#### STATE OF NEW MEXICO

# ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

### OIL CONSERVATION DIVISION

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

APPLICATION OF PERMIAN RESOURCES, INC., ) CASE NOS. FOR COMPULSORY POOLING AND AN UNORTHODOX ) WELL LOCATION, LEA COUNTY, NEW MEXICO

APPLICATION OF PERMIAN RESOURCES, INC., TO AMEND THE COST RECOVERY PROVISIONS OF ) COMPULSORY POOLING ORDER NO. R-11,682, LEA COUNTY, NEW MEXICO

12,953

and 12,954

(Consolidated)

# ORIGINAL

#### REPORTER'S TRANSCRIPT OF PROCEEDINGS

## **EXAMINER HEARING**

BEFORE: MICHAEL E. STOGNER, Hearing Examiner

No. 7 for the State of New Mexico.

October 24th, 2002

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, MICHAEL E. STOGNER, Hearing Examiner, on Thursday, October 24th, 2002, 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

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# APPEARANCES

#### FOR THE DIVISION:

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### FOR THE APPLICANT:

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

\* \* \*

## ALSO PRESENT:

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

\* \* \*

WHEREUPON, the following proceedings were had at 9:10 a.m.:

EXAMINER STOGNER: At the request of legal counsel, at this time I'm going to consolidate and call Cases 12,953 and 12,954. 12,953 is the Application of Permian Resources, Inc., for compulsory pooling and an unorthodox well location, Lea County, and 12,954 is the Application of Permian Resources, Inc., to amend the cost recovery provisions of Compulsory Pooling Order Number R-11,682, Lea County, New Mexico.

Call for appearances.

MR. HALL: Mr. Examiner, Scott Hall, Miller
Stratvert Torgerson law firm, Santa Fe, appearing on behalf
of the Applicant, Permian Resources, Incorporated, with two
witnesses this morning.

EXAMINER STOGNER: Any other appearances?
Will the witnesses please stand to be sworn?
(Thereupon, the witnesses were sworn.)

MR. HALL: Mr. Examiner, of course we'll take these cases out of order. We'll start with testimony on Case Number 12,954 first, if you don't mind. I think it might facilitate handling of the two cases. They do involve the same acreage.

You may recall that in September a year ago we had a compulsory pooling case on Permian's Chambers Number

2 well, and during the course of testimony we discussed with the Division Examiner the fact that there was a second wellbore on the subject acreage for the Chambers Number 1 inactive well, and the possibility was discussed that that well could be re-entered under the guise -- poor choice of words, but under the authority of the pooling order that would issue in Case Number 12,715.

And if were that the case, then what we would do is come back with a subsequent application to the Division to seek an A order, an amended order. It would be Order 11,682, was issued -- the order that was issued initially.

So what we're asking now is for the Division to consider the fact that Permian has, in fact, re-entered the Chambers Number 1 well, recompleted that in the Wolfcamp formation at significant savings over a new drill. And because of that, we would like the Division to readdress the cost provisions of Order Number 11,682 and provide the pooled, unleased mineral interest owners with an opportunity to elect and with an opportunity to object to reasonableness of well costs, should they so choose.

Now, in view of the fact that the Chambers Number 2 well in the original application was not drilled, I thought it would be best to consolidate the two cases, since we're also talking about another Chambers Number 2 well, in Case Number 12,953. So again, that's why we ask

1 for consolidation. I think we can keep things straight 2 that way. So at this time, Mr. Examiner, I'd call Will 3 Porter to the stand. 4 WILLIAM L. PORTER, 5 the witness herein, after having been first duly sworn upon 6 7 his oath, was examined and testified as follows: DIRECT EXAMINATION 8 BY MR. HALL: 9 10 Q. For the record, please state your name, sir. William Porter. 11 Α. Where do you live? 12 Q. Midland, Texas. 13 Α. By whom are you employed? 14 Q. Permian Resources, Incorporated. 15 A. And what do you do for Permian? 16 Q. I'm land manager. 17 Α. Mr. Porter, are you familiar with the 18 Applications that have been filed in these cases and the 19 20 lands that are the subject of the Applications? 21 Α. I am. 22 Q. And you're familiar with the subject area? 23 Α. Yes. 24 You've previously testified before the Division Q. 25 and had your credentials accepted as an expert professional

petroleum landman?

A. I have.

MR. HALL: Mr. Examiner, are the witness's credentials acceptable?

EXAMINER STOGNER: They are.

- Q. (By Mr. Hall) Let's talk about, first, the Application, Case Number 12,954, on the Chambers Number 1 well, Mr. Porter. Would you briefly summarize what Permian is seeking in this case?
- A. Yes. Under this Application, we seek to amend the cost recovery provision as set out in R-11,682, which pooled the interests for the Wolfcamp formation, North Shoe Bar-Wolfcamp Oil Pool, located in the southeast quarter of Section 7, 16 South, 36 East.
- Q. Let's refer to your exhibits, please, sir. What does Exhibit Number 1 show?
- A. Exhibit Number 1 shows the acreage in question, which is the southeast quarter of Section 7 of 16 South, 36 East, located approximately a mile and a half from the -- west of the City of Lovington, New Mexico.
  - Q. And Exhibit 2, what is that?
- A. Exhibit 2 shows the existing pool boundaries in this area for the Wolfcamp and the Strawn.
- Q. All right. Now, in the original pooling case last September, which resulted in the issuance of Order

9 Number R-11,682, did Permian pool only unleased mineral interest owners in the Wolfcamp formation? Yes, that's true. And let's explain to the Examiner what the plan 0. was initially for the drilling of the Chambers Number 2 well under that Application. Was that well to be drilled at a standard location? Yes. Α. And following the hearing, the issuance of that Q. order, by what date was that well to be commenced? On or before January 31st, 2002. And again, in the testimony in that case was the 0. Chuck Chambers Number 1 well discussed with the Hearing Examiner? A. Yes, it was. And the Examiner, by the way, was Mr. Brooks, was 0. it not? Right, that's correct. Α. Now, what's the footage location for the Chambers Q. Number 1?

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- 19 20
  - Okay, the Chambers Number 1 is located 555 feet Α. from the south line, 2085 feet from the east line of Section 7 of 16 South, 36 East.
  - And what was the status of the Chambers Number 1 Q. at the time of the hearing last September?

- A. It was inactive.
  - Q. All right, do you mean it was --
  - A. It was not producing.
    - Q. It's not plugged?
    - A. It was not plugged, and it was not producing.
  - Q. All right. And did Permian's witnesses discuss that that well was, in fact, a candidate for re-entry and recompletion?
- A. Yes.

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- Q. And was that done?
- 11 A. Yes.
- Q. And it was done before January 31st, 2002?
  - A. That's correct.

MR. HALL: Mr. Examiner, at this time I'd refer you to Exhibits 3 and 4, so you have it in your file. It's the original application from Case Number 12,715, and Exhibit 4 is Order Number 11,682, which discussed the Chambers Number 2 well and had the commencement of drilling deadline of January 31st in it.

EXAMINER STOGNER: Administrative notice will be taken of Case Number 12,715.

- Q. (By Mr. Hall) Now, in the original pooling case, Mr. Porter, what was the quantum of the mineral interests that were pooled?
- 25 A. The quantum of the mineral interest pooled was

4.40928 percent.

- Q. Okay, very small interest. And has that ownership percentage changed at all? Let me correct myself. Has the ownership of that interest changed at all since then?
  - A. It has not, no.
- Q. And at that time did the Division apply the statutory 1/8 royalty rate and 7/8 working interest rate to those pooled mineral interests?
  - A. Yes.
- Q. What were the well costs that were testified to in Case Number 12,715, for the Chambers Number 2?
- A. The approximate well cost that was testified to was approximately \$1,618,410.
  - Q. And what are the well costs that we're talking about for the re-entry and recompletion of the Chambers Number 1 now?
    - A. The approximate well cost is \$72,000.
  - Q. All right. And will Permian present another witness to address the basis of these well costs?
    - A. Yes.
  - Q. So in any event, Permian accomplished the same result, it got a successful completion in the Wolfcamp at a savings of in excess of \$1.5 million?
    - A. That's correct.

Q. Now, how does Permian propose that the Division treat the mineral interest owners under an order that would result from this hearing, given that all these costs have already been incurred?

- A. Okay, we propose that similar to standard compulsory pooling order, that the owners of the pooled interest be given an opportunity to tender their share of the actual well cost and avoid any risk penalty. They should also have the opportunity to object to the reasonableness of the well costs as to the re-entry on the Chambers Number 1 well.
- Q. All right. Now, as you might recall, these mineral interest owners were, one, numerous, and two, they are widespread throughout the country?
- A. That's correct. I had -- Approximately five of the mineral owners lived overseas in Greece, and the remainder lived in the continental U.S., spread about in the U.S.
- Q. And we've had several separate applications affecting these same interests, several waiver request letters that have gone out to these interest owners. Have you received any response from them?
  - A. No response whatsoever.
- Q. Okay. So the likelihood that those interest owners are going to come back and object to well costs are

probably remote, wouldn't you agree? 1 2 Α. Yes. What would the proportionate share of costs 3 Q. attributable to these interest owners be? 4 Approximately \$3000. 5 Α. All right. So you got me out of bed this morning 6 Q. to talk about \$3000 in well costs? 7 Yes, sir. 8 Α. And is Permian asking that the same producing 9 Q. overhead rates be applied for the recompletion operation? 10 Α. Yes. 11 And does Permian request the Division to enter an 12 0. amended A order for Order Number R-11,682, to include these 13 new well costs and election provisions? 14 15 A. Yes. In your opinion as an expert petroleum landman, Q. 16 do you see any unfairness or prejudice that accrues to 17 these unleased mineral interest owners by proceeding with 18 19 this well? 20 Α. None. In fact, they're way ahead, aren't they? 21 Q. They're way ahead, yes. 22 Α. 23 Now, let's talk about the new Chambers Number 2 Q. 24 well. In that Application, in Case Number 12,953,

summarize briefly for the Hearing Examiner what we're

trying to do in that case. 1 Okay, for the new Chambers Number 2, we'd like to 2 3 talk about four issues for the Examiner to consider. Number one, again, we would seek to pool these 4 5 same mineral owners for the Strawn formation. Number two, we will have an unorthodox well 6 7 location for this Chambers Number 2 well. 8 Number three, the designation of a special 9 project area for the directional drill, because this will be a horizontal well. 10 11 And number four, because we have an existing Wolfcamp producing well, the simultaneous dedication of 12 production from the Wolfcamp on the Chambers Number 1 and 13 the Chambers Number 2. 14 The primary objective for the Chambers Number 2 15 Q. is --16 17 -- is Strawn. Α. -- is Strawn, correct? 18 0. -- is the Strawn formation, which is below the 19 Α. 20 Wolfcamp, yes. And since you already have the Wolfcamp interests 21 pooled, you're seeking to pool only the Strawn interests, 22 23 correct?

And are they the same interest owners that were

24

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A.

Q.

That's correct.

pooled in the Wolfcamp?

- A. No, we have had a few owners leased to me. There are four owners from Greece whose leases came in during the time of the Number 1 well being re-entered, and the Number 2 drilling -- or the asking for the drilling of the Number 2 well. So there's a very minuscule difference in the amount of interest I'm seeking to pool.
- Q. Okay, and we have some exhibits that will reflect that later on?
  - A. That's correct, yes, sir.
- Q. And are there special pool rules that are applicable to this Strawn pool?
- A. Yes.
- 14 Q. What pool is that?
  - A. It is the Northeast Shoe Bar-Strawn Pool, under Order Number R-10,848, establishing 80-acre units.
    - Q. Okay, what's the orientation of the Strawn unit you're proposing?
    - A. The orientation of our Strawn unit is a laydown 80-acre tract, being composed of the south half of the southeast quarter of Section 7, 16 South, 36 East.
    - Q. Okay. Let's look at Exhibit Number 5, your ownership breakdown. If you would review that with the Hearing Examiner, please, sir?
      - A. Okay. What I have here is a listing of all the

mineral owners in the southeast quarter of Section 7 and what their gross mineral ownership is in that quarter section.

If you'll turn to the last page of that exhibit,

I want to note that on the north half of the southeast

quarter Permian Resources Holdings, Inc., has 100 percent

of the working interest. It's held by production from a

well up in the northeast quarter, the Chambers Number 1

well that's operated by Chesapeake.

In the south half of the southeast quarter, surface to 100 feet below the base of the Wolfcamp, per our original pooling order we now control 100 percent of the working interests there.

As to the south half of the southeast quarter, as to depths below 100 feet below the base of the Wolfcamp, we control 97.6985 percent, the balance being the interest that we're asking the Commission to consider force-pooling.

- Q. All right, let's identify the owners of the interests that you're seeking to pool.
  - A. Okay.

- Q. Do you have an exhibit that will reflect that?
- A. I do. If we can go to Exhibit Number 7, please.

  There are eight owners that I'm seeking to pool. They are

  listed there. The total of that interest -- and I'm sorry

  I don't have that totaled there on that page, but the total

interest that we're seeking to pool with those owners would be 3.64439 percent.

- Q. And again, since these are all unleased mineral interest owners, Permian's requesting that the Division apply the statutory 1/8 royalty to these pooled interests?
  - A. That's correct, yes.

- Q. Let's discuss your efforts to obtain the voluntary participation or leases from these interest owners.
- A. Okay. As discussed in the prior hearing, normally what I do as a landman in seeking the voluntary leasing is, I send out offer letters to all the mineral owners, and I get responses and I lease the mineral owners. Then I have a grouping of people that I have to spend a lot of time probably looking for, trying to contact, and there's a lot of correspondence back and forth that goes on with that.

In this particular instance since I had forcepooled these people, these owners, in the past, what I
elected to do is a combination of lease offer and well
proposal. And if you'll look at Exhibit 6, please, I have
given to you a letter dated April 12th of 2002 to these
owners, outlining two things.

Number one is an offer to lease their mineral interest again as to the Strawn formation.

In the alternative, I've provided to them an authority for an expenditure to drill the Chambers Number 2 well and allowed them the opportunity to participate in the drilling of that well. I received no response from any of these owners by this communication.

- Q. All right. And in your opinion, Mr. Porter, have you made a good-faith effort to try to obtain the voluntary participation of these owners?
  - A. I believe I have, yes.
- Q. Okay. Is Permian seeking the imposition of the 200-percent risk penalty against the assumed 7/8 working interest for the interests attributable to the unleased mineral interest owners?
  - A. On the Chambers Number 2?
- 15 | Q. Yes, sir.

- 16 A. Yes, we are.
  - Q. And Permian also seeks to be designated operator, does it not?
    - A. That's correct.
    - Q. Okay. And as we've discussed, you already have an order pooling the Wolfcamp.

What are the proposed surface and bottomhole locations for the new Chambers Number 2?

A. Okay, those locations are as follows for the Chambers Number 2: Our surface location is 1038 feet from

the south line, 802 feet from the east line. Our bottomhole location will be 950 feet from the south line and 1500 feet from the east line.

- Q. At what footage location do you expect to first encounter the Strawn?
- A. We anticipate the Strawn at 1000 feet from the south line and 1100 feet from the east line.
- Q. All right. Let's refer to Exhibit 8. If you would review that for the Hearing Examiner, please --
  - A. Okay.

- Q. -- what is that exhibit?
- A. Exhibit 8 is -- Because we have an unorthodox location, as advised by my counsel I needed to notify offset operators and offset unleased mineral owners. We are the offset operator. And again, referring back to Exhibit 7, these owners would be offset mineral owners that are unleased. And I sent out these amended waivers for administrative approval of unorthodox location, using the same addresses that I've used in the past, including a copy of the waiver, the Application that was filed here, and if you'll notice on the last page I've included my certified mail return receipts that I sent out with these letters.

I received no response whatsoever from this mailing.

I do want to point out that I cannot send

certified mail overseas; I have to send it registered mail. 1 But I have received no response whatsoever from these 2 3 mailings. Now, will Permian's engineering witness testify 4 0. about the well costs and the overhead rates and the basis 5 6 for the risk penalty for both wells? 7 Α. Right, yes, sir. 8 Q. And were Exhibits 1 through 8 prepared by you or 9 at your direction? 10 Α. That's correct. MR. HALL: That concludes our direct of this 11 12 witness, Mr. Examiner. We'd move the admission of Exhibits 13 1 through 8. 14 EXAMINER STOGNER: Exhibits 1 through 8 will be 15 admitted into evidence at this time. 16 Okay, let me double-check here. On this 12,953 17 we're just force pooling the Strawn? 18 MR. HALL: Yes, sir. 19 EXAMINER STOGNER: Okay. Now, what about the 20 simultaneous dedication of the Wolfcamp? I'm a little 21 confused about that. The engineering witness will address 22 MR. HALL: 23 that. 24 EXAMINER STOGNER: Oh, okay. 25 MR. HALL: We'll have two Wolfcamp completions in

1 that 160. EXAMINER STOGNER: Okay, so the well is going to 2 be dually completed? 3 MR. HALL: Yes. 4 EXAMINER STOGNER: Okay. But the horizontal 5 portion will just be in the Strawn? 6 7 MR. HALL: That's right. EXAMINER STOGNER: Okay, okay. 8 9 Mr. Brooks, do you have any questions? MR. BROOKS: Well, yeah, I have a few. 10 11 THE WITNESS: Okay. 12 **EXAMINATION** BY MR. BROOKS: 13 The new Chambers Number 2 well, is that a 14 different well from the existing Chambers Number 2, or is 15 16 it using -- is it some way -- what's the relationship 17 between the two Chambers Number 2 wells? Okay, we currently have no two Chambers Number 2 18 In the original order we were seeking to drill a 19 wells. brand new well called the Chambers Number 2. 20 21 Q. Okay. That well was never drilled. 22 Α. 23 Oh, okay, that well was never drilled? Q. Α. No, sir. We re-entered the Chambers Number 1 24 25 well.

- Q. That was in lieu of, not in addition to --
  - A. Yes, sir, that is correct.
- Q. -- Chambers Number 2? Well, as I had recalled, that was an additional project that might be undertaken, but now I understand. So the Chambers Number 2 well, the new one that you're going to drill -- and I just heard you say in response to Mr. Stogner's question that was going to be dually completed in the Strawn and the Wolfcamp; is that correct?
  - A. I'm going to refer that to our engineer.
- 11 Q. Okay.

- A. Yes, sir.
  - Q. Okay. Now, you were going fairly fast when you said where you expected to encounter the Strawn. What was the location where you expected to encounter the Strawn?
  - A. Yes, sir, let me back up, sorry. We expect to encounter the Strawn at 1000 feet from the south line and 1100 feet from the east line.
  - Q. Well, I got it correct after all. Okay, and the Strawn is on an 80-acre spacing for the south half of the southeast quarter --
    - A. That's correct, yes, sir.
    - Q. -- is what you're requesting? Okay.
- 24 EXAMINER STOGNER: No other questions at this

25 | time.

1	Well, yeah, let me go ahead and ask you on this
2	one.
3	THE WITNESS: Okay.
4	EXAMINATION
5	BY EXAMINER STOGNER:
6	Q. Okay, you have a current force-pooling provision
7	for the Wolfcamp
8	A. Yes, sir.
9	Q southeast quarter, by Order Number R-682, in
10	which you're requesting amendment. How is a second dual
11	completion in the Wolfcamp how is that going to affect
12	the order or the current order, the compulsory pooling?
13	How will that be handled?
14	A. I'll defer that to our engineer as well, if you
15	don't mind, sir.
16	MR. HALL: You mean on the cost issue, Mr.
17	Examiner?
18	EXAMINER STOGNER: Yes, I'm talking about the
19	cost issue.
20	MR. HALL: We'll address that.
21	EXAMINER STOGNER: Okay. I may recall you, then.
22	THE WITNESS: Okay.
23	EXAMINER STOGNER: Thank you.
24	THE WITNESS: Yes, sir.
25	MR. HALL: At this time, Mr. Examiner, we would

call Mike Stewart to the stand. 1 2 MICHAEL L. STEWART, 3 the witness herein, after having been first duly sworn upon 4 his oath, was examined and testified as follows: 5 DIRECT EXAMINATION 6 BY MR. HALL: 7 Q. Please state your name. 8 A. Michael Stewart. 9 And where do you live and by whom are you Q. 10 employed? 11 I reside in Midland, Texas, and I'm employed with Α. 12 Permian Resources, Incorporated. 13 And what do you do for Permian? Q. 14 I'm a petroleum engineer. Α. 15 You've previously testified before the Division Q. and its Examiners and had your credentials accepted as a 16 17 matter of record, have you not? That's correct. 18 Α. 19 Q. Are you familiar with the Applications before the 20 Examiner today and the lands that are the subject of the 21 Applications? 22 Α. Yes, I am. 23 0. As well as the wells that are the subject of the 24 Applications? 25 Yes, I am. Α.

MR. HALL: Mr. Examiner, we'd offer Mr. Stewart as a qualified expert petroleum engineer.

EXAMINER STOGNER: Mr. Stewart is so qualified.

Q. (By Mr. Hall) Mr. Stewart, if you would, please, let's turn back to the Chambers Number 1, and could you discuss for the Examiner the history behind that well?

A. And I'll reference three exhibits at the same time, that being Exhibits 9, 10 and 11.

Exhibit 9 is a detailed wellbore history of the Chambers Number 1 from inception to current.

Exhibit 10 is a graphical representation or a wellbore schematic of the Chambers Number 1.

And Exhibit Number 11 is a rate-versus-time

And Exhibit Number 11 is a rate-versus-time production plot of the Chambers Number 1, historically up through current.

The Chambers Number 1 was drilled and completed in 1974 by Mesa. They drilled down through the Strawn interval, DST'd the Strawn and found it to be wet. At that point in time they ran pipe and completed it as a Wolfcamp producer. It IP'd approximately 630 barrels of oil per day, quite an amount of gas, over 1000 MCF per day on gas.

It continued to produce until 4 of 1982 from what is locally known as the Three Brothers Wolfcamp section.

In 4 of 1982 they added perforations in the upper Wolfcamp section at approximately 10,280 feet and combined those

with the lower Wolfcamp perforations, approximately 10,500 feet.

In January of 1989 Conoco took over as operator of the well. Sometime in early 1995, Merit took over operations of the well. And in October of 1997 Merit attempted to drill out and kick off below the Wolfcamp formation to an updip structural location in the Strawn formation. They were unsuccessful, they did not get out of the existing or the prior wellbore that Mesa had drilled.

At that point in time they ran a 2-7/8-inch liner, squeezed off all the Wolfcamp perforations and completed the well as a Strawn producer. It was a marginal producer with high water cuts.

Permian Resources purchased the well from Merit, effective January 1 of 2000, actually took over operations 5-1 of 2000. At that point in time the well was nonproducing. In researching the leasing history of the Chambers Number 1, it was determined that the lease which -- the 160 acres, which is made up of the north half and the south half, the north half being held by the Chesapeake Chambers 7 Number 1 well, it appeared that the south half had been lost due to nonproduction.

So that brought about the force-pooling hearing that we had last September. We went through a leasing exercise, tried to re-lease those owners. Some of them

weren't able to be leased, and so we force pooled the Wolfcamp.

At that point in time, we had another well proposed, the Hillburn Number 1, which is approximately two miles to the west of the Chambers Number 1 as a Strawn-Wolfcamp target -- Excuse me, it's the Hillburn Number 3.

We drilled the Hillburn Number 3 beginning in early November into middle of December of 2001. The well, utilizing two separate laterals was nonproductive, did not encounter Strawn formation nor Wolfcamp formation. That well was drilled based upon primarily subsurface geology.

Our plans were to move from the Hillburn Number 3 immediately to the proposed Chambers Number 2 well, and we at that point in time regrouped and circled the wagons and said we need to learn more geologically and geophysically about this area. And that was primarily the reason why the Chambers, the original Chambers Number 2 well, was not drilled.

We also had concerns that the Chesapeake Number 7-1 well -- they had had a pulling unit on it and were having some problems with the well, and we were concerned that if that well had no production for the 90-day period, that we would lose the north half of the southeast quarter of Section 7.

So at that point in time we made a decision to

postpone the drilling of the Chambers Number 2 well in favor of more geological and geophysical data and study, and recomplete the Chambers Number 1 well in the Wolfcamp formation. And that was done in December of 2001.

The Strawn perforations were isolated with a cast-iron bridge plug and cement, the old existing Wolfcamp interval that Mesa had perforated was reperforated, acid-stimulated, and the well was returned to production with favorable results.

Exhibit Number 9 details what I just talked about with some production rates.

Exhibit Number 10 shows the existing Wolfcamp perforations, Merit's Strawn-attempted perforations.

And then Exhibit Number 11, the rate-time plot, graphically displays the production rates associated with the Chambers Number 1 from inception to current.

- O. So it was a successful workover?
- A. Yes.

- Q. Let's look at Exhibit 12 now, and if you could discuss for the Hearing Examiner the basis of the costs that we're seeking to recover here.
- A. Exhibit Number 12 is a lease operating statement based upon 8/8 or 100-percent working interest as to cost and revenues. It details monthly the oil sales, oil revenues, gas sales, gas revenues before and after taxes.

It details normal lease operating expenses that were incurred by the Chambers Number 1 well, beginning in December of 2001, following our recompletion.

It also details the workover expenses associated with plugging back from the Strawn formation to the Wolfcamp formation in the Chambers Number 1.

Total costs associated with the plugback are approximately \$40,000, and current net revenue through September of 2002 to 100-percent working interest ownership, less taxes and royalty, has been a positive \$58,000.

- Q. Now, in establishing your cost basis, how did you account for the plugging liability and the salvage value of the well?
- A. I took the approach that the Chambers Number 1 wellbore, prior to the force pooling that was issued in October of last year, the wellbore had some value, salvageable value that the working interest owners were entitled to, the working interest owners being those working interest owners prior to the force pooling, the ones who in effect had lost the lease. They also had an obligation to plug the well.

So based upon that premises, I have calculated a salvage-less-plugging-cost value. That's detailed in Exhibit Number 13, the second page. It lists the

equipment, the salvageable equipment and the associated plugging cost estimates. That net value is \$32,107.15.

In addition to that, we had approximately \$40,000 -- or actually it was \$39,355 that was associated with plugging the well back and recompleting it as a Wolfcamp producer.

I employed a 200-percent penalty just as to the actual workover expense of \$39,355, so the penalty would be \$78,710. I added to that the estimated net salvage value less plugging cost of \$32,107.15, to give us a cost basis of \$150,172.15 as the cost basis to recoup for the pooled interest owners as to the Wolfcamp in the Chambers Number 1 well.

- Q. So in effect, you're allowing these pooled interest owners to enjoy a credit for the savings of the plugging liability; is that what you've done basically?
  - A. That's correct.

- Q. Let's explain why Permian is seeking a 200percent risk penalty for a recompletion after the fact.
- A. Well, some would argue that there's no geological risk, but there was considerable economic risk -- I mean mechanical risk, associated with plugging the well back, that Permian took upon themselves. We have also offered, as we'll testify, the opportunity for these pooled interest owners to participate in the project, in effect, with a

free look at the results.

- Q. And again as we've discussed before, you're comparing some \$39,000 in actual costs pre-penalty which resulted in re-establishment of Wolfcamp production, as opposed to almost \$1.7 million in costs for a new drill. So isn't it accurate to say that these interest owners come out way ahead economically?
  - A. That's correct.
- Q. Let's discuss the new Chambers Number 2 well, and again explain what we're trying to do there.
- A. Again, in reaction to our failed effort on the Hillburn Number 3 well, we acquired 3-D survey across the Hillburn and the Chambers leases.

Having processed that 3-D seismic data, it became apparent to us that the original location, both surface and bottomhole, of the originally proposed Chambers Number 2 well was not favorable to encounter the Strawn algal mounds in the area. That necessitated the changing of the surface location and bottomhole location to our currently proposed Chambers Number 2.

- Q. Okay, what's Exhibit 14?
- A. Exhibit Number 14 is an application, NMOCD Form
  C-101 Application to -- Permit to Drill the Chambers Number
  2 well at the surface location of 1038 feet from the south
  line, 802 feet from the east line, with a bottomhole

location proposed at 950 feet from the south line and 1500 feet from the east line.

- Q. These footage locations are current as of yesterday?
  - A. That's correct.

- Q. And Exhibit 15, what's that?
- A. Exhibit 15 is the NMOCD Form C-102, Well Location and Acreage Dedication Plat. It illustrates the surface location of the newly proposed Chambers Number 2, the Strawn entry point, expected Strawn entry point of the Chambers Number 2 and the bottomhole location of the Chambers Number 2.

It also illustrates the existing location of the Chambers Number 1 well, being 555 feet from the south line, 2085 feet from the east line -- that is a typo on the plat -- and it illustrates the 80-acre south half of the southeast quarter project area associated with directional drilling of the Chambers Number 2 well.

The attachments to the C-102 are well profiles, drilling plans that have been prepared, that illustrate the wellbore geometry that's been proposed with the Chambers Number 2.

We expect to drill vertically down to approximately 10,200 feet, pick up motors and kick the well off with a build angle and drill a pilot hole through the

Strawn formation to approximately 11,600 feet. We expect to encounter the Strawn at 11,355 feet, the Strawn porosity at approximately 11,420 feet.

At that point in time we'll evaluate, via open hole logs and DST, the productive potential of the Strawn. If favorable, we'll run 5-1/2 casing to the top of the Strawn formation or the base of the shale formation and then turn the well horizontally within the Strawn porosity interval at 11,420 feet and drill approximately 500 feet of horizontal lateral.

The necessitation for the build angle has been common in this area. You've got such a short distance between the top of the Strawn or the base of the shales and the Strawn porosity, you have to enter the Strawn with some built-in angle to make that turn quick enough and not leave the shales open above you. It's hard to turn the well with the shales encased above you.

The additional attachments to the C-102 are a topographic map that locates the Chambers Number 2 as to the town of Lovington and other lands.

- Q. Is there significant risk associated with your proposed drilling procedure?
  - A. Yes, there is.

Q. Does that mechanical risk constitute the basis for the risk penalty that Permian is seeking?

- A. That constitutes a portion of it. The geological risk also constitutes a portion of it.
- Q. All right. Is Exhibit 16 a narrative of your proposed drilling procedure?
  - A. That's correct.

- Q. Let's talk about geology briefly. Let's refer to Exhibit 17, and if you would provide the Examiner with an overview of the Strawn and Wolfcamp geology in the area.
- A. Exhibit Number 17 is a producing horizon map in the area of the Chambers lease. It by color illustrates existing producing zones from the Wolfcamp, Strawn, Atoka and Morrow formations. It also illustrates cumulative production from those wells, up through January of 2001.

You can see that the Chambers Number 1 well, located in the southwest quarter of the southeast quarter of Section 7, has cumulative production of approximately 394,000 barrels of oil and 978,000 MMCF of gas. That is a Wolfcamp well.

You'll notice that there are three Strawn wells adjacent or surrounding the Chambers 7 Number 1 well.

Those wells are drilled and operated by Chesapeake Energy.

Exhibit Number 18 is a Wolfcamp structure map.

It's just illustrating the structural position of the

Chambers Number 1. It's also got an isopach of the

Wolfcamp that's been superimposed on the structures. It

shows a nosing feature structurally into the southeast quarter of Section 7. It shows the tops of the Wolfcamp formation in the Chambers Number 1 well and the associated offset wells.

Exhibit Number 19 is simply a cross-section from the wells, east-west or west to east, through wells in Section 7, the Chambers Number 1 well and the Chesapeake wells. It illustrates the Wolfcamp formation locally -- or predominantly which produces out of the Three Brothers formation at approximately 10,500 feet.

It shows the discontinuity of the porosity in the Wolfcamp formation from well to well, but it shows the continuity of the structural thickness of the Wolfcamp formation.

The Wolfcamp formation in this area is a limestone reef. It's believed that the porosity has developed adjacent to some shoreline feature, hence the Wolfcamp -- If you'll refer back to Exhibit Number 18, you can see the Wolfcamp producers kind of align themselves in a northeast-southwest trend along that structural nosing feature, which would be indicative of kind of a shelf margin buildup.

Exhibit Number 20 is a map that illustrates the Strawn structure. This was derived off of subsurface data. It also illustrates DST information from Strawn wells

adjacent to the proposed Chambers Number 2 location. It also illustrates cumulative production from the Strawn wells through, again, I believe, January of 2001.

You'll note that there are three wells, three Strawn wells, offsetting the Chambers Number 2 proposed location.

The well to the northwest is the Chesapeake

Carlisle 7 Number 1 well, which currently Permian Resources

operates.

The well directly to the north is the Chesapeake Chambers 7 Number 1 well.

And the well to the northeast is the Chesapeake Alston 8 Number 1 well.

Those wells were originally all Strawn completions. The Chesapeake Chambers 7-1 and Alston 8

Number 1 currently are producing wells. The Chesapeake -or now the Permian Resources Carlisle 7 Number 1 well, has been temporarily abandoned after the Strawn formation.

Exhibit Number 21 is a Strawn structure map that was derived off of the 3-D survey that we acquired and had processed by our geophysicist. It's similar to Exhibit Number 20. It also notates the proposed surface location of the Chambers Number 2 well.

Exhibit Number 22 is a cross-section of the Strawn interval across Section 7 from west to east. It

takes in the Permian/Chesapeake Carlisle 7-1 well, goes
through the Chambers -- existing Permian Chambers Number 1
well up north to the Chesapeake Chambers 7-1 well, and then
back to the east to the Chesapeake Austin 8 Number 1 well.

Highlighted on the cross-section again is the Strawn interval. The Strawn in this vicinity has been classified as an algal mound buildup or buildups. They tend to be small in nature but prolific producers when discovered.

The Carlisle 7 Number 1 well, the Chesapeake

Chambers 7 Number 1 well and the Austin 8 Number 1 well all
encountered very good Strawn porosity in the algal mounds,
as did the Permian Resources Chambers Number 1 well, but
the Chambers Number 1 was wet in the Strawn.

Exhibit Number 23 is a time-slice map illustrating, based upon the geophysical data that again we acquired and have processed. It shows the Strawn interval and the predicted buildup of the Strawn algal mounds in concurrence with the Chambers Number 2 location.

Exhibit Number 24 was again prepared by a geophysicist. It is a flattened horizon of the Strawn in and around the Chambers Number 2 proposed location's area. What the geophysicist attempted to do was take a time slice and show how the Strawn algal mounds have built up in the area.

And again, the thing that is interesting to note here is that the algal mounds as they appear colorwise on this plat have been proved up by the drilling of actual wells. And you can notice that the algal mound, as it's depicted in this projection, associated with our Chambers Number 2 well is predominantly and almost exclusively in the south half of the southeast quarter of Section 7.

Those are quarter-section lines that are depicted on that map.

Again, our original Chambers Number 2 well, surface location and bottomhole location, was going to be in the north half of the southeast quarter of Section 7. Having acquired this data, that's what has necessitated the relocation of the surface location and bottomhole of the Chambers Number 2 well. And we feel like this data has credence because it illustrates the location of the offsetting wells and their encounter in the Strawn algal mounds in the area.

- Q. In your opinion, has Permian fully evaluated all available standard well locations for the Chambers Number 2 and eliminated them?
  - A. Yes, we have.

Q. In your opinion will the well at its proposed unorthodox location be best situated to efficiently and economically recover Strawn reserves from the proration

unit?

- A. Yes, that's my opinion.
- Q. And if Permian's Application is not approved and the unorthodox location not granted, is there a likelihood that waste will result?
  - A. That's correct.
- Q. Let's turn to the issue of well costs. If we could refer to Exhibit 25, your AFE exhibit.
- A. Exhibit 25 is an authority for expenditure and a cost estimate to drill and complete the Chambers Number 2 well. This was the same AFE that was forwarded to the parties that we have requested to be pooled. It amounts to a total cost of \$1.6 million.

The plans are to, as I previously described, evaluate the Strawn formation through a pilot hole. If the Strawn exhibits productive qualities, we will run casing to the top of the Strawn interval and then turn the well horizontal. If the Strawn is absent or tight, it is our plans also to evaluate the Wolfcamp formation and possibly complete the Wolfcamp formation. If that is the case, it will require simultaneous dedication of the Chambers Number 2 well with the Chambers Number 1 well as to the Wolfcamp.

The possibility of dual-completing the Strawn and the Wolfcamp will primarily be dependent upon encountering both formations and pressure formation as derived by DST

testing of the Wolfcamp in the Strawn formation.

There is some concern that the Wolfcamp formation may be partially depleted by the Chambers Number 1 well.

In that case, that would limit downhole commingling of the Wolfcamp and Strawn and precipitate two strings of tubing which were not estimated in this AFE.

- Q. Now, are the charges and costs reflected on Exhibit 25 in line with what's being charged by other operators in the area for similar horizontal well projects?
- A. At this point in time in the industry -- This was actually prepared back in April of 2002. Rig rates were a little higher then than they are today, so it's kind of a moving target. But I would say that they're in the area.
- Q. Would you expect actual costs to come in a little lower?
- A. On some items, and some items may be a little bit higher.
- Q. And what drilling and producing overhead rates are you proposing?
- A. We proposed an administrative overhead rate of producing wells of \$650 a month, and I believe we asked for drilling overhead rates of \$6000 per month.
- Q. Let me make sure I heard you correctly: \$650 and \$6000?
  - A. I believe so. May want to refer to the

Application.

- Q. And again, Permian is seeking the 200-percent risk penalty for its costs based on geologic and mechanical risk factors?
  - A. That's correct.
- Q. And does Permian seek that the order provide for an adjustment of the drilling and producing overhead rates in accordance with the current COPAS bulletin for the area?
  - A. Yes, we request that also.
- Q. And in your opinion, would granting Permian's Application be in the best interests of conservation and the prevention of waste?
  - A. Yes, it would.
- Q. Were Exhibits 9 through 25 prepared by you or at your direction?
  - A. Yes, they were.

MR. HALL: Mr. Examiner, at this time we would tender Exhibits 26 and 27. They are the notice affidavit for Case Numbers 12,953 and 12,954, respectively.

That concludes our direct of this witness. We again move the admission of Exhibits 9 through 27.

EXAMINER STOGNER: Exhibits 9 through 27 will be admitted into evidence.

Okay, I'm still a little bit confused here. The pooling case is for just the Strawn formation?

MR. HALL: Yes, sir. 1 EXAMINER STOGNER: The Wolfcamp is not included 2 in the --3 4 MR. HALL: We're regarding the Wolfcamp as 5 previously pooled under R-11,682. 6 EXAMINER STOGNER: Okay, so that would be under the new -- or the amended order? 7 MR. HALL: Yes. 8 EXAMINER STOGNER: Okay. Now, under the amended 9 10 order that would still be 200 percent, or how are you proposing -- Essentially what you have here is a 11 recompletion of an old well that has produced quite a bit 12 13 of production, it appears. And now you want to drill an infill well. 14 15 Are you still seeking 200 percent? MR. HALL: Yes, I believe that's appropriate, 16 based on the testimony, given the risks involved. 17 EXAMINER STOGNER: Okay. Now let's talk about 18 19 the Strawn. 20 EXAMINATION 21 BY EXAMINER STOGNER: Now, the Strawn in this spacing unit, the 22 Q. 23 Chambers Number 1 never had any production from the Strawn; 24 is that correct? 25 It had marginal volumes produced out of the Α.

Strawn when Merit recompleted it in the Strawn. I don't 1 know that Merit ever filed a C-103 evidencing their Strawn 2 completion, and in fact our records indicate that they did 3 4 not. So we post-production filed that C-103 on behalf of 5 Merit. I believe that the production that was reported 6 7 via state reports as to the Wolfcamp pool from the time 8 period -- and I'll refer to -- I believe it was Exhibit 11 -- from 10 of 1997 through 5 of 2000, those production 9 volumes that were reported actually came from the Strawn 10 horizon. 11 So the Chambers Number 1 did produce small 12 amounts of oil from the Strawn. 1.3 EXAMINER STOGNER: Mr. Brooks, do you have any 14 questions? 15 MR. BROOKS: Yeah, let me understand this. 16 don't recall from your land witness's testimony, is there a 17 18 difference in ownership between the Strawn 80-acre unit and 19 the Wolfcamp 160-acre unit? MR. HALL: In the south half of the southeast --20 21 MR. BROOKS: Correct. 22 MR. HALL: -- there is. MR. BROOKS: So the 80-acre unit does not have 23 24 exactly the same ownership pattern as the 160-acre unit that's been previously pooled? 25

MR. HALL: Well, that's right, of course 1 proportionally reduced as well. But the individuals are 2 3 the same in either case. MR. BROOKS: But the interests are not identical? 4 5 MR. HALL: That's correct. MR. BROOKS: Okay. The previous order related 6 7 only to the proposed well, which was not ever drilled. Now, I think I understand what you propose to do 8 9 on cost recovery for the recomplete, that is to say, 10 basically you propose to put a 200-percent penalty 11 applicable to the recompletion costs only, and then provide 12 a credit against the total cost recovery for the salvage 13 value? That's right. 14 MR. HALL: MR. BROOKS: Okay, I thought I understood that. 15 Now, what do you propose to do with regard to 16 17 cost recovery for the new well? I understand you want a 200-percent penalty, but how do you propose to allocate 18 19 costs between the Strawn and the Wolfcamp? 20 MR. HALL: I understand what you -- It's difficult to do. Do you want to address that? 21 22 It's most likely that it will be an THE WITNESS: 23 either/or completion. It will be a Strawn completion and 24 not a Wolfcamp completion, or a Wolfcamp completion and not a Strawn completion. 25

It's very unlikely that both wells -- both horizons will be completed at the same time, again because of downhole commingling problems and wellbore geometry.

What we would propose is that if the Strawn well

and the Strawn horizon is productive, the owners that are

pooled as to that 80 acres are -- the 200-percent penalty
would apply to them.

If the Strawn is absent and the Wolfcamp productive, we would propose that the 200-percent penalty associated with the proportional cost to drill and complete just to the Wolfcamp formation be applied to the 160-acre proration unit and their associated owners.

MR. HALL: Would you apportion that on the basis of depth?

THE WITNESS: I would apportion that on the --

MR. HALL: The footage?

THE WITNESS: -- probably on the basis of depth and the cost incurred to a certain depth point.

So depth would be the primary factor used to proportion those costs.

## **EXAMINATION**

## BY MR. BROOKS:

Q. Now, do you propose to keep track of the actual cost to drill to a particular depth, or do you propose to simply use a mathematical proportion of costs in that...

A. I would propose to keep track of the actual 1 cost --2 Okay, that's the way we --3 Q. -- to drill to the appropriate depth. 4 Α. That's the way we've been doing -- particularly 5 6 the -- the only ones I've done have been up in the 7 northwest, but that's the way we've been doing these cost 8 allocations --9 Α. Right. 10 -- is basically the drilling to the shallower Q. 11 formation is allocated to the shallower formation, and then the drilling from there on down is allocated to the deeper 12 13 formation. But you do not anticipate a simultaneous 14 completion? I would say that that would be unlikely at this 15 Α. point in time because of the possibility of the pressure 16 17 differences if we encounter the Strawn and the pressure 18 that exists in the Wolfcamp. Okay. Now going to a different subject, what is 19 Q. 20 unorthodox about this proposed location for the 80-acre unit? 21 It is closer than the normal field rules allow 22 23 for offset. To which line? 24 Q.

25

A.

To the north line.

Q. To the north line? And let's see, it's -- I had 1 the footages from the south line. It's 1038 from the south 2 line --3 So take 1320 from that and --Α. 4 Yeah, it's going to be about -- It's going to be 5 Q. 6 a little less than 330. Is 330 the rule --7 Α. Yes. -- for that field, that pool? Okay, so -- And 8 9 why can't you drill it further south? 10 A. Predominantly based on the geophysical data and the flattened Strawn horizonal map, it shows that the --11 Which exhibit is that? 12 Q. 13 That would be Exhibit 24. A. 14 Okay. Q. -- it shows that the algal mound exists in kind 15 A. of an east northeast-southwest orientation. 16 17 Is the light portion, is that the algal mound? Q. Is that in that light-colored splotch there? 18 19 Α. Yes. 20 Very technical term. Q. 21 Yeah. A. MR. BROOKS: Okay, very good. I guess that's all 22 23 my questions. I have no other questions. 24 EXAMINER STOGNER: That concludes our case. 25 MR. HALL: I hope

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everything was clear, that we presented a new and exciting
 1
 2
      case concept to you.
 3
                 EXAMINER STOGNER: If there's nothing further,
 4
      then both of these cases will be taken under advisement.
 5
                 (Thereupon, these proceedings were concluded at
 6
      10:17 a.m.)
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                                          I do hereby certify that the foregoing is
                                          a complete record of the proceedings in
13
                                         the Examiner hearing of Case No.
                                         beard by me on____
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                                           Conservation Division
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## CERTIFICATE OF REPORTER

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

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

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

WITNESS MY HAND AND SEAL November 5th, 2002.

STEVEN T. BRENNER

CCR No. 7

My commission expires: October 16th, 2006