STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION COMMISSION

IN THE MATTER OF THE HEARING CALLED BY) THE OIL CONSERVATION COMMISSION FOR THE) PURPOSE OF CONSIDERING:)

APPLICATION OF PRIDE ENERGY COMPANY FOR) CANCELLATION OF A DRILLING PERMIT AND) REINSTATEMENT OF A DRILLING PERMIT, AN) EMERGENCY ORDER HALTING OPERATIONS, AND) COMPULSORY POOLING, LEA COUNTY,) NEW MEXICO)

COMMISSION HEARING

REPORTER'S TRANSCRIPT OF PROCEEDINGS

BEFORE: MARK E. FESMIRE, CHAIRMAN JAMI BAILEY, COMMISSIONER FRANK T. CHAVEZ, COMMISSIONER

August 12th, 2004

Santa Fe, New Mexico

This matter came on for hearing before the Oil Conservation Commission, MARK E. FESMIRE, Chairman, on Thursday, August 12th, 2004, at the New Mexico Energy, Minerals and Natural Resources Department, 1220 South Saint Francis Drive, Room 102, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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CASE NO. 13,153

INDEX

August 12th, 2004 Commission Hearing CASE NO. 13,153 PAGE EXHIBITS 4 APPEARANCES 6 **OPENING STATEMENTS:** 8 By Mr. Bruce By Mr. Carr 12 APPLICANT'S WITNESSES: JOHN W. PRIDE (Landman) Direct Examination by Mr. Bruce 21 Cross-Examination by Mr. Carr 36 51 Examination by Commissioner Chavez Examination by Chairman Fesmire 54 55 Redirect Examination by Mr. Bruce Further Examination by Commissioner Chavez 57 JEFF ELLARD (Geologist) Direct Examination by Mr. Bruce 59 Voir Dire Examination by Mr. Carr 75 Voir Dire Examination by Chairman Fesmire 77 Cross-Examination by Mr. Carr 79 92 Examination by Commissioner Bailey Examination by Chairman Fesmire 94 96 Redirect Examination by Mr. Bruce YATES WITNESSES: CHARLES E. MORAN (Landman) Direct Examination by Mr. Carr 98 Cross-Examination by Mr. Bruce 105 Examination by Commissioner Bailey 109 Examination by Commissioner Chavez 111 Examination by Chairman Fesmire 113 (Continued...)

YATES WITNESSES (Continued):

JOHN AMIET (Geologist) Direct Examination by Mr. Carr Cross-Examination by Mr. Bruce Examination by Commissioner Bailey Examination by Commissioner Chavez Examination by Chairman Fesmire	116 135 148 150 154
DAVID F. BONEAU (Engineer) Direct Examination by Mr. Carr Cross-Examination by Mr. Bruce Examination by Commissioner Chavez Examination by Chairman Fesmire	156 170 173 181
CLOSING STATEMENTS: By Mr. Carr By Mr. Bruce	184 190
REPORTER'S CERTIFICATE * * *	198

	<u> </u>	
Applicant's	Identified	Admitted
Exhibit Exhibit Exhibit	2 27	35, 36 35, 36 35, 36
Exhibit Exhibit Exhibit	5 35	35, 36 36 78
Exhibit Exhibit Exhibit	8 66	78 78 78
Exhibit Exhibit Exhibit	11 67	78 78 78

* * *

(Continued...)

	EXHIBI	T C	(Continu	
		1 0	(COIICIIIu	cu)
Yates		Identi	fied	Admitted
	Exhibit 1	12,	102	105
	Exhibit 2	,	103	105
	Exhibit 3	16	104	105
	EXHIDIC 5	40,	104	105
	Exhibit 4		104	105
	Exhibit 5		117	135
	Exhibit 6		119	135
	Exhibit 7		123	135
	Exhibit 8		125	135
	Exhibit 9	69,	128	135
	Exhibit 10		128	135
	Exhibit 11		129	135
	Exhibit 12		130	135
	EXHIDIC 12		100	155
			1 5 0	
	Exhibit 13		158	170
	Exhibit 14		159	170
	Exhibit 15		162	170
	Exhibit 16		162	170
	Exhibit 17		163	170
	Exhibit 18		163	170
	Exhibit 19		164	170
		* * *		

APPEARANCES

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* * *

1 WHEREUPON, the following proceedings were had at 2 9:14 a.m.:

CHAIRMAN FESMIRE: And the last case before the Commission today is Case Number 13,153. It was a *de novo* case continued from the July 15th, 2004, Commission Hearing. It's the Application of Pride Energy Company for cancellation of a drilling permit and reinstatement of a drilling permit, an emergency order halting operations, and compulsory pooling in Lea County, New Mexico.

10 At this time I'd like to ask the attorneys for 11 the Applicant and the Protestants to make appearances, 12 please.

MR. BRUCE: May it please the Commission, Jim Hand Bruce of Santa Fe, representing the Applicant. I do have two witnesses.

MR. CARR: May it please the Examiner, my name is William F. Carr with the Santa Fe office of Holland and Hart, L.L.P. I represent Yates Petroleum Corporation in this matter, in opposition to the Application. I have three witnesses.

21 CHAIRMAN FESMIRE: Mr. Bruce, are your witnesses22 present in the hearing room today?

MR. BRUCE: Yes, sir.

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CHAIRMAN FESMIRE: Mr. Carr?

MR. CARR: Yes, sir, they are.

1 CHAIRMAN FESMIRE: I'd ask that the five 2 witnesses stand to be sworn.

3 (Thereupon, the witnesses were sworn.) 4 CHAIRMAN FESMIRE: Mr. Bruce, do you have an 5 opening statement?

6 MR. BRUCE: I presume Mr. Carr does, so I will 7 make a brief statement.

Mr. Chairman, if you could put in front of you 9 just Exhibit 1 of Pride Energy, which is the land plat, the 10 land we're interested in today is highlighted -- part of it 11 is highlighted in pink. It's Section 12 of 12 South, 34 East. Yates Petroleum and other Yates entities own 100 12 percent of the working interest in the north half and the 13 14 southeast quarter of Section 12, and Pride Energy owns the 15 leasehold interest in the southwest quarter of Section 12. 16 These are both state leases. I believe they have the same 17 terms, one-sixth royalty interest.

18 You'll hear a lot of testimony about force 19 pooling and APDs and geology today, but in my mind the case 20 is pretty simple. Both parties want to re-enter what is called the State "X" Well Number 1, which is located in the 21 22 southwest quarter of the northwest quarter of Section 12. 23 That well was drilled, I believe, to the Devonian. Both 24 parties are interested in testing a portion of the 25 Mississippian formation in that well.

Yates, back in 2001, obtained an APD for a northhalf unit. Then in 2002 they obtained an extension, a oneyear extension, of that APD. In 2003, however, that APD lapsed.

At that point Pride Energy went and obtained an APD for a west-half unit to re-enter that well. Pride legally obtained that APD since there was no existing APD on that well.

9 One other matter is that they then commenced the 10 pooling process. Obviously Pride only has 160 acres, 11 regardless of whether a well is standup or laydown. It 12 needs to be force-pooled -- or I should say, the parties 13 need to voluntarily agree or be force pooled into a well, 14 whether it's standup or laydown.

In Mr. Carr's pre-hearing statement he says that Pride contends that the Division's approval of its APD gave it the exclusive right to drill in the west half. That's not quite correct. Obviously they need an APD; nobody can drill in this state without an APD. But since Pride only has 160 acres, they needed to force pool Yates into the well.

Now, the testimony will show that Pride attempted to obtain the voluntary joinder of Yates but received no response from Yates, so they had to force pool. As that process was going along, Pride found out that its APD,

which on its face is good for one year, was canceled 1 2 without notice to it by the Hobbs District Office. We believe that APD was illegally canceled, and 3 as a result Pride filed this Application to revoke the new 4 5 Yates APD that was approved in August of 2003, a month after Pride's APD, and to force pool Yates, et al., into a 6 west-half well unit. We believe that is proper because Yates did not 8 9 properly obtain its APD, number one. 10 Number two, the geology supports a west-half well unit. 11 12 And number three, under the pooling statute it 13 says when there are two or more separately owned tracts of 14 land embraced within a spacing or proration unit and the 15 parties can't voluntarily agree, the Division or the 16 Commission shall pool that acreage. 17 Furthermore, with respect to the existing 18 wellbore -- which is on Yates' acreage, no dispute about 19 that -- the pooling statute says that all operations which 20 are conducted on any portion of the pool unit shall be 21 deemed for all purposes to have been conducted upon each 22 tract within the unit. Therefore once the force pooling 23 order was issued, Pride certainly had the right to re-enter that wellbore under the pooling order. 24 25 Both parties agree that the proper way to develop this reservoir is to re-enter the "X" 1 well. That's the most economical way to test this reservoir -- Or I should say, the reservoir has already been tested by a Pride well, a Pride and Yates joint well, in the southwest quarter of Section 1, and the way to further develop this wellbore, this reservoir, is to re-enter that wellbore.

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As I said, as a result of the Pride APD being, we think, illegally revoked, Pride filed this Application to cancel the Yates APD, to reinstate Pride's APD and to force pool the west half.

As the Chairman said when he called the case, 11 12 there was also a request for emergency relief, which was 13 denied by the Division. However, during the pendency of 14 these proceedings, before the order was entered, Yates did 15 not take any action, further action, on the well. And 16 after the pooling order was entered, Pride voluntarily did not take any action on the wells. So nothing has been 17 done, it has been in a state of stasis for the last year, 18 19 or almost a year, since last September. So no one has been 20 adversely affected by any further activity on the well. But we believe that the Division correctly 21

22 revoked Yates' APD and force pooled the west half, and we'd 23 ask the Commission to uphold that order.

24 CHAIRMAN FESMIRE: Mr. Carr, do you have an 25 opening statement? MR. CARR: Yes, sir, Mr. Chairman, I do, and I'd ask you to look at our Exhibit 1, which is behind Tab 1 in the exhibit book. It's similar, but I'd like to use it as I work through my opening.

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In some ways this case, Mr. Chairman, may be a simple case. But I think as you listen to it today there's going to be an attempt to confuse what the real issues are before you by talking about things that really are not at issue.

There's no dispute that prior to the time that Pride acquired its lease in this section, Yates owned the north half and the southeast quarter. It was the lessee under one single State of New Mexico oil and gas lease covering that acreage.

Prior to the time that Pride acquired its lease in the southwest quarter of this section, Yates had already filed an application seeking an APD authorizing them to drill the north half of the section. One thing that has always been clear, Yates intended to develop the reserves in the north half of the section with the well that existed on this state lease.

If you look at Exhibit Number 1 and you go to the north in Section 1, you're going to see that in that tract there also is a well operated by Yates -- I mean operated by Pride, in which Yates and Pride own an interest. Again, you will see the well is on the Yates acreage. Again, it is draining reserves from the Yates tract. And because of the standup unit in that tract, it receives one-quarter of the reserves, although in fact the reserves are being drained from the acreage principally owned by Yates.

But while there are a lot of issues that are not really, I think, going to determine what we do here today, there are important questions before you. Some are technical in nature, others are truly legal issues.

The central issue before you involves the correlative rights of the parties who are before you here today, and that is where we are going to focus our technical presentation.

But there are also other issues that pop up in this case, issues concerning how this Division interprets its own rules, where do process rights apply, issues that are purely legal in their characterization.

And so while Pride is attacking or challenging the District Office's decision to cancel a Yates -- or cancel a Pride APD and approve one filed by Yates, really what's going on here is an effort to use the regulatory process to take reserves that are under acreage leased to Yates, take those and give them to Pride.

At the bottom you'll see that Pride seeks the cancellation of Yates' APDs so we can re-enter the same well, an existing wellbore, acreage leased to Yates, the well is at a standard location, and Yates has for years been proposing development with a north-half unit.

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The evidence will show Yates owns the entire 5 north half. It will also show that Pride only owns the southwest quarter and that what it is proposing to do is 6 7 reorient the spacing unit and enter a well that it does not own on a tract it does not own. And when it filed its 8 9 Application in this case, it knew that Yates was on the 10 well, recompleting the well, was doing it pursuant to a Division-approved APD which they -- somehow was illegally 11 12 or improperly obtained.

And the evidence will show we did one thing: We filed a C-101 and a C-102 like the ones we had filed before. We did not ask anything be reinstated, we filed an application. But that somehow is characterized as wrong. And when we found out they were challenging the north-half unit, we stopped operation. And we have not operated or conducted operations since that date.

20 Pride also seeks to reinstate its own APD. And 21 if it does, what you do is dedicate the west half of the 22 section. So now Pride goes into the wellbore we've been 23 working on, and we have to pay them half of their cost for 24 re-entering this well, and then we have to give them half 25 of the reserves produced by this well. And Pride really doesn't dispute this. They agree that with this Application they seek to take this well away from Yates and dedicate it to this west-half spacing unit. But of course Yates doesn't agree. So to achieve their goal, they have to seek a compulsory pooling order from this Division.

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Now, usually in a case like this you have 7 8 competing pooling applications. But we have none, because 9 we truly believe, and believed at the time of the Examiner 10 Hearing, that none was needed. Remember, one state lease, standard unit, standard location, owned by us. We thought 11 what we were doing was consistent with the Rules and the 12 Statutes and the policies of the Division. We thought it 13 14 was consistent with State Land Office policy, developing 15 one single state lease. We believed we had the right to 16 proceed.

17 You know, the Division recently -- the Commission 18 recently stated -- and this is the infamous TMBR/Sharp case 19 that Jim today doesn't like -- it says where compulsory 20 pooling is not required because of voluntary agreement or because of common ownership of the dedicated acreage, the 21 22 practice of designating the acreage to be dedicated to the 23 well on the application for permit to drill furthers 24 administrative expedience.

Once the application is approved, as ours was,

the Commission has said no further proceedings are necessary.

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We were on the property, we owned a standard unit, standard location with an APD, and we felt we had a right to proceed. And we did not present a technical case at the Examiner Hearing, but the Examiner thought more was needed. And so we're here today, we're here to present our technical case.

9 And the evidence in this case focuses on 10 correlative rights. As we all know, you are a creature of 11 statute and your powers come from the Oil and Gas Act, and 12 your jurisdiction is based on the prevention of waste and 13 the protection of correlative rights.

There is no waste issue here. We both want to do the same thing, we want to re-enter the same well, recomplete in the same formation.

So the issue is, of necessity, one of correlativerights.

And as we start, I think it's important that we always go back and look at what correlative rights means, because it is defined by statute.

Correlative rights is defined in the Oil and Gas Act as the opportunity afforded, so far as it is practicable to do so, to the owner of each property in the pool to produce without waste his just and equitable share of the oil or gas or both from the pool.

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And it goes on and it defines by statute what is 2 meant by what is your just and equitable share. And it 3 says that is an amount, so far as practically can be obtained and so far as practically can -- so as -- that is -- if I could read, it would help. It defines what is just 6 7 and equitable as an amount, so far as can be practicably determined and so far as can be practicably obtained 8 9 without waste, substantially in the proportion that the 10 quantity of recoverable oil or gas or both under the 11 property bears to the total recoverable or gas or both in 12 the pool.

13 It's sound and it is based not on spacing units 14 but on ownership. And correlative rights is the 15 opportunity to produce what you own, based on what is under 16 your tract.

And so today that's what we're going to do, we're going to look at what is under the Yates tract. Our evidence will show that the reserves in this section are under the north half.

And we get to an immediate problem here because, you see, you change the spacing several years for deep gas. And while we preapproved an infill and indirectly, at least, recognize that wells really only drained 160 acres, we kept the larger spacing units. So while we're going to be looking at the northwest quarter, we've got to talk about a half a section, a north half or a west half.

We're going to show that the reserves are under the north half, that there is an alluvial fan or a debris flow that moves across the north half of this section. We're going to show that the best quarter in Section 12 is the northwest and the worst is the southwest. We're going to show that the recoverable reserves are under Yates' acreage.

And you're going to hear conflicting technical presentations -- that's why we need you regulators -engineers, geologists, because you're going to have to look at the evidence, you're going to have to look at the quality of the evidence, and you're going to have to make a decision.

17 And the evidence that Pride will present is based 18 on a fault that traverses Section 12. They're going to 19 present you a commercial map -- it has not been prepared by 20 the witness, it's from a commercial source -- and it shows 21 a fault, a fault on the Devonian 900 feet below the subject 22 horizon. There's going to be no evidence that you can see where a fault was ever cut by a wellbore, but it's inferred 23 24 by differences in subsea depth.

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Without the fault, you see, they testify that

there is a general flow to the east northeast, which would take the reserves across the north half of the section. 2 But they conclude that this fault controls, and therefore the deposits are in the west half of the section and therefore under their acreage, under the southwest quarter, a quarter they've never been willing to drill.

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The geologist also sees more feet of pay. 7 And 8 we'll look at the quality of the logs from which you have 9 to infer that.

10 Yates's testimony is going to review Pride's evidence, it's going to conclude that the interpretations 11 drawn from this hard, factual information simply go beyond 12 where this information can honestly be taken. 13

14 And then we're going to present evidence that 15 shows the fault upon which their case rests does not exist. 16 We have prepared our own study, we have integrated the 17 well-control information -- which is limited in this area 18 -- with a 3-D seismic shoot across the area. It shows the 19 fault simply is not there.

20 But we're going to go beyond that. We're not 21 going to just stop with the geology, we're also going to 22 present an engineering witness, we're going to talk about 23 drainage area.

24 And if you look at our Exhibit Number 1, the well 25 in the southwest southwest of Section 1 to the north of us

is a good well in this Mississippian pay, and everyone will agree that that well should perform substantially better than the re-entry in the northwest of Section 12.

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And so what we've done is, with good information 5 on the well to the north, calculated a drainage area for that well. To date it has drained 23 acres. Ultimately it 6 7 will drain 113. And when you put 113 acres around that 8 well, you can see it doesn't drain very much of the 9 dedicated acreage. If you assume that the well that we're 10 talking about today is even anywhere near that good and you 11 then plot the reserves, you see again that those reserves 12 have to come from acreage leased to Yates, not acreage leased to Pride. 13

And when that happens, we submit to you that by definition our correlative rights are impaired. We are not given an opportunity to produce our fair and reasonable share, our just and equitable share of the reserves that are under the acreage that we own.

19 The evidence will also show that denial of 20 Pride's Application cannot impair their correlative rights.

They talk about how we for two years have an APD and didn't do anything about it. But you should remember that they have had a lease since 2001, and they have had an opportunity each and every day, if they really thought they had anything under their land, to go and drill a well, and

they have not. 1 CHAIRMAN FESMIRE: Mr. Bruce, your first witness? 2 MR. BRUCE: Call John Pride to the stand. JOHN W. PRIDE, the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows: DIRECT EXAMINATION BY MR. BRUCE: 8 Would you please state your name and city of 9 Q. residence for the record? 10 John Pride, Tulsa, Oklahoma. 11 Α. And do you work for Pride Energy? 12 Q. 13 Α. Yes. 14 Q. Are you one of the principals of Pride? 15 Α. Yes. 16 Have you previously testified before the Division Q. 17 or the Commission? 18 Α. Yes. 19 And were you qualified as an expert landman --Q. 20 Α. Yes. -- at your appearance? 21 Q. 22 Are you familiar with the land matters involved in this Application? 23 24 Α. Yes. 25 MR. BRUCE: Mr. -- I'm used to saying Mr.

Examiner. Mr. Chairman, tender Mr. Pride as an expert 1 2 petroleum landman. CHAIRMAN FESMIRE: Any objection? MR. CARR: No. COMMISSIONER BAILEY: No. COMMISSIONER CHAVEZ: No objection. CHAIRMAN FESMIRE: He's so admitted. 8 (By Mr. Bruce) Now, Mr. Pride, could you Ο. 9 identify Exhibit 1 just briefly for the Examiner? It's a land map showing the acreage that's under 10 Α. lease by us as well as Yates, with some 320-acre standup 11 units. 12 Okay, well, let's go through this. In Section 12 13 Ο. which you're interested in, the north half and southeast 14 15 quarter are owned by Yates' lease; is that -- by Yates 16 under a State of New Mexico lease? 17 Α. Correct. 18 And that lease was issued, I believe, in the year Ο. 19 2000? 20 Α. Yes, I believe so. Okay. And then Pride Energy owns the state lease 21 Q. on the southwest guarter of Section 2? 22 23 Correct. Α. 24 Okay. And the State "X" 1 well is located in the Q. 25 southwest quarter, northwest quarter of Section 12?

1 Α. Yes. Okay. Before we get into the yellow items, there 2 Q. will be discussion today on the -- is it the State "M" 1 3 well in the southwest quarter, southwest quarter of Section 1? Α. Yes. 6 Is the well unit the west half for that well? Ο. Yes, it is. 8 Α. 9 What is the ownership in that well? Q. 10 Α. Pride Energy owns 75 percent working interest, and Yates owns 25 percent. 11 Is that really the well that has raised interest 12 Q. in completing or recompleting other wells in this area in 13 14 the Mississippian? 15 Α. Yes, it is. 16 Q. When was that well -- Was that a re-entry also? 17 Α. It was. 18 Who proposed the re-entry of that well? Ο. 19 Pride Energy Company. Α. 20 When was -- And Yates owns an interest in that. Q. 21 Was that force pooled or was there a voluntary agreement to 22 drill that well? 23 Α. There was a voluntary agreement. 24 So Yates voluntarily agreed to a west-half unit? Q. 25 Α. Yes.

When was that well re-entered? 1 Q. What was the date? I can't recall the date right 2 Α. 3 off the top of my head. Okay, was it several years ago? Q. Α. Yes. Okay, and it has been completed in the 6 Q. 7 Mississippian? Yes, it has. 8 Α. 9 And it has been producing since that time? Q. 10 Α. Yes. Now, as to the State "X" 1 well, the well we're 11 Q. here for today, when was that well drilled, approximately? 12 Late 1950s, I think 1958 or something like --13 Α. And what zone was it drilled to test? 14 Q. 15 Α. Devonian -- the depth close to the Devonian, 16 right, 13,000 -- a little over 13,000 feet total depth. 17 Okay. So basically what is the well proposal? Q. 18 You're not really -- just re-entering and recompleting it? 19 Α. Yes, in the Mississippian. 20 Now, there are other well units highlighted on Q. here. What is the purpose of these? 21 22 Just to show that there's other 320-acre standup Α. 23 units in the immediate area. 24 And are these all deep gas well tests? Q. 25 Α. Yes.

Okay, so either by Pride or by Yates? 1 Q. 2 Α. Yes. Now, let's go into the timing. Yates did obtain 3 Ο. an APD in the year 2001, did it not? 4 Α. Yes. And do you recall approximately what date that Q. 7 APD was issued? May 25th of '01. 8 Α. 9 Now, Yates already had a lease covering its Q. acreage in Section 12? 10 11 Α. Yes. When did Pride purchase its lease from the State 12 Q. 13 of New Mexico? Α. It was actually purchased at the New Mexico Oil 14 15 and Gas Lease sale, which occurred in May, approximately 16 the 18th or 19th, I don't recall exactly what date. The 17 effective date was June 1st of '01 --18 Ο. Okay --19 -- but the actual lease took place, the sale of Α. 20 the lease, around the 18th or 19th of May. Okay, so the -- Pride purchased this lease in the 21 Q. southwest quarter about a week before Yates obtained its 22 23 APD? 24 Yes. Α. 25 Now, did Pride obtain its lease with the Okay. Q.

interest of developing the Mississippian in this area? 1 Α. Yes. 2 And after you obtained the lease, did you or Ο. someone on your behalf look at -- determine whether or not 4 there were any APDs issued on the west -- on either the 5 north half or west half of Section 12? 6 Α. Yes. 7 And what did you determine? 8 Ο. 9 At what date, what time? Α. 10 Sometime in 2001? Q. Yeah, we noticed that Yates filed an APD. 11 Α. Okay. And Pride was interested in re-entering 12 Q. the State "X" 1, Well Number --13 14 Α. Yes, we were. 15 Q. -- 1, excuse me. Now, did Pride take any action to force pool 16 17 Yates in 2001 or 2002? 18 Α. No. 19 You didn't take any action to disturb Yates' APD, Q. 20 did you? 21 Α. No. Did you also understand later on in 2002 that 22 Q. 23 Yates had obtained an extension of its APD? 24 Α. Yes. 25 To the best of your knowledge, during 2001 Q.

through the middle of 2003 did Yates ever take any action 1 to re-enter the State "X" 1 well? 2 No, they did not. Α. When approximately did you learn that Yates' APD Q. 5 on the north half of Section 12 had expired? Well, shortly after it had expired, just a matter Α. 7 of days, I had actually called the Hobbs District to determine whether or not it had expired and spoke with 8 Donna there in the Hobbs Office, and she informed me that 9 10 it had expired. Okay. Did Pride then file an APD to re-enter the 11 Ο. State "X" 1 well and to form a west-half -- designate a 12 west-half unit? 13 14 Α. Yes. 15 Ο. And is Yates -- excuse me, Pride's APD marked 16 Exhibit Number 2? 17 Α. Yes. 18 And it's your understanding that that APD was Ο. 19 good for one year? 20 Α. Correct. Okay. And we'll get into this a little bit more, 21 Q. 22 but did you -- at about the same time as you filed your 23 APD, did you contact Yates to try to get them to voluntarily join in a re-entry of the "X" 1 well? 24 25 Α. Yes.

Who did you speak with? 1 Q. Actually, I had written a letter and sent to 2 Α. 3 them. Okay. Did you speak with anyone at Yates Q. thereafter? 5 Well, I had spoken with some people from Yates Α. since then, yes --7 8 Okay. Ο. 9 -- but not immediately at that time. Α. 10 Okay, but it was your intent -- And is the letter Q. that you wrote to Yates marked Exhibit 4? 11 12 Α. Yes. 13 And that letter dated July 15th, 2003, that was Ο. shortly after the date of the APD that you filed with the 14 15 State, was it not? 16 Α. Yes. 17 Q. Did you hope to obtain Yates' voluntary joinder 18 in re-entering the State "X" 1 well? 19 Α. We did, we presumed that they would, based on 20 their election to participate on the State 1 M unit ---- just to the north? 21 Q. 22 Α. -- just to the north. 23 What happened next? Ο. 24 Regarding -- ? Α. 25 Regarding the State "X" 1 well. Were you --Q.

Let's put it this way, Mr. Pride, were you ever contacted 1 by Yates with respect to your APD? Did anyone at Yates 2 respond to your well proposal? 3 Α. No. Marked next is Exhibit 3, Mr. Pride. Ο. Okav. What 6 is that letter? This is the letter from the New Mexico Energy, Α. 8 Minerals and Natural Resources Department dated August 26th 9 of '03, addressed to Pride Energy Company, cancellation of the intent to re-enter on the State 1 "X". 10 Was this letter canceling Exhibit 2? 11 Q. Yes. 12 Α. Did you ever receive this letter in the 13 Ο. The APD? 14 mail? 15 Α. Did not. 16 How did you receive it? Q. 17 Α. I had received it via fax from the Hobbs 18 District, after speaking with Donna at the Hobbs District 19 and learning that this letter was created and exists, and I was actually shocked, even --20 But what had happened on the well that made you 21 Ο. 22 call the OCD regarding this matter? 23 As far as Yates starting to --Α. 24 Yes. Q. 25 -- move the rig in and do work. Α.

Okay, so did one of your field hands inform you 1 Q. 2 that Yates was on the well site --Α. Yes. -- conducting operations? Q. Α. Yes. And you called the -- At that time did you call 6 Q. 7 the OCD? 8 I did. Α. 9 And that's when you spoke with Donna? Q. 10 Α. Yes. And she faxed you this letter? 11 Q. Right. 12 Α. Was that the first notice you had that -- Let's 13 Ο. put it this way, did Mr. Williams or anyone at the Hobbs 14 15 District Office contact you before you received this 16 letter --17 Α. No. 18 -- canceling your APD? Ο. 19 Α. No. 20 And it was at that time, shortly thereafter, that Q. you filed this Application? 21 22 Α. Yes. 23 Now, perhaps the geologist can answer this Ο. 24 question a little better, but the State "M" Well Number 1 25 has been producing for several years, correct?

1 Α. Yes. That's the first Mississippian well out there in 2 Q. this immediate area. Was there time -- Was it required 3 that that well be evaluated for a period of time before you could determine what next --Α. Yes. -- step to take in evaluating the reservoir or Q. 8 the need to re-enter or drill another well? 9 Yes, it is. Α. It looks like it's a good well, correct? 10 Q. Sure. You'd want to observe the production, see 11 Α. what the decline rate is and determine what the expected 12 13 reserves might be. 14 Q. Okay. Now, you said that you sent Exhibit 4, the 15 well proposal, to Yates. You never received a response 16 from them on this, did you? 17 Α. No. 18 Did you call someone at Yates and express your Ο. 19 desire to reach agreement with respect to a west-half unit? 20 I don't recall talking with anyone at that Α. particular time regarding that. 21 22 In July? Q. 23 Α. Right. 24 What about before you learned of Yates' re-entry Q. 25 operations on the well?

1	A. Well, prior to well, depends on what time,
2	because I did receive a call from Yates, a geologist.
3	Q. John Amiet?
4	A. Yes. And he asked me whether This was
5	immediately, I'd say, within days after we actually took
6	the lease from the State of New Mexico on the southwest
7	quarter, and he asked me if we had intentions of re-
8	entering this State 1 "X" well. And I told him at that
9	time we were evaluating it, but it was a possibility, but
10	we were evaluating the results from our State 1 "M" well
11	just joining to the north there.
12	Q. Okay
13	A. That's Immediately after that, within days,
14	that's when Yates filed their APD.
15	Q. Okay, so you bought the well on or about May 18th
16	or 19th, 2001?
17	A. Yes.
18	Q. A few days later, Yates called you and asked
19	about your plans for the State "X" 1 well?
20	A. Yes.
21	Q. And then they filed the APD?
22	A. Yes.
23	Q. Okay. But again, you never received any response
24	to your voluntary joinder proposal?
25	A. Correct.

Attached to that is an AFE for the well. 1 Ο. Now, 2 this is, at this point, about a year old. On this AFE what are the proposed re-entry and recompletion costs? 3 Total completion cost would be \$628,295 on this Α. AFE. Would that cost have increased at all in the last 6 Q. 7 year? Yes. 8 Α. 9 Do you have an idea of approximately how much? Q. Oh, without going down through there on each item 10 Α. and getting bids on each item, I would just guess maybe 11 \$750,000 today, as opposed to \$628,000. 12 Just because of the higher rig costs, et 13 Ο. 14 cetera --15 Α. Well, casing cost and tubing cost have 16 dramatically gone up --17 Q. Okay. -- as well as other things. 18 Α. 19 Would a cost of approximately \$750,000 be a Q. 20 reasonable well cost for re-entering a well of this type and this depth in Lea County? 21 22 Α. Yes. 23 Pride does still request that the west half of Ο. Section 12 be force pooled --24 25 Α. Yes.

-- is that correct? 1 Q. Does Pride request that it be named operator of 2 the well? 3 Yes. Α. Do you have a recommendation for the amounts Ο. which Pride should be paid for supervision and 6 administrative expenses? 7 Yes. 8 Α. 9 And what are they? 0. 10 As the well is being drilled it's \$5000 per Α. month, and then after it's producing it's \$600 per month. 11 12 And are these amounts equivalent to those Ο. normally charged by Pride and other operators in this area 13 for wells of this depth? 14 15 Α. Yes. 16 Do you request that this rate be adjusted Q. 17 periodically as provided by the COPAS accounting procedure? 18 Α. Yes. 19 And do you request the maximum cost-plus-200-0. 20 percent risk charge on nonconsenting interest owners? 21 Α. Yes. 22 Were Exhibits 1 through 4 prepared by you or Q. 23 under your supervision or compiled from company business 24 records? 25 Α. Yes. CCR

And in your opinion is the granting of Pride's 1 Q. Application in the interests of conservation and the 2 prevention of waste? Α. Yes. MR. BRUCE: Mr. Chairman, I'd move the admission of Pride Exhibits 1 through 4. 6 MR. CARR: No objection. CHAIRMAN FESMIRE: Any objection from the 8 9 Commission? 10 COMMISSIONER BAILEY: No. COMMISSIONER CHAVEZ: No. 11 CHAIRMAN FESMIRE: They're so admitted. 12 MR. BRUCE: And also Exhibit 5, which was simply 13 14 my affidavit of notice regarding the initial pooling 15 hearing, Mr. Chairman. 16 MR. CARR: No objection. 17 COMMISSIONER CHAVEZ: I do have a question. 18 They're marked as -- for the record, they're marked as 19 "Before Examiner Stogner". 20 MR. BRUCE: I apologize, Mr. Commissioner. These are the exact same land exhibits that were used in front of 21 the Hearing Examiner last fall, and -- but I will just ask 22 23 them to be designated Commission Exhibits. 24 COMMISSIONER CHAVEZ: I'm wondering if they 25 should somehow also be marked so that as people view them

they're -- in the OCD records, that they would also be 1 2 appropriately --MR. BRUCE: We can do that, Mr. Commissioner. COMMISSIONER CHAVEZ: If you would, I think that would help. 5 MR. BRUCE: I will -- For the court reporter and for the official copy kept by the Division, I will resubmit 7 exhibits marked as Commission exhibits. 8 9 CHAIRMAN FESMIRE: In lieu of the new 10 designation, we will provisionally accept Exhibits 1 through 5. 11 MR. BRUCE: And I pass the witness, Mr. Chairman. 12 13 CHAIRMAN FESMIRE: Mr. Carr? MR. CARR: Mr. Chairman. 14 15 CROSS-EXAMINATION 16 BY MR. CARR: 17 Q. Mr. Pride, I'd like to look at your Exhibit 18 Number 1. Do you have that before you? 19 Α. Yes. 20 On this exhibit, Mr. Pride, you've indicated five Q. spacing units; is that right? 21 22 Α. Yes. 23 And is the purpose of that to indicate that Ο. acreage in this area is being developed with standup units? 24 25 Α. Yes.

Wouldn't you agree with me that it's appropriate 1 Q. that a spacing unit conform to the extent that it can to 2 the reservoir? 3 Α. Yes. And in this case, the reason you're proposing a Ο. west-half spacing unit is, you believe in Section 12 that 6 is where the reservoir is found; is that correct? 7 Α. Yes. 8 You did the same thing when you proposed the well 9 Ο. 10 up in Section 1, did you not? 11 Α. Yes. 12 Q. Do you have any plans to drill a well in the northwest of Section 1? 13 We don't have any immediate plans. 14 Α. 15 Ο. Based on your information on the well in the 16 southwest quarter, do you have any reason to believe that 17 the northwest quarter, "M" 1, would contribute commercial 18 reserves or produce commercial reserves? 19 Α. You said the "M" 1. "X" 1? 20 No, I'm talking about the "M" 1 in Section 1. Q. You have a standup spacing unit there --21 22 Α. Yes. 23 -- you're not planning to drill in the northwest Ο. 24 quarter. My question is, do you have data or anything that 25 would suggest that the northwest quarter would contribute

1 reserves? It's possible. 2 Α. Is it possible that they might also be in the Ο. southeast quarter? 4 Southeast of 1? Α. In Section 1. Q. I guess it's possible. Α. But at this point in time you've stood the unit 8 Ο. 9 up, but you really don't know for sure where the recoverable reserves are in 1; is that fair to say? 10 Well, we know that they're in the west half 11 Α. there, since that's where the well is located. 12 Have you done any work on the 1 "M" to determine 13 Ο. how many acres it's draining? 14 15 Α. I'm not an engineer. 16 Have you had an engineer who works for you do Q. 17 that? 18 Α. No. 19 Have you tried to determine where those reserves Q. 20 might be coming from under that west-half unit? I have not personally. 21 Α. 22 If we look down, then, at the unit in Section 12, Q. 23 the appropriate orientation of that spacing unit would be to conform it as best we can with the data we have for the 24 25 reservoir; is that fair to say?

I couldn't understand your last part of your 1 Α. 2 question. Whether we go to the north half or west half in 3 Ο. 4 1, what we ought to be about here today is trying to orient 5 the unit so it conforms with the reservoir; isn't that fair to say? 6 We feel like the west half does. Α. Now, you acquired your lease in the southwest 8 Ο. 9 quarter of Section 12 June 1, 2001; is that right? No, not actually, that's the effective date. We 10 Α. actually acquired it in May, like I mentioned to Mr. Bruce, 11 around the 18th or 19th of May. 12 Did you know at that time that Yates was the 13 Ο. owner of the remainder of the section? 14 15 Α. Yes. 16 Did you know that they had sought and obtained an 0. 17 APD for a north-half spacing unit, were in the process of 18 doing that? 19 Α. Well, as of May 18th or 19th when I acquired the 20 lease, they had not. Did you own anything in the north half of the 21 0. 22 section? 23 Section 12? Α. 24 Yes. Q. 25 Α. No.

Do you own any -- Do you own that wellbore? 1 Q. No, we don't own the wellbore. 2 Α. Have any interest in it whatsoever? 3 Ο. 4 Α. Well, I do have an interest in it, yes. 5 And what is that? Q. We're interested in re-entering it. 6 Α. Do you have any ownership interest in that 7 Q. 8 property or that well? We feel like we have a right to re-enter it. 9 Α. 10 Q. My question is, do you own anything in the north half, including the wellbore? 11 No, I don't own anything in the leasehold in the 12 Α. north half. 13 14 Ο. You said you think you have a right to enter it. 15 What do you base that decision on? What would give you 16 that right? 17 Because we had an approved APD. Α. 18 And it's your belief that an APD, then, would Ο. 19 give you the right to go onto an adjoining tract and use 20 the wellbore? 21 Α. Yes. And that's even without a compulsory pooling 22 Q. 23 order? 24 You know, I object to this line of MR. BRUCE: 25 question insomuch as it's asking legal conclusions and this witness is not an attorney.

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2 MR. CARR: I'm not trying to take him into an 3 area where he isn't qualified to speak, but he has 4 testified that he thinks he has a right to be there, and 5 I'd just like to know what he bases that on. If he doesn't 6 know, that's fine.

7 CHAIRMAN FESMIRE: Okay, I'll overrule the 8 objection. I think it's relevant.

9 THE WITNESS: We are filing for the pooling. We 10 assumed that Yates would give us response when we give them 11 written proposal to re-enter the well. But since they did 12 not, then we had to take the next step to initiate the 13 pooling.

Q. (By Mr. Carr) By the time you had the pooling, at that time you only had the APD; is that right? When you filed for the pooling application?

A. Only the APD, as opposed to having what else?
Q. Okay, you had no order or anything else, you had
only the APD, which would give you the right to use the -A. We had no what?

21 Q. You only had an APD at the time you filed the 22 Application?

A. Yes, we did not have an agreement with Yates, they did not respond to our proposal, nor did we have a pooling order, because we hadn't applied for it.

You've talked about the two-year delay in Yates 1 Q. 2 actually developing the acreage. Was it your understanding that because they had an APD they were required to do 3 anything? No, they didn't have to. Α. Q. They have the full lease term, do they not, 7 within which to drill? Well, from my understanding they have the length 8 Α. 9 of time that the APD --And those can be extended, you understand that? 10 Q. And it was, I understand, one year. 11 Α. To find out what was going on on this property, 12 Q. you called the Oil Conservation Division, did you not? 13 14 Α. Yes. 15 Q. You talked to Donna in the Hobbs Office? 16 Α. Right. 17 You called the OCD several years ago, back early Q. in the life of your lease; isn't that fair to say? 18 19 Α. I don't recall. 20 Were you ever told by the OCD whether or not you Q. could go ahead and try and pool or do anything with the 21 property while the Yates APD was in place? 22 23 Α. No. 24 Did you ever consider developing the acreage you Q. 25 had under lease with a well in the southwest quarter?

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1	Α.	No.
2	Q.	Did you ever consider forming a south-half unit?
3	Α.	No.
4	Q.	Now, you could do that, could you not?
5	Α.	Could.
6	Q.	And if you drilled a well in the southwest
7	quarter,	it would serve to produce the reserves under your
8	acreage;	isn't that fair to say?
9	Α.	If a well was drilled in the southwest. It's
10	much, much	n riskier.
11	Q.	It's not as good a location as the northwest?
12	Α.	The Since our State 1 "M" well in the
13	southwest	quarter of Section 1 proved to be productive,
14	then hones	stly the next step would be to remain as close to
15	that as po	ossible, to reduce the risk.
16	Q.	If Yates drilled on the north half, a well in the
17	northwest	quarter, information from that well could be
18	useful to	you in determining whether or not there were
19	reserves :	in the southwest quarter of the section; isn't
20	that true	?
21	Α.	Information from the 1 "X" would be useful.
22	Q.	You were aware of the Yates APDs for a north-half
23	unit, cor	rect?
24	Α.	Yes.
25	Q.	And you called the Oil Conservation Division, if
L		STEVEN T. BRENNER, CCR

1	I understand your testimony, to confirm that, in fact, the
2	APDs had expired, and you did that last year sometime?
3	A. I determined that it had expired, yes.
4	Q. Then you prepared the APD which has been included
5	as your Exhibit Number 2, correct?
6	A. Yes.
7	Q. That is dated July the 10th?
8	A. Yes.
9	Q. Did you file it at about that time?
10	A. Yes.
11	Q. And then did you call the OCD to confirm whether
12	or not it was being approved?
13	A. I asked Donna to call me once it was approved.
14	Q. And did she?
15	A. Yes.
16	Q. And so you knew that it was approved about when?
17	A. About July 16th.
18	Q. Now, the letter that you provided to the
19	proposal letter that you sent to Yates, Exhibit Number 4,
20	that's dated July the 15th, correct?
21	A. Yes.
22	Q. You had already filed your APD at that time?
23	A. Yes.
24	Q. Now, when I was listening to your testimony, Mr.
25	Bruce talked with you about calling Yates about the
L	STEVEN T. BRENNER, CCR

development of this property. Did you call Yates about 1 2 this letter, the letter proposing the well, dated July 15, 2003? 3 Α. No. So this was the only thing you did to form the 5 Ο. west-half unit; is that correct? 6 What, proposing the --7 Α. Yes. 8 Ο. 9 -- letter to Yates? Α. 10 Q. Yes. No, I filed the APD. 11 Α. But you did not contact Yates in any other way, 12 Q. it was just this letter? 13 Just the letter. 14 Α. 15 Q. If I look at this, you testified that -- in 16 response to a question from Mr. Bruce, that Yates didn't 17 respond to you about your APD; is that correct? 18 Α. Yates did not respond to me regarding the APD --19 My APD? 20 Q. Yes. 21 Α. Yes. 22 If I look at this letter, you never even told Q. 23 them you had an APD; isn't that right? 24 I think the letter proposed re-entering the well, Α. 25 I believe it was.

Had you ever contacted them prior to this time 1 Q. 2 about the development of the acreage? Prior to -- I had not contacted them, they had Α. 3 4 contacted me. I'd like you to look at what has been marked 5 Ο. 6 Yates -- It's in Yates Exhibit Number 3, and I actually have numbered these pages. They were -- They're all here, 7 they're out of order in what you have, and I numbered them 8 9 so we don't have to try and sort through this. These are 10 exactly the same documents. But Mr. Pride, if you will look at Page 11 in 11 this exhibit, you had previously contacted Yates back in 12 2001 about developing the well with a north-half section, 13 14 had you not? 15 CHAIRMAN FESMIRE: Mr. Carr, do you have a copy 16 for Mr. Bruce? 17 MR. CARR: I have a copy for Mr. Bruce. Oh, 18 heck. This is the one without page 11. 19 (Laughter) 20 (By Mr. Carr) Mr. Pride, you had previously Q. talked to them --21 22 Α. Yes --23 -- about --Ο. 24 -- Mr. Bullock, yes. Α. 25 And so what you did in 2003 with your July 15th Q.

letter was, again, you proposed a well on the west half of 1 the section, correct? 2 Α. Yes. And you knew all along that Yates had plans and Q. 5 had been proposing developing the acreage with a north-half unit? They had APDs? 6 They had APD which was -- went from one year, 7 Α. 8 extended for another year. It's terminated, and I learned 9 from the OCD Office in Hobbs that I had the right at that time to file for an APD, which I did. 10 Did anyone ever tell you that the OCD also has 11 Q. the right and the jurisdiction to cancel an APD? 12 I didn't understand why mine was canceled. 13 Α. Now, you got the letter from Mr. Williams, which 14 Q. 15 is your Exhibit Number 3. You were surprised to get that 16 because Yates already had a rig on location; isn't that 17 right? 18 Α. Which -- What am I looking at? 19 Q. This is your Exhibit Number 3. 20 Three? Yes, the cancellation letter, yes. Α. Is this actually your address in Tulsa? 21 Q. Yes, it is. 22 Α. 23 So it was correctly addressed, you just didn't Ο. receive it? 24 25 Right. Α.

It says in this letter, the last sentence 1 Okay. Q. 2 in the first paragraph, "To date no progress reports, form C-103, have not been received." 3 You understand what a C-103 is? I believe that is -- Isn't that the completion? Α. Just a subsequent report, I'm not trying to --6 Q. 7 this isn't a guessing game, but -- if you don't know this, fine. My question is, had you done anything on the well by 8 9 the time this letter was prepared? No, but it's a short time. 10 Α. Yeah. Okay. You know, to obtain an order 11 Ο. pooling lands, you're supposed to make a good faith effort 12 to reach a voluntary agreement for the development of those 13 lands. And so just to be sure the record is clear, there 14 15 were no other telephone calls concerning -- or any other 16 contacts with Yates concerning just the July 15th --17 Α. Yes, I never received any telephone calls from 18 them. 19 Ο. And if we look at the AFE attached, the cost for 20 the recompletion then was over \$628,000; now it could be \$750,000; is that your testimony? 21 22 Α. Approximately. 23 And if your Application is granted, you would Ο. 24 expect Yates to pay you half of those costs, either 25 directly or out of production from the well?

Yes. 1 Α. The re-entry, you indicated, that was undertaken 2 Q. 3 by Yates was done without your knowledge? Yes. Α. Would you have expected Yates to notify you Ο. before they re-entered that well? 6 I didn't expect Yates to re-enter the well. Α. You knew it was 100-percent a Yates lease, the 8 Ο. 9 north half? 10 The north-half lease was 100-percent, yes. Α. And you knew they had a standard location? 11 Q. 12 Yes. Α. 13 And a standard unit? Ο. 320 is a standard unit. 14 Α. 15 Q. And when you filed your pooling application, you 16 were aware that they were actually on the location? 17 Α. Yes. 18 Ο. You knew they had a workover rig on the well? 19 Α. Yes. 20 That they had built the location? Q. 21 Α. Yes. 22 That they had improved the road? Q. 23 Yes. Α. 24 That they had installed a pit? Q. 25 Α. Yes.

MR. CARR: Don't want to get too far into that. 1 2 (Laughter) (By Mr. Carr) And you had discovered they had an 3 Ο. approved APD, had you not? At that time? 4 Α. Yes. Okay. You would agree with me that Yates had the Q. 7 right to be on the lease doing that work at that time? I still don't think they should have re-entered 8 Α. 9 it. But you would agree with me that they had an APD 10 Q. and that they had all the requirements that they impose on 11 an operator to go into a property and develop it? 12 They had an APD. 13 Α. And what you're trying to do with forming of a 14 Q. 15 west-half unit is basically stop that re-entry and turn 16 that well over to you so you can develop the west half of 17 the section, correct? 18 Α. That's one way of -- kind of roundabout way of 19 saying it. Actually, I look at it a little bit 20 differently. And what is that? 21 Ο. 22 I thought I had the right to re-enter that Α. 23 wellbore with the approved APD I had. 24 And you thought that just from the APD itself? Q. 25 Α. Yes.

Have you attempted to determine where the 1 Q. reserves were going to come from that would be produced by 2 a well in the northwest quarter? 3 Mississippi formation. Α. Did you determine whether or not the southwest Q. quarter would really contribute those reserves? 6 We think it will. Α. And that's based on your geological 8 Ο. 9 interpretation --10 Α. Yes. -- is that correct? 11 Q. 12 Α. Yes. 13 MR. CARR: Thank you, that's all I have. 14 CHAIRMAN FESMIRE: Commissioner Bailey, do you 15 have any questions of this witness? 16 COMMISSIONER BAILEY: No, I don't. 17 CHAIRMAN FESMIRE: Commissioner Chavez? 18 COMMISSIONER CHAVEZ: Yes, I do. 19 EXAMINATION 20 BY COMMISSIONER CHAVEZ: Mr. Yates, when was it that you --21 Q. 22 Α. My name's Mr. Pride. 23 I'm sorry, Mr. Pride. Ο. 24 (Laughter) 25 Q. (By Commissioner Chavez) When was it that you CCR

determined that a well in the northwest quarter would be 1 draining from the entire west half, including your acreage? 2 When was that determination made by Pride? It was after we completed our 1 "M" well to the Α. north, of course, and then after my geologist had reviewed it. So once Yates had actually filed their Q. 8 application for a permit to drill, at that time you were 9 thinking then, if they had re-entered that well they would be producing some of your reserves? 10 11 Α. Yes. Couldn't you have at that time filed an 12 Ο. application for force pooling? 13 At which time is this? 14 Α. 15 Ο. After Yates had filed their Application for 16 permit to re-enter that well. 17 Α. Is this the first APD that they filed for --18 At any time that they had an approval to re-enter Ο. 19 with the first APD and with their extension? 20 Well, we filed the pooling at once -- at what Α. time I had an APD, approved APD. 21 22 You did not think you could have filed a pooling Q. application after Yates had filed their APD? 23 24 I don't know whether we thought or not. Α. We just 25 didn't at that time.

Q. To clear up an issue on your APD and applied in your Application, now your APD, Form C-101, it shows two proposed pools, the Four Lakes-Mississippian and Four Lakes-Morrow, but the C-102 on your Application, Number 2, shows Four Lakes-Morrow stricken out. Was that done by you?

A. No, it was the Hobbs District.

Q. Hobbs District struck that out. Do you have any 9 reason why that's been stricken?

A. I think it's probably because our State 1 "M" created a new pool, or a new field, and they were calling it the Four Lakes-Mississippian.

Q. But your Application for this hearing includes the Four Lakes-Morrow and the Four Lakes-Mississippian. What I'm trying to get straight is that if this Application is reinstated the way you're requesting, the Four Lakes-Morrow has been stricken from the C-102, but do you still intend to include that in your Application?

A. I would like to have the rights to produce from the Atoka-Morrow as a possibility. The Mississippian is our primary target.

Q. Okay, and that's also a 320-acre dedication?A. Correct.

Q. And it would also be the west half --

A. Yes.

22

23

24

25

-- for that? Q. 1 COMMISSIONER CHAVEZ: Okay, that's all I have. 2 EXAMINATION 3 4 BY CHAIRMAN FESMIRE: Mr. Pride, this kind of gets back to a question Q. 6 Commissioner Chavez asked. Why didn't you force pool it 7 before you applied for an APD? We thought that since Yates had the APD, they had 8 Α. 9 the right to drill --10 Q. Yeah, but ---- at that time. 11 Α. -- the time between the lapsing of their APD and 12 Q. the time you applied for your APD, I realize it was a 13 pretty short period of time --14 15 Α. Okay, during that time? The reason I thought 16 that was, is because based on the 1 "M" well to the north 17 that we had proposed to Yates and they had agreed to 18 participate in that well, I assumed that they would do the 19 same with this 1 "X" well, and so I did not think that 20 pooling was necessary at that particular time. I thought I 21 would get a response from Yates after my proposal letter 22 went to them, agreeing to participate. That's the thinking 23 at that particular time. 24 Now, you said something in your testimony that Ο. 25 sort of hit a red flag with me. You said drilling in the

southwest quarter would be riskier. Do you mean just 1 2 financially riskier because of the advantage of re-entering an existing wellbore, or is it geologically riskier? 3 Both. Α. Why would it be geologically riskier? Ο. Α. I'm going to let my geologist address that, if you don't mind, because he's the expert in that field. 7 You raised the issue and told me both, so why 8 Ο. 9 don't you give me your --10 Α. Well, obviously if you're stepping out away from the proven -- in the Mississippian formation in the 1 "M", 11 as you move a quarter -- or a half a mile to the south 12 further from the 1 "X", obviously the risk is going to 13 increase as you get further away from the proven well. 14 You 15 don't have as much well control. 16 CHAIRMAN FESMIRE: I have no further questions. 17 Mr. Bruce, do you have some redirect? 18 MR. BRUCE: I just have a few follow-up 19 questions. 20 REDIRECT EXAMINATION BY MR. BRUCE: 21 22 I just want to clarify a few items here on your Ο. 23 Exhibit 1, again, Mr. Pride. 24 The State "M" 1 well, which is to the north, that 25 is on Yates' acreage, correct?

1 Α. Yes. And you had reached voluntary agreement with 2 Q. 3 Yates to develop that on a standup basis? Yes. Α. Okay. And essentially you plan to do the same Q. with the west half of Section 12? 6 Correct. Α. Now, other than this case, has Pride ever filed 8 Ο. 9 any compulsory poolings in New Mexico? 10 No. Α. And then on the timeline again, you bought your 11 Ο. lease about May 18 or 19, 2001? 12 13 Yes. Α. And then a few days later you got a call from 14 Q. 15 Yates' geologist asking if you had intentions of re-16 entering the State "X" 1 well? 17 Α. Yes. 18 Ο. And you did send Yates' Exhibit -- you did send 19 the letter in June of 2001, proposing that very same thing? 20 Α. Yes. Was it somewhere around or after that time that 21 Ο. you found out Yates had an APD --22 23 Α. Yes. 24 -- on the north half? Q. 25 Α. Yes.

So you didn't pursue it any further at that time? 1 Q. 2 Α. Correct. Okay. And then when you did get your APD you 3 Ο. wrote a letter. Did you intend to contact Yates again and 4 5 to --Yes --6 Α. -- reach voluntary agreement --Q. -- I was giving them an opportunity to respond. 8 Α. 9 And the next thing you found, did you -- Who did Q. you find out from that Yates was conducting activity on the 10 well? 11 12 Α. It was my field hand, pumper. 13 Ο. Okay, and this case resulted from that? 14 Α. Yes. 15 MR. BRUCE: Thank you. 16 CHAIRMAN FESMIRE: Mr. Carr, I'd rather not get into the habit of recrossing folks, but since I've never 17 18 said that before I'll give you the option. 19 MR. CARR: I'll try not to push you on your 20 sentiment this time. CHAIRMAN FESMIRE: Okay. Does the Commission 21 22 have any --23 FURTHER EXAMINATION 24 BY COMMISSIONER CHAVEZ: 25 Just a comment here, Mr. Pride, on the issue of Q.

communication and mailing, that it is important for the 1 2 OCD, for us to communicate with people, especially written, many times. And I do note that Mr. Carr asked if this was 3 a correct address for you --Α. Yes. -- on both your APD and I think on the notice Q. 7 that the District sent to you, and note to you that your mailinghead on the -- your mailing address on the 8 9 letterhead on Exhibit Number 4 is different than these 10 other addresses, so --Was it a different P.O. box? 11 Α. 12 Q. Yes. We have two P.O. boxes. 13 Α. 14 Well, I just want to be sure that --Q. 15 Α. We have one that actually got too small for all 16 the mail we were getting, so we had to get a larger one, 17 and that's the other P.O. box number. 18 COMMISSIONER CHAVEZ: Okay, thank you. 19 CHAIRMAN FESMIRE: Mr. Bruce, anything further? 20 MR. BRUCE: I have no further questions, Mr. 21 Chairman. 22 CHAIRMAN FESMIRE: Thank you very much, Mr. 23 Pride. 24 Thank you. THE WITNESS: 25 MR. BRUCE: Call Mr. Ellard to the stand.

MR. ELLARD: Might be a little easier to see than 1 2 all that wad of maps. JEFF ELLARD, the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows: DIRECT EXAMINATION BY MR. BRUCE: 7 Mr. Ellard, would you please state your name and 8 Ο. 9 city of residence for the record? My name is Jeff Ellard, Tulsa, Oklahoma. 10 Α. Who do you work for and in what capacity? 11 Q. CHAIRMAN FESMIRE: Mr. Bruce, before we start, 12 Mr. Ellard, you have been sworn? 13 14 THE WITNESS: Yes, I was here. I work for Pride 15 Energy. (By Mr. Bruce) And what is your occupation? 16 Q. 17 Α. Geologist. Have you previously testified before the Division 18 Ο. 19 or the Commission as an expert -- as a geologist? 20 Α. Yes. And were your credentials as an expert petroleum 21 Q. 22 geologist accepted as a matter of record? 23 Α. Yes, they were. 24 And are you familiar with the geology involved in Q. 25 this case?

1 Α. Yes, I am. MR. BRUCE: Mr. Examiner, I'd tender Mr. Ellard 2 3 as an expert petroleum geologist. MR. CARR: No objection. CHAIRMAN FESMIRE: Any objection from the Commission? 6 COMMISSIONER CHAVEZ: No objection. CHAIRMAN FESMIRE: He's so accepted. (By Mr. Bruce) Mr. Ellard, why don't you pull 9 Q. 10 out your exhibits, and if you need to go to the easel go 11 ahead. Or if we can put one up there, we can paper-clip 12 it. Let's just -- Which exhibit would you prefer to 13 14 start with, Mr. Ellard? Exhibit Number 6, this is a reproduction of a 15 Α. 16 commercial Geomap of this area. 17 On Exhibit 6 you'll see two cross-sections and a very heavy line from A to A', which is this one, which 18 19 transects from the -- roughly north to south across the 20 subject area. B to B' runs from west to east across the subject area again, intersecting wells of interest. 21 22 Okay. Now, in looking at this map, why -- well, Q. 23 why don't you first talk about the State "M" Number 1, that 24 re-entry, and what you learned from that re-entry? 25 State "M" Number 1 was re-entered by Pride. Α.

1	Yates was a working interest partner in that well.
2	Indications done previous to my joining the company were
3	that by log analysis, that the old well which had been
4	drilled there had bypassed pay in the Austin cycle of the
5	upper Mississippian. It was successfully re-entered and
6	recompleted. A little over 30 feet of 7-percent-porosity
7	rock was encountered. It has sustained a production rate
8	over time, which would indicate that it is going to drain
9	considerable reserves. And as a result of that, we have
10	looked elsewhere to penetrate and try to capture reserves
11	from this same reservoir sequence.
12	Q. Okay. Now, is faulting somewhat important in
13	this area?
14	A. Yes, it is.
15	Q. Could you identify the faults that you show on
16	Exhibit 6 and discuss how they relate to production from
17	the Mississippian in this area?
18	A. Yes. Again, we're very limited in that the area
19	that or for all practical purposes, the only Austin-
20	avale vell which I'm every of on this man is every vell. We

20 cycle well which I'm aware of on this map is our well. We
21 have basically a new zone discovery for the area.

Q. When you say our well, you mean the State "M" 1? A. The "M" 1, that's correct. By looking at Exhibit 6, you'll see two faults which run north-south, one transecting the west half of Section 2. It is downthrown 1 to the west. There is a horst block which the South Four 2 Lakes field exists on, and then a separate fault to the 3 east which also runs north to south, roughly, which is 4 downthrown to the east.

The faulting, which is depicted here on the Devonian, has apparently been rejuv- -- or has regenerated several times through the depositional cycle.

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In other words, it didn't just end in the Devonian; it was recycled through periods of the Mississippian. We have indications that we see possibly some slight faulting; we cannot be sure of it, even in the lower Penn.

13 Subsequent drilling which we have done out here, 14 which is not marked on this, lends us evidence that there 15 is additional faulting in the area of the "M" 1 well, which 16 is in the southwest southwest of Section 1, that the 17 faulting does continue at least into the Canyon.

18 The faulting as it exists through the 19 Mississippian does not have as great a displacement as 20 depicted here on the Devonian, simply didn't have as much 21 energy, there wasn't as much tectonism, and so as a result 22 you didn't get as much displacement. However, there was 23 enough displacement to allow shedding off of the horst 24 block, downdip to the east, which has created the reservoir 25 that the "M" 1 is producing out of. It's much like an

alluvial fan.

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Q. Is it better to be closer to the fault or further away from the fault to hit a productive well in the Mississippian?

A. The better wells should be encountered closer to the fault, because we have two dynamics operating here.

One is grain sorting size. The closer you are to the fault or to the source area, an escarpment, the closer you are, the coarser the material, because there's more energy to carry bigger particle sizes. As you move out from there, particle sizes become smaller because there's less energy to carry them distally. We want to be very close to the fault. Secondarily -- or relatively close.

Secondarily, faulting is a break in the rock. It is almost never the break in the rock. The rock will shatter, much like glass, in pieces. While there may not be displacement, it will be a break, which we call fractures. The fracturing that's occurring will be more intense near the fault than away from the fault.

So to answer your question, we want to be close to the fault to encounter the reservoir rock that has then been modified by fracturing which increases porosity and permeability.

Q. Okay. Now, you have two faults, the one on the west side and, as we'll get into shortly, there's a dispute

about the eastern fault, the one that runs through the west 1 2 half of Section 1 and right along the Section 11, Section 12 line. You show that fault as kind of dissipating as it 3 moves to the south; is that correct? I agree with the interpretation of multiple Α. geologists who have created this map for Geomap, that the 6 7 fault dies in displacement as you move to the south. There's no dispute about that. 8 Okay. Now, about being close to the fault, down 9 Q. 10 in Section 13, in the southwest quarter, there's a State QE Number 1 well. Is that a Pride well? 11 12 Α. Yes. COMMISSIONER CHAVEZ: I'm sorry, would you --13 14 MR. BRUCE: Excuse me, Jeff, in Section -- Mr. 15 Commissioner, the southwest quarter of Section 13, 16 immediately to the south --17 COMMISSIONER CHAVEZ: Okay. 18 MR. BRUCE: -- of the proposed well unit, the 19 State QE 13 Number 1 well. 20 COMMISSIONER CHAVEZ: Okay, thank you. 21 THE WITNESS: And on the big cross-section it's the furthest one over here under A 1. 22 23 Ο. (By Mr. Bruce) And what does -- Well, why don't 24 you go through your cross-section and explain to the 25 Commission your opinion as to why you need to be close to

the fault and what happens if you get too far away? A. One thing that we see, the upper Mississippian, which occupies the same position -- the Austin cycle is the upper Mississippian here -- on the horst block, that point A on the cross-section is very thin. It's very tight, as indicated by the resistivity off this old-style log.

7 When we move over to the State 1 "M" -- now, this 8 is stratigraphic, it's not a structural cross-section, so 9 you don't see displacement on it; we're only looking for 10 zone development.

11 When we come here we see over 30 feet of porosity 12 development at the second point here on that cross-section. When we move to the 1 "M", again, we have a very old-style 13 14 log, the very same type of old-style log. The same type of 15 scientific analysis is being applied here that we used in 16 the 1 "M", that gives us indication here where the curves are kicking back that we may have as much as 25 feet of 17 18 reservoir rock.

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Q. In the "X" 1 well?

A. In the "X" 1 well. Until we get there, we don't know. But we have positive indications that are very -- It warrants testing the zone.

When we move all the way down to the end, at the QE well, we see that this interval has turned to tombstone. It is located so far distally from the fault that no reservoir-quality rock exists there.

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So in your opinion, just looking at Section 12 as 2 Ο. you're moving into the east half of Section 12, that is not 3 nearly as prospective as the west half of Section 12? The amount of risk that exists in the east half Α. of Section 12 is greater than the risk in the west half of 6 7 Section 12, if we're making a successful commercial completion. 8 Now, you've gone through the first A-A' cross-9 Ο. section that's marked Exhibit 7. 10 Does Exhibit 8, your other cross-section, show 11 pretty much the same? 12 Yes. B-B', again, runs from west to east, and it 13 Α. 14 makes a depiction the same. We're coming, actually, from 15 the west side of the horst block where we have very low 16 development, we move to the "M" 1, we have excellent 17 development, we move all the way almost two miles to the 18 east, and you'll see again we have no development -- no 19 porosity development in either of the two wells on the end. 20 So again, distally from the fault you run out of reservoir-quality rock. 21 Okay. Now let's move on briefly to your final 22 Q. exhibits. First, Exhibits 9 and 10 together, what wells 23 24 are involved in those partial cross-sections, and what do 25 they show?

This is a second well, which is down in Section 1 Α. 2 13, the Reese State drilled by Yates, or operated by Yates now. It's simply showing the upper Mississippian-Austin 3 cycle, which is located even further from the fault complex, you know, that is to the west of us. It's located 5 further east than the QE 13 1. And it shows again, with 6 7 modern style logs, very tight. It's tombstone-type rock. So it's not productive in the Austin? 8 Ο. Α. We would not think so. 9 And Exhibit 10? 10 Q. 11 Α. Exhibit 10 is really just a -- it's the well out on the end of cross-section B-B'. The cross-section is 12 13 very small scale. This is just blown up to show again, if 14 you look underneath the line drawn for upper Mississippian, 15 again it is very tight. It's 2-percent-porosity rock. 16 Just briefly, what are Exhibits 11 and 12? Q. Exhibit 11 here is just depicting that the basal 17 Α. 18 Morrow is what is actually productive. We're in complete 19 agreement with Yates that they're producing from the basal Morrow in the well which is depicted on Exhibit 10. 20 21 And 11 again confirms their calling the upper 22 Mississippian-Austin section the same thing we do down at 23 the Reese State well. 24 Okay. So in your opinion, there's no difference Ο. 25 between the way Pride and Yates interpret where the Austin

1 is? No, we agree that we are looking at the same 2 Α. stratigraphic interval. 3 Okay, a couple more questions. On the State "M" Ο. 1 well, which sets off the next well, is there any water 5 production? To my knowledge, any water it is making is Α. 8 minimal. One other item. Although you're not an engineer, 9 Ο. Yates, going through their exhibits, has presented some 10 testimony that they think the State "M" 1 well will 11 ultimately drain about 120 acres. 12 Does Pride have any dispute, any big 13 disagreement, with that number? 14 15 Α. I believe that number is conservative. 16 In your opinion, is the best way to develop the Q. 17 reservoir to first re-enter the State "X" 1 well? 18 Α. Yes, it makes geologic and economic sense to 19 pursue development of the reservoir from the "X" 1 well. 20 And then, depending on results, determine where Q. the next well is? 21 22 Α. Absolutely. 23 Based on what you know now, if the "X" 1 re-entry Ο. is successful, would the next well be in the southwest 24 25 quarter or would it be in the east half?

A. Based on what I know now, I believe that if we moved eastward we would be running out of reservoir-quality rock, we're getting too far out. Rather than being in, say, sand-size material, we may be in clay- or silt-sized material. Recoveries would be less.

We would probably want to stay parallel to the fault complex as close as we can. That would be a location in the southwest of 13 -- I'm sorry, southwest of 12.

9 Q. Mr. Chairman, to avoid recalling any witness to 10 -- my witness, to comment on Yates' proposal, what I'd like 11 to do now is, if you would refer to Yates Exhibit 9, Mr. 12 Ellard, have you reviewed Yates Exhibit Number 9?

A. Yes, I have.

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Q. There are some differences that -- In looking at your Exhibit 6 and Yates Exhibit 9, as to the western fault there's not a big area of disagreement, is there?

A. No, the placement of the fault approximates what we have done in our interpretation and follow-on interpretation from the Geomap data.

Q. Okay.

A. We're in agreement with that. In addition, that fault also appears on in-house seismic which we possess. Q. Okay, the bigger disagreement is, the eastern fault they have running -- you have running relatively north-south, they have running in a northeast-southwest fashion, and then they have an intermediate fault. Could you comment on those and what your disagreement is?

A. I'm very interested in the basis for the fault which is at -- oh, roughly, you know, one o'clock or 1:30 on a clock face that dies in the northwest of Section 1. We have extensive wellbore data and production data of the South Four Lakes field, which we own and operate.

The structural fabric on multiple horizons, including the Mississippian and Devonian, as well as production histories, would just -- it mystifies me that a fault would be drawn in there. There is no displacement apparent from mapping, there is no displacement apparent from reservoir performance.

Q. Now, when you say from reservoir performance, those wells in the Four Lake field, are those Devonian wells?

A. Devonian and Penn.

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Q.

18 Q. Okay, so those wells penetrated the 19 Mississippian?

A. Yes, they -- Well, the majority of the wells did,
that's correct.

Q. And so based on the well performance -- The
Devonian is deeper than the Mississippian, correct?
A. Oh, yes.

And you don't see any faulting in the Devonian

that would justify that middle fault? 1 Α. None. 2 Okay. Now next, you -- Both parties agree there Ο. is a second fault somewhere there in the west half of 4 Section 1? Α. Correct. And it's kind of hard to see the numbers, but Ο. 8 between your State "M" Well Number 1 in the southwest southwest of Section 1, and then going to the northwest, 9 there's a Four Lakes unit. I think it's the Number 6 well? 10 Moving to the northwest is the Number 6 well, 11 Α. correct. 12 Do you see faulting there? 13 Ο. 14 Α. Absolutely. 15 Q. And you agree with Yates that there's a fault 16 between those two wells? 17 Α. Yes, we do. 18 There's a difference in the orientation of the Ο. 19 fault? 20 Α. Difference in the orientation, yes, sir. And on that map also, Yates has outlined what it 21 Q. sees as the reservoir. Do you see any basis for outlining 22 23 the reservoir in that shape? There's no basis in scientific fact for having 24 Α. 25 that reservoir limited or extending or oriented in that

1 manner. Now, they have this -- oh, what do you call it, 2 Q. the alluvial --3 Alluvial fan. Α. -- alluvial fan --Q. Α. Yes. -- coming out of just one specific place of this Q. 8 fault. Could the alluvial fan come out of other places 9 along the fault? 10 Α. Yes, it could. And what do you base that on? 11 Q. Regional studies that I have personally conducted 12 Α. on alluvial fans throughout the Permian Basin and Delaware 13 14 Basin. 15 Ο. Does Yates have another well in this area that 16 would indicate --17 Α. They do. And where is that well? 18 Ο. 19 That well is located approximately six miles Α. 20 south of here, their Mocha State Number 2. Is that in Section 12 of 13-34? 21 Q. 22 I believe it's Section 2. Α. 23 Section 2. Ο. 24 I believe that's correct. Α. 25 Section 2 of 13-34, which is a Yates well. And Q.

1 did that well demonstrate that there could be multiple 2 alluvial fans along a fault?

A. It demonstrates that there could be alluvial fans, and in fact there are more than one alluvial fan that are emanating off of this fault complex. Remember, we're not talking about just one fault, we're talking about a fault complex, multiple faults, each one capable of shedding.

9 We're also, as we move south -- On the eastern 10 side of Section 11, as we move down through the eastern 11 side of Section 14, we may not be talking about faults of 12 great displacement, 20, 30, 40 feet. Very hard to see, but 13 they can exist.

14 Q. But even if the faulting is small, could it still 15 result in a buildup of the Austin reservoir?

16 A. Absolutely. And in fact, the source for the 17 Austin reservoir may be the fault lying on Exhibit -- Yates 18 Exhibit -- I don't what the number is here.

Q. Nine.

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A. Nine. -- may be the fault running approximately
through the middle of Section 11.

22 Q. Do you have any further comments on Yates Exhibit 23 9?

A. I do not.

Q. Okay. Now Mr. Ellard, Exhibit 6, how was that

exhibit prepared? Your Exhibit 6, excuse me. 1 How it was prepared? Α. 2 Yeah. Ο. It's a simple photocopy of a commercial document. Α. Have you reviewed the data on the wells in this Q. 6 area? Yes, I have. Α. And does your interpretation of the data on the 8 Ο. 9 wells in this area accord with what's set forth on this 10 map? I have found them to be accurate within reason 11 Α. for the ability to pursue oil and gas exploration out here. 12 Were Exhibits 6 through 12 prepared by you or 13 Ο. under your supervision or compiled from company business 14 15 records? 16 Α. Yes, they were. 17 And in your opinion is the granting of Pride's Q. 18 Application in the interest of conservation and the 19 prevention of waste? 20 Α. Yes, it is. MR. BRUCE: Mr. Chairman, I'd move the admission 21 of Pride Exhibits 6 through 12. 22 23 MR. CARR: Mr. Chairman, I'd like to examine the 24 witness on Exhibit 6. 25 CHAIRMAN FESMIRE: Go ahead, Mr. Carr.

VOIR DIRE EXAMINATION 1 2 BY MR. CARR: Mr. Ellard, if you look at Exhibit Number 6, I Ο. believe you'll --I'm sorry, I can't hear you. Α. If you'll look at Exhibit Number 6 --Q. Α. Yes. -- this exhibit was not prepared by you; is that 8 Ο. 9 correct? 10 Α. The data which exists on the map is -- was 11 created by Geomap. And what other information -- What have you done 12 Ο. to change or adjust this? 13 Α. Only placing where the trace of the 320 standup 14 15 unit would be, placing a header stating Pride Energy 16 Devonian Structure Map/Cross Sections, and marking where 17 those cross-sections, A-A' and B-B', exist. 18 Ο. Is your testimony that the faults you depict 19 running north-south through Section 1 and into Section 12 20 is accurately placed? I believe that -- I don't think that there is any 21 Α. question that a fault exists east of South Four Lakes Unit 22 23 Number 3, located in the northwest. 24 Of -- ? Q. -- Section 1, and that the fault -- that same 25 Α.

fault exists between South Four Lakes Unit Number 6, 1 located in the southeast of Section 2, and the Pride "M" 1 2 well, located in the southwest of Section 1. Have you examined the data that was utilized to Q. place this fault where it is shown? 5 Did I create the map? Α. Q. Yes. 8 Α. No. 9 You would agree with me, would you not, that Q. there is very limited data available to use, to place the 10 fault where it is exactly placed? 11 I would disagree. 12 Α. Let's take a look at this, then. If we look at 13 Ο. 14 the data points -- and I assume you've checked the data 15 points? 16 Α. Yes. 17 Certainly the Number 1 "M" would be a useful data Q. 18 point; is that correct? 19 CHAIRMAN FESMIRE: Mr. Carr, can I interject 20 something here? 21 MR. CARR: Yes. 22 CHAIRMAN FESMIRE: Are we going to pursue a line 23 of questioning concerning the credibility of the data or the admissibility of the --24 25 MR. CARR: I'm going to the admissibility. This

witness has not prepared the exhibit, there is limited data 2 available for the placement of it. We have had testimony that we have looked at seismic information, we have extensive data on the Four Lakes field, we have regional studies, and it has not been presented.

And I therefore object to the admission of Exhibit 6 because the witness cannot sponsor it. It's a 7 commercial service, and not to make fun of it, but it may 8 be accurate to a fault, but it is not properly sponsored, 9 there is no foundation for its admission. It is not his 10 11 work.

12 CHAIRMAN FESMIRE: Okay, go ahead and --MR. CARR: That's it, I'll stand on that. 13 14 CHAIRMAN FESMIRE: Okay, and you're objecting to 15 the admission --

16 MR. CARR: I'm objecting to the admission of 17 Exhibit 6.

VOIR DIRE EXAMINATION

19 BY CHAIRMAN FESMIRE:

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20 Q. Mr. Ellard, you previously testified that the Geomap is a tool used in the industry, that it's generally 21 22 accepted for regional mapping, essentially, in the oil and gas industry; is that correct? 23

Yes, sir. Α.

> And you have verified the data on this map Q.

concerning the wells in question?

A. Concerning the wells in question, I've verified the structural points which are listed on here are the same ones which I pick when I look at the logs, and -- within a reasonable -- you know, they may be five feet off where I would pick the top of the Cisco B, but they are accurate within reason to be able to perform exploration work out here.

9 Q. And you've worked with this data enough to be 10 comfortable with it and to urge this Commission to accept 11 it as essentially your work?

A. Yes.

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13 CHAIRMAN FESMIRE: Mr. Carr, I'm going to 14 overrule your objection to the admission of this exhibit. 15 You can certainly examine the viability and the credibility 16 of the exhibit during the cross-examination.

17 So we're going to admit Exhibits 6 through 12. I 18 understand that there's no problem with the labeling on 19 these, that we don't have the same problem that we had with 20 1 through 5; is that correct?

MR. BRUCE: I don't think so.

MR. BROOKS: Well, these are labeled -- at least 6 is, there's one immediately in front of me -- it's labeled "Oil Conservation Division, Case Number", and the case number is not filled in, and then "Exhibit Number",

but it doesn't have "Before Examiner". 1 MR. BRUCE: I did them late, and I only had a 2 3 Division stamp. CHAIRMAN FESMIRE: If you'd be so kind as to make that correction and provide Florene a copy of these exhibits. MR. BRUCE: I'll provide two. CHAIRMAN FESMIRE: Okay. Do you have any further 8 9 questions? 10 MR. BRUCE: I have no further questions of the 11 witness, Mr. Chairman. CHAIRMAN FESMIRE: Mr. Carr, before you start, 12 why don't we take a 10-minute break and come back at five 13 minutes to 11:00? 14 15 (Thereupon, a recess was taken at 10:45 a.m.) (The following proceedings had at 10:55 a.m.) 16 17 CHAIRMAN FESMIRE: I'm assuming, Mr. Bruce, that 18 you've completed your presentation? 19 MR. BRUCE: Yes, sir. 20 Mr. Carr, do you have any questions of this 21 witness? 22 MR. CARR: Yes, Mr. Chairman, I do. 23 CROSS-EXAMINATION 24 BY MR. CARR: 25 Mr. Ellard, what is your position with Pride? Q.

1 Α. Geologist. And when did you start to work for Pride? 2 Q. Approximately a year ago. Α. At the time you came to work for Pride, the APD Q. 5 for the re-entry had already been prepared and filed, had it not? 6 I have no knowledge of the APD date. Α. If you look at Pride Exhibit Number 2 -- would 8 Ο. 9 you do that, please? 10 Α. Okay. -- it shows that the APD was approved on July the 11 Ο. 16th. Down at the bottom, you'll see a stamp down in the 12 lower right-hand corner? 13 I see that. 14 Α. 15 Q. Was that before you were employed by Pride? 16 Α. Yes. 17 So the determination to develop this section with Q. 18 a west-half unit was made prior to your arrival? 19 Α. Yes. 20 The exhibits and the material that you have Q. presented here today were prepared by and compiled under 21 your direction; is that fair to say? 22 23 Α. Yes. 24 And during the last almost year --Q. 25 Stop just a moment. The geological --Α.

1 Q. Yeah. Yes, anything related to the land --2 Α. Correct. Ο. -- APDs, legal documents I have no knowledge of. Α. 5 We're just talking about the exhibits that you Q. have sponsored here today? 6 Yes. Α. And those were either prepared or compiled by 8 Ο. 9 you; is that right? 10 Α. Or at my direction. CHAIRMAN FESMIRE: Okay, to be specific, you're 11 talking about Exhibits 6 through 12, Mr. Carr? 12 13 MR. CARR: I am, I am. 14 CHAIRMAN FESMIRE: Okay. 15 Q. (By Mr. Carr) You use this commercial map 16 service frequently, I understand, from what you say? 17 I use it, yeah, on a frequent basis. Α. 18 And you took the map and you have independently Ο. 19 checked the information on it? 20 Α. And constructed my own. Have you presented any maps that you have 21 Q. constructed on your own? 22 23 I have presented cross-sections I have Α. 24 constructed on my own; I have not presented any structure 25 or isopach maps.

Have you prepared those? 1 Q. Yes, I have. 2 Α. And you've decided not to present them here 3 Ο. 4 today? We consider them proprietary and choose not to Α. have them present. 6 If we look at the structure map, you've reviewed Q. 8 the Yates structure map as well, I believe? 9 Α. Yes. 10 Both of the interpretations show the --Q. Just a moment. I don't have the Yates structure 11 Α. 12 map. That's all right. The structure map, Exhibit 13 Ο. Number 6, shows a high, does it not, off to the north and 14 15 northwest of the State "X" well location? 16 Α. Yes. 17 Ο. And the reserves that we are chasing in that well 18 are actually reserves that eroded off that high; isn't that 19 fair to say? 20 That is our best estimate. Α. And the real difference between your 21 Ο. 22 interpretation and that of Yates is that you see a fault 23 that would have affected where those reserves actually wound up at the time they were deposited; is that right? 24 25 Incorrect, incorrect. Α.

Okay, what is your testimony on that? 1 What is Q. 2 the significance of the fault? As I have previously stated, the source of the Α. 3 alluvial fan may be the fault, which is in dispute as to 4 orientation, located along the section line between 5 Sections 11 and 12. The source may also be the fault which 6 is located along the midline of Section 11, running north-7 We don't know, we only have one data point right 8 south. 9 now where we have found reservoir-quality rock, the presence of that rock and in a thickness that lends to 10 commercial reserves and production. 11 And that's the 1 "M"? 12 Q. That's the 1 "M". 13 Α. 14 Q. Correct. Would you agree with me that the 15 general regional dip is to the east-southeast? 16 Α. Correct. 17 If we -- what we're chasing is a relatively small Ο. 18 reservoir in the Mississippian formation, correct? 19 Α. We don't know. 20 You do at this time have limited data on that Ο. reservoir, would you not agree with that? 21 22 Correct. Α. 23 If we look at the wells that you've put on your Ο. cross-sections A and A', if we go to -- is this --24 25 Α. This is A-A' here, yes.

-- and we look at the trace on Exhibit Number 6, 1 Ο. 2 if we go to the well at A, that's in Section 2. No one suggests that that is in this reservoir, correct? 3 There is -- a stratigraphic unit exists. Α. It is not of reservoir quality. 5 If we go to the other end of that cross-section, 0. down in Section 13, there's a well there. No one is 7 suggesting that that is going to be part of this reservoir; 8 9 is that fair to say? 10 Α. I've testified to that, yes. If we look at B-B', we go to the well at B, point 11 Q. B, that is fault-separated and is not part of the reservoir 12 we're hoping to encounter with the State "X", correct? 13 14 Α. Say that again. 15 Q. That doesn't give us any data --16 Α. No, no --17 -- at that location that we would use to map the Ο. 18 reservoir we're trying to encounter --19 Α. I didn't hear which cross-section you're 20 referring to. I'm sorry, B-B'. 21 Q. 22 Α. B-B', okay. 23 There's no dispute that we're not trying Ο. Yeah. 24 to encounter this reservoir over there, right? 25 Α. Not at location B.

And the two wells on the extreme east end of B, 1 Ο. 2 at B', those wells again are outside this reservoir? Correct. Α. And so what we're trying to do is understand this Ο. 5 reservoir with really two data points, two places we can look with logs that appear to intersect potentially 6 commercial reservoir, right? 7 Correct. Α. 8 9 And from that data we have a difference of 0. 10 interpretation. We see a fault, you see a fault, we do not; isn't that fair to say? 11 I do not agree with how you have couched that, 12 Α. 13 no. 14 Q. You see a fault, correct? 15 Α. I see the same fault you see. I changed the 16 orientation of it. 17 Ο. All right, you see a fault, but it is somewhere 18 else, right? 19 Α. Which fault? 20 Q. You know, we can spend a long time on this. I'm talking about the fault that crosses Sections 1 and 2. 21 22 Α. All right. 23 If you'll look at your exhibit --Ο. 24 Α. I am --25 -- you will see it there. Q.

I'm -- I agree with you completely on --1 Α. All right. Now, when we look at the data that 2 Q. 3 you have --Uh-huh. Α. -- you could move the fault slightly, could you Q. not? 6 It could be interpreted, sure. Α. It could be a hundred feet east or west of where Ο. 8 9 it is mapped on this commercial map? 10 Α. Sure. It could be moved, based on this data, more than 11 Ο. a hundred feet, could it not? 12 The likelihood decreases with the greater 13 Α. 14 distance you move it. But this is not necessarily where that fault is 15 Q. 16 located? 17 Α. Again, for reasonable exploration work, it is 18 properly placed. 19 But the quantity and the quality of the data you Q. 20 have to place that fault is limited, correct? It is limited insofar as we have seismic, other 21 Α. geologists have looked at this and constructed this map, I 22 23 have looked at it. Based on my work, I agree with the 24 placement of the fault. 25 Have you looked at seismic across the area? Q.

1	Α.	A geophysicist has looked at seismic across the
2	area at m	y request.
3	Q.	And have you looked at the seismic?
4	Α.	I've looked at his interpretation
5	Q.	And was any of that work integrated into this
6	exhibit?	
7	Α.	No.
8	Q.	And you're not sharing any of that work with us
9	either?	
10	Α.	We consider that proprietary, yes.
11	Q.	If we are looking for commercial reservoir in
12	Sections 3	1 and 2, I believe you testified that it was
13	important	to be as close as possible to the fault; is that
14	what you ⁻	testified?
15	Α.	As close as possible to the source fault, yes.
16	Q.	What is the source fault on this map?
17	Α.	Again, we don't know.
18	Q.	Now, if we look at the State 1 "M" well in
19	Section 1	
20	Α.	Yes.
21	Q.	and we compare that to the location of the
22	State "X"	well in Section 2
23	Α.	Yes.
24	Q.	do you have an opinion as to which appears to
25	be a bette	er location?

Based on the logs which I have examined, that 1 Α. were run in the "M" 1 prior to its re-entry, and comparing 2 that to the "X" 1, the "M" 1 appears to be slightly thicker 3 in the interval that can develop porosity. As far as quantitatively stating that the "M" 1 has better porosity 5 or less porosity than the "X" 1, I can't make that 6 determination. 7 Now, you have gotten logs -- you've gotten logs 8 Ο. 9 since you re-entered, or since you re-entered the "M" 1, 10 correct? 11 Α. Yes. 12 Q. And you've looked at those logs? 13 Α. Yes. And when you look at that information, does it 14 Q. 15 suggest to you that you have a better chance of a 16 commercial well there, now knowing what you know about it, 17 than you would down in the 1 "X"? 18 Α. Again, I don't know. 19 So you would expect a comparable well with this Q. 20 re-entry? We would think that we would be looking at a 21 Α. 22 comparable-type well. 23 Would you agree with me that it is farther from Ο. the fault that you have depicted on 6 than the "M" 1? 24 25 Α. Yes.

Would that have any bearing, in your opinion, on 1 Q. 2 its productive capability? Only insofar as to what the reservoir fabric Α. looks like within the fan at that point. But it wouldn't be --Ο. The fan may be -- The reservoir-quality rock Α. 6 7 within the fan may stretch a half a mile wide, threequarters of a mile wide, it may be a quarter of a mile 8 9 wide. 10 And you don't know that? Q. We do not know. 11 Α. And so what we have here is just your 12 Ο. interpretation, or we have an interpretation that you're 13 endorsing and sponsoring? 14 15 Α. That is my interpretation, yes. 16 Q. You have adopted the Geomap interpretation; is 17 that what you're saying? 18 Α. No, I thought we were talking about the alluvial 19 fan --20 Okay. Q. -- my interpretation of the alluvial fan and its 21 Α. 22 placement along the fault. 23 We're looking at a map on the Devonian; isn't Ο. 24 that right, when we look at Exhibit 6? 25 Α. Correct.

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1	Q. And the Mississippian is what we're talking
2	about. That's about how many feet above?
3	A. On this side, approximately 900 feet. Up on the
4	structure it's less than that.
5	Q. Did you testify that we might anticipate less
6	displacement along this fault in the Morrow than we see in
7	the Devonian?
8	A. Did you mean in the Mississippian?
9	Q. Yes, I'm sorry, I did mean the Mississippian.
10	A. Yes, I would anticipate that.
11	Q. I believe you testified that you thought, looking
12	at Section 12, that the northeast quarter was greater risk
13	than the northwest quarter?
14	A. Yes.
15	Q. Would you also say that the southwest quarter was
16	greater risk than the northwest quarter?
17	A. At this point in time, because we do not know the
18	lateral extent of the fan.
19	Q. And with the well data that you have and the
20	information you have, it's going to require some
21	development to get that data; isn't that true?
22	A. Correct.
23	Q. And it may be down there and it may not?
24	A. Correct.
25	Q. Have you done any work whatsoever to estimate the
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drainage area for the well? 1 For the "M" 1 well or estimating --2 Α. For the "M" 1 --Ο. -- the "X" 1? Α. -- for the "M" 1. Ο. For the "M" 1, we are assuming -- again, Α. 6 7 depending -- we only have one data point, so we don't know the extent of the reservoir. We would assume the 8 9 orientation would run north northwest to south southeast, because it should parallel the fault trace, dying distally 10 to the east. So we would have an elliptical or an ovoid-11 shape drainage pattern which would be, we are estimating 12 just by thumbnail, 160 to 200 acres. 13 When you stated that you had prepared -- or that 14 Q. 15 you had looked at the Yates drainage information and you 16 found it conservative, my question is, have you made an 17 volumetric calculations? 18 Α. I have not. 19 Have any been reviewed by you? Ο. 20 They have been discussed. I have not had hands-Α. on work in doing any volumetrics out of the "M" 1. 21 22 Do you know if your company has? Q. 23 Not directly. Α. 24 And you're not presenting any of that today? Q. 25 No, sir. Α.

That's all I have. MR. CARR: 1 CHAIRMAN FESMIRE: Commissioner Bailey? 2 EXAMINATION 4 BY COMMISSIONER BAILEY: Would you expect to see any difference in the log Ο. signatures if the reservoir is patterned, in your opinion, 6 the you've discussed, as opposed to Yates's? 7 The log signatures, we of course are hoping that 8 Α. 9 we have a log that is comparable to the "M" 1. Based on what we saw out of the old-style logs that were run in the 10 11 "M" 1, you know, which was a re-entry, we feel that the 12 tool signatures that we see in the "X" 1 give us 13 encouragement that we have reservoir-guality rock there, 14 that we think that we should have something similar to what 15 we have in the "M" 1. But until we run a modern log, we 16 will not know. 17 But would we see any difference in signatures Ο. 18 between your interpretation of the reservoir, as opposed to 19 Yates's interpretation of the reservoir? 20 Α. I think that Yates is depicting less reservoir opportunity at the "X" 1 than we do. We see a signature 21 22 here of reduced resistivity that is on the order of 25 feet. On their isopach they're showing 10 feet. 23 So we 24 would think that if we are correct, the orientation of the 25 fan strikes more north-south rather than east-west, as

they're depicting.

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Q. The drainage pattern that you commented on in the cross-examination, I think, is extremely important to this case. Can you elaborate more on direction of permeability s as you see it?

A. We would expect preferred permeability, or preferential permeability, to run parallel to the major fault systems. We would drain in an ovoid shape, as opposed to a circular shape around the wells. Therefore, we feel like drainage would be oriented roughly north south, you know, pending grain orientation, due to the fracturing and solution modification of the reservoir.

13 Q. So essentially the east half of this section 14 would contribute nothing to this reservoir?

A. We feel that we lose fracturing, and we also -because we're located further away from the fault. And we would also lose reservoir-quality rock, because we're located more distally from the fault. The material that would be deposited in the east half of Section 12 would be of a finer grain size and therefore have less porosity and permeability.

Q. So yo would expect no contribution from the northeast or from the southeast, and if there was any contribution from the quarter section outside of the northwest, it would have to come from the southwest quarter of the section?

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That would be our contention. Α. 2 COMMISSIONER BAILEY: That's all I have. CHAIRMAN FESMIRE: Commissioner Chavez. COMMISSIONER CHAVEZ: I don't have anymore. EXAMINATION BY CHAIRMAN FESMIRE: 7 Mr. Ellard, I've been waiting to get the numbers 8 Ο. 9 and I haven't exactly gotten them. What do you all predict the reserves are in the "M" 1? 10 11 Α. We are not in disagreement with Yates on an ultimate recovery of in the 2-BCF range. We are -- I guess 12 I'm a little more optimistic in that I think you drain a 13 bigger area but probably not as efficiently as they believe 14 they do -- or they believe the well will drain. 15 16 And what has it produced to date, do you know? Q. 17 Approximately -- I want to say between 400 and Α. 18 500 MCF, million, and I don't know how much oil. It makes 19 some associated oil, but I don't know how much. 20 Q. Okay. Now, Mr. Carr either made a very good 21 point or I missed something here. Do you agree with the fault trace on the fault that runs through Sections 1 and 22 23 12 that you presented on this map? That runs through 1 and 12, do I agree with the 24 Α. 25 trace?

Q. Yes.

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A. At this time I do.

Q. Okay. It sounded to me like perhaps you had seismic indications that that wasn't correct, and you all were attempting to, in essence, play your cards by inference and not tell us that fault is.

We believe there is a fault that is dying across Α. 7 We have no question that we do not have the 8 there. 9 displacement in -- Once you cross the line from 1 to 12, as 10 we go south, that fault is dying in intensity, compared to 11 the intensity, compared to the amount of displacement we 12 have in Section 1. We have no question, no quarrel with 13 that.

At Mississippian time, we cannot verify -- and we won't argue for or against -- that the fault has 100 feet of throw or 50 feet of throw or 200 feet of throw. And what we think is more important is that we do show faulting in Section 11 that provides the shedding off for the alluvial fan into Section 12.

20 Q. But it may or may not be as represented on the 21 Geomap?

A. Right. Now, I agree with the interpretation asshown on Geomap.

Q. Which is a sneaky of not answering my question.
A. I agree with the interpretation as depicted on

Geomap, the fault is dying and will quit as you move further south. Other faults pick up further south of this one.

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Q. Okay. Now, you said that you haven't done the volumetric calculations, but you presented everything today that you'd need. You've got an ultimate recovery, you've given us the porosity, you've given us the thickness, and then you come up with an estimate plus or minus 20 percent on the drainage area.

A. Again, you know, when we get into reservoir engineering that is not my forte. I only talk to reservoir engineers and try to learn what they tell me. Most of the reservoir engineers that I talk to will tell you that you drain a bigger area than you think you do and not as efficiently as you believe you will. That is the basis for what my statement was.

17 CHAIRMAN FESMIRE: Okay, I have no further
18 questions. Jim, do you have --

MR. BRUCE: Just a couple. I just wanted to get a couple of numbers out because they may not have been said. REDIRECT EXAMINATION BY MR. BRUCE:

Q. You said that you hope to get a thickness of 25 feet in the "X" 1 well; is that what you said?

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That's -- The total indication we see on the 1 Α. cross-section is a total thickness of the zone opportunity 2 of 25 feet. 3 And what did you encounter in the "M" 1? Q. A little over 30 feet. Α. MR. BRUCE: Thank you, that's all I have. CHAIRMAN FESMIRE: Mr. Carr? MR. CARR: I have no further questions. 8 9 CHAIRMAN FESMIRE: Anything further from the Commissioners? 10 11 Thank you, Mr. Ellard. 12 MR. BRUCE: That concludes my direct 13 presentation, Mr. Chairman. 14 CHAIRMAN FESMIRE: Thank you. Mr. Carr, are you 15 ready? 16 MR. CARR: Yes, may it please the Commission, 17 when we prefiled our exhibits we had logged it within the 18 wrong scale on Exhibit Number 6. I have -- We were able to 19 quickly get copies that you could, if you wanted, paste on, but I do have exhibits that do not contain anything 20 different; they are just easier to read, and it is in a 21 correct scale at this time. 22 23 So with your permission and without objection 24 from Mr. Bruce, I hope, I will provide you with the 25 exhibit, and I have a copy for him.

Mr. Chairman, I have three witnesses, all of whom 1 have been sworn. Our first witness is Mr. Charles Moran. 2 Mr. Moran is a landman with Yates, and during the recess, 3 reviewing his testimony, much of it has already been 5 covered. I'm going to call him briefly to fill in just several facts to be sure they're addressed in the record, 6 but we are substantially abbreviating his presentation at 7 8 this time, and I'm prepared to proceed if you're ready. 9 CHAIRMAN FESMIRE: Commission ready? 10 COMMISSIONER BAILEY: Yes. COMMISSIONER CHAVEZ: 11 Yes. 12 CHARLES E. MORAN, the witness herein, after having been first duly sworn upon 13 his oath, was examined and testified as follows: 14 15 DIRECT EXAMINATION 16 BY MR. CARR: 17 Would you state your name for the record, please? Q. 18 My name is Charles Moran. Α. 19 Mr. Moran, where do you reside? Q. 20 I reside in Artesia, New Mexico. Α. 21 By whom are you employed? Q. 22 Yates Petroleum Corporation. Α. 23 And what is your current position with Yates Ο. 24 Petroleum Corporation? 25 I am the chief landman for Yates Petroleum Α.

Corporation.

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Q. Mr. Moran, when we talk about Yates Petroleum Corporation here today, are we also discussing other Yates entities?

A. Yes, we are talking about entities that are owned by various family members. They are all separate entities that are acting cooperatively.

Q. But they are all affiliated --

A. They are all affiliated --

10 Q. -- with Yates.

A. -- and I can speak for all of them.

Q. And you're speaking for 100 percent of the working interest owners in the lease that covers the north half and the southeast quarter of Section 12?

A. Yes, I am.

16 Q. Have you previously testified before this 17 Commission?

18 A. I have not testified before this Commission.19 Q. Would you summarize for the Commissioners your

20 educational background?

A. I received a bachelor's of business
administration in 1988 in accounting from St. Edwards
University in Austin, Texas, and in 1991 I received a juris
doctor degree from the University of Tulsa in Tulsa,
Oklahoma.

1	Q. Since graduation, for whom have you worked?
2	A. Yates Petroleum Corporation.
3	Q. And at all times with Yates have you been
4	employed as the landman?
5	A. I've been employed in the land department and
6	received various promotions through time to be the chief
7	landman now.
8	Q. Are you familiar with the Application filed in
9	this case by Pride?
10	A. Yes, I am.
11	Q. Are you familiar with what we call the Limbaugh
12	AYO State Number 1 or the State "X" Well Number 1?
13	A. Yes, I am.
14	Q. And are you familiar with Yates' efforts to re-
15	enter that well?
16	A. Yes, I am.
17	MR. CARR: We tender Mr. Moran as an expert in
18	petroleum land matters.
19	CHAIRMAN FESMIRE: Commissioner Bailey, any
20	objection?
21	COMMISSIONER BAILEY: No objection.
22	COMMISSIONER CHAVEZ: No objection.
23	MR. BRUCE: No objection.
24	CHAIRMAN FESMIRE: His credentials are so
25	admitted.

(By Mr. Carr) Mr. Moran, would you briefly state 1 Q. what it is Yates seeks with this Application? 2 Yates seeks denial of the Application of Pride Α. 3 Energy Company for cancellation of the drilling permit 4 issued to Yates for the re-entry of our well located in the 5 northwest quarter of Section 12, Township 12 South, Range 6 34 East. Do you ask the Division to permit Yates to 8 Ο. 9 proceed with its development of this acreage? 10 Α. Yes, we ask the Division to permit us to proceed with our cooperative development of the north half of the 11 section. 12 That does not require any kind of an order from 13 Ο. the Division, does it? 14 15 Α. It does not. 16 It simply requires the denial of the Application Ο. here presented by Pride? 17 18 Α. Correct. 19 You have a hundred percent of the interest in the 0. north half of the section? 20 I have a hundred percent of the interest, all 21 Α. voluntarily committed to development on the north-half 22 23 spacing unit. And it's a standard unit? 24 Q. 25 Standard 320-acre unit. Α.

And the well is at a standard location? 1 Q. The well is at a standard location. 2 Α. We've heard testimony here today concerning the Ο. 3 ownership in the section. You agree with the testimony as 4 presented, do you not? Α. I agree as to the Yates ownership. I did not review the Pride ownership. 7 Would you explain to the Commission what rules 8 Ο. 9 govern the development of the Mississippian formation in this area? 10 This well would be developed under the standard 11 Α. state rules that require a 320-acre spacing unit. 12 Does it provide for a pre-approved infill well on 13 Ο. 14 the other quarter section? 15 Α. Yes, it does provide for a preapproved infill 16 well. 17 If you look at Yates Exhibit Number 1, is this a Ο. 18 land map that simply shows the Yates ownership in Section 19 12? 20 Α. Yes, this is intended to represent Section 12 of Township 12 South, Range 34 East, Section 12 highlighting 21 the State of New Mexico Lease B-5855, which is composed of 22 23 the north half of the Section 12 and the southeast quarter. And the location for the State "X" Well Number 1 24 Ο. 25 is shown in the northwest quarter of 12?

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1 Α. Yes, it is. 2 The Pride-operated 1 "M" well is shown in the Q. southwest southwest of 1? 3 Α. Yes, it is. And what acreage does Yates own in that section? Ο. In Section 1 we own the east half of the section Α. and the south half, southwest of Section 1. 7 Yates actually is the lessee of the tract upon 8 Ο. 9 which the well is located? 10 Α. Yes, it is. 11 Ο. And that was developed with an east-half unit by agreement of the parties? 12 West-half unit. 13 Α. West-half unit. 14 Q. 15 Α. Yes. 16 And you agreed to that? Q. 17 Α. Yes, we did. 18 Let's go to the chronology that's marked Yates Ο. 19 Exhibit Number 2, and Mr. Moran, much of this has been 20 I'd ask you to refer to this exhibit and review covered. information that has not previously been presented to the 21 22 Commission. 23 The part that is important is that Yates Α. Petroleum Corporation applied for the APD in August of 24 25 2003, August 25th. We received that APD on the 26th of

August, and we commenced our operation soon thereafter in 1 September of 2003, commenced the reworking of the well. 2 Was this a request to reinstate a previous APD? Ο. No, it was a newly filed APD. Α. And was there anything unusual on Yates' part Ο. 6 about filing this APD? To me it looked -- After reviewing the file, it Α. 8 was determined it was a normal operation to file the APD. When you discovered that the compulsory pooling 9 Ο. 10 Application that is the subject of this hearing had been filed, what did you do? 11 We ceased working on the -- The decision was made 12 Α. to cease working on the well. 13 14 Ο. And is Yates still standing down on that property 15 and not --16 Α. We have not performed any work on that well since 17 the decision was made to stand down on the well. 18 Ο. Is Exhibit Number 3 various items of correspondence from Yates' files that support some of the 19 items shown on Exhibit Number 2? 20 21 Α. Yes, it is. 22 And what is Exhibit Number 4? Q. 23 Exhibit Number 4 is a copy of our newly filed APD Α. that we filed on August 25th, 2003. 24 25 Q. When Yates was on the location, actually

commencing re-entry operations, was this APD in place? 1 I believe it to be in -- the APD in place, that 2 Α. 3 we were acting under. Will Yates call geological and engineering Q. witnesses to review the technical portion of the case? 5 Yes, we will. Α. Were Exhibits 1 through 4 either prepared or Q. compiled under your direction and supervision? 8 They were compiled under my direction. 9 Α. 10 MR. CARR: At this time, Mr. Chairman, we move the admission of Yates Exhibits 1 through 4. 11 12 MR. BRUCE: No objection. CHAIRMAN FESMIRE: Any objection from the 13 Commission? 14 15 COMMISSIONER BAILEY: No. 16 COMMISSIONER CHAVEZ: No objection. 17 MR. CARR: That concludes my direct examination 18 of Mr. Moran. 19 CHAIRMAN FESMIRE: Okay, Exhibits 1 through 4 20 admitted. Mr. Bruce? 21 22 CROSS-EXAMINATION 23 BY MR. BRUCE: 24 Just a few questions. Q. 25 Let's turn to your Exhibit 2, Mr. Moran, and this 1 is a pretty good listing of what went on. One of the top 2 items, June 1, 2001, Pride Energy Company acquires state 3 lease on the southwest quarter of Section 12. Are you 4 aware that state leases are always, at least in present 5 day, made effective on the first of the month following a 6 lease sale?

A. Yes, I am aware that tends to be the procedure.
Q. And that generally state lease sales are in the
9 middle of the month?

10 A. Yes.

Q. Okay. So really, June 1, although the lease was issued on that date, Pride had purchased and paid for a couple weeks earlier?

A. I presume they paid for it. But I know that based on our decision, we'd already made plans to proceed out there prior to that date.

17 Q. But the APD wasn't filed until after Pride had 18 acquired its lease?

19 No, I don't think it's good practice to go file Α. 20 an APD during the lease sale, or with open acreage -- with the lease sale coming out, to disclose what you want to do. 21 One other -- I'll hand you Pride Exhibit 3, Mr. 22 Ο. Moran. Looking at your timeline, you have August 23, 2003, 23 OCD cancels Pride APD. That letter is actually dated 24 25 August 26th, isn't it?

A. That does appear to be correct.

Q. So in your timeline it should be August 25, Yates submits new APD, and then on August 26th, the OCD canceled Pride's APD and approved Yates' new APD.

A. I stand corrected on my timeline.

Q. And just a couple more questions.

Referring to your Exhibit 1, assuming that Yates 8 won this case and got a north-half unit and then a second 9 well was to be drilled to test the Mississippian in the south half of Section 12, Pride and Yates would either have 10 to enter into a voluntary agreement or there would have to 11 be a compulsory pooling on the south half, would there not? 12 To develop a south-half spacing unit, the two 13 Α. ways I'm aware of are by compulsory pooling or voluntary 14 15 agreement.

16 Q. And either way, the well could be located on 17 Yates' acreage or on Pride's acreage?

18 A. I think you're asking me to testify about geology19 and well placement?

Q. No, I'm just saying, under a joint operating agreement, if it was signed by the Yates entities and Pride, or if there was a compulsory pooling, whether by Pride or by Yates, that well could be located on either quarter section, could it not?

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A. Under a voluntary agreement with both leases

committed to the unit, placement of the well could be 1 determined on either lease. 2 What about under force pooling? Ο. Under a force pooling, the effect of the pooling Α. statute declares that the leases are pooled. 5 And the well can be located on either -- on 0. anyone's lease? 7 I believe that it is potential that it could be 8 Α. 9 put on the lease. It could be placed on Pride's lease, or it could 10 Ο. be -- If Yates force pooled Pride, the well could still be 11 on Pride's lease; is that correct? 12 13 Α. Restate, please? 14 Q. If Yates force pooled the south half, Yates could 15 still place that well on Pride's lease? 16 Α. I have an unresearched opinion that the lease 17 gives you the permission to be there, and that -- and this 18 is a theory that you're asking me to get into that is 19 unresearched, and I haven't had the time to go finish 20 researching it, but under my general belief, the pooling statute pools the leases, and the well could be placed 21 22 anywhere in the spacing unit. 23 Ο. That's all I'm asking. Thank you, Mr. Moran. 24 Oh, one other question. 25 You talked about the pool rules out here, whether

it's Morrow or Mississippian. Both the Morrow and the 1 2 Mississippian out here, regardless of the pool they're in, are spaced and developed on what we call the statewide 3 rules? Statewide rules. Α. And the statewide rules do not mandate a standup 6 Q. 7 or a laydown unit, do they? 8 Α. No, they do not. 9 MR. BRUCE: Thank you. 10 CHAIRMAN FESMIRE: Commissioner Bailey? MR. CARR: Mr. Chairman, could I violate your 11 rule very briefly and just ask two questions? 12 CHAIRMAN FESMIRE: Why don't we give the 13 14 Commissioners a chance to --15 MR. CARR: All right. 16 EXAMINATION 17 BY COMMISSIONER BAILEY: 18 Okay, Yates Petroleum is involved in quite a few Ο. 19 compulsory poolings in their line of business, right? 20 Α. Yes. 21 Is it a requirement that compulsory pooling Ο. application be done before or after an APD is filed with 22 23 the OCD? What is the order that Yates consistently uses? 24 In determining how to proceed with a compulsory Α. 25 pooling, we look at what the ownership is, and normally we

try to acquire as much ownership as possible. And in the event we do not obtain, we make the decision to proceed with a force pooling based on the uncommitted interest.

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At the time, if we had a large uncommitted interest, which is what is the subject here, which would be 50 percent, we would commence a force pooling prior to beginning operations.

In the event that we had a very small, like oneor two-acre uncommitted, we might make the business decision to proceed based on the changes in the current rules for the compulsory pooling.

The thing that we do look at is, do we have -what rights we do own in the section, and normally we try to obtain rights throughout the whole proposed spacing unit and not be acting on a leasehold that we don't have some sort of, either by contract, farmout or operating agreement, rights to be on.

Q. What I needed to find out from you is, what is the consistent timeline that Yates uses? Do they first apply for an APD and then come in with compulsory pooling, or do they first apply for compulsory pooling and then do an APD?

A. Our practice is normally to file the APD first in an attempt to obtain voluntary participation in drilling the well.

1 Only at the time that we can determine we cannot 2 make a voluntary participation would we proceed with a 3 compulsory pooling. COMMISSIONER BAILEY: Okay, thank you. CHAIRMAN FESMIRE: Commissioner Chavez? EXAMINATION BY COMMISSIONER CHAVEZ: 7 Along that same line, Mr. Moran, does Yates ever 8 Ο. 9 file an APD for a location on a lease that it does not own? 10 Α. I'm not going to say it's never happened, but 11 that's not standard practice that I'm aware of at the company. 12 Being that there was an existing APD at the time 13 Ο. 14 that -- Well, let me put it this way. Apparently Yates submitted their APD at the time 15 16 there was an existing APD to re-enter this well. Is that a Yates practice? 17 18 Α. The Yates practices -- We were continuing our 19 plans. I don't know that we went and verified whether there was an existing APD out there or not. 20 21 Upon submitting the Application, I think, is when we -- I don't know the exact time we learned that, but that 22 23 would go through the regulatory process in turning in. We 24 were not notified, to my knowledge, of the existing APD out 25 there, other than what would be available by going to the

OCD and checking their records.

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Q. Is it not -- So Yates does not look to see if 3 there's an existing APD before they file an APD?

A. I presume that it would -- in planning our -- in the filing of the plan, to me, looking back on the record, it looks like we believe we had an APD, and there was a time lapse in getting that one removed, so that we believe that we went back and filed our APD.

9 That's a regulatory compliance that we have to 10 obtain from the OCD.

Q. If you had done that research and discovered that Pride had an existing APD, would Yates have filed another APD as they did on the 25th?

A. I believe we would, because we had voluntary agreement to develop on a north-half basis, and I think that's what we did, is file our APD. I'm basing it off the review of the record.

Q. So you would have then, anyway, filed -- What you're saying is, you would have filed an APD regardless of whether there was an existing one or not?

A. I believe that's what we did, yes. The
regulatory department, working for us, makes those
decisions. I don't know what decision process the use, but
it is my understanding and belief that we did file an APD.
Q. When you filed an APD, even if there was an

1 existing one on place, were you contacted by the OCD about the conflict? 2 I have no personal knowledge of whether we were Α. or we were not. That would have been handled by our 4 regulatory department, and I did not talk to them concerning that. 6 COMMISSIONER CHAVEZ: That's all that I have. EXAMINATION 9 BY CHAIRMAN FESMIRE: 10 Ο. Mr. Moran, you testified a little earlier that 11 Yates would have a preapproved infill well on Section 12, 12 in the northeast quarter. Does Yates intend to drill that if they win this case? 13 14 Α. That is a management decision that I can't -- I 15 have not participated in, so I don't know an answer to that. The geologist would be more apt to be able to answer 16 what he would recommend. 17 18 Okay. How much has Yates expended to date on the Ο. 19 re-entry of the "X" 1? The dollar number that comes to mind is 20 Α. approximately \$50,000, but that's not a researched number, 21 22 just a conversation number that I'm recalling. 23 Did you ever personally have contact with the Ο. 24 Hobbs OCD Office concerning the APD that was in place on 25 this unit?

No, I did not. 1 Α. Do you know of anybody who did? 2 Q. I would believe that people out of our regulatory Α. department would have been contacted. If there was such 4 contact, that would be the normal -- they or the people at the company charged with taking care of the permits. 6 For clarification, I think, to one of Q. Commissioner Chavez's questions, did Yates know that there 8 was an existing APD on that location when they filed 9 10 theirs? I don't know whether they did or they did not. 11 Α. Ι cannot answer that question. 12 Now, you had a -- or an APD and essentially an 13 Ο. 14 extension to that APD for two years prior to Pride's APD; 15 is that correct? 16 Α. Based on what I saw in the files, we had an APD filed in approximately August -- I mean, June of 2001, and 17 18 then we received a subsequent extension of that APD, 19 correct. 20 Ο. And for two years you didn't drill that well; is 21 that correct? 22 We were still within the primary term of our Α. 23 lease. Right, and that's the reason you didn't drill the 24 Q. 25 well, is because you were within the primary term?

I don't know the business decisions that the 1 Α. 2 owners of the company decided on when to proceed with drilling. I don't know any of that. 3 CHAIRMAN FESMIRE: I have no further questions. Mr. Carr, you said you had some redirect. I have no problem with redirect examination. It's recrosses and 6 re-re's. 8 MR. CARR: All right, I'm not even going to 9 redirect this witness. 10 CHAIRMAN FESMIRE: Okay. 11 MR. CARR: I'm just trying to get the lay of the land here. 12 CHAIRMAN FESMIRE: Mr. Carr, then, assuming that 13 14 you have no more questions of this witness --15 MR. CARR: I have no more questions of Mr. Moran, 16 and at this time we call John Amiet, our geological 17 witness. 18 CHAIRMAN FESMIRE: Mr. Carr, before you start, do 19 we have a copy of that? 20 MR. CARR: That is in the exhibit set I've handed 21 out. 22 MR. AMIET: It's Exhibit 6. 23 CHAIRMAN FESMIRE: Oh, okay. 24 MR. CARR: We had to correct the scale on the log 25 on the extreme right.

1 JOHN AMIET, the witness herein, after having been first duly sworn upon 2 his oath, was examined and testified as follows: DIRECT EXAMINATION BY MR. CARR: Would you state your name for the record, please? Q. John Amiet. Α. 8 Mr. Amiet, where do you reside? Ο. 9 Artesia, New Mexico. Α. 10 Q. By whom are you employed? Yates Petroleum Corporation. 11 Α. And what is your current position with Yates? 12 Q. I'm a geologist with Yates. 13 Α. 14 Q. Have you previously testified before this 15 Commission? Never before the full Commission. I've testified 16 Α. before the OCD seven or eight times. 17 18 Could you review for the Commission your Ο. 19 educational background? 20 I graduated in 1978 from Colorado State Α. 21 University. I've worked for about 21 years for Yates 22 Petroleum, about 18 of those in oil and gas exploration. I've got about 21 hours, graduate hours, from University of 23 Texas, Permian Basin, and I've had about 20 industry 24 25 classes in oil and gas exploration.

Are you familiar with the Application filed in 1 Q. 2 this case on behalf of Pride? Α. Yes, I am. Have you made a geological study of the area Q. 5 that's the subject of this Application? Α. Yes. Are you prepared to share the results of that Q. 8 work with the Commission? 9 Yes, I am. Α. 10 MR. CARR: We tender Mr. Amiet as an expert in 11 petroleum geology. 12 MR. BRUCE: No objection. CHAIRMAN FESMIRE: Any objection from the 13 Commission? 14 15 COMMISSIONER BAILEY: No. 16 COMMISSIONER CHAVEZ: No objection. 17 CHAIRMAN FESMIRE: He's so admitted. 18 (By Mr. Carr) Mr. Amiet, let's go to what has Ο. 19 been marked Exhibit Number 5 in the exhibit book, and I would ask you to identify this exhibit and review it for 20 the Commissioners. 21 22 Α. This is a structure map on top of the Austin, or 23 also called the upper Mississippian. The faults are shown with the heavy black lines with the up and down movement. 24 25 We're going to talk about cross-section A-A', as shown by

the green line. Seismic line is B-B'. The structure tops on top of the Austin are shown in red, and TDs of the well are shown below the wells in black. And I might mention only the deep wells, or wells greater than 11,000 feet, are shown on this map.

Q. And this exhibit was prepared by you?

A. Yes, it was.

Q. And in preparing this exhibit you used well-9 control information?

I used both well control and seismic. And you 10 Α. might notice that the Four Lakes field is what we call a 11 12 pop-up block. During compressional or wrench-type faulting a lot of times you'll get these pop-up blocks. This is 13 kind of on the northwest part of the map, and it's labeled 14 15 "Four Lakes Field". You can see there's probably 500 or 16 600 feet of relief between that and the wells out -- that 17 we're referring to, the State "M" 1 and the State "X" 1.

Q. They're more --

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A. And again, one of the things -- the contours kind of point up towards that uplifted or fault blocks, or if there's an alluvial fan or a debris flow, it's going to go down to the southeast or, as Mr. Ellard stated, to the east southeast. I think we agree on that point.

Q. So you agree that is the regional dip across the area?

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A. That's correct.

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Q. All right. Let's go now to your exhibit, your cross-section A-A'. The trace is on Exhibit 5, and that is Exhibit 6 that we've just passed out revised copies. It's also on the easel beside you. Would you review that?

A. Yes. Again, the faults are shown with the heavy black line, the fault in the first and second well, and the fault in the second and third well, the up-and-down movement shown. Again, this is a structural cross-section, this is what it looks like today.

I've colored -- my wife says this is kind of a 11 turquoise, I call it light blue -- the Austin or upper 12 13 Mississippian lime. This lower portion is a little bit 14 shalier and a little bit cherty, but as you go down the 15 first step to the first, if you refer back to -- or 16 actually we show it on this map here, there was the first 17 well, the second well, the third well and the fourth well. 18 So again, there's -- as you're stepping off that

Four Lakes high, you're gradually dropping down until you get in this more gently dipping area of where the productive Pride well is located, and the proposed reentry, the "X" Number 1.

Q. What is the red depicted on the well logs on the right of the exhibit?

A. Again, if you look at this, the thickness in

blue, this is about 50 feet thick --

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Q. That's the well -- Which well is that?

This is the Humble Oil and Refining South Four Α. 4 Lakes Unit Number 1, so it's the first well on the left side. You've got about 50 feet of what we're calling 5 Mississippian here. You drop down about 95 feet and you 6 get 160 feet. So again, you've got an unconformity at the 7 top, an unconformity here, an unconformity at the middle, 8 9 and then when you erode -- this is about 100 feet eroded off of here and a good 60, 65 feet eroded off the second 10 11 well. That's got to be deposited down, what I'm showing in red as this alluvial fan. 12

Now, it's difficult to -- off of logs, to
identify an alluvial fan, other than just say it's got
better porosity, if it's a different depositional system.
You can see the gamma-ray is a little bit hotter here, it's
cleaner right here. You have a shale kick right in here
at --

19 Q. When you say "here", I'd like you to identify the 20 log that you're talking from, John.

A. Okay, I'm talking the productive alluvial fan well is Pride "M" Number 1, and the top of that fan is going to be at about 12,110, say 12,120. And this well has cum'd about 464 million to date and about 4600 barrels of oil.

Again, as you have this erosion coming off of the 1 2 high into this "M" 1 well and the "X" 1 well, again, I agree with Mr. Ellard, this is an alluvial fan. You've got 3 a lot of deposition as you're close to what I'm calling the source of the fault. As you go farther to the south I 5 think you're getting farther away from the source of the 6 fault. The erosion is off this high block right here. 7 And when you say "right here", you mean where? 8 Ο. 9 Referring to my map, that would be the northeast Α. quarter of Section 2 and maybe a little bit of this --10 primarily off the northeast quarter of Section 2, maybe a 11 little bit off the northwest of Section 1, 12 South, 34 12 13 East. And so that's where the erosion has occurred? 14 Q. 15 Α. That's correct, yes. 16 And then it flows where? Q. 17 It flows downdip, it's east southeast or to the Α. 18 southeast. 19 Now, if we look at your exhibit and compare it to Q. 20 the work of Mr. Ellard, you're, in fact, seeing less productive pay in the location of the State 1 "X"; is that 21 22 right? 23 That's correct. I've shown -- Originally this Α. 24 well --25 Which --Q.

A. -- the Pride "M" 1 well, was logged with a sonic log. Mr. Pride logged it with a neutron density log. It's a more current log. It was run, I think, in March of 2001. And it's showing good porosity development in what I'm calling this fan, shown by the red color.

Now, you go over to the -- what we're calling the Limbaugh or the State "X" 1 on the far east side of the cross-section, this was an old 1957, old e-log. It's a resistivity log. It does not measure porosity. It's very difficult to infer how much pay there is in that well.

Il I've looked at some of the wells that we've drilled, and it seems like you want to get below about 200 ohms in order for it to have a good, productive Austin well. 200 ohms, if you're looking at the curve on the far right, is your deep-reading resistivity curve.

16 And actually this red color should be down, just 17 about seven feet down in this interval, about seven feet 18 lower than where it's shown on this. That's a little 19 drafting error. Right where this curve comes back, that 20 touches the 200-ohm reading, so again, I'm kind of using that as -- I think it's going to be a productive well. I 21 22 don't think it's going to be nearly as good a well as the State "M" 1, so I'm showing less pay than Mr. Ellard from 23 24 looking at this log, but also some of the other logs that 25 we've run in the area: the Newgrass well, the Annabelle

well. There's four or five wells we've got completed in the Austin, and it seems like you need to get below that 200-ohm reading to get a good well.

Q. So what you have is, you've got high resistance. Is that what the 200 ohms shows you?

A. It's higher resistance than what -- on the State "M" 1, it went below 200 ohms. It also has some porosity above 200 ohms. The porosity above 200 ohms is in slightly tighter rock, so again I think it's going to be productive. I don't think it's going to be as good a well as the State "M" 1.

Q. And how many feet -- I believe Mr. Ellard estimated as much as 25 feet. How many feet do you see, based on your interpretation of this log data?

A. It looks like there's about 10 feet touching that200-ohm resistivity reading.

Q. And this is your interpretation, correct?A. That's correct.

19 Q. Because the log you have available is, in fact, 20 not a tool that measures porosity?

A. This is not a porosity tool.

Q. Okay. Let's go now to Yates Exhibit Number 7.
Would you identify that and review it for the
Commissioners?

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A. This is again a top-of-the-Austin or upper

1 Mississippian structure map. It's identical to the first 2 map except it's showing where I would put this alluvial 3 fan. Again, I think the erosion is coming off the tops of the Four Lake field. You can see that there's a big 4 structural difference. We've looked at the cross-section 5 where you can see where there's a lot of erosion. That's 6 7 the source of the fan. We've all agreed that the dip is to 8 the east southeast, or the southeast, so I'm bringing that 9 down to the southeast.

One other thing I might mention. When you look at the literature of a mountain front and a fan is coming out of a mountain front, they're usually perpendicular to that fault or the uplifted block. And so again I've taken that perpendicular to this fault that's trending to the northeast to the southwest on Exhibit 7.

Q. And you -- as you depict this fan, that extends across the north half, not down on the west half of Section 18 12?

19 A. Pardon?

20 Q. The fan as you depict it goes across the north 21 half of the section?

A. That's correct, I'm taking it across the north half of the section. Again, I agree with Mr. Ellard that the closer to the source, you're going to have coarser sand and gravel, and we're going to look at some pictures in a minute.

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As you get farther away from that source -- I'm calling Four Lakes field the source -- where the State "X" 1 is you're going to have, as he said, finer-grain sands and silts and clays. So you're getting farther away from the source. I don't expect the "X" 1 to be as good a well as the "M" 1, but again I think it's a potential re-entry candidate.

9 Q. Let's go to Yates Exhibit Number 8. Would you10 identify that and explain what it is?

Again, I've mentioned the literature. 11 Α. There's a lot of documentation about alluvial fans and debris flows 12 and carbonate flows, and this is just one document, and 13 14 I've tried to -- again, that's showing the fan coming up 15 perpendicular to the mountain front, and I've tried to make 16 a fan look somewhat similar to this since again all we have is two data points, and one of them doesn't measure 17 18 porosity.

19 Q. If we go back to Exhibit 7, you haven't shown 20 reservoir under the southwest quarter?

A. That's correct.

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Q. And why is that?

A. Again, the fan is going to the east, southeast. You bring that out perpendicular, and it's going to go to the north half of the section. If it goes farther than

I've shown, if the reservoir is bigger, it's going to cross 1 2 down into the southeast quarter rather than the southwest. I feel the southwest quarter as the least potential of any 3 of these four quarter sections. Ο. If you were making a recommendation to your management on whether or not you were going to drill a well 6 7 over in the northeast quarter, what would you say? Α. I would rather drill the northeast, rather than 8 9 the southwest. 10 Ο. What about the northeast, as opposed to the 11 southeast? 12 Α. I would say, again, stay as close to the source as you can, so I would drill the northeast as opposed to 13 the southeast or the southwest. 14 15 Q. Now, you have drawn this fan. It covers a 16 relatively small area. 17 Α. That's correct. 18 Why did you limit it to this area? Ο. 19 Again, I had some conversations with Dr. Boneau, Α. 20 the reservoir engineer, and got an idea how much erosion 21 came off the top of this fan or off the top of this Four 22 Lakes field and tried to pattern my fan after what he was -- how much was eroded. And of course not all of the 23 24 erosion is going to come down this direction. Some might 25 go in a slightly different direction, but I think the

majority of it is going to come to the southeast. And so again, I contacted the reservoir engineer to talk about the size.

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Q. If you're wrong, if it's larger, would that make the southwest a good candidate for the drilling of a second well?

A. If it's very large, yeah, you could drill in the southwest. Again, I would rather drill in the northeast or the southeast first.

But again, I'm having a source kind of to the northwest. Mr. Ellard is saying that you're getting -- if I understand him, getting source more from the -- he's got a fault coming down close to these two wells, the "M" 1 and the "X" 1, so he's saying there's source coming more due west. And I disagree with that from my evaluation of the 3-D survey.

Q. There was a question for Mr. Bruce about water in the "M" 1. Do you see any evidence that water would be a factor in determining whether or not any of these locations are productive or not?

A. To my knowledge, the "M" 1 is not producing water. As a general rule, we -- Well, actually, we only have one well that's produced water from the Austin, and we're not sure where that water is coming from, since it got a bad cement job. So water is generally not a problem in the Austin.

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Q. Let's go now to Exhibit Number 9 in the exhibit book, the Austin porosity isopach map. Will you identify that for the Commissioners?

Again, this is the same basic map that we've Α. 6 looked at previously. In this one I've just taken my 31 feet of pay for the State "M" 1 and 10 feet of pay in the 7 Penrose Danglade State "X" 1 or what we're calling the 8 9 Limbaugh, Yates is calling Limbaugh, and just made a 10 contour map and tried to stay -- again, it's going to be 11 thicker in the main part of the channel, and I think the 12 State "M" 1 really hit the main part of the channel system 13 coming down, and again it's close to the fault. As you get 14 farther out away, your fan is going to spread out and thin 15 rapidly.

Q. Mr. Ellard testified about fracturing in this reservoir. I'd like you to refer to Yates Exhibit Number 10 and first review what it shows, and then I'd like you to address the fracturing issue.

A. This is the Pride Energy State Number 1 "M" log that Mr. Pride ran in 2001. This is a new log. Again, it was run in 2001. It's neutron density.

I've highlighted the caliper curve on the left side of the log, the tension curve and the correction curve. These are indicative of tension. Whether the hole is washed out and whether you're getting a correction on the density curve, if it's fractured, a fractured reservoir is going to show some washouts, it's going to show tension as the curve catches, it's going to show correction as the density pad loses contact, it's going over fracture, it's going to lose pad contact, and that correction curve is going to be spiking.

The only place you could really say it deflects 8 9 at all to the right, this correction curve, is right at the 10 shale from 12,116 to -20, to the shale spike right there, 11 and you get a little bit of a correction. Except for that, there's no correction on this log, so I'm not sure how we 12 can -- or I see no evidence that this is a fractured 13 14 reservoir. A fractured reservoir, you see these curves 15 spiking.

16 Let's go to Exhibit Number 11. What is that? Q. Again, this is just a picture out of the 17 Α. 18 literature. It's of a four-inch core out of the Wolfcamp 19 in the Midland Basin, just showing what I think this might look like. You've got clasts and cobbles anywhere from 20 21 several inches to lime mud. This is actually a reservoir 22 rock, this produces, and this is just an example of what I 23 think we're looking at in the State 1 "M" and hopefully in the "X" 1 well. 24

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Q. Let's go now to your seismic line B-B', which is

Yates Exhibit 12.

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A. This is B-B', and if you look back at your -- one of the maps, it's shown on all the maps. It goes through two wells.

It goes through one well, the Four Lakes State Number 1, on the west side of a fault, and I've got the fault trace shown. And then I've got the State "X" 1 kind of right in the center of this cross-section.

9 This off on the right, this is in seconds, 1.5 10 seconds, 1.6 seconds. So each of these intervals in 11 between the 1.5 and the 1.6 on the right side or the left 12 side is 10 milliseconds in travel time.

13 It's got the Morrow picked on the lower right-14 hand side, the Austin or upper Miss. lime and the Chester 15 shale.

Again referring to the fault, this is maybe a 300-, 350-foot fault that we're looking at. You look where the up and the down is. That's the -- Where the up is, is the upper Austin. You can see how much offset there is on this fault.

You go over towards the State "X" Number 1, there is no -- I don't see any faulting at all. There's a little bump under the State "X" 1. This is about 2.5 milliseconds. It might relate to about 20 feet. This is getting really beyond the resolution of the seismic data.

Again, also when we're looking for faults we're 2 looking for lineations. We see no lineations when we look at the 3-D seismic, and again we have 3-D seismic over this entire area. This is good quality seismic. It was shot in -- I believe it was 1997 or 1998, so it's a good quality 3-D seismic program.

My structure maps represent our interpretation of 7 8 this 3-D seismic, and we don't see any fault in the 9 orientation that Pride has proposed. We see a fault going from the northeast to the southwest, coming down from 10 Section 31, down across Section 1 and hooking up with the 11 main north-south fault in Section 2. 12

Now this pop-up block of Four Lakes field, if you 13 14 go south off this map, there's also another pop-up block 15 that forms the Ranger Lake Field. So again, we've got 16 regional coverage, and this fits in very well with our 17 regional seismic interpretation.

18 The fault shown on this exhibit, on the left-hand Ο. 19 side of the exhibit, shows a substantial break in the formation? 20

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That's correct. Α.

And that's about a 300 to 350-foot fault? Q.

That's correct. Α.

24 If you have a fault anything like that, you would Q. 25 expect a similar break to show as you move --

Α. Oh, there's no fault between there and the State 1 2 "X" 1 that's of any significance. If we were to argue about a 10-foot fault, that's beyond the resolution. 3 Is there anything here that would suggest any Ο. 5 faulting across Sections 1 and 12, like depicted by Pride, that would affect the direction of the flow of the erosion 6 7 off that limestone high? Α. The only fault that I see is the one that goes 8 9 northeast to southwest. It's marked on the map. I don't 10 see a north-south fault cutting close to the Hanagan State "M" 1 or the State "X" 1. And I don't see -- the argument 11 that there's fault-created porosity, I don't see that in 12 the log. So looking at the data, I don't see support for 13 either one of those facts. 14 15 Q. The data doesn't show the fault? 16 Α. Pardon? 17 Q. The data does not show the fault? 18 Α. That's correct. It does not show the fracturing? 19 Q. 20 That's correct. Α. 21 Is it your conclusion that this fault does not Q. 22 exist as depicted? 23 The Pride fault, that's correct. Α. You looked at the well data available on the 24 0. 25 area, did you not?

A. Yes.

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Q. Based on the kind of information you have available, is it possible that the Pride fault, based on that information, could be located 100 feet from where it is shown on that Geomap?

A. On the Geomap, there's no doubt that there's a fault on both sides of the Four Lakes field. Again, the 3-D seismic supports there's a north-south fault, and on the east side of this pop-up block it's northeastsouthwest. There's not a north-south fault going through Sections 1 and 12.

Q. Summarize your conclusions for the Commission,
 please.

From looking at the data I have, which is 3-D 14 Α. 15 seismic, it's very obvious that this is a flat area out 16 from the State "M" 1 and the State "X" 1. There's no 17 significant faulting in there. From looking at the log 18 data -- this is a new log -- there's no evidence of 19 fracturing in that well. And again, this is -- we've spent a lot of time on the 3-D seismic and it's very difficult to 20 21 argue with 3-D seismic. This is data that Geomap does not 22 have.

I use Geomap occasionally, or I used to use it. It's a good start. But you use it as a starting basis. You get more data or 3-D seismic or something, you have to edit that data, because there's limited well control here. And you can vary this fault not by 100 feet, you could vary this location of the fault by 500 feet, because there's only two wells in Section -- actually I guess three wells total in Sections 1 and 12. So you could move that fault all over the place. But we've located that with the 3-D seismic.

Q. And based on your data, is it your opinion that the reserves in Section 12, the recoverable reserves, are located in the north half of the section?

A. And again, Mr. -- Dr. Boneau will testify to this. But in talking with him, yes, these are draining a limited area.

Q. Were Yates Exhibits 5 through 12 prepared by you?A. Or under my supervision, yes.

Q. Can you testify as to their accuracy?A. Yes.

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MR. CARR: At this time, may it please the Commission, we'd move the admission into evidence of Yates Exhibits 5 through 12.

21 CHAIRMAN FESMIRE: Mr. Bruce, do you have any 22 objection?

MR. BRUCE: No objection.

24 CHAIRMAN FESMIRE: Any objection from the 25 Commission?

COMMISSIONER BAILEY: 1 No. CHAIRMAN FESMIRE: They're so admitted. 2 MR. CARR: That concludes my direct examination 3 of Mr. Amiet. CHAIRMAN FESMIRE: Mr. Bruce, would it break up your flow if we broke for lunch for a while? 6 MR. BRUCE: No, not at all. CHAIRMAN FESMIRE: What do you say we come back 8 9 after lunch at 1:15? 10 (Thereupon, noon recess was taken at 12:05 p.m.) 11 (The following proceedings had at 1:12 p.m.) 12 CHAIRMAN FESMIRE: Let's see, when we left, Jim, 13 you were going to cross-examine Mr. Amiet. 14 MR. BRUCE: Yeah, I have a few questions. 15 CROSS-EXAMINATION 16 BY MR. BRUCE: 17 I don't know if we need to refer to any 0. 18 particular exhibit, Mr. Amiet, but did you use -- what type 19 of 3-D was used? Vibroseis? 20 It's a Vibroseis, yeah, Western Spec Shoot was Α. run in either 1997 or 1998, so it's relatively recent. 21 And what is the minimum resolution? 22 Q. 23 It's probably about 70 hertz data. We're trying Α. 24 to see 30-, 40-foot sands, sometimes we can't see them 25 inside a shale, so I would say it's probably greater than

40 feet, 50 feet, is what you're -- Sometimes we think we 1 can see indications, but you kind of have to use your 2 imagination to get much below about 50 feet. 3 So 50 feet is kind of a cutoff. Would you rather Ο. have a 100 feet difference to really be able to see it? 5 Oh, yeah, for sure. Ten milliseconds is probably Α. 7 -- maybe a hundred feet, so 10 milliseconds is a pretty small interval of it. You would like to start seeing 100 8 9 feet. 10 Ο. Looking at your -- Let's look at your structure map, which is your Exhibit 5. 11 12 Α. Okay. Now, you've theorized this middle fault. 13 Ο. Do you 14 have -- Does Yates have seismic up there? 15 Α. Yes, you can see some indications of that fault. 16 It's not as resolvable as the north-south or this northeast-southwest fault, and also the data kind of seems 17 18 to support that there might be something in there, although 19 if you wanted to delete that fault I wouldn't argue. I 20 think it's probably there, but it's a little more questionable than the other two. 21 22 Well, the reason I ask is, if you -- The highest Q. 23 well is that South Four Lakes Unit Number 2, is it not? That's correct. 24 Α. 25 Now, if you go straight north a couple of wells, Q.

you're going approximately -- oh, three-quarters of a mile, 1 2 and there's a well, the Number 4 well --Α. Yes. -- which is at minus 7575 --Q. Α. Uh-huh. -- so the difference in structure there is 155 6 Q. 7 feet? 8 Yeah, that's approximate. Α. 9 And you don't see any fault there, going north-Q. 10 south? The difference is, on the 3-D seismic we can see 11 Α. a little bit of a lineation, which is why I put that fault 12 in there, and the seismic data seems to support that, so I 13 put it in, although like I say, it's not as distinct a --14 15 that area is pretty well broken up. It's an uplifted fault 16 block, so it's -- I wouldn't disagree that it's pretty well 17 faulted. There's a lot of faults going through there. We 18 thought we saw a lineation going up through there, though. 19 Q. All right. Because if you go to the southeast from minus 7420, in roughly the same distance, you're just 20 going down 160 feet or so; is that correct? 21 That's correct, that's correct. 22 Α. 23 So there's really no difference when you're Ο. looking at the structure between going to the north or 24 25 going to the southeast; you just theorize that southeast --

I won't say I theorized it. Again, we see 1 Α. 2 indications on the seismic that there's a lineation there, and again that's important to follow these faults. A fault 3 can't be at one point, a fault -- you have to follow it in kind of a straight line or a direction. But definitely there's a fault from the Number 6 Ο. well, which is at minus 7582, down to the State "M" Number 7 8 1, that's about 330 feet --That's correct, I'm looking --9 Α. 10 Q. -- in approximately -- in a smaller distance, 11 actually? We can see that very distinctly on the seismic. 12 Α. And I think this is your Exhibit 6? 13 Ο. 14 Α. Yes. 15 Q. Is that one you have up on the chart? 16 Α. Right. 17 And I guess my guestion is this: You were Q. 18 talking about, I think, the porosity greater than 200 ohms? 19 Α. Yes. 20 In the "X" 1 well, how much on the "X" 1 well is Q. above 200 ohms? 21 The "X" 1, that's the well farthest to the 22 Α. 23 east --24 To the east, or on the right side of the chart. Q. On the right side. It looks like there's about 25 Α.

10 feet that's right at 200 ohms. If you look at the 1 2 resistivity curve farthest on the right, that's your deepreading curve. 3 Okay, and what if you use the curve immediately Ο. 5 to the left of that? How much does that --That's -- Well, that would be a thicker zone, but Α. 6 again, you've got an 8-3/4-inch borehole, so that could be 7 8 reading some mud. 9 Q. Okay. 10 Α. I'd just rather take a deep reading. The second curve that I just mentioned shows 11 Q. about 25 feet, right? 12 That's correct, if -- Well, again, we don't know 13 Α. 14 what porosity is in that curve. I'm trying to relate the 15 deep reading to logs that we've run since 2001. We've 16 completed, oh, probably four or five wells in the Austin, 17 and as a general rule the good wells go below 200 ohms. So 18 again, it's not a porosity tool, so I've just made an 19 analogy. Over here 200 ohms seems like it's a cutoff, so I'm going to apply it to this well here --20 Okay, is --21 Q. -- and that's --22 Α. 23 -- 200 ohms the maximum or the minimum that Ο. 24 you're looking at? 25 Α. 200 ohms probably will -- Again, I'm making an

analogy from some of the other work that we've done. 1 200 2 ohms will probably produce a well, but it won't be a 2- or The well that -- like the Newgrass well is 3 a 3-BCF well. an excellent well. It gets down to about 130 ohms. The Chesapeake Chocolate Foam well in 15 South -- 14 South, 35 5 East, Section 33 -- this is way down to the south -- there 6 7 are no other good Austin wells in this are. Mr. Pride found a good well with the "M" 1. 8

9 Q. Okay. Was it Pride's initial proposal to re-10 enter the "M" 1?

A. I assume so. Like I say, I came to Yates, or I
started with Yates about a week after that well was logged.
So I started the end of March, 2001. I think that well
was logged March 21st, 2001. But I assume that they
approached Yates and asked for a farmout.

Q. On your Exhibit 7, which is your alluvial fan, you've placed the beginning of the fan at a certain line on the fault. I mean, could it be further to the northeast, could it be further to the southwest?

A. Well, again, I've gone where I thought the major part of the erosion was, and a lot of times coming out from the mountains these are point sources. Again, if you had a very long, uplifted fault block that was three miles long, you would have a number of point sources coming out. But this is a relatively small uplifted -- or a pop-up fault 1 block, and so again, I don't think there's going to be too 2 many channel systems coming out of this. I tried to put it 3 kind of in the middle of that uplifted fault block.

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Q. There could be more than one channel system?
A. You couldn't go very far to the northeast or the
southwest, because you don't get the kind of relief,
especially going to the southwest, because you're getting
away from your fault block.

9 Q. And you really won't know until the "X" 1 is re-10 entered and perhaps other wells are drilled in this area as 11 to the orientation and as to the extent of this alluvial 12 fan?

As to the orientation, I stand by my 13 Α. 14 interpretation. Again, perpendicular to that northeast-15 southwest fault is an orientation that most of these fans 16 coming out of a mountain system. And also the contours 17 support that, that it's going to be going to the southeast. 18 In fact, Mr. Bruce also mentioned east-southeast was a 19 regional dip -- or Mr. --20 -- Ellard. Q.

A. -- Ellard, sorry.

Q. Looking at your Exhibit 9, Mr. Amiet --

23 A. Yes.

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Q. -- what justifies the eastern edge of your little reservoir here, the zero line, the 10 line?

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

A. Again, in talking to Dr. Boneau, who's going to testify in a minute, we looked at the amount of material that might be eroded off of an 80- or 100-acre fault block on top of this pop-up block, and kind of tried to keep apples and apples, if this much is eroded, this much is going to come out downdip.

Q. Okay, so 80- or 100-acre fault block, are you 8 talking about that fault block between your easternmost 9 fault and then that middle fault?

A. Oh, I would say probably a northeast, maybe 160, is where most of your debris or alluvial fan is coming from. So it could be 80, it could be 160, somewhere in there. You're getting erosion. The 80 acres, you're losing about 100 feet a section. If you go to 160, you're losing less section as you come to the southeast.

Q. What I'm saying is, if that middle fault block isn't there, then there's more material to erode; is that correct?

A. That fault in the middle, well, again, you're going to erode whether that fault is there or not. You're still coming downdip to the southeast. You're still going to have erosion, because again, looking -- you're going, like you said, from minus 7420, down to 7582, down to 7911. So you're coming downdip fairly steeply.

Q. But Yates doesn't have any well control to

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justify the eastern or the southern boundary of this little 1 2 reservoir you've drawn. Α. The northeast quarter of the southeast quarter 3 4 of --Q. Yes. -- Section 12? Α. 6 Well, in the southeast guarter of Section 1 or Q. 8 the northeast guarter of Section 12 or the southwest 9 quarter of Section 12 --10 Α. Oh, that's correct. Yeah, there's no well 11 control there. That's why I have to depend on the seismic to --12 And you won't know until the "X" 1 is re-entered? 13 Ο. 14 Α. That's correct, although again, as Mr. Ballard 15 [sic] suggested, the farther away you're getting from this 16 fault block, your pay horizon is going to deteriorate and get more clays and silts, and I think the log, the State 17 18 "X" 1, also suggests that. 19 Ο. And the orientation of this reservoir is 20 completely dependent upon your orientation of that easternmost fault? 21 22 Α. The easternmost fault going perpendicular to it? 23 The one that's running at 45 degrees --Ο. 24 That's correct, and also that's downdip, so again Α. 25 that's the direction that your debris --

Okay, if it was more oriented north-south, then 1 Q. 2 that could change your interpretation of where the reservoir is. 3 I don't see any data to suggest that. Α. That wasn't my question. Q. Okay, I'm sorry. Α. If the easternmost fault is more north-south, Ο. that would change how your reservoir is drawn, would it 8 9 not? 10 Α. But it's not north-south. We've got 3-D seismic 11 outlining very -- this is, like you say, a fairly significant fault. 12 Well, let's get to that. How come you didn't 13 Ο. support -- You said you've got seismic data to the north. 14 15 How come you didn't present that seismic data? Wouldn't 16 that be the better determining factor as to the orientation 17 of that easternmost fault block? If you've got all that 18 seismic data to the north, why didn't you show that? 19 Α. I have on my map, my structure map. This is interpreted from the 3-D seismic. 20 But you haven't shown any of those seismic lines 21 0. 22 here, have you? 23 No, I haven't shown -- I've just shown the one Α. seismic line. I felt that's all that was needed to go 24 25 through the proposed location.

Do you have those other seismic lines to the 1 Q. 2 north with you? No, I don't. Α. So you're not presenting those today --Q. Α. No, I'm not. -- to justify this 45-degree orientation of that 6 Q. easternmost fault? 7 Well, again, I think there's several pieces of 8 Α. 9 evidence that do support that. There's no doubt that fault is there, off of 3-D seismic. 10 Wouldn't the best evidence be that seismic data, 11 Ο. to show whether it runs 45 degrees? 12 I'm showing that by the interpretive map. 13 Α. Now, I don't know how many seismic --14 15 Q. And you're not showing me the data though? 16 Α. If you'd like to come up to the office, I'd be 17 happy to show you this data, you know --18 But you're not showing it to me here today? Ο. 19 No, I'm not showing it today, I didn't think it Α. 20 was necessary. And Pride or I have never had a chance to look at 21 Ο. 22 that data to justify your orientation of that easternmost 23 fault? 24 I guess you could say that we misinterpreted a Α. 25 several-hundred-foot fault that is similar to the one that

I've shown on the cross-section. There's no doubt where 1 this fault is located if you look at the seismic section. 2 Well, the seismic section only has to do with 3 Ο. faulting that main north-south fault on the western side of 4 your maps. It doesn't have anything to do with this 5 northeast-southwest fault; is that correct? 6 That's correct, although I think the seismic 7 Α. really -- the cross-section answers that question, that 8 9 there is a fault there. 10 0. There is a fault, but you are not showing us the 11 underlying data which justifies your orientation of that fault? 12 That's correct. 13 Α. 14 Q. I guess I just have one other question. If --15 Well, a couple more. 16 Looking at your Exhibit 9 again, although Mr. --17 excuse me, Dr. Boneau has not testified yet regarding 18 drainage, it's Yates' position, based on what Mr. Carr has 19 questioned my witnesses about, is that the State "M" 1 well is draining Yates' lease in the northwest quarter of 20 Section 12. Is that --21 22 Mr. Boneau is going to testify to that. I'd Α. 23 rather wait and have him --24 Q. Okay. 25 -- discuss that. Α.

Q. Well, based on your mapping, why would you want to re-enter the "X" 1 well, which you show as being very poor? Why wouldn't you drill out a standard location, say up in the northwest quarter, northwest quarter, where it shows to be, number one, much thicker on your maps and, number two, would immediately offset the State "M" Number 1 and prevent any future drainage of its acreage?

If the State "X" 1 comes in, that's something we 8 Α. 9 would consider if it -- see how the State "X" 1 produces. You'd have to plug that well to drill a new well, but 10 that's something we would have to consider. First it's 11 economics. We think it's economical to re-enter the "X" 12 13 Number 1 well and see how far that -- see if there is pay 14 at that location. It's a much cheaper alternative than 15 drilling a top-to-bottom well.

16 Q. Well, is it more economical than re-entering one 17 well and drilling a second well?

A. Well, if the well comes in, that's a discussion we will have. Also we'd possibly drill in the northeast quarter.

Q. But Yates has no plans at this point to drill in the northeast quarter?

A. Not at this point. First we want to re-enter
that "X" 1 well and see if that's a viable producer.
MR. BRUCE: I think that's all I have.

CHAIRMAN FESMIRE: Commissioner Bailey? EXAMINATION

BY COMMISSIONER BAILEY:

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Q. Up in Section 31, to the northeast of all of our conversation here, it shows that the fault line goes between the Humble State Number 1 and the Yates Willie State Unit Number 1.

A. That's correct.

9 Q. What evidence do you have to show that it splits 10 the difference between those two wells?

A. Again, we've got the 3-D seismic data, and we just drilled the Willie State Unit Number 1 and it came in where the seismic predicted it. It came in low to the Humble State "X" 1 in Section 31. So again, it supported the seismic data. And that's where the 3-D seismic shows that fault trend.

Now, you can -- On 3-D seismic you can vary it a little bit, but in this interval you can't measure or you can't -- I guess on the seismic you get a blurry zone sometimes where you see a fault, but that's usually several hundred feet wide, maybe. So I think that's very close to the proper location for that fault, and the well data supports that.

Q. What zone is the Willie completed in?A. It's in the lower Morrow.

What's the depositional environment? 1 Q. The Willie Number 1, it would be kind of a north-2 Α. 3 south-trending channel system, so it's a different depositional system than what we're looking at here. It's completed in the basal Morrow and lower Morrow. What is the potential -- You show one large fan Ο. coming from this fault block. 7 That's correct. 8 Α. 9 What is the potential for a series of overlapping Ο. fans? 10 Well again, if you look at the subsea depths, the 11 Α. depths on top of the Four Lakes field are structurally much 12 higher than any of the other depths, and so again you have 13 more section eroded off the top of that Four Lakes field. 14 15 If you go down south off of this map, there's 16 also the Ranger Lake field that you're seeing the same 17 thing. That's a pop-up block. And Mr. Ellard mentioned 18 fans coming off it. I also support that. There are fans 19 coming off these pop-up blocks, but you have to have some 20 vertical structure in order to get the erosion -- to erode the limestone. 21 22 Just having a fault with a hundred or a couple hundred feet of relief, I don't think is enough to create a 23 24 significant fan. You might have a small buildup right at 25 the base, but not a significant fan. You need some

structural relief to get the erosion.

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2	Q. So according to your map, the northeast quarter
3	of Section 12 really isn't going to contribute very much to
4	the well in the northwest quarter of Section 12?
5	A. The northeast quarter? Well, I think it's going
6	to be thinner out there. And again, it depends on if the
7	State "X" 1 comes in, and if it's a better well than I'm
8	I think it will be an economic well for a re-entry. We'd
9	have to evaluate, would that be an economic well in the
10	northeast quarter to drill a top-to-bottom well? I would
11	much rather drill in the northeast quarter than the
12	southwest quarter.
13	COMMISSIONER BAILEY: Those are all the questions
14	I have.
15	CHAIRMAN FESMIRE: Commissioner Chavez?
16	EXAMINATION
17	BY COMMISSIONER CHAVEZ:
18	Q. Mr. Amiet, I was trying to look at this in my own
19	mind to the up and downs that you have on showing which
20	directions the relationships are on either side of the
21	fault, and it's very, very difficult to imagine. So this
22	What we're looking at is tremendous changes underneath
23	the ground throughout this area?
24	A. That's correct, I think you can see that on this
25	structural cross-section, how much relief you get on some
	STEVEN T BRENNER CCB

1 of these pop-up fault blocks.

2	Q. But even then, when one side is up, one side is
3	down, and yet they come close together, in trying to
4	imagine that or make at least a model in my mind, as I get
5	towards the southern part of Section 2 it becomes real
6	difficult in my mind to see that. Would you say there's
7	quite a bit of change in there because of that?
8	A. Oh, yeah, no doubt. The seismic is a little
9	as I mentioned earlier, the seismic is a little more
10	indistinct in there, because this pop-up block has been
11	broken up as it's being uplifted. It didn't come up as one
12	big piece, it came up as a number of slivers, so it's a
13	little hard to resolve in there.
14	But again, I put the contours the way we think
15	the seismic our best interpretation, although as you
16	come to the south it becomes less resolvable on that pop-up
17	block.
18	Q. Okay. Is this fault, then, more of a sealing
19	type of fault? What's the significance, say, between the
20	wells as far as we might look at drainage, these different
21	zones?
22	A. This northeast-to-southwest fault?
23	Q. Yes.
24	A. Okay, the northeast-to-southwest, I don't know
25	that I would call it a sealing fault. I think on top of

1 the structure -- Structure is more important for these 2 wells that are producing on top of the Four Lakes field. Т don't think structure means much in the deposition -- I 3 don't think structure is important in terms of fracturing in these wells, the "M" 1 or the State "X" 1. So that 5 fault is important just in the fact that it lifted up this 6 Four Lakes field block, and you've got erosion off of that 7 8 high.

9 Q. Okay. Now, your interpretation of the direction 10 of the alluvial fan, just to glance at it for me, it looks 11 like just a very slight angular change -- I'm sorry, I'm 12 looking at your Exhibit Number 7 --

A. Yes.

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14 Q. -- a very slight change in the way you've got the 15 direction of the material going there --

Α.

Uh-huh.

Q. -- a very slight angular change could put everything more in the east half there at the -- where you show the flow, I guess, coming across the fault.

A. Well, if you look at the contours, the contours are going to -- or the channel is going to go downdip where the contours point -- it's hard to explain this -- where the contours point towards the Four Lakes field, the channel will go down. That's the path of least resistance or the path of easiest flow for the fluid, so I think there could be a little bit more trending to the east.

And also I took into account the State "X" Number 1, and again my knowledge of other wells, that looks like it might produce but it doesn't look like it's going to be a great well, so I put less pay in the State "X" 1 using that 200-ohm cutoff, and that kind of maybe tilted that fan a little bit more to the east.

Q. But doesn't that assume that the contour lines you're showing were in existence in that manner at the time that the material was flowing down?

A. That's true, but that's all that we really can go on. We can't go back and see what it looked like during deposition of the fan or the uplift in the late Morrow time. We just have to infer that it's similar to what we see today.

Q. Okay. Was this information, the seismic information, available to Yates at the time that they entered into a voluntary agreement with the Applicant on the west half of Section 1?

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A. I believe it was.

Q. According to your interpretation here on your Exhibit 7, however, it would seem like the majority of the reservoir from that alluvial fan is in the south half of Section 1, rather than on the west half.

Mr. Pride did a good job in recognizing the

potential in the State "M" 1. The Austin wasn't productive 1 2 in this area, or really it wasn't very productive anywhere 3 in the Tatum Basin. And I congratulate him on that; Yates missed that. So we -- This map was not made at that time. We had the 3-D seismic. We were looking for channel sands in the lower Morrow, not Austin pay. So again Mr. Pride 6 7 found something that we missed, and this map was not made 8 at that point. We didn't recognize that potential for the 9 State "M" 1. 10 COMMISSIONER CHAVEZ: Okay, thank you. That's 11 all I have. 12 EXAMINATION BY CHAIRMAN FESMIRE: 13 14 Ο. Mr. Amiet, one thing that concerns me here is, you've got these two faults, both the main northeast-15 southwest-trending fault --16 17 Α. Uh-huh. 18 -- and the smaller fault intersecting the north-Ο. 19 south fault --20 Α. Uh-huh. 21 -- at sort of an odd angle. Isn't that an odd Ο. 22 angle for faults to intersect at? 23 No, it isn't. In a wrench-type fault system Α. 24 where you get these pop-up blocks, you can have a 30- to 25 45-degree angle off of your main fault. Your main fault is your north-south fault, and that's again in textbooks, that you get secondary faults cutting off.

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And again, we see the same thing, just the same pattern that we're seeing here down in the Ranger Lake field that's several miles to the south, identical fault configuration coming off at a 30- to 45-degree angle.

Q. Well, it wouldn't take much of a change in your interpretation to have those two faults running parallel at 40 to 60 degrees off the main fault, would it?

A. I believe enough in the seismic, that you can't change the location of this northeast-southwest fault more than maybe 100, 200 feet. The seismic is that good.

Q. Just to clarify something that's come up twice in your testimony, do you all intend to drill -- if you're successful in this case, do you intend to drill a second location in the north half of 12?

A. That's something we'd have to evaluate, depending on how good the "X" 1 well is. If it's a better well than I think, yeah, that's the option we would definitely consider.

At this time we have no plans to drill an offset. First we want to re-enter this well, the "X" 1, and see what kind of production there is, because the way I've got it mapped on the -- maybe the limits of this fan, you still get decent production, or is -- because again, you're going

out to the limits of the fan, you go out to the northeast 1 2 corner. And again, that depends to some extent how much 3 limestone has been eroded, and Dr. Boneau is going to 4 address this question, how large some of these fans can be. CHAIRMAN FESMIRE: Okay. I have no further 7 questions. Mr. Bruce do you -- I mean, Mr. Carr, I'm sorry. 8 9 MR. CARR: Nothing further. CHAIRMAN FESMIRE: Your next witness? 10 MR. CARR: Yes, sir, at this time we call Dr. 11 Boneau. 12 DAVID F. BONEAU, 13 14 the witness herein, after having been first duly sworn upon 15 his oath, was examined and testified as follows: 16 DIRECT EXAMINATION 17 BY MR. CARR: 18 Would you state your name for the record, please? Ο. 19 Α. David Francis Boneau. 20 Q. Dr. Boneau, where do you reside? Artesia, New Mexico. 21 Α. 22 By whom are you employed? Q. 23 Yates Petroleum Corporation. Α. 24 And what is your current position with Yates Q. 25 Petroleum Corporation?

It's called engineering manager. 1 Α. What does that involve? 2 Q. I'm responsible for all the engineering 3 Α. functions, including drilling, completion, environmental 4 and reservoir. Have you previously testified before this 6 Ο. 7 Commission? I've testified before the Commission, but it was 8 Α. 9 composed of different people --10 All right, would you --Q. -- the last time --11 Α. -- would you review your --12 Q. -- except for one. 13 Α. -- would you review your educational background? 14 Q. 15 Α. Yes. I have a BS in physics from Notre Dame in 16 1962. I'm old. I have a PhD in nuclear physics from Iowa 17 State University in 1969. I have had two jobs in my life. 18 I worked for Phillips Petroleum for 12 years, first as a 19 research scientist, and through all sorts of funny events 20 turned into a reservoir engineer for Phillips Petroleum. And I have worked 24 years for Yates Petroleum as reservoir 21 22 supervisor, reservoir engineer, and engineering manager. 23 Dr. Boneau, are you familiar with the Application Ο. filed in this case on behalf of Pride? 24 25 Α. Yes, sir, I am.

1	Q. Have you made an engineering study of the area
2	that's the subject of the Application?
3	A. Yes.
4	Q. Are you prepared to review your work with the Oil
5	Conservation Commission?
6	A. That would really be great. Yes, sir.
7	MR. CARR: I tender Dr. Boneau as an expert in
8	petroleum engineering and reservoir engineering.
9	CHAIRMAN FESMIRE: Mr. Bruce, do you have any
10	objection?
11	MR. BRUCE: No, sir.
12	CHAIRMAN FESMIRE: Objection from the Commission?
13	COMMISSIONER BAILEY: No.
14	COMMISSIONER CHAVEZ: Qualified.
15	CHAIRMAN FESMIRE: He is accepted as an expert
16	witness.
17	Q. (By Mr. Carr) Dr. Boneau, let's go to what's
18	been marked Yates Exhibit 13, also bears the notation E-1.
19	Would you identify and review that, please?
20	A. Exhibit 13 is another map. You guys have seen
21	lots of maps. It simply shows Section 1 and Section 12 in
22	kind of big, bold The yellow is the Yates acreage, and
23	we're talking about two wells which I think we should agree
24	to call the State "M" and the State "X" and not worry about
25	all the other names that have been given to it. So you've

seen that exhibit.

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Q. And the yellow shading is the Yates acreage?A. The yellow shading is the Yates acreage.Q. Okay. Would you go to Exhibit Number 14,identify and review that?

A. Okay, the main thing I'm bringing to you is a drainage calculation, and a lot of directions to go from that, but we've done a drainage calculation for the Pride Energy State "M" Number 1 well, and the page that's marked Exhibit 14 is the summation of that. The pages behind it gives some detail of the backup that's required to get this equation -- I mean this analysis, this calculation.

It's a standard volumetric -- what I call 13 14 pancake-reservoir calculation, so constant-height reservoir 15 calculation, which we know we don't have here, but anyway 16 -- and item 1 is the volumetric equation, and I'm using a 17 recovery factor of 80 percent of the gas in place to be 18 recovered. And Pride has said that's high, but that's relatively reasonable for this kind of medium-permeability 19 20 reservoir.

Item Number 2 is the results of my log analysis that you will see in the preceding pages, and it gives a hydrocarbon pore volume of 2.1 feet. That means if you take all the 30 or so feet of pay and condense it down to the pay that actually is gas, holes with gas, there's 2.1 feet of holes of gas in this log, in the log for the State "M" 1.

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Item Number 3 talks about the gas formation volume factor, and that's -- as you engineers know, that's simply related to -- you have a cubic foot of gas in the ground under temperature and pressure. When it comes to the surface and conditions, it gets a lot bigger. And it goes through the calculation, and it says it becomes 275 standard cubic feet on the surface.

Then items 4 and 5, I've taken the equation, 10 11 rearranged it, and in item 5 completed the calculation. 12 And you need to see the pieces of this, but you need to see 13 the answers too. And the answers are, for the production 14 to date, which is about a half a BCF -- and the number 15 there, 464,127 MCF, is as of earlier this year. But that 16 much gas, with 80-percent recovery, came out of 23 acres of 17 this imaginary pancake reservoir. That's like -- has the 18 same thickness as what you see in the State "M" 1 well.

What we'll see a couple pages down the road, that we need to spread that over a little bit more area because it's not that same thickness everywhere, but for pancake reservoir it's drained approximately 23 acres to the present time. And I'll show you in a minute, you know, my estimate of how well this Mississippi zone is going to do in the future, and I'm saying it's going to make about 2.3 BCF in its life, and that would require that you pull 80 percent of the gas out of 113 acres of the same kind of pancake reservoir.

Q. Okay, let's go --

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A. So the bulk of my testimony is going to support those calculations and then try to apply it to the more or less real situation we have here.

> CHAIRMAN FESMIRE: Can I ask a quick question? MR. CARR: Yes, sir.

10 CHAIRMAN FESMIRE: Doctor, why did you use the 11 80-percent recovery factor, instead of calculating the gas 12 in place and abandonment pressure?

THE WITNESS: I think that -- you want -- well, I 13 14 think this is -- I don't know what abandonment pressure is. 15 I think this just avoids issues of compressors and of line 16 pressures and -- It's going to give you the same picture, and it just avoids the complication of trying to -- us 17 18 agree on that parameter, on -- Scout's honor, we're going 19 to get the same kind of general conclusions. Maybe I 20 should just say this is easier than... 21 CHAIRMAN FESMIRE: Okay.

THE WITNESS: But I think it's entirely appropriate in this case, and I'd hate to add those complications to the gibberish that I'm putting out to you right now. CHAIRMAN FESMIRE: Okay.

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Q. (By Mr. Carr) Dr. Boneau, let's go to Yates Exhibit Number 15. What is that?

A. Yates -- So now I have a few exhibits, you know, supporting what I did in that calculation, or at least showing you what I did in that calculation.

Exhibit 15 is a production plot of the State "M" 1 well, the Pride well. The pink triangles are the gas production in MCF per day, and the green triangles are the oil production. The oil production is becoming less and less significant, but there's about 5000 barrels of oil involved here.

13 So the well is currently making, you'd say, 500 14 MCF a day. And it's been fairly flat. It's not going to 15 stay flat forever, it's going to decline. And I've got it 16 declining relatively slowly. That's what Exhibit 15 shows.

17 And it leads right into Exhibit 16, which is my 18 computer spit-out of the future of this well, including 19 dollars, which are not really of interest here. But it --20 What's really of interest is, in the upper left there's a couple columns, gross oil and gross production, gas, MMCF, 21 22 et cetera, which lists what amounts of gas the well would 23 produce in the future if it follows the curve that I am 24 forecasting for it.

And what it says is that over 20-some years,

quite a long time, the well will make an additional 1.8 BCF and cum about 2.3 BCF. And that's what I think the well is going to do, and I think that's pretty optimistic. It can be a good well for 20 years or a -- a good well, it's not a 5-million-a-day well, it's a 500-MCF-a-day well. But it's hanging in there, and I think it's going to hang in there quite a while longer. And those are the numbers I used and the drainage calculation for the production.

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Q. Let's go to Exhibit 17, the log section.

Α. 10 Exhibit 17 and I quess Exhibit 18 talk about what 11 we did for the log analysis. And Exhibit 17 is exact- --12 well, really close to exactly the same picture as our geologist John showed in Exhibit 10. So it's the log that 13 14 Pride ran when they re-entered this well. It's the 15 porosity log. And we went in and read the porosity, both 16 the density porosity and the neutron porosity, over the 17 perforated interval from this log.

We also read the resistivity from the accompanying log, which I didn't put in here and probably should have put in here. We can go give it to you if you really want it. But we took numbers off of their log to do the log calculation. Here's the porosity log.

Exhibit 18 is a tabular presentation of foot by foot, showing this log analysis. And so we have a column that's depth and a column that's neutron porosity right off

the log, density porosity right off the log, crossplot 1 2 porosity, which is halfway in between those. We used -- and "we" is me with consultation with 3 4 John Amiet -- used a porosity cutoff of 5 percent in a 5 carbonate, pretty reasonable number. And that cuts out some of the porosities that are smaller than that, but it 6 leaves 31 feet that have porosity greater than 5 percent. 7 8 There's a column that's the deep resistivity off of the resistivity log. Used Archie to calculate the water 9 10 saturation, and in the right-hand corner a hydrocarbon pore 11 volume. 12 The lower right-hand corner is the final answer, the sum of all that right-hand column, 2.1 feet of empty 13 14 space that contains gas. 15 So it's just the details of our log analysis, 16 and --17 And that information was used in the drainage Ο. 18 calculation? 19 Α. And that information was item 2 in the drainage 20 calculation, and the production information was used in, I 21 think, item 5 of the drainage calculation. But I tried to 22 show you where all the numbers came from that I used in the 23 drainage calculations. 24 Dr. Boneau, let's now go to Exhibit Number 19. Ο. 25 Would you identify and review this exhibit?

A. Exhibit 19 you've seen before also. It's basically Exhibit 9 or Exhibit 5 -- no, it's Exhibit 9 with John Amiet's isopach. And then I've tried to show in that context where these drainage areas, you know, actually fit. And I need to say -- Well, I need to say this carefully and right.

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First of all, the porosity -- Well, first of all, 7 8 the isopach, the fan that is shown there contains about 6 9 BCF of gas. I calculated using this isopach and 10 planimeters and all that stuff. And if you assume that the porosity in the "M" 1 is representative of the whole fan --11 12 which, you know, maybe or maybe not is true -- there's 13 about 6 BCF of gas in place in that fan. I think that --14 Well, I'm not arguing for anything; I just think that's a 15 number that you get in your head that acquaints you of what 16 we're talking about.

17 So there is a rather small, sort of dime-sized 18 red circle around the State "M" 1 well. That encloses the 19 area that the well -- the circular area that the well has drained to date. And it's not 23 acres, since this isopach 20 is -- you know, is not flat, it has some curvature to it. 21 22 I've taken that into account, and this circle is about 29 acres, in order to contain the volume that's necessary 23 -- that's equivalent to that. 23 acres of 31 feet is 24 25 equivalent to 29 acres of 30 and a little, 25, et cetera.

I mean, you can't tell the difference very much, but that's 2 what I'm trying to do. I'm trying to show you the area in, you know, quotes, the real reservoir, at least John Amiet's real reservoir, that would be drained.

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And I think a point is that to date the gas has come from the southwest quarter of Section 1. It just has. The drainage circle is not out all that far, so far, to the state.

The blue circle that's more or less half-dollar 9 10 size shows the area of this isopach that would have to be trained to contain the amount, the 2.3 BCF of gas that I am 11 12 forecasting the well will actually drain. And I calculated 113 acres as a pancake reservoir, and because of the 13 curvature of the fan that expands to like 145 acres. 14 And 15 so the blue circle there is 145 acres. But that is an area 16 that would contain, at 80-percent recovery, the 2.3 BCF of 17 qas. Okay.

18 And from there we get into, you know, what does 19 all this mean for the situation that you face. And Mr. 20 Carr probably wants to lead me through that, or let me go 21 blind.

22 There's nothing you could do to lead Dr. Boneau 0. 23 through anything.

24 Dr. Boneau, would you summarize for the 25 Commission the conclusions that you've reached from your engineering work on this reservoir?

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A. Well, some of these are opinions and some of these flow directly from the calculations.

I think that the "X" well will be about, you know, half as good as the "M" well. It will be less good. It has less feet of pay, it's further from the source, it's going to be somewhat smaller particles, all that stuff.

The "M" well -- well, I told you, has drained 23 acres as a pancake or 29 acres to date, and it will eventually drain 113 by one calculation, or something, up by 150 eventually. But a lot of gas is going to come out of less than 160 acres in this well.

The southwest quarter of Section 1 is where most of the gas is coming from in the "M" well. And to apply that to the "X" well I pull numbers around in my head, but -- well, okay, let's see if I can tell you what numbers in my head.

I think the "X" well will be half as good as the "M". It's only got a third of the pay, and so it's going to reach that dime-sized drainage area, you know, faster than the "M" is going to reach it, in two years rather than three years.

24 But the initial drainage around the "X" well, you 25 know, is going to be in the northwest quarter of -- the drainage in the "X" well is always going to be more from the northwest quarter than from the southwest quarter, clearly in our picture, because we have no reservoir in the southwest quarter. But even if there is reservoir in the southwest quarter, the majority is going to be from the better acreage in the northwest quarter.

If Pride is right that the "X" well is 25 or 30 7 feet thick, then it's like the "M" well, and my circles 8 around the "M" well you could transfer to that "X" well 9 10 location. And again it will say, initially, the first 11 three or so years, all the gas is going to come from the 12 northwest quarter. And over time, even if they're right about the thickness at the "X" well, most of the gas, you 13 14 know, 60, 70 percent, 80 percent of the -- well, 60 to 70 15 percent of the gas is going to come from the northwest quarter, and eventually that "X" well will get up there and 16 17 bump into my blue circle and push it back. It will take those -- it will fight with the "M" well for those 18 19 reserves. 20 Probably a lot that is obvious to you, and --Dr. Boneau, if the --21 Q. -- that's fine. 22 Α. 23 -- Application of Pride is granted and a west-Ο. 24 half unit is formed, what impact will that have on the 25 correlative rights of Yates?

A. Well, we're going to -- If what they want to happen happens, we'll have 50 percent of the well, and we will be providing, I think at a minimum, 65 percent of the reserves and, according to our geologic picture, which actually fits together pretty well, we're providing, you know, 97 percent of the reserves, or some really high percentage.

Q. In your opinion will approval of the Application deny Yates the opportunity to produce the recoverable reserves under its tract?

11 A. Say that again, because I didn't listen to the12 first part.

Q. If the Application of Pride is granted, will it deny to Yates the opportunity to produce the recoverable reserves under its acreage in the north half and in the northwest guarter of this section?

A. If the Commission approves what Pride wants,we'll get a bunch of reserves taken away from us.

Q. If that Application is denied, will it prevent Pride from developing its reserves with a well drilled on its acreage?

A. No, Pride -- If there are reserves on Pride's
acreage, they can drill a well and get those reserves.
Q. Dr. Boneau, were Exhibits 13 through 19 prepared
by you?

Yes, they were, with a little help from people 1 Α. 2 who helped me with work --But you --Ο. -- under my supervision. Α. MR. CARR: At this time, may it please the Commission, we'd move the admission into evidence of Yates 6 Exhibits 13 through 19. 7 CHAIRMAN FESMIRE: Any objection, Mr. Bruce? 8 9 MR. BRUCE: No objection, Mr. Chairman. CHAIRMAN FESMIRE: From the Commission? 10 COMMISSIONER BAILEY: 11 No. 12 COMMISSIONER CHAVEZ: No objection. CHAIRMAN FESMIRE: They're so admitted. 13 14 MR. CARR: That concludes my direct of Dr. 15 Boneau. 16 CHAIRMAN FESMIRE: Mr. Bruce, do you have some 17 cross-examination? 18 MR. BRUCE: Just a very little. 19 CROSS-EXAMINATION 20 BY MR. BRUCE: In an alluvial fan, does permeability and 21 Q. 22 porosity vary? 23 In carbonates permeability and porosity vary, Α. 24 yes. 25 Now, your calculations are based on a uniform Q. STEVEN T. BRENNER, CCR

porosity, correct?

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A. Yes.

Q. So if it's not uniform, would you then drain a larger area less efficiently?

Yes, in theory, but we're talking -- with the "M" Α. well, we're talking about the good part of the reservoir, 6 7 which extends over most of what we -- over most of my blue 8 and red circles. And so in theory, yes, I agree, but I 9 don't want to agree that that's a great factor in my calculation for the "M" well. Obviously, you're right --10 Maybe out between the zero and 10 contour lines the 11 porosity is less and the rock is tighter and my recovery 12 factor should be lowered in that area. 13

14 0. Now, let's get to one of the -- the final -- one 15 of the final questions Mr. Carr asked you, you said that 16 Pride won't be harmed because it can go drill another well 17 and get the reserves under its tract. I believe that was 18 the essence of your answer, it can drill its own well, it 19 can get the reserves under its tract? If necessary I could 20 probably have the court reporter read the question back. I'm thinking --21

A. Is your question, is that what I said, or -Q. Yeah, is that what you said? It was with respect
to correlative rights.

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A. Yeah, that's basically what I said. And this --

The "X" well, you know, I was surprised to hear Mr. Pride 1 say that we should love his deal for this "X" well because 2 we loved his deal for the "M" well. The difference with 3 the "X" well is that we own the whole north half, and we 5 don't need all this pooling nonsense, et cetera. Well, that's what I'm getting to. Q. I don't know if that's where you're going or not. Α. No, not quite. I don't think we heard the word 8 Ο. 9 "love" in here before, Mr. Boneau. But my question was this --10 Just a nice four-letter word. 11 Α. 12 Q. The question was this: You say Pride won't be affected because they can go drill a well in the southwest 13 14 quarter. 15 Α. Well --16 But then Yates would get 50 percent of that also, Q. 17 wouldn't it? 18 Α. Unless we went nonconsent or something, yes. 19 Q. Yeah. 20 Α. I mean, I don't know where you're leading, but the "X" well is a re-entry, it costs \$750,000. A new well 21 22 costs a million dollars more than that, and you need 23 commensurate -- double the reserves, or --24 Q. Okay. 25 -- more than double the reserves to do that. So Α.

Pride is not going to cavalierly go out and drill the 1 2 southwest quarter, and I'm surely not suggesting that they 3 should. But the reserves are mostly on our acreage, and somehow we should get most of the reserves. But if Pride's -- if Yates gets what it wants, Ο. 6 which is a north-half unit, but Pride's geology is correct, then Yates will be getting 75 percent of that production, 7 will it not? 8 9 Assuming a lot of things are equal, you're right, Α. 10 you know. It might be somewhat different from that, but 11 yeah. 12 MR. BRUCE: Thank you. That's all I have. 13 CHAIRMAN FESMIRE: Commissioner Bailey? 14 COMMISSIONER BAILEY: I don't have any questions. 15 CHAIRMAN FESMIRE: Commissioner Chavez? 16 EXAMINATION 17 BY COMMISSIONER CHAVEZ: 18 Yes, Dr. Boneau, after -- it looks like almost Ο. 19 three years of production from the well in Section 1, do 20 you find that the actual production profile that's there is 21 in agreement with your calculations of what you would 22 expect that well to be doing at this time, or have you 23 explored that? 24 I've asked myself that. Not every well -- Well, Α. 25 The production profile of this well is a little whatever.

unusual. It's not unique or the only one ever seen, but it's a little unusual.

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I think the well -- the well really is declining, and you can see three or four months at the end of '03, it's declining, and then it's back up a little but it -operators and wells can hang in there like this for a while, but they can't do it -- And I don't even know what direction you're going. I really think that my curve is as optimistic as I dare be, is what I think my curve is.

I'm answering questions you're not asking, but you get on the subject and, you know, I'll tell you what I know or what I think about it.

So there's a period in there of six or eight months where it's extraordinarily flat. Physics and, you know, the real world simply can't let that happen forever. It is falling. And so I think it's really, basically, a normal operating well that had a few good months.

So I don't know what the permeability is. I think the permeability is half a millidarcy or something in that, and I can make that okay in my head, that this kind of well would operate like that, and that 80 percent or so recovery is reasonable for that kind of a well.

Yeah, I have tried to put together in my head and on paper here the kind of things you're saying, and I think it fits together. I think that the really flat part of this production is just an anomaly that's not going to continue over years, and it's going to -- this kind of behavior makes sense with an unfractured carbonate, 8percent porosity, half a millidarcy permeability. Yes, I have tried to think that through, and I have satisfied myself that it makes sense together. I think that's what you're asking, but --

Q. Yes, I --

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9 A. -- I have worried about that, yes, and I am 10 telling you what my inner feeling is about it.

Q. Okay, was there anything from the production profile of that well that influenced your calculations that you made in that Exhibit 14?

A. Well, I'm not sure where that goes at all. I have this production information about this well, I have a log, I've learned lots in talking with the geologist that I didn't know before, and it all makes a good picture.

18 To me, this well acts like lots of wells that we 19 have in Wyoming where there's relatively tight rock everywhere, and then come down to a level and stay fairly 20 flat, but over time they fall off slowly anyway, and that's 21 -- I've taken the production and this is what I think it's 22 going to be and I think -- well, this is what I'm showing 23 24 you it's going to be, and I think that this is probably as 25 most optimistic I'd be about this well.

I have the feeling I didn't address your question 1 2 at all. Well, in a sense you did. I was asking if these Ο. 3 numbers that you used, the way you calculated --4 Oh, you're talking about --Α. -- on Exhibit 14 --Q. I should look at the --Α. -- if there was any information in there, any of 8 Ο. 9 the things that you used that came from the actual production of the well in Section 1, anything that 10 influenced your calculations? 11 Okay. Well, let's talk about the num- -- There's 12 Α. only a handful of numbers, really. 13 14 The recovery factor is just my guess, and it's my 15 guess based on guessing thousands of wells and other people 16 doing the same thing, but 75 or 80 percent -- 80 percent is 17 a right kind of number for this well. That's just my 18 feeling. 19 The log analysis is standard log -- number two, is standard, you know, stuff that you're not going to have 20 21 much problem with. 22 In item number three, I do not have a bottomhole pressure from Pride's well. The number there is based on a 23 gradient that's reasonable in the area from our wells, and 24

25 I think it says 4860 pounds, like I really know it's not

4870, but it's 4800 to 5000 pounds, and that's no factor.

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The temperature is taken from the log and from the gradient in southeast New Mexico, and that's within a couple degrees of right.

I do not have a gas analysis from their well. 6 Their well makes a reasonable amount of oil, and I assumed 7 -- I'm quite sure the gas gravity is about .7; I don't think it can be .65 because it makes too much oil for that. 8 I used .7. It might be .72, it might be .68, but that's a 9 number I had to use, and the number I used is a reasonable 10 one, so the Z and everything follows from that. So the 275 11 standard cubic feet per cubic foot has got to be right 12 within 10 or 20 standard cubic feet per cubic foot. It is, 13 even though a couple of the numbers I did not have the 14 15 actual thing.

The production numbers, the production to date is in the state records, and you can just go look up the number.

The prediction for the future is my prediction. I sat down and do a curve out there and looked at it and went and got a cup of Coke and came back and drew it again, and that's what you see. It's my best estimate. Anyway, I tried to review, you know, where those numbers came from, blah, blah, blah, quickly. I hope that's --Q. That's helpful, thank you. A. -- helpful or --

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Q. Okay, let's look at your Exhibit Number 19 then. Okay, if the reservoir is made up as it's described here with a certain thickness of material and all, do your calculations appear to confirm that geometry that's shown there?

A. Yeah, we -- You know, I'm glad you asked. You may not have even asked this, but Mr. Amiet promised that I would talk about how much material was in there, and I really haven't done it.

The isopach that's on 19 and an earlier exhibit where it first were introduced, the volume -- I gave him the volume of that basically. He made the orientation, in which direction do we go and how those channels go and all that stuff, but I gave him a volume for the whole thing, and it might be worthwhile to explain where we got that.

I think the best way -- I hope you asked this question, because I'm trying to answer this question that I made up in my head.

If you look at Exhibit 5, which is his original structure map, I think you'd call it, but -- The volume of the material in the fan was estimated by me in the way I'm trying to explain in the next sentences.

I estimated the volume of this Devonian high inside this pie-shaped piece. And in your thinking, if you just ignore the little fault you're better off. I ignored the little fault. The little fault is not big enough.

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There's a pretty good-sized pie-shaped piece 3 4 there in the northeast part of Section 2, and in my estimation of it, I basically looked at -- There's a 5 structure line of minus 7600 that goes from the diagonal 6 7 fault north and then turns west. It's there, and essentially the high is defined by the north-south fault, 8 9 the diagonal fault and that minus 7600 line. That's the 10 real Devonian high and the real -- at the least the way I picture the geology, the real high that rubbed off and went 11 down the hill and formed this fan. So that's about 200 12 acres. John mentioned some numbers. I used about 200 13 acres, is what I used as the number. 14

John estimates that about 100 feet came off that high and fell down, and I said roughly two-thirds of that material went the southeast direction. So 200 acres, 100 feet thick, two-thirds of it going the southeast direction, gives you a volume of debris falling down the hill, and that volume is represented in the isopach that John drew.

I don't know that that's at all -- Well, it's got to be vaguely related to your question, but I wanted to make that clear or at least tell you more about -- since John promised and we hadn't delivered, I wanted to at least tell you what we had done there.

Well, what I was getting at is, you have a 1 Q. 2 volume, then, of material that forms this reservoir --Yes, we have a volume --Α. -- and it contains gas --Q. Α. Yes. -- and given there's some gas producing from it 6 Q. 7 at a certain pressure, have you seen any -- does the production profile or -- seem to match or in any way 8 9 confirm your estimates of what that material -- the size -the volume it was and how much oil and gas it might 10 11 contain? What's happened to date is consistent with the 12 Α. picture that I've shown you. 13 14 Q. Okay. 15 Α. Whether our picture is uniquely right, you know, 16 will be determined in time. We don't have enough data to say, whatever. But what we have here is a -- The geologist 17 18 and I usually don't agree on things this well, but he 19 really does have 3-D seismic, and we've got agreements with 20 Western that we can't show you the 3-D seismic, and that handcuffs us. 21 22 But on the 3-D seismic, this, and this diagonal fault are, you know, clear to a dumb engineer. They are 23 really there. We got this amount of material that's a 24 reasonable estimate, off this high coming -- it's coming 25 STEVEN T. BRENNER, CCR

down, and it sort of turns just like the structure map turns.

The volume matches what we know about the logs. We've only got two logs, and one of them is ancient. But it all fits together into this picture, and the production so far fits this picture.

So what we've done is supported by, you know, 10 7 8 or 15 different facts coming from different directions, and 9 it's way more believable than a lot of stuff that I've got 10 to show the bosses and we make decisions on. This one is, 11 you know, not pinned down to the corners, but it's pinned 12 down way better than most of the stuff we're doing, estimate what's going on two and a half miles down in the 13 14 ground.

This is a good, consistent picture, and it makes -- well, it definitely is sensible, and all the facts to date confirm and agree with it. We'll learn something in the future that it's not right here or there, but right now it is a sensible, consistent picture.

20 COMMISSIONER CHAVEZ: Thank you, that's fine.21 EXAMINATION

22 BY CHAIRMAN FESMIRE:

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Q. Doctor, during this period of flat production do
we know what the flowing tubing pressure was doing?
A. I do not know. Pride probably knows. I do not

1 know. Okay. But you all --2 Q. I do not have the data on that detail on that Α. detail, no. 4 Okay. We're going along producing about 500 a Ο. day for a year or more, and then all of a sudden the 6 7 production doubles for a month. Do you have any idea what caused that? 8 9 Yeah, I do have an idea what caused that. The Α. 10 system has a zero, and it has two months as one entry. 11 Q. Okay. 12 You just look at the numbers and that's obvious. Α. There's a zero and a month that's double high. And if you 13 took that double high number, cut it in half and assigned 14 15 it to each of those months, you would not see it at all on 16 this plot. 17 Q. Okay. 18 Α. I'm sure that's what happened. 19 Q. Okay. You broke the decline rate out in the 20 beginning of 2009, you changed your decline rate. 21 Α. Yes. 22 What's the scientific basis for that? Q. 23 There's probably no scientific basis for that. Α. 24 The initial decline rate from 2004-2009 is guite flat, and 25 I do not believe that that flat decline rate can continue

for 20 years, and I want to give it credit for what it's 1 2 doing now, but I just don't think it's right to give it credit 20 years from now for what it's doing now. It just 3 isn't going to stay that flat. Wells do not stay that flat. We've all looked at a lot of wells, and wells in 5 southeast New Mexico do not stay that flat. 6 And so I gently increased the decline rate. 7 That's what I do when I do our own company's reserves, and 8 9 that's what I did here.

10 CHAIRMAN FESMIRE: Okay, I have no further 11 questions.

Do you have any redirect?

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MR. CARR: No, sir, I do not. That concludes the presentation of Yates' case.

15 CHAIRMAN FESMIRE: Okay. Dr. Boneau, thank you 16 very much.

At this point, we probably ought to take about a 10-minute break, and then I think we're going to break into 19 executive session and go over what the evidence has been 20 presented today and try, I hope, to come up with a decision 21 this afternoon. We may not.

22 MR. BROOKS: Yes, I believe we need a motion and 23 vote on the record to go into executive session.

24 MR. CARR: And Mr. Chairman, I mean, if you want, 25 we can provide brief closings. If you don't need them, we won't burden you with them.

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2 CHAIRMAN FESMIRE: Having forgotten about that, I 3 wouldn't mind it. I don't know about the other members of 4 the Commission.

COMMISSIONER CHAVEZ: That would be fine.

6 CHAIRMAN FESMIRE: Well, why don't we go ahead 7 and do the closings, then, prior to --

MR. CARR: I had a very long closing, and I guess not -- as being the unapplicant, I go first. Jim as the Applicant goes last. And I have during the course of today gotten rid of a good part of it, you'll be happy for that.

As I look at the case, the closing -- the purpose of a closing is to review the evidence and the law. And at the end of this case, as I look at it, it seems to me that while we can argue about APDs and is Pride attacking the actions of the District Office and have they tried to get an APD to take reserves or not, that we've really gone beyond that in this case.

Now, I want you to know that going first, I have to sort of warn you that when Jim speaks I don't get to talk again, and so there are a few things I sort of have to head off up front.

We talked at some length, the two of us, and addressed things in the prehearing statements about problems with how APDs were approved. And I remember days when anyone could get an APD, and everyone would come to my office excited when they had one, and I got to tell them, yes, but I'm sure the other side will have one too.

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And the problem with it as I see, and as we sort of banter back and forth on the same side sometimes, as well as on opposite sides, is, the policy to only approve one and strictly enforce creates a race to the OCD, and that often is inconsistent with really trying to act to protect correlative rights and prevent waste, because we've had cases where people with top leases and no right to drill can use that to prevent someone from drilling.

Having said that, it seems to me that where we are today is still not arguing about the APD, we've gone beyond that. The Examiner Order had questions about due process and are there rights in permits versus rights in minerals and where we go on all of that. And again, I must tell you that I believe the case is beyond that, and I'll tell you why.

In April of 2002, in a case that Jim was involved in and I attended for Yates, TMBR/Sharp drilling, there were competing pooling applications. And you entered a finding that I suspect we will actually all agree on, and that says that the issuance of a permit does not prejudge the results of a compulsory pooling proceeding.

And any suggestion that an acreage-dedication

plat attached to an application to drill somehow pools acreage is expressly disavowed.

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We're no longer fighting over the APD, we're talking about -- it seems to me -- compulsory pooling. Usually when we come before you we have two competing pooling cases, and we're only sort of in that posture now because we don't need one. We have all the acreage; there is nothing to combine.

And so it seems to me we've gotten to the point where we have to look at this case as a pooling case, and the standards that govern a pooling order kick in: good faith negotiations prior to drilling. And you're going to have to look at the letter from Mr. Pride and see if that standard really has been met.

You're also going to have to look and see if they really, before they file, have a right to drill the well. Those are preconditions for a pooling order.

But as you sort through all of this, I think 18 19 you'll find yourself in a posture that the Division and Commission has found itself before when there are competing 20 21 pooling applications. And it all boils down to questions 22 of geology, because they are involved in issues that relate to waste and issues that relate to correlative rights. And 23 24 I think we've got two geological interpretations. I think 25 what you have is a pooling case, and you're going to have

to use your expertise to evaluate those two interpretations.

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And because I don't get to speak last, I'm sure 3 we're going to hear that they didn't give us their seismic. 4 They have seismic, they didn't present it. Well, I'll tell you, we know what Pride's theory is, we know they have 6 a fault. But I don't know what their data shows, and I 7 don't think you do either, because while they suggested 8 9 they have a structure map, we didn't see it. They suggest they have an isopach; we didn't see it. They suggest they 10 11 too have seen seismic, directly or indirectly; they showed none of it. They talked about regional studies; we haven't 12 13 seen them.

I wonder what they showed? I mean, when you don't do that, the way you attack the other side is, you say, well, I want some more of their seismic. You can always want more.

18 But I will tell you what we did. We put together 19 our best technical case. We showed you the evidence that 20 we thought addressed the issues concerning the characteristics of this reservoir, and our data shows the 21 fault that Pride bases its case on isn't there. 22 The fractures that they see in close proximity to the fault 23 24 simply don't show on the one good log we have in this 25 reservoir.

They have very different interpretations than we do, but we believe the case we have presented has been presented, not just suggested. They haven't just given you a commercial map and said, we think this is it. We've shown you our case, we've shown you what we believe, and it shows that the reserves are in the north half.

And if you take -- And when you look at this pooling case, you know, you're working at the core with a fiction. You have one well that's going to drain -- even under our Rules, presumed to drain 160 acres, and you're dedicating 320 acres to it.

And so Mr. Bruce is going to sit here and he's going to tell you, well, the southwest becomes the mouth as well as the northeast. Well, maybe, and what if, and we may know that later.

But I'd ask you to rule on what you know today. And what we know today is that the reserves are under the northwest. And when we go to the definition of correlative rights, it sounds in ownership under our property -- those terms are in this definition, and when you do that, we own the reserves that will be produced from our well. And I think that's clear.

What we have on the other side is data that hasn't been shown, interpretations that appear, in terms of fracturing and things, to be pushed to the very limit if not beyond where that data honestly can go.

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But we came before you and we showed you solid technical, geological and engineering data that shows there is no fault in the Mississippian.

And then you can put the geology aside and you get to the engineering presentation. We have a flat pancake and we adjust it, and we go through all that stuff for you because that's how it really is, to the best of our understanding. And what that also shows it that the reserves come from acreage owned by Yates.

Now, I'm going to tell you that Pride can go drill its own well, and in some ways that's a very cavalier sort of an attitude for me to pitch at you because we know the economics are much better if we have a re-entry. But you need to know that if you don't have the reserves you shouldn't drill your well.

And you shouldn't be able to play games with the Rules of this Division to economically be able to drill a well by taking reserves from your neighbor. And that's what when you pool like this actually does.

I think when you look at the evidence, you'll see that what we came in with was better prepared, scientifically sound, and it shows that what we know today is the reserves that will come out of the State "X" Number 1 are owned by Yates. 1 And you apply those facts to the definition of 2 correlative rights, and if you're to do your duty you must 3 deny the Pride Application and let us proceed to develop our one lease with a well on our acreage, at a standard 5 location, on a standard unit, not have to pay them half of the cost of the re-entry and then take half of the 6 7 reserves. If you do that, I think you've violated our correlative rights, and I think that is the only way on 8 9 this record you can go.

CHAIRMAN FESMIRE: Mr. Bruce?

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11 MR. BRUCE: Well, I wasn't really going to say 12 anything about seismic. And as far as regional studies, I 13 think both geologists said they had regional studies and 14 they had regional seismic, and they didn't present it. And 15 the reason is simple: They have proprietary data they don't like the other side to see. It's understandable. 16 17 They -- from -- Ever since I've been doing it -- and Bill 18 has been doing it longer than me -- companies have to 19 protect their data so that nobody gets an unfair advantage 20 by obtaining free data.

But as to what is important in this case, I'd point out that at the Division level Yates took the position that it had a valid APD and therefore the geology was irrelevant. And now they're saying APD is irrelevant, just look at the geology. The fact of the matter is, either way Pride should win.

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As I said in the opening, I think this is a simple case about force pooling and the propriety of the Division canceling a validly issued APD.

5 I won't go through the time line except in this 6 one instance where after Pride got its APD, sent a letter 7 as is proper to commence a pooling procedure or at least to 8 obtain a voluntary joinder under a JOA, it filed its APD in 9 early to mid-July. Shortly thereafter it sent a letter to 10 Yates.

11 On August 25th, Yates filed its own APD. On 12 August 26th that was granted. And on August 26th, that 13 same day, the Division allegedly sent out a letter to Pride 14 saying, hey, your APD is canceled. Why? Because you 15 haven't filed C-103s.

Well, Mr. Carr in his own questioning of Mr. Pride said, Mr. Pride, is there any obligation of Yates under its prior APDs to conduct any activity during that year's period? The answer, of course, is no. The APD was good for a year. Both Yates' APD was good for a year, a year longer as extended, and so was Pride's APD.

The fact of the matter is, the Hobbs District Office improperly canceled Pride's APD, which constituted the basis for Yates to go on that land. And all of a sudden, Pride thought it was marching down the road of

getting a voluntary joinder of Yates in the well proposal, 2 next thing it knows, Yates is on the well, and that's what resulted in this hearing.

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Pride's APD was valid for a year. There's no 5 Division regulation authorizing the Hobbs Office to unilaterally change that time period. Can the Division 6 cancel an APD? Yes, it can, but that has to be done after 7 8 notice and hearing. That notice has to be given to Pride 9 of the basis, if any, for revoking that APD. That was not 10 done.

Now, I don't know how the Division's Hobbs Office 11 determined that it should cancel the APD, but nonetheless, 12 13 what it did was improper. If you have rules, you have to 14 follow them and they have to be followed, they have to be 15 applied fairly to all the people.

16 Secondly, as far as force pooling, although it's not in the record, if the Commission would look at its own 17 records, the State "M" 1 well was completed in about March 18 19 of 2001. In May of 2001 was a state land sale. Pride 20 bought that lease. A few days later, Yates files its APD on the well. 21

22 A month later, Mr. Pride sends a letter to Yates 23 asking about forming a west-half unit. He then found out 24 Yates had a north-half unit proposed. He didn't take any 25 further action at that time. He thought Yates was going to move forward. They didn't. They spent two years and didn't do a thing.

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The only time they took action was after they got 3 4 a well-proposal letter from Mr. Pride, again in July of 5 2003. And somehow they get -- I won't say "they". I know 6 the people at Yates, they're good people. I don't know them as well as Bill, but I'm not blaming them for 7 anything. But somehow that APD got revoked, and that was 8 9 just plain improper. And yes, Pride did have the right to notice before that was revoked. 10

Now, as far as force pooling, as Mr. Pride testified he was hoping to enter into a voluntary agreement with Yates, just as he had on the State "M" 1 well. He had sent them a proposal letter, which the Division has held numerous times is what's necessary to commence the forcepooling procedure.

Secondly, it is proper to combine these two leases into a west-half unit. As the land plats show, regardless of whether you have standup or laydown units, there is going to have to be a JOA or compulsory pooling involving the southwest quarter. It is perfectly proper for Pride to -- excuse me, for Pride to propose a west-half unit.

24 Mr. Carr said that -- regarding the TMBR/Sharp 25 case. I guess what's kind of contradictory about that case 1 is that during the proceedings leading up to the hearing in 2 that case, TMBR/Sharp had a drilling permit, and my client, 3 Ocean Energy, attempted to get a conflicting APD. 4 TMBR/Sharp had a north-half unit, Ocean Energy attempted to 5 get a west-half unit, and the Hobbs Office at that time 6 said, Oh, there's already a drilling permit in place, we're 7 not going to approve one.

Now, in this case they just take the exact 9 opposite position. Again, that's improper.

10 But force pooling was allowed to go forward. My 11 client lost, but at least they had their day in court. The 12 fact of the matter is, Pride Energy has taken all steps necessary to propose a west-half unit and to commence the 13 14 force-pooling proceeding. There has been a good-faith 15 effort to obtain the voluntary joinder of Yates in this 16 well unit.

Yates just doesn't want to join; it wants a westhalf unit. And that's why we're force-pooling. That's the way it goes.

Now, as to the geology, I think there's a couple of things. We think our geology is proper. We think the placement of the faults in Mr. Ellard's study of the area shows that the reservoir is more north-south than eastwest, as proposed by Yates.

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I was looking at Dr. Boneau's final exhibit,

which is basically the geologically exhibit, but I notice one thing that always struck me on this map, is when you look at the western edge of the reservoir, it goes almost north-south, gets down to virtually the lease line of Pride's lease and zips off at a right angle to the east. The zero contour line virtually follows Pride's lease line. That's not real geology, that's lease-line geology.

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And I think Dr. Boneau in his testimony said that the reservoir turns like the structure map turns. Well, if you look at Yates' own structure map, it's north-south, it's not east-west. We think this reservoir goes northsouth.

Another thing, the State "M" 1 well, Mr. Ellard testified, has about 30 feet of reservoir, and he thinks the State "X" 1 has about 25 feet of reservoir. But under Yates' theory that goes from 25 feet to zero feet in about 660 feet. We don't think that's right.

18 The fact of the matter is, if Yates gets its way 19 and the geology presented by Mr. Ellard is correct, Yates, 20 with only a half of the reservoir on its lease, will get 75 21 percent of production, because Pride will be forced into 22 drilling a well in the southwest quarter to offset the "X" 23 1. They're very suspect that there's any reservoir in the 24 east half, and Yates will yet get three-quarters of 25 production.

As Mr. Carr said, correlative rights means the opportunity to produce the proportionate share of reserves under your acreage. The fact of the matter is, if Pride is right -- and what we know at this time is, Pride is right -- Pride will only get 25 percent of those reserves, versus 75 percent. We think the correlative rights of Pride must be protected by approving a west-half unit.

We think that if Yates wanted to properly 8 9 terminate or cancel the APD of Pride, it should have filed 10 an Application. It never did so, that is not before the 11 Commission. Yates' permit was improperly granted. We 12 believe the geology supports a west-half unit, and we would ask the Commission to affirm the Division's decision. 13 14 Thank you. 15 CHAIRMAN FESMIRE: Why don't we take a 10-minute break and reconvene at five minutes to three? 16 17 (Thereupon, a recess was taken at 2:45 p.m.) 18 (The following proceedings had at 2:50 p.m.) 19 CHAIRMAN FESMIRE: Let's go back on the record. At this time the Chair would entertain a motion 20 21 to go into executive session to discuss Cause Number -- is 22 it 13- --23 MR. BROOKS: 13,153, I believe. 24 CHAIRMAN FESMIRE: Right. 25 COMMISSIONER CHAVEZ: I so move.

COMMISSIONER BAILEY: Second. 1 CHAIRMAN FESMIRE: All those in favor? 2 COMMISSIONER BAILEY: Ave. COMMISSIONER CHAVEZ: Aye. CHAIRMAN FESMIRE: All those opposed? At this time we will -- the motion is accepted, and we will go into executive session to discuss Cause 7 Number 13,153. 8 9 (Off the record at 2:51 p.m.) 10 (The following proceedings had at 3:46 p.m.) CHAIRMAN FESMIRE: Okay, let's go back on the 11 12 record. The Commission has deliberated on Cause Number 13 14 13,153. That was the only thing we discussed during the 15 executive session. 16 A motion was made and accepted to go back into 17 public session, and at this time we are back in public 18 session, and the Chair would entertain a motion to dismiss. 19 COMMISSIONER BAILEY: I so move. 20 MR. BROOKS: A motion to adjourn. 21 CHAIRMAN FESMIRE: Adjourn, I'm sorry. 22 COMMISSIONER CHAVEZ: I second a motion to 23 adjourn. CHAIRMAN FESMIRE: All those in favor? 24 25 COMMISSIONER BAILEY: Aye.

COMMISSIONER CHAVEZ: Aye. CHAIRMAN FESMIRE: Opposed? The Commission meeting for August 12th is hereby adjourned. (Thereupon, these proceedings were concluded at 3:47 p.m.) * * *

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 Commission was reported by me; that I transcribed my notes; and that the foregoing is a true and accurate record of the proceedings.

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

WITNESS MY HAND AND SEAL August 16th, 2004.

STEVEN T. BRENNER CCR No. 7

My commission expires: October 16th, 2006