we have two partners.

11 Q. Okay, and they've joined in the amendment to the
12 unit agreement --

13 A. Yes, they have.

14 Q. -- to expand?

15 A. Yes.

16 Q. Okay, so it's an entirely voluntary agreement at
17 this point?

18 A. Yes. Yes, it is.

19 EXAMINER BROOKS: Let's see, are there any other
20 questions I need to ask?

21 MR. BRUCE: Mr. Brooks, if you look at Exhibit 5,
22 the last several pages are the revised Exhibit B to the
23 unit agreement --

24 EXAMINER BROOKS: Okay --

25 MR. BRUCE: -- and it would set forth the --

1 EXAMINER BROOKS: -- you did not put the unit
2 agreement itself in the record?

3 MR. BRUCE: I don't think the unit agreement
4 would change.

5 THE WITNESS: No, the unit agreement didn't
6 change.

7 Q. (By Examiner Brooks) Well, the unit agreement is
8 a federal form, as I understand it.

9 A. Yes, it's a fill-in-the-blank form.

10 EXAMINER BROOKS: The form requires approval by
11 -- if I recall rightly, it requires approval by the
12 appropriate state authority. And from what you were
13 telling us, it's -- the requirement for OCD approval
14 originally rises from the State Land Office Rules?

15 MR. BRUCE: That's correct.

16 EXAMINER BROOKS: Because just as with state
17 units, they won't give final approval until they receive
18 the OCD approval.

19 MR. BRUCE: That is correct.

20 EXAMINER BROOKS: This question I guess is for
21 you, Mr. Bruce. What provision of the Oil and Gas Act
22 confers the authority to approve these units on the OCD? I
23 know we've been doing it for years.

24 MR. BRUCE: Yeah, and Mr. Examiner, I don't know
25 if I can point to anything other than general provision

1 about prevention of waste and -- just the general
2 conservation provisions. I've asked that myself, and if
3 this was an entirely federal unit we wouldn't be here.

4 EXAMINER BROOKS: Right, because it wouldn't
5 require state approval.

6 MR. BRUCE: And so all I can point to is the
7 State Land Office regulations.

8 EXAMINER BROOKS: State Land Office. Okay, thank
9 you. That's all I have.

10 MR. BRUCE: Mr. Yahney back up to the stand, and
11 again if the record could reflect that he was previously
12 sworn and qualified.

13 EXAMINER JONES: Do you want to first --

14 MR. BRUCE: I'll just let you go.

15 EXAMINER JONES: Okay, that's what I was told
16 earlier.

17 GORDON K. YAHNEY,
18 the witness herein, having been previously duly sworn upon
19 his oath, was examined and testified as follows:

20 EXAMINATION

21 BY EXAMINER JONES:

22 Q. Okay, the -- Can you talk a little bit about the
23 first three wells and what they hit and what they didn't
24 hit and what you were going for originally and...

25 A. The original unit was set up, we set up an

1 exploratory unit to test the Fusselman formation. We
2 thought that that would be the deepest potential reservoir,
3 and based on some geochem and some other wells, mainly in
4 Texas, we thought that that reservoir would probably
5 contain oil. So we set up an outline with the BLM based on
6 the geology that was outlined with 40-acre proration units.
7 Okay.

8 In drilling, eventually, you know, we discovered
9 gas. Okay? The drilling sequence was, in mid-1997 we went
10 out there to the Bennett Ranch unit and started a well, you
11 know, targeting the Fusselman, and the Fusselman is roughly
12 at about 5500 to 6000 feet, we thought, in that initial
13 well. The Bennett Ranch Unit Number 1Y was drilled to a
14 depth of about 2400 feet before we lost the hole.

15 MR. DYER: The other 1. You said the 1Y.

16 THE WITNESS: The 1 was drilled to 2400 feet.
17 The 1Y is the replacement.

18 The situation there is, we had shows of
19 hydrocarbons at very shallow depths. We also drilled into
20 a situation where we had gas and water in close proximity,
21 and we had a situation where we got a very sensitive shale
22 wet and it basically came in on us, and we were unable to
23 drill any further and got stuck.

24 Q. (By Examiner Jones) So you had sands and shales,
25 sequence there?

1 A. The sequence there at Bennett Ranch, the surface
2 is Yeso, and it's very thin. We drilled into a very thin
3 Abo section and at about 600 feet or so we went into the
4 Wolfcamp. The Wolfcamp, right where that is, that is about
5 1300 to 1500 feet thick.

6 Q. Was the --

7 A. And that's all carbonate for the most part --

8 Q. Oh.

9 A. -- until you get to the bottom of it, and at the
10 bottom of the Wolfcamp is an interval called the Powwow.
11 The Powwow is a conglomerate and shale sequence that is the
12 -- you know, it's the remnants of a large regional
13 unconformity. And it was in this sequence of red and green
14 shales and conglomerates that make up the sequence of the
15 Powwow and the top of the Penn where we had gas and we had
16 water, and we had the shale problems.

17 Q. So it was below the Wolfcamp that you had --

18 A. Well, the Powwow is considered to be a Wolfcamp-
19 age lower member of the Wolfcamp. It's a lower member of
20 the Wolfcamp.

21 Q. Okay. But when you went back into the
22 Pennsylvanian, that's when you started hitting --

23 A. Right, we got to a point where we got just a
24 little bit into the Pennsylvanian and got stuck, basically.

25 Q. How was the --

1 A. And we were drilling -- You know, we drilled this
2 well like we drilled the second and the third one, with
3 air. We got to a point where we had a lot of water come in
4 on us. And it was a matter of -- we -- you know, we spent
5 too much time, because of mechanical problems, in one place
6 and the shale swelled on us and came in on us.

7 Q. Okay.

8 A. We've since learned a little bit from our mistake
9 there in that we drilled our second well just slightly
10 different in terms of the -- what we're using to try to
11 control the shales.

12 Q. Okay. So those shales wouldn't have been a
13 problem if they hadn't been hit by water, would they?

14 A. You can't keep the water off of them, really, but
15 you can control that by using, you know, a high
16 concentration of KCl. We ended up misdrilling the second
17 and third well through that particular interval, you know,
18 and we didn't have near the problems. Of course, we didn't
19 have mechanical problems in the interval where the shale
20 was either. We figured that we could leave that particular
21 shale sequence open for about three days max, before it was
22 going to give us problems.

23 Q. And that Canyon is right below where you have
24 trouble?

25 A. The -- You have to realize that there's a big

1 unconformity out there. The Canyon has a lot of relief on
2 it. At the southern end of the structure it's within --
3 oh, it's within a thousand feet of the unconformity. If
4 you're offstructure, there's expansion in that section,
5 that Penn shale section, and it picks -- that section
6 expands to -- by probably up to 1500 or more feet.

7 Q. And how far deep is the Mississippian, then,
8 below the Canyon?

9 A. Back to the -- you know, kind of the drilling
10 scenario, once we were stuck there and had junked the well,
11 we skidded that well over about 50 to 100 feet and drilled
12 a replacement well. That well -- we drilled that well down
13 to basement. Basement was at a little more than 7000 feet.
14 We looked at the Fusselman and the Montoya and Ellenburger
15 equivalents as well.

16 And in the drilling of that well we had lots of
17 gas up in the Penn section, and we had a big gas increase
18 in the Mississippian. Big -- You know, we're drilling with
19 air, big flare. I don't know whether you've seen the video
20 from that. We did show that to some people. Lots of
21 excitement.

22 Q. Did you change anything else on the first --
23 between the first and the second well, as far as your
24 casing design, what you tried to case --

25 A. Well, we tried to run casing in the first well.

1 That was part of the problem. We got this section wet, and
2 we were trying to run casing to solve that problem and got
3 it stuck.

4 Q. Okay.

5 A. We ran a deeper string of casing in the
6 subsequent replacement well --

7 Q. Okay.

8 A. -- and we were able to get through it, you know,
9 the problem area, quicker and get quite a ways below it and
10 run a string up the casing.

11 Q. Were you able to cement the casing, the second
12 casing?

13 A. We cemented this second -- the intermediate
14 casing in that second well.

15 Q. Were you able to get it to the surface?

16 A. I would have to look at a schematic to -- I don't
17 remember the exact situation there. I would assume that
18 that was kind of what we wanted to do, but I don't know
19 that that's necessarily what happened there.

20 Q. Well, I understand in wildcat areas you have to
21 kind of play -- you know, feel your way. But as far as the
22 adjustments that you made to protect the fresh water, can
23 you tell me what you did to do that? I say fresh water. I
24 mean the waters you encountered in that --

25 A. The waters that we encountered -- we had a

1 protection string, you know, just a surface string, and
2 then we were running a string through the section to get
3 below the base of the Wolfcamp into the Penn section.
4 Okay. The water that we were seeing, we were seeing water
5 at the base of the Wolfcamp in that Powwow to the lower
6 part of the Wolfcamp section. And that was, you know, what
7 we were trying to shut off and get that Powwow behind pipe.

8 Q. Were you able to do that in the second and third
9 wells?

10 A. Yes, we were.

11 Q. So you were able to adjust your drilling program
12 and get casing down?

13 A. The third well drilled a little bit different.
14 It was much higher on the structure, on the unconformity
15 structure, and we did not have the water problems that we
16 had lower in the section, lower in the first two wells.
17 The 25-1 is somewhere between -- depending on the horizon
18 that you're mapping, between 500 and 1000 feet higher than
19 the initial 1Y.

20 Q. And you moved up because you saw gas and you
21 wanted to move updip?

22 A. Yes, we had the opportunity to move updip,
23 further updip on the structure, and test that.

24 Q. You gave up on the oil?

25 A. We drilled that third well down to the Fusselman

1 again and had another look at it --

2 Q. But not --

3 A. -- and it was not productive. In fact, we had
4 better shows, indications of hydrocarbons, in the first
5 well.

6 Q. Did you drill the first one with air and then
7 switch over to kind of a saltier water mud -- water system
8 on the second ones, or did you drill them all with air?

9 A. We drilled them all with air to a certain point.

10 You know, the first well we drilled with air
11 until we had problems with too much water, that we couldn't
12 lift it.

13 Drilled the second well with air to a point where
14 we were in the lower Paleozoic section, and we switched
15 over to a fluid system.

16 And we did that, or tried to do that again with
17 the third well.

18 Q. So --

19 A. We were using a very cut brine -- I wouldn't call
20 it a brine, I'd call it a -- you know, we were using
21 drilling fluids that we thought were fairly close to the
22 same chloride concentrations of the waters that we were
23 seeing when we were drilling, and that's kind of a fairly
24 wide range, but it's not very salty.

25 Q. Where did you get your water for drilling?

1 A. We got our water for drilling from a couple
2 places, but I would -- one of them that comes to mind, we
3 were buying water from Bebo Lee at the Hat Ranch.

4 Q. Which is close by somewhere?

5 A. Yeah, it's about, I don't know, eight, ten miles
6 to the north of us.

7 Q. Wasn't -- Okay, north. So this goes all the way
8 down to the Texas state line, 11,637 acres.

9 Well, in your -- can you -- in your opinion, is
10 this expansion of this unit and conversion over to a gas
11 target -- as far as the geologic concept that's involved,
12 it was obviously different than it was for the oil, but
13 what -- did you have to show that to the BLM and the State
14 Land Office, the concept that --

15 A. Well --

16 Q. -- why you wanted to retain these leases --

17 A. -- we --

18 Q. -- in suspense, at least, in this --

19 A. Well, I don't know, I lost that. But we went and
20 demonstrated to the BLM that the two producing wells, the
21 one in the Mississippian -- and it's producing from a -- of
22 a fractured carbonate and an igneous sill in combination --
23 and the Canyon, which is a sandstone interval, both of
24 those reservoirs are high-perm, low pressure, with lots of
25 deliverability but low pressure, lots of volume

1 deliverability but low pressure, and they would drain a
2 pretty fair extent. So far that some of the -- one of the
3 production tests that we ran on the initial 1Y well, we
4 could not see any kind of barriers.

5 Now if you want details and that kind of stuff,
6 you need to talk to an engineer, which I'm not.

7 Q. That's all right. As far as the structure goes,
8 though, what can you say about the structure within this
9 unit? Does the unit contain a geologic structure?

10 A. The unit contains a geologic structure that we
11 think, based on the deeper horizon, that being the deeper
12 pay zone, Mississippian, justifies the extent or the
13 expansion of the unit.

14 Q. As defined by --

15 A. Again, that's defined by seismic and the closure
16 that we see on the seismic in terms of the regional
17 seismic. You're talking about 2-D lines that cover the
18 area. It's not really exactly tied down by any means at
19 this point.

20 EXAMINER BROOKS: Okay, I don't have any more
21 questions.

22 EXAMINER BROOKS: Nor do I.

23 EXAMINER JONES: Okay, thank you.

24 MR. BRUCE: That's all I have on this, Mr.
25 Examiner. I do remember in looking at one of the plats

1 that was presented by the geologist in the first go-around
2 in this, and I had never seen such a large-scale plat with
3 so few wells on it, but...

4 EXAMINER JONES: Okay, with that we'll take Case
5 14,000 under advisement.

6 (Thereupon, these proceedings were concluded at
7 2:42 p.m.)

8 * * *

9
10
11
12
13
14
15 I do hereby certify that the foregoing is
16 a complete record of the proceedings in
17 the Examiner hearing of Case No. _____
18 heard by me on _____

19 _____, Examiner
20 Oil Conservation Division
21
22
23
24
25