1 STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT 2 OIL CONSERVATION DIVISION 3 4 IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION 5 DIVISION FOR THE PURPOSE OF CONSIDERING: 6 CASE NO. 10169 7 APPLICATION OF PACIFIC ENTERPRISES) OIL COMPANY (USA) FOR COMPULSORY 8 POOLING, EDDY COUNTY, NEW MEXICO.) 9 10 REPORTER'S TRANSCRIPT OF PROCEEDINGS 11 EXAMINER HEARING BEFORE: MICHAEL E. STOGNER, Hearing Examiner 12 December 19, 1990 13 11:22 a.m. Santa Fe, New Mexico 14 15 This matter came for hearing before the Oil 16 Conservation Division on December 19, 1991, at 11:22 a.m. 17 at the Oil Conservation Division Conference Room, State 18 Land Office Building, 310 Old Santa Fe Trail, Santa Fe, 19 New Mexico, before Maureen R. Hunnicutt, RPR, Certified 20 Shorthand Reporter No. 166, for the State of New Mexico. 21 22 23 FOR: OIL CONSERVATION BY: MAUREEN R. HUNNICUTT, RPR DIVISION Certified Shorthand Reporter 24 CSR No. 166 25

1	I N D E X		
2	December 19, 1991 Examiner Hearing		
	CASE NO. 10169	1	PAGE
3	APPEARANCES	ŀ	3
4	OPENING STATEMENTS		
5	By Mr. Kellahin		4
6	APPLICANT WITNESSES: M. CRAIG CLARK		
7	Direct Examination by Mr. Kellahin Cross-Examination by Mr. Vandiver		5 13
8	RICK RICKETTS		
9	Direct Examination by Mr. Kellahin		14
10	REPORTER'S CERTIFICATE		24
11	* * * E X H I B I T S		
12	APPLICANT PEOC EXHIBIT	ID AI	OT'MC
13	1	15	23
14	2	18	23
15	3		23
16	4	19	23
17	5	5	13
18	6	7	13
19	7	8	13
20	8	8	13
21	9	9	13
22	10	11	13
23	11	12	13
24	12	12	13
25			

1 2 a P P E A R A N C E S 3 FOR THE DIVISION: ROBERT G. STOVALL, ESQ. General Counsel 4 Oil Conservation Commission 5 State Land Office Building 310 Old Santa Fe Trail Santa Fe, New Mexico 87501 6 7 FOR THE APPLICANT: KELLAHIN, KELLAHIN & AUBREY 8 Attorneys at Law BY: W. THOMAS KELLAHIN, ESQ. 9 117 North Guadalupe Santa Fe, New Mexico 87501 10 11 FOR THE APPLICANT: FISK & VANDIVER Attorneys at Law 12 BY: DAVID R. VANDIVER Seventh and Mahone, Suite E 13 Artesia, New Mexico 88210 14 15 16 17 18 19 20 21 22 23 24 25

EXAMINER STOGNER: On the record. Case No. 10169 1 I'll call that at this time. 2 MR. STOVALL: The application of Pacific Enterprises 3 Oil Company (USA) for compulsory pooling, Eddy County, 4 New Mexico. 5 EXAMINER STOGNER: Call for appearances. 6 MR. KELLAHIN: Mr. Examiner, I'm Tom Kellahin of the 7 8 Santa Fe law firm of Kellahin, Kellahin & Aubrey, appearing on behalf of the applicant. 9 EXAMINER STOGNER: Are there any other appearances? 10 MR. VANDIVER: Mr. Examiner, my name is David Vandiver 11 12 with the firm of Fisk & Vandiver of Artesia, appearing on 1.3 behalf of Yates Petroleum Corporation. I have no witnesses. 14 MR. STOVALL: Yates, I assume, is one of the parties 15 to be force pooled, Mr. Vandiver? 16 17 MR. VANDIVER: Yes. EXAMINER STOGNER: Are there any other appearances? 18 19 (No response.) 20 MR. KELLAHIN: May the record reflect, Mr. Examiner, that both Mr. Craig Clark and Mr. Rick Ricketts have been 21 duly sworn, continue under oath and have been qualified as 22 respective experts in their field? 23 24 EXAMINER STOGNER: The record will so show. 25 Mr. Kellahin, you may proceed.

MR. KELLAHIN: A preliminary matter, Mr. Examiner. I have taken out a Byram's Reporting Service and highlighted in yellow what I think are the applicable orders and description of acreage that might be involved in the formations to be pooled.

We've got at least four that I could find -four if not five potential different gas pools, all of
which are reflected on the docket with the exception of
one. It's not fatal, and it's certainly not critical, but
in looking at the information, it would appear that there
is also a south Millman-Morrow gas pool in the approximate
vicinity of this section, and that's one of them that's
not identified in the docket sheets. So as reference
material, there are the pools that we could find.

EXAMINER STOGNER: Thank you, Mr. Kellahin.

M. CRAIG CLARK,

the Witness herein, having been previously duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

1.3

2.0

Q. Mr. Clark, let me direct your attention, sir, to Exhibit No. 5. Within this particular area, your company has filed an application to pool for 320-acre gas spacing from the top of the Wolfcamp to the base of the Pennsylvanian?

A. That's correct.

2.0

- Q. In attempting to consolidate the acreage in order to form on a voluntary basis a 320-acre gas spacing unit, was it your responsibility to perform those duties?
 - A. Yes, it was.
- Q. What did your company determine would be the orientation of the 320 in Section 21?
- A. It would be the south half of Section 21, 19 South, 28 East.
- Q. When we look at Exhibit No. 5, there is a window in the top of the display that summarizes. It says, "320-acre Drilling Ownership."
 - A. Uh-huh.
 - Q. What does that right reflect?
- A. That reflects when you take the interest of the parties within the individual tracts and then multiply it out, and by a 320-acre unit it will show their working interest ownership in that unit.
 - Q. "PEOC" is Pacific, the applicant?
 - A. That is correct.
- Q. When we break that interest out into individual leases in the 320, how is that shown on the display?
- A. It shows Pacific acquired its interest from

 Bulldog Energy. We acquired a farmout from them, and that
 is

in the southwest quarter of southeast quarter. The remaining part of the southeast quarter is owned a hundred percent by Chevron.

And then the southwest quarter is owned by ARCO, Yates, Marathon and DeKalb, and their ownership is reflected on that hundred percent tract. And again, when you look back up and see the 320-acre, it is just basically cut in half, since they own 50 percent of the 320-acre unit.

- Q. Have you also taken the information shown on that display and tabulated it?
 - A. Yes, I have.

1.3

- Q. How was that shown?
- A. That is shown on Exhibit No. 6 where it has, again, the 100 percent ownership of the various tracts, and these are, again, there is shallow production in this area that we are not particularly looking at. We are seeking to force pool from below the -- from Wolfcamp below, and therefore, these interests reflect the deep rights. The shallow rights could be owned by different people; however, we're not seeking to pool those parties.

And then at the bottom of page 6 or Exhibit 6, it shows the 320-acre ownership.

Q. You're seeking a pooling order in the absence of voluntary agreement from all parties shown on

Exhibit No. 6 in the summary excluding Pacific Enterprises?

A. That's correct.

2.4

- Q. Describe for us your first efforts to form a working, voluntary agreement among the working interest owners.
- A. Well, first efforts are shown on Exhibit 7, we sent a letter out August 8th, and that was to Chevron. We knew that they were going to take a longer time than the other parties to respond, and therefore, we proposed -- we formally proposed the well to them.

And then, Exhibit 8, we proposed the well to the remaining interest owners.

- Q. So in August you went to Chevron, and then followed it up in September's letter, Exhibit 8, with the rest of the working interest owners?
- A. And Chevron again. We did -- The second page of Exhibit 8 has ARCO. It has the parties that own the southwest quarter. The third page, since we had already proposed it to Chevron, we dealt with differently. We used the same front letter, but it was sent to two different parties, two different ways.
 - Q. All right.
- A. And that's also reflected on the AFE, had the owners in the southwest quarter and shows Pacific, et al.,

owning 50 percent, which was supposed to include Chevron, and then the next page shows Pacific, et al., when we were dealing with Chevron's interest.

- Q. And you've provided to those various interest owners not only their percentage, but you've calculated for them what you estimated to be their share of the costs of the AFE?
 - A. That's correct.

2.1

2.4

- Q. And when you turn through some of that, you finally get to the AFE itself?
 - A. That is correct.
 - Q. What's the vintage of the AFE?
- A. This AFE was prepared in August; and since that point with the Middle East crisis, the prices have come up --

(Discussion off the record with the reporter.)

-- since that point, the Middle East crisis, the prices for drilling have come up somewhat from that August AFE.

And if you'll turn to Exhibit 9, we proposed a new well -- or not -- we sent out a new AFE November 27th when we had to continue this hearing; and at that time we advised them that we were continuing the hearing, and we sent out this new AFE to have costs that were more reflective of the current situation.

1	Q. All right. The revision in the AFE has
2	resulted in a slight increase, oh, about 47,000 increase
3	\$47,000 increase, approximate?
4	A. Approximately.
5	Q. Okay.
6	A. And that's mainly due to the footage work. It
7	went from, I believe, \$15 a foot on our original AFE, and
8	this new AFE has it at \$22 a foot for drilling.
9	Q. Have you received any objection from any of the
10	working interest owners as to the AFE?
11	A. No, we have not.
12	Q. Has anyone objected to the orientation of the
13	spacing unit?
14	A. No, they have not.
15	Q. To the well location?
16	A. No.
17	Q. Have you submitted to them a proposed joint
18	operating agreement?
19	A. We have not submitted a proposed joint
20	operating agreement. I've talked to Chevron. They just
21	haven't come up with the decision of what they want to do
22	yet.
23	We have a farmout, as I said, from Bulldog, and
24	so we are under a deadline. That's why we're pushing
25	forward with getting this thing done. I contacted Marrow

Brosely (phonetic approximation) when I sent out this letter November 27th, just to find out if they had come up, and they just had not reached a decision yet as to whether they were going to participate or farm out.

- Q. The plan, as you understand it, is to locate the well at a standard location within the lease shown on Exhibit No. 5, held by Bulldog Energy?
- A. Yes. We plan our location being 1,980 from the east line and 660 from the south line, just a standard location.
- Q. Your time constraints with Bulldog on the farmout requires that you commence the well by when?
 - A. Middle of February.

- Q. All right. We've looked at Exhibit 9. Identify and describe Exhibit 10.
- A. Exhibit 10 is a memo from our operations department. It's just detailing the costs for drilling this well, and this again is -- they use costs that they're familiar with, that they've been drilling wells in the last month or two.
 - MR. KELLAHIN: Excuse me just a second.
- 22 (Discussion off the record.)
- MR. KELLAHIN: Thank you.
- EXAMINER STOGNER: Mr. Kellahin.
 - Q. (By Mr. Kellahin) Back on the record.

- A. This is a memo from our operations department saying that they believe that these costs are in line with costs to drill this well, and it also does make a notation in here that they received a preliminary AFE from an outside consultant to get a different view of the AFE.
- Q. Did the processing of the AFE follow its normal course of evolution through your company with your consultants?
 - A. Yes, it did.

- Q. It completed the process. It was revised and submitted to working interest owners?
 - A. That's correct.
 - Q. Let's go to Exhibit 11.
- A. Exhibit 11 is the only response we've had from any of the parties in this, and this is where Chevron has agreed to farm out to us on terms which was -- basically they're asking for a 35 percent back-in. We feel that Marboff (phonetic approximation) farmout only had a 25 percent back-in, and we feel with the amount of risk involved in this well, a 35 percent back-in is too high to do that.

So Exhibit 12 is our reply to their letter and we have had no response to that yet.

Q. All right. What do you recommend to the Examiner for overhead rates, Mr. Clark.

1	A. For drilling well rates, we'd like to have
2	\$5,500, producing well rates would be \$550 a month.
3	Q. Again does this fall in line with the Ernst &
4	Young well cost averages that they've tabulated for
5	southeastern New Mexico?
6	A. Yes, it does.
7	MR. KELLAHIN: That concludes my examination of
8	Mr. Clark. We move the introduction of these
9	Exhibits 4 through 12.
10	THE WITNESS: 5 through 12.
11	MR. KELLAHIN: I'm sorry, 5 through 12.
12	EXAMINER STOGNER: Exhibits 5 through 12 will be
13	admitted into evidence.
14	(Applicant PEOC Exhibits 5 through 12
15	were admitted into evidence.)
16	EXAMINER STOGNER: Mr. Vandiver, your witness.
17	CROSS EXAMINATION
18	BY MR. VANDIVER:
19	Q. Mr. Clark, have you contacted any of these
2 0	parties to be force pooled by telephone?
21	A. Yes, I have.
22	Q. And you've just had no response from Yates?
23	A. No, we have not. I talked to Mr. Bullock. As
2 4	I say, we were scheduled to go to a hearing the end of
25	November, and he said that they had not made up their

minds as to whether they were going to participate or not 1 2 yet. And you must commence under your Bulldog 3 Q. farmout by -- you said mid-February, was the date? 4 The date, I believe, was the 14th. 5 MR. VANDIVER: I have no further questions. 6 7 EXAMINER STOGNER: Thank you, Mr. Vandiver. Are there any other questions of this witness? 8 MR. KELLAHIN: Nothing. 9 10 EXAMINER STOGNER: You may be excused. 11 Mr. Kellahin. 12 RICK RICKETTS, the Witness herein, having been previously duly sworn, was 13 examined and testified as follows: 14 DIRECT EXAMINATION 15 BY MR. KELLAHIN: 16 Mr. Ricketts, have you as a petroleum geologist 17 Q. for your company made a geologic investigation of this 18 19 prospect? 20 Α. Yes, I have. As part of your study were you able to reach a 21 22 conclusion with regards to the risk involved in drilling this well? 23 24 Yes, I have. Α. 25 Have you been able to a assess that risk in Q.

terms of the percentage that the division awards for undertaking the drilling of this well to be charged against nonconsenting working interest owners?

A. Yes, I have.

- Q. What is your recommendation and opinion?
- A. I recommend we get the maximum penalty for nonconsent.
- Q. Identify and describe your displays and show us why you've reached that conclusion.
- A. Okay. Exhibit 1 is a structure map contoured on the base of the Lower Morrow shale, 50-foot contour interval. The wells indicated on here are all the penetrations of Wolfcamp or deeper. It does not include the shallow wells, just Wolfcamp or deeper.

And you'll see there are quite a few Morrow penetrations and quite a few Morrow completions on here. However, if you examine the production on these Morrow completions -- and what I did, I took a 9-square-mile block around Section 21, and in that area there were 13 Marrow penetrations, 9 Morrow completions with 70 percent of them completed in the Morrow, which is a pretty good percentage. However, the average production on those 9 wells is only 900 million cubic feet of gas. And at this depth 900 million cubic feet of gas is pretty marginal completion.

16 We're dealing with a well that costs Q. approximately \$840,000? I think that's correct. Α. Q. What would you estimate would be the price received for the gas sold from the well? Okay. At this point we're estimating it to be Α. around \$1.50. And if you were to get a bcf of gas out of it, 0. that would give you a million and a half dollars? That's correct. Α. Ο. You'd get back less than twice your money. Quite a bit less. That does not include the overrides and the net interest we'd have would be quite a bit less than half; that's correct, or twice. In terms of gross dollars, a 100 percent Ο. interest without taking the overrides, you'd get your money back one and a half times? About that, yeah. Α. How do you assess that? Q. Α. Well, I think it makes the well fairly risky. In other words, you have to make considerably better than

1

2

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Pacific Enterprises.

Q. Can you show the Examiner those wells among the

the average well for it to be an economical well for

Q. Can you show the Examiner those wells among the 13 that have been able to produce in excess of a bcf of

gas?

1

2

3

5

6

7

8

9

10

11

12

15

16

17

18

19

20

- A. Okay. There are actually three wells that will produce an excess. The first one would be in Section 16, the Yates No. 1 Millman "SB" State in the north half of Section 16, which is cum 1.4 bcf to date.
 - Q. Just a minute.
 - A. I'm sorry.
 - Q. I need to find out --
 - A. Yes.
 - Q. In 16?
- A. Yes, the north half -- north half northeast quarter of Section 16.
- Q. You've got two wells in 16. The north half well has got 1.4 bcf cum?
 - A. That's correct.
 - Q. All right. That's one of the good ones. Where is the next one?
 - A. Okay. In Section 17 in the southeast quarter of Section 17, the Yates Millman HD State No. 1 is cummed a little over 1.5 million.
 - Q. All right, sir. Any others?
- A. In Section 28, the south half of Section 28, the Oxy No. 1 "CX" State Comm. has produced 2.4 bcf.
- I might add, there is one other well that is just below a million cubic feet of gas -- or a billion

cubic feet of gas, and that is the Meridian Featherstone

State in the northeast of section 20, so you have three

that are over bcf, and one just right at bcf. The rest of

them are considerably below.

- Q. Let's look at how you've mapped the reservoir.
- A. Okay.

- Q. Let's see what the sand map looks like.
- A. Okay. Exhibit 2 is an isopach map of the "A" sand porosity. The "A" sand is really the main thing we're shooting for here. There are, of course, a number of Morrow sands stacked in this area, as we'll see when we look at the cross section. But the "A" sand is really the -- by far the most prolific producer.
- Q. Let's go get them all out, then. If the top one is the "A."
- A. The top one on that map is the "A"; that's correct.
 - Q. Okay.
- A. What I've done, I went through and mapped the standard or very continuous that I could map over the entire area, and that basically included two sands, the "A" and the "B."
 - Q. All right. We go lower, then. We get the B.
- A. That's correct. There are other sands that are less continuous and far more difficult to map. I did not

map on an individual basis.

- Q. In constructing the cross section, which is Exhibit 4, did you use the same wells in the cross section to show the "B" and the "A" sand?
 - A. Yes, uh-huh.
- Q. Okay. Let's look at the cross section then and see how those appear.
- A. This is a stratigraphic cross section found on the top of the Morrow clastics, the blue-shaded line at the top, runs basically south to north as you're looking at it, A A', and the "A" sand is the very continuous sand that runs -- that lies between the top of the Morrow clastics and the base of the Lower Morrow shale.

The "B" sand is the continuous sand, the thicker, continuous sand below the base of the Lower Morrow shale. And as I mentioned, you can see a number of other sands that are less continuous that are present in the area. Most of the prolific wells actually are producing out of the "A" sand.

- Q. Let's make a comparison of both sand maps and look at the two wells in 16.
- A. Okay. Neither well in Section 16 are -- the Yates "SB" State No. 2 and the "SB" State No. 1, neither one are actually producing out of the "A" zone. The "A" zone is behind pipe in both of those wells, potentially

productive, but it currently -- it's not producing out of either zone.

- Q. Okay. When we go to the "B" sand --
- A. Okay. The "B" sand is present in both wells. It is not producing in the "SB" State No. 1. Gross end tests of the right interval were covered condensate and salt water, so it may never be productive.
 - Q. Look at the cum on production, though.
 - A. The -

1

2

3

4

5

6

7

8

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

- Q. How do you --
- A. That's coming out of a stray sand much lower in the section.
 - Q. Okay.
- A. In fact, it's the lowest sand in the section.

 It indicated -- the red indicates the perforations on that particular zone.
 - Q. If we look at the cross section, then,
 Exhibit No. 4, look at the Millman "SB" State 1 Well, the
 red perforation is in this lower --
 - A. Yeah. Kind of a stray sand, yeah.
 - Q. Do you find that lower sand string (sic) are producing gas in any of these other wells that indicate --
 - A. No, I don't.
 - Q. You can't pick it up again?
 - A. Not that I can definitely correlate it with it,

no.

- Q. Well, that's one of your three wells that produces more than a bcf?
 - A. That's correct.
 - Q. What does that tell you about the risks?
- A. Well, it tells you at least one of your three wells in there, you're probably not going to hit that particular sand.
 - Q. Okay.
- A. As far as the "B" sand goes on these two wells, like I said, it's behind pipe. In the "SB" State No. 1, the bsq (phonetic approximation) over that interval were covered condensate and salt water. It was a long interval, so we can't tell for sure what came from what.

If you look at the "SB" State No. 2, however, it has a nice, thick porous "B" sand and has produced essentially nothing. It's basically a case-dry hole.

- Q. All right. Make a comparison for me in terms of sand thickness and cumulative production between the other two good wells. You've got a well in Section 20 just under a bcf?
 - A. That's correct.
 - Q. 17 feet in the --
- A. It's producing out of the "B" sand, and -- yeah, producing out of the "B" sand.

- Q. When you look to the "B" sand production out of the well in 28 with nine feet, are we getting "B" sand production out of that well?
- A. We're getting both "B" and "A" sand production out of that particular well; and it's difficult to say what -- how much is coming from each zone.
- Q. And when you make that same comparison of the "A" sand with the well in Section 20 and the well in Section 28 --
 - A. Section 20 does not produce out of the "A."
- Q. Right. When you get down to 28, you've got 15 feet?
 - A. That's correct.

- Q. Typical high-risk, Morrow channel deposition, that it's hard to project the quality of your sand or the productivity of your well --
 - A. That's correct.
 - 0. -- isn't that true?
- A. That is correct. Particularly in "B." The thing that hurts you in the "B" sand so much is the "SB" State No. 2 in the south half of 16, which has a good-looking sand on the log and it is not producing anything.
- Q. Any reservations at all, Mr. Ricketts, about recommending the maximum penalty?

1	A. No, none whatsoever.	
2	MR. KELLAHIN: Move the introduction of Exhibits 1	
3	through 4.	
4	EXAMINER STOGNER: Exhibits 1 through 4 will be	
5	admitted into evidence.	
6	(Applicant PEOC Exhibits 1 through 4	
7	were admitted into evidence.)	
8	MR. KELLAHIN: That concludes my examination of	
9	Mr. Ricketts.	
10	EXAMINER STOGNER: Thank you, Mr. Kellahin.	
11	Mr. Vandiver, your witness.	
12	MR. VANDIVER: I have no questions.	
13	EXAMINER STOGNER: Does anybody else have any	
14	questions of this witness?	
15	(No response.)	
16	EXAMINER STOGNER: Anything else further in Case No.	
17	10169?	
18	(No response.)	
19	EXAMINER STOGNER: If not, this case will be taken	
20	under advisement.	
21	(The foregoing hearing was concluded at the	
22	approximate hour of 11:46 a.m.)	
23	* I to hereby certify that the foregoing is	
24	a complete record of the proceedings in the Examiner hearing of Case No. 10169.	
25	heard by me on 19 December 19 90. Mahul E Layre, Examiner	

1 2 STATE OF NEW MEXICO 3) SS. COUNTY OF SANTA FE 4 REPORTER'S CERTIFICATE 5 6 I, MAUREEN R. HUNNICUTT, RPR, a Certified Shorthand 7 Reporter and Notary Public, DO HEREBY CERTIFY that I 8 stenographically reported these proceedings before the Oil 9 Conservation Division; and that the foregoing is a true, 10 complete and accurate transcript of the proceedings of 11 said hearing as appears from my stenographic notes so 12 taken and transcribed under my personal supervision. 13 I FURTHER CERTIFY that I am not related to nor 14 employed by any of the parties hereto, and have no 15 interest in the outcome hereof. 16 DATED at Santa Fe, New Mexico, this 29th day of 17 January, 1991. 18 19 20 MUNNICUTT, RPR 21 My Commission Expires: Certified Shorthand Reporter April 25, 1993 CSR No. 166, Notary Public 22 23 24 25