## STATE OF NEW MEXICO 1 ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT 2 OIL CONSERVATION DIVISION 3 IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION 5 DIVISION FOR THE PURPOSE OF CONSIDERING: 6 CASE NO. 10168 APPLICATION OF PACIFIC ENTERPRISES) 7 OIL COMPANY (USA) FOR COMPULSORY POOLING, EDDY COUNTY, NEW MEXICO. ) 8 10 REPORTER'S TRANSCRIPT OF PROCEEDINGS 11 EXAMINER HEARING 12 BEFORE: MICHAEL E. STOGNER, Hearing Examiner December 19, 1990 1.3 10:52 a.m. Santa Fe, New Mexico 14 15 This matter came on for hearing before the Oil 16 Conservation Division on December 19, 1990, at 10:52 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 2.0 Shorthand Reporter No. 166, for the State of New Mexico. 21 22 23 FOR: OIL CONSERVATION BY: MAUREEN R. HUNNICUTT, RPR 24 DIVISION Certified Shorthand Reporter CSR No. 166 25

1	I N D E X				
2	December 19, 1990 Examiner Hearing				
3	CASE NO. 10168	PAGE	- 1		
4	APPEARANCES	3	'   		
5	APPLICANT PEOC WITNESSES:				
6	M. CRAIG CLARK  Direct Examination by Mr. Kellahin	5	5		
7	RICK RICKETTS	15 16	_		
8	Direct Examination by Mr. Kellahin Examination by Examiner Stogner	15-16 21			
9	REPORTER'S CERTIFICATE	2 4			
10					
11	* * *				
12	EXHIBITS	ID ADMTD	,		
13	APPLICANT PACIFIC ENTERPRISES OIL CO. EXHIBIT				
14	<pre>Porcupine Prospect Structure Map B / Lower Morrow Channel</pre>	17 21	-		
15	Porcupine Prospect Isopach Map Lower Morrow Channel Clean Sand	18 21	-		
16	Porcupine Prospect Stratigraphic Cross Section A - A'	18 21	_		
18	4 Porcupine Prospect Land Plat	7 21	L		
19	5 Exxon State 16 #1, Working Interest Ownership	9 15	5		
20	<del>-</del>				
21	6 Letter, February 14, 1990, to Working Interest Owners, Re: Porcupine Prospect	9 15 #6140	>		
22	7 Memo, To: Ralph Moore, From: Jeff Ryan Date: December 17, 1990, Subj: AFE's	11 15	5		
23	8 Letter, June 12, 1990, to PEOC from Michael R. Goode, Division Landman	12 15	5		
25	9 Letter, June 21, 1990, to Mike Goode from M. Craig Clark	12 15	5		

				<del>-</del>
1		E X H I B I T S (CONTINUED)		
2		(**************************************		
3	APPL	ICANT PACIFIC ENTERPRISES OIL COMPANY EXHIBIT		
4	10	Letter, July 26, 1990, to Mike Goode from M. Craig Clark	13	15
5	11	Letter, November 7, 1989, to Exxon Company from M. Craig Clark, Re: Farmout Request	13	15
7	12	Letter, December 11, 1989, to PEOC from Joe B. Thomas	13	15
8 9	13	Letter, January 23, 1989, to Joe B. Thomas, From M. Craig Clark	14	15
10	14	Letter, February 7. 1990, to M. Craig Clark from Joe B. Thomas, Trades and Unitization	14	15
11	15	Letter, February 19, 1990, to M. Craig Clark from Kathryn A. Neeper	14	15
13	16	Letter, July 26, 1990, to Joe Thomas from M. Craig Clark	14	15
14	17	Fax Memorandum, Date: November 1, 1990 to William T. Duncan and James Bruce, Esq. from W. Thomas Kellahin	14	15
16	18	Letter, November 1, 1990, to Joe Thomas	14	15
17	19	from M. Craig Clark  Certificate of Mailing of Notice	22	22
19				
20				
21				
22				
23				
24				
25				

APPEARANCES FOR THE DIVISION: ROBERT G. STOVALL, ESQ. General Counsel Oil Conservation Commission State Land Office Building 310 Old Santa Fe Trail Santa Fe, New Mexico 87501 FOR THE APPLICANT: KELLAHIN, KELLAHIN & AUBREY Attorneys at Law BY: W. THOMAS KELLAHIN, ESQ. 117 North Guadalupe Santa Fe, New Mexico 87501 

EXAMINER STOGNER: Okay. Call the next case, 1 No. 10168. 2 MR. STOVALL: Application of the Pacific Enterprises 3 Oil Company (USA) for compulsory pooling, Eddy County, 4 New Mexico. 5 EXAMINER STOGNER: Call for appearances. 6 7 MR. KELLAHIN: Mr. Examiner, I'm Tom Kellahin of the Santa Fe law firm of Kellahin, Kellahin & Aubrey, 8 appearing on behalf of the applicant; and I have two 9 witnesses to be sworn. 10 11 EXAMINER STOGNER: Are there any other appearances? 12 (No response.) 1.3 EXAMINER STOGNER: There being none, will the witnesses please rise to be sworn? 14 (The witnesses were duly sworn.) 15 16 MR. KELLAHIN: My first witness is Mr. Craig Clark. 17 He's a petroleum landman with Pacific. M. CRAIG CLARK, 18 19 the Witness herein, having been first duly sworn, was examined and testified as follows: 2.0 21 DIRECT EXAMINATION BY MR. KELLAHIN: 22 23 Mr. Clark, for the record would you please Q. 24 state your name and occupation? 25 Α. My name is Craig Clark. I'm a petroleum

landman for Pacific Enterprises Oil Company (USA).

- Q. Mr. Clark, were you assigned the responsibilities as a petroleum landman on behalf of your company to attempt on a voluntary basis to consolidate the acreage for the drilling of the subject well?
  - A. I was.

- Q. Have you made a study of and are you familiar with that ownership?
  - A. Yes, I am.
- Q. And under your direction and supervision have you communicated with all the working interest owners in an attempt to derive their agreement on participation?
  - A. Yes, I have.
- MR. KELLAHIN: We tender Mr. Clark as an expert petroleum landman.
  - EXAMINER STOGNER: Mr. Clark is so qualified.
- Mr. Kellahin, before we go any further -
  MR. KELLAHIN: Sure.

EXAMINER STOGNER: -- in this one, we need to clarify a few things. Wasn't the Fren-Pennsylvanian gas pool the subject of a case and an order several weeks ago?

MR. KELLAHIN: Exactly right, Mr. Examiner. The division changed the spacing rules for the pool and changed them from 160 to 320; and you did that by order No. R-9333. Here's a copy of that order.

EXAMINER STOGNER: Okay. I'll take administrative notice of Order R-9333. And that particular order made the Fren Pennsylvanian gas pool who had -- that was being developed on 160-acre spacing now in line with the statewide 320-acre spacing pursuant to the general rule; is that correct?

MR. KELLAHIN: That's correct; right. You may remember, there were two different cases going on at the same time, the Anderson-Penn, we froze the 160 to its current boundaries and let the adjoining property go to 320.

The Fren pool, this one we're dealing with now, we changed the rule for the entire pool.

EXAMINER STOGNER: Okay. I remember those two. I forgot which one was which. I wanted to make sure that was clear.

With that, you may proceed.

- Q. (By Mr. Kellahin) Mr. Clark, let me direct your attention to what is marked as Pacific Exhibit No. 4. Identify and describe that for us.
- A. That is a plat of the land ownership for our particular proration unit for the east half of Section 16. This is for the deeper rights. That is what we're primarily interested in, the Morrow formation.

The southeast quarter is owned a hundred

percent by Exxon. The west half of the northeast quarter, 1 Pacific owns 75 percent. Fina Oil & Chemical owns the 2 other 25 percent. We have secured a farmout from them. 3 4 And Anadarko owns a hundred percent of the northeast They have indicated they'll participate; 5 northeast. 6 however, we have nothing signed by them at this point; annual Matador Petroleum owns the southeast northeast, and 7 we have secured a farmout from them. 8 So the two people we're looking to pool in this 9 case are Exxon and Anadarko. 10 11 EXAMINER STOGNER: Excuse me. While we're on 12 Exhibit 4, then the 320-acre proration unit, 50 percent is 1.3 owned by Exxon? THE WITNESS: Yes, sir. They own the entire 14 15 southeast quarter. 16 EXAMINER STOGNER: And ARCO has 12-1/2 percent? Yes, sir. 17 THE WITNESS: EXAMINER STOGNER: And those are the two interests 18 19 which you are force pooling today? 2.0 THE WITNESS: Yes. 21 EXAMINER STOGNER: Okay. Mr. Kellahin. 22 MR. KELLAHIN: Thank you, Mr. Examiner. 2.3 (By Mr. Kellahin) You've identified the Q.

Identify the vertical intervals you are

entities that would be subject to the pooling order,

24

25

Mr. Clark.

9 seeking to pool from the top of the Wolfcamp --1 2 Α. That's correct. -- to the base of the Pennsylvania for the 3 Ο. deep-gas, 320 spacing. 4 That's correct. 5 Α. And the primary target of the well is going to 6 0. 7 be the Morrow? That's right. 8 Α. The approximate location of the well, is that 9 0. shown on your display? 10 It is. We're going to drill the well 1,980 11 Α. 12 from the north and 1,980 from the east. Let's set that aside for a moment and turn to 13 0. next Exhibit No. 5. 14 15 Α. Exhibit 5 shows the same thing as basically on the land plat, has the parties and the interest they own, 16 17 and then it has their election of what they have done for 18 this well. 19 Q. Okay. Identify for us what was your first written communication to any of the working interest 20 21

owners to first propose this well.

22

23

24

25

Α. Well, to all the working interest owners, we formally proposed the well, February 14th, and that's shown on my Exhibit No. 6. We enclosed a copy of the AFE and asked them to either join or farm out their interest.

- Q. What, if any, response did you receive from any of these parties following your February 14, 1990, letter?
- A. Well, we had no response from Exxon to that specific letter. Exxon has -- We started communicating with Exxon in November of 1989, requesting a farmout.

  Those are shown further on in here with some other exhibits.
  - Q. All right. We'll come to those.
- A. And the other companies -- Anadarko has indicated they are willing to join; however, as I've said, we have not secured them either, prepaying their costs or signing a JOA.
- Q. In your earlier communications, did you send these proposed working interest owners an AFE for the well?
  - A. Yes, we did.

- Q. Is that the AFE attached as the last document to Exhibit No. 6?
  - A. That's correct.
- Q. That AFE shows a date of approximately February of 1990?
  - A. That's correct. We have gone back here recently. There's been an increase in the costs of drilling wells here the last few years; however, when this AFE was prepared, it was prepared at \$21 a foot, and we

find that we're still able to drill wells in this general vicinity for that price.

- Q. What have you done to satisfy yourself that despite the age of AFE, that it still represents a reasonable estimate in terms of current costs for those items --
- A. These AFEs, we have gone back to our operations in -- our department which prepares these AFEs. They have gone back and looked at the wells that we are currently -- We spudded a well approximately three weeks ago. We're paying \$20.75 cents a foot to have that well drilled, and they also used outside consultants to get a different view on the costs for drilling those wells, and they feel that these costs are just still reasonable, even though the AFE is almost a year old.
- Q. Have you had that information summarized and put in writing?
  - A. Yes, that is shown on Exhibit No. 7.
- Q. Okay. Have you had any objection from any of the proposed working interest owners as to your AFE costs?
  - A. No, we have not.
- Q. Has anyone objected to Pacific being the operator?
  - A. No, they have not.
  - Q. Anyone objected to the well location?

A. No.

2.0

- Q. The orientation of the spacing unit?
- A. No, they have not.
- Q. Anything?
- A. No.
- Q. Let's go to Exhibit -- What's that?
- A. Exhibit No. 8 is just a letter from Anadarko where they have indicated that they are willing to join, subject to an operating agreement and execution of AFE.

I've been in verbal contact with Anadarko, they still have indicated that they are willing to participate in the well. They realize they still are -- that we are force pooling their interests and they anticipate working out a deal with us prior to our actually spudding the well.

- Q. In the unfortunate event that that doesn't occur, then would you ask the Examiner to be able to utilize the pooling order, then, against that company so you can go ahead with the well?
  - A. Yes, sir.
  - Q. Okay. Exhibit No. 9, what's that?
- A. Exhibit No. 9 is just correspondence where we had sent them the drilling title opinions and the AFE, that they wanted in a little more in depth of our costs.
  - Q. Okay. Exhibit 10.

- A. Exhibit 10 is just a letter when we were updating the Anadarko, the status. This is back when we did have to go back in and apply for a change in field rules, and we were just trying to keep them apprised of the status of this well.
- Q. Have you timely and fairly responded to Anadarko's request for information by which they then could make decisions on participation?
  - A. Yes, we have.
  - Q. Let's turn now to Exxon.
  - A. Okay.

- Q. Summarize for us by use of these proposed exhibits your efforts to get Exxon to participate.
- A. Okay. Well, Exhibit 11 is our first request for the farmout. As I say, it was November 1989, and this was before we had proposed a well. We had just gone in and requested a farmout of their interest.
  - O. Okay. Exhibit 12?
- A. Exhibit 12, where they turned us down on that request.
- Exhibit 13 is we, again, proposed a well in January. It says '89; however, we hadn't changed the date; it should be January, 1990. And we again requested a farmout of their interest.
  - Exhibit 14, they again declined to farm out

their interest.

Then Exhibit 15 is a letter in response to our formal proposal, which was our Exhibit No. 6, where we formally proposed the well then and asked them to join or farm out then.

Exhibit 16 is in July when we had to go back in, and we anticipated going in and force our -- force pooling back in July. That's when the question of the field rules came up. We communicated with Exxon then and told them we were going to go back and change the field rules to 320-acre spacing. Then we again asked them to join the drilling of the well. There was no response to that.

And then Exhibit 17 is a letter from Kellahin's firm to Exxon that was written after the order changing the field rules and saying that we again anticipate going to hearing for compulsory pooling.

And Exhibit No. 18 is my letter to the landman of Exxon, saying basically the same thing, that we had received an order changing the field rules, and we would like for Exxon to join again.

- Q. In your opinion, Mr. Clark, have you given Exxon a fair and reasonable opportunity to voluntarily participate in the well at this point?
  - A. Yes, sir, we have.

Q. And in the event they elect not to do so on a
voluntary basis, do you need the assistance of a pooling
order in order to accomplish the drilling of this well?
A. Yes.
Q. What do you recommend to the Examiner that he
utilize for overhead rates in the pooling order?
A. For drilling well rates we would like to use
\$5,500. For producing well rates, we would like to use
\$540. Both of those are in line with Ernst & Young for
overhead rates for wells drilled to this similar depth.
MR. KELLAHIN: That concludes my examination of
Mr. Clark. We would move the introduction of his exhibits
1 through 18 I'm sorry 4 through 18.
EXAMINER STOGNER: Exhibits 4 through 18 will be
admitted into evidence.
(Applicant PEOC Exhibits 4 through 18
were admitted into evidence.)
EXAMINER STOGNER: I have no questions of this
witness. You may be excused.
Mr. Kellahin.
MR. KELLAHIN: I would like to call Mr. Rick
Ricketts. Mr. Ricketts is a petroleum geologist
testifying on behalf of Pacific.
RICK RICKETTS,
the Witness herein, having been previously duly sworn, was

1 examined and testified as follows: DIRECT EXAMINATION 2 BY MR. KELLAHIN: 3 Mr. Ricketts, for the record would you please 4 5 state your name and occupation? 6 Α. My name is Rick Ricketts. I'm a petroleum 7 geologist for Pacific Enterprises Oil Company. Mr. Ricketts, on prior occasions have you 8 testified as a petroleum geologist before the oil 9 10 conservation division? 11 Α. Yes, I have. 12 And are you familiar with the mechanics of the 0. 13 risk factor penalty component of the forced-pooling orders? 14 15 Α. Yes, I am. 16 With the percentages and how that is handled? Ο. Yes, I am. 17 Α. 18 And you've testified on that subject before in Ο. 19 terms of the geologic risk involved in pooling cases? 20 Α. Yes, I have. 21 All right. Have you made such a geologic Q. assessment with regards to this well and reached any 22 23 conclusions? 24 Yes, I have. 25 MR. KELLAHIN: We tender Mr. Ricketts as an expert

petroleum geologist.

EXAMINER STOGNER: Mr. Ricketts is so qualified.

- Q. (By Mr. Kellahin) What is your opinion?
- A. My opinion is we should get the maximum nonconsent penalty on this well.
- Q. Let's turn to your Exhibit No. 1 and have you tell us how you reached that conclusion.
- A. Okay. Exhibit No. 1 is a structure map, contoured on the base of the Lower Morrow shale to the prominent shale marker within the Morrow formation that I used to do my contouring on. Contour interval was a 50-foot contour interval. All the deep penetrations, Morrow penetrations in Township 17 South, 31 East are indicated on here.

I might add, all the shallow wells have not been included on this map.

- Q. Refresh the examiner's recollection. Identify for him the wells that were spaced onto 160 when we were dealing with Fren-Penn pool on 160 gas, please.
- A. It would be the Skelly well on Section 15, the Skelly well in Section 21 and also a Skelly well on Section 22.
- Q. In fact, that's all of the producing wells available under the rules as we changed them this summer?
  - A. That's correct.

Q. Let's go to Exhibit No. 2. Identify that display for us.

- A. Okay. Exhibit No. 2 is an isopach map of the Lower Morrow channel. It's a Queen Sand isopach. Lower Morrow channel is the main producing horizon in this particular area, and it is the zone that is producing in all three of the Skelly wells in Fren-Penn field.
- Q. Show us how you have determined the geologic objective for your well in the east half of 16 in terms of locating that well in 16.
- A. Okay. I feel the Lower Morrow channel is a northeast -- or north -- excuse me -- northwest southeast trending fluvial system. The three previously mentioned Skelly wells in Sections 15, 21 and 22 penetrated that zone, are productive out of that zone.

There was another Skelly well in the southeast corner of Section 22 that also encountered the same sand and was wet in that zone.

And their four wells, you know, indicates the orientation of the sand fairway. The Sinclair up in Section 4 missed that zone; and again I think it's -- although it's a zero point, it does kind of give you an indication of how the orientation of the sand does trend.

Q. Let's go to Exhibit 3 and see how the cross section fits into the isopach.

- A. Okay. This is a stratigraphic cross section, hung on the base of the Lower Morrow shale, runs from Section 21 through Section 22 through Section 15 in a northeast-southwest direction. As you can see, on the well in Section 22 where the thickest sand is encountered in the Lower Morrow channel, the other two zones are much thinner, indicating to go -- on the feather edge of the channel fair well (phonetic approximation).
  - Q. Let me ask you some questions about the comparisons between Exhibits 2 and 3. When we look at the well in Section 15, there's a well on the Lower Morrow isopach with 8 feet?
    - A. That's correct.
    - Q. And it's got 4.5 bcf?
  - A. That's correct.

- Q. When we look at the cross section, where did the gas come from?
- A. Well, it probably came -- well, it obviously came out of the same channel system. It probably -- that well had probably a little better permeability porosity than the other wells, and therefore, it probably drained a larger area than the other two wells.
- These being very old logs, it's hard to determine, you know, an exact amount of porosity and permeability the well has. However, based on the fact

that it's had actually less sand than the other wells, I would assume it had better permeability and better porosity and therefore had a better drainage ratio.

- Q. When we look at the well in 22 in the northwest quarter, you've got 21 feet of that and just under a bcf of gas?
  - A. That's correct.

- Q. How do you explain that geologically?
- A. Well, geologically, just as I mentioned in the well in Section 15, you have a thicker sand, but probably less permeability and less porosity and therefore a less effective reservoir.
- Q. What does that do for your ability to predict the risk involved in locating oil in 16?
- A. Well, basically what it tells you, it's a fairly high risk deal. I feel we're going to be right in the middle of the channel there in Section 16, but you know, the question is: How good of a sand is it going to be? We're going to be there, it's just will it have an effect on porosity and permeability.
- Q. And your next control point as you move to the north is the old Sinclair well up in 4?
- A. That's correct. And it did not have any of that particular channel in there.
  - Q. So --

1	A. That, I think, is another reason that makes
2	this somewhat of a risky prospect. The fact that it's
3	very poorly controlled. We essentially have really only
4	five wells in the entire north half of the township to
5	base the orientation of the sand body on.
6	Q. Would you recommend to the Examiner that he
7	assess the maximum 200 percent respective penalty for this
8	well?
9	A. Yes, I would.
10	Q. Were Exhibits 1, 2 and 3 prepared by you?
11	A. Yes, sir.
12	MR. KELLAHIN: We move their introduction.
13	EXAMINER STOGNER: Exhibits 1, 2 and 3 will be moved
14	into evidence.
15	(Applicant PEOC Exhibits 1 through 3
16	were admitted into evidence.)
17	MR. KELLAHIN: That concludes my examination of
18	Mr. Ricketts.
19	EXAMINATION
20	BY EXAMINER STOGNER:
21	Q. The application is everything from the top of
22	the Wolfcamp down, but this Morrow sand in the Fren-Penn
23	is the only production, is that correct, in the area?
24	A. There down in Section 32, there is a excuse
25	me Section 30, I'm sorry. Section 30, there is some

production out of the Atoka and out of the Cisco. 1 Morrow is the main objective on this prospect, yes. 2 EXAMINER STOGNER: I have no further questions of 3 this witness. 4 Are there any other questions of Mr. Ricketts? 5 MR. KELLAHIN: No, sir. 6 7 EXAMINER STOGNER: If not, he may be excused. Anything further in Case No. 10168? If not --MR. KELLAHIN: I need to submit the certificates. 9 apologize. I almost overlooked that. We're up to 19 for 10 the next exhibit number? 11 (Applicant PEOC Exhibit 19 12 13 was marked for identification.) MR. KELLAHIN: Mr. Examiner, Exhibit 19 is our 14 15 certificate of mailing of notice to the parties to be pooled. We move its introduction, Mr. Examiner, 16 17 EXAMINER STOGNER: Exhibit 19 will be admitted into 18 evidence. 19 (Applicant PEOC Exhibit 19 20 was admitted into evidence.) 21 EXAMINER STOGNER: Is there anything future in this 22 case? 23 MR. KELLAHIN: That will conclude it. 24 EXAMINER STOGNER: This case will be taken under advisement. 25

1	(The foregoing hearing was concluded at the	
2	approximate hour of 11:18 a.m.)	
3	* * *	
4		
5		
6		
7		
8		
9 l		
10		
11		
12		
13		
14		
15		
16		
17 18	I do hereby certify that the foregoing is	
19	a complete record of the proceedings in the Landingrahearing of Case 215. 10168.	
20	Machael & Lague, Examiner	
21	Oil Conservation Division	
22		
23		
24		
25		

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 19th day of 17 January, 1991. 18 19 20 HUNNICUTT, MAUREEN R. 21 My Commission Expires: Certified Shorthand Reporter April 25, 1993 CSR No. 166, Notary Public 22 2.3 2.4 25