1	STATE OF NEW MEXICO
2	ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
3	OIL CONSERVATION DIVISION
4	
5	IN THE MATTER OF THE HEARING)
6	CALLED BY THE OIL CONSERVATION) DIVISION FOR THE PURPOSE OF) CONSIDERING:) CASE NO. 11,066
7	,)
8	APPLICATION OF YATES ENERGY) CORPORATION)
9	· · · · · · · · · · · · · · · · · · ·
10	ODICINIA
11	<u>ORIGINAL</u>
12	REPORTER'S TRANSCRIPT OF PROCEEDINGS
13	EXAMINER HEARING
14	BEFORE: DAVID R. CATANACH, Hearing Examiner
15	
16	August 18, 1994
17	Santa Fe, New Mexico
18	
19	
20	This matter came on for hearing before the Oil
21	Conservation Division on Thursday, August 18, 1994, at
22	Morgan Hall, State Land Office Building, 310 Old Santa Fe
23	Trail, Santa Fe, New Mexico, before Steven T. Brenner,
24	Certified Court Reporter No. 7 for the State of New Mexico.
25	* * *

				2
1	I	NDEX		
2				
3	August 18, 1994 Examiner Hearing			
4	CASE NO. 11,066			
5				PAGE
6	APPEARANCES			3
7	APPLICANT'S WITNESSES:			
8	<u>SHARON R. HAMILTON</u> Direct Examinati	on by Mr. Pad	illa	4
9	Examination by E			12
10	<u>KIRK ROSS</u> Direct Examinati	on by Mr. Pad:	illa	13
11	Examination by E	xaminer Catana	ach	20
12	REPORTER'S CERTIFICATE			23
13		* * *		
14				
15	EX	нівітѕ		
16		Identified	Admitted	
17				
10	Exhibit 1	15	20	
18	Exhibit 2	15	20	
19	Exhibit 3	16	20	
20	Exhibit 4	6 7	11	[
20	Exhibit 5	9	11	
21	Exhibit 6		11	
22	Exhibit 7	9	11	
22	Exhibit 8 Exhibit 9	10 10	11 11	j
23	EXHIBIC	* * *	11	
24				
25				

1	APPEARANCES
2	
3	FOR THE APPLICANT:
4	PADILLA LAW FIRM, P.A.
5	1512 South St. Francis Drive P.O. Box 2523 Santa Fe, New Mexico 87504-2523
6	By: ERNEST L. PADILLA
7	* * *
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18 19	
20	
21	
22	
23	
24	
25	

1	WHEREUPON, the following proceedings were had at
2	8:53 a.m.:
3	EXAMINER CATANACH: At this time we'll call Case
4	11,066, Application of Yates Energy Corporation for a unit
5	agreement, Eddy County, New Mexico.
6	Are there appearances in this case?
7	MR. PADILLA: Mr. Examiner, Ernest L. Padilla,
8	Santa Fe, New Mexico, for the Applicant.
9	I have two witnesses to be sworn.
10	EXAMINER CATANACH: Any additional appearances?
L1	Will the two witnesses please stand and be sworn
L2	in?
L3	(Thereupon, the witnesses were sworn.)
L4	SHARON R. HAMILTON,
L5	the witness herein, after having been first duly sworn upon
L6	her oath, was examined and testified as follows:
L7	DIRECT EXAMINATION
L8	BY MR. PADILLA:
L9	Q. Ms. Hamilton, for the record would you please
20	state your name?
21	A. Sharon Hamilton.
22	Q. Ms. Hamilton, have you testified before the Oil
23	Conservation Division previously and had your credentials
24	accepted as a matter of record?
5	A Vec Thave

Q. And you're a petroleum landman? 1 That's correct. 2 A. And you've testified in that capacity before? 3 Q. Α. Yes, I have. Can you tell us whether you're familiar with the 5 Q. land matters associated with this Application? 6 7 Α. Yes, I am. 8 Q. And have you followed up with the various agencies regarding the approval process for the unit 9 10 agreement under consideration today? 11 Α. Yes, we have. MR. PADILLA: Mr. Examiner, we tender Ms. 12 Hamilton as an expert petroleum landman. 13 EXAMINER CATANACH: Ms. Hamilton is so qualified. 14 0. (By Mr. Padilla) Ms. Hamilton, would you briefly 15 tell the Examiner what this Application concerns? 16 We're requesting approval to form a 1623.82-acre 17 A. federal exploratory unit that includes 40 acres of state 18 land and 40 acres of fee land. 19 20 Ms. Hamilton, does this exploratory unit involve 21 royalty owners? 22 Α. No, sir, it's a working-interest unit. 23 Q. So it does not affect the ownership of the various royalty owners or overriding royalty owners 24 underlying the various leases committed to the unit 25

agreement; is that --

- A. No, it does not.
- Q. Okay. Let's turn to what we have marked as Exhibit Number 4, Ms. Hamilton, and have you identify that for the Examiner, please.
- A. This is the form of unit agreement that the Bureau of Land Management required that includes the state, federal and fee type of lands.
- Q. Ms. Hamilton, what exhibits are attached to Exhibit Number 4, to the unit agreement?
- A. There's the -- Exhibit A is the plat of the unit outline. Exhibit B is the scheduled leases. Exhibit C is the tract participation schedule. And then there are several ratifications that we've received for the unit.
- Q. Ms. Hamilton, you've also prepared other exhibits that are essentially -- or correspond to the exhibits attached to the unit agreement; is that right?
 - A. That's correct.
- Q. Okay. So that we won't be too redundant on this thing, I'll jump from -- into Exhibits 4, 5, 6 and 7 as we go along and as you feel necessary that we should do so.

Let's start out with the table of contents on the Exhibit Number 4. Let me have you look at item number 2, which is the unit area. Can you identify the unit area on Exhibit -- let's see, Exhibit Number 5?

- A. Yes, sir, the unit area on the first page of
 Exhibit 5 is the computerized map that shows the outline of
 the unit, and then the second page is a map plat that
 indicates the unit outline and the acreage involved.
- Q. Ms. Hamilton, can you tell the Examiner whether any of those leases committed to that unit agreement are near expiration or require some kind of expeditious action in terms of approval of this Application?
- A. Yes, sir, we have one federal lease that's due to expire September 30th, and so we intend to commence drilling operations prior to that date.
- Q. So holding that lease is not necessarily dependent on approval of the unit agreement; but in terms of considering that well as a unit well, you would like to have the unit approved before commencement of the well; is that --
 - A. Yes, that's -- We would prefer that.
- Q. Which is the lease that is going to expire on September 30th?
- A. It's in Section 14, there in the northeast quarter.
 - Q. And is that a federal lease?
- 23 A. That's a federal lease.

Q. And you've discussed the federal leases with the Bureau of Land Management?

1 A. Yes, we have. Let's look at the second part of that Exhibit 2 Number 5 and have you identify that for the Examiner. 3 That's a map plat of the unit that has the 4 Α. 5 different types of acreage colored. 6 Q. So essentially you only have two 40-acre tracts 7 that are non-federal? That's correct. 8 Α. 9 Q. One fee and one state? 10 Α. Yes. Ms. Hamilton, let's look at item number 3 of the 11 unit agreement, which applies to unitized lands and 12 unitized substances. Can you tell us what is the vertical 13 extent of the unit? 14 The unit would cover all formations. 15 What is your primary objective in the first -- of 16 Q. the initial well for the unit? 17 We're obligated to drill through and test the 18 Α. upper Penn Canyon formation. 19 And that is what you're going to test? 20 Q. Α. Yes. 21 Q. How about unit operators? Is Yates Energy 22

Let's go now to what we have marked as Exhibit

proposing to be the unit operator?

Yes.

23

24

25

Α.

Q.

Number 6 and have you identify that, please.

- A. Exhibit 6 is the lease schedule of the unit agreement that lists the individual leases involved.
- Q. And that's the same schedule that's attached to the unit agreement?
 - A. Yes, it is.

- Q. Is there anything significant about this? Now, this shows all of the interest owners; is that correct?
 - A. Yes, it does.
- Q. Now, let's look at Exhibit Number 7 in conjunction with Exhibit Number 6, and that is a schedule of tract participation; is that correct?
- A. Yes, it is.
- Q. Now, you've changed Exhibit Number 7 slightly from what's attached to the unit agreement. Will you explain what changes you've made to Exhibit Number 7 that are not included with the exhibit to the unit agreement?
- A. I've gone in and listed the parties that have either verbally committed or have committed and also executed the ratification forms.
- Q. Can you give the Examiner what the status of commitment to the unit agreement is by the working interest owners?
- A. We've had 100-percent verbal commitment and 90 percent of the owners have signed off already.

2	commitment?
3	A. Within the next two weeks.
4	Q. Ms. Hamilton, let's turn on to Exhibits 8 and 9,
5	please, and have you identify those for the Examiner,
6	please.
7	A. Exhibit 8 is the unit designation letter received
8	from the Bureau of Land Management, and Exhibit 9 is the
9	preliminary approval from the State Land Office.
10	Q. What does Exhibit 8 essentially say, in a
11	nutshell?
12	A. It establishes the unit outline of the 1623.82
13	acres, and the unit designation is in place for a one-year
14	term.
15	Q. In other words, you have to drill the first well
16	within one year?
17	A. Well, I believe we'd have one year to finalize
18	the unit.
19	Q. Okay. How about Exhibit Number 9?
20	A. Exhibit Number 9 is the preliminary approval from
21	the State Land Office.
22	Q. Ms. Hamilton, in your opinion, from a land
23	standpoint, is this a logical unit area for development, at
24	least of the initial prospect?
2 =	A You gir we feel that itle the practical method

By when do you expect to have a full written

Q.

to avoid waste, and for the development of this area. 1 2 Ms. Hamilton, do you have anything further to add to your testimony? 3 Α. No, sir. MR. PADILLA: Mr. Examiner, we tender Exhibits 4 5 6 through 9. 7 EXAMINER CATANACH: Exhibits 4 through 9 will be admitted as evidence. 8 9 MR. PADILLA: And we'll pass the witness. EXAMINER CATANACH: Mr. Padilla, I notice in the 10 advertisement for this case we have it listed as the unit 11 area comprising 1543.82 acres, as opposed to your 1623.82. 12 But I also see that you filed your Application right; that 13 was our mistake. So... I don't think that has any real 14 15 effect. Would you think that we could proceed with the 16 case and not have to readvertise it for that reason? 17 I hope -- I don't see any problem, 18 MR. PADILLA: 19 especially considering the commitment. And we've also -- let me -- In conjunction with 20 that, let me hand you my affidavit of mailing and 21 certificate of service. 22 We mailed that to royalty owners as well, and we 23 have not received any objection, even though it didn't 24 25 apply to royalty owners.

EXAMINATION BY EXAMINER CATANACH: 2 Ms. Hamilton, who are you still waiting on in 3 Q. terms of a written commitment? 4 On Exhibit 7, the owners that have not formally 5 Α. 6 signed are Santa Fe Energy. Union Oil and Arco are under farmout and have indicated that they'll execute the unit 7 agreement. And then the Tom Brown, Inc., interest is being 8 sold to David Fasken, and then that interest has indicated 9 that they'll sign off on the unit. 10 Now, this unit agreement doesn't affect royalty 11 interest owners; is that correct? 12 Α. Right. 13 How do the royalty owners share in the 14 production? 15 On a lease basis, as they're drilled. 16 Do the working interest owners share in the 17 production? 18 Yes, the working interest owners are -- on the 19 20 unit basis, would share in all the production. Unit basis. You've got some fee acreage in here? 21 Q. There's one 40-acre fee tract in Section 11. 22 Α. And you're the leasehold owner of that tract? 23 Q. 24 Α. Yes, we are.

Have you had any contact with the royalty

25

Q.

interest owners? 1 No, sir. We haven't had any correspondence with 2 Α. 3 them. They're just not affected by this at all? 4 Q. 5 A. No, sir. Do you know where your first well is going to be 6 7 located, Ms. Hamilton? We're going to -- On the second page of Exhibit 8 Α. Number 5, the well location is marked in the northwest 9 quarter of the southwest quarter of Section 12. 10 EXAMINER CATANACH: I have nothing further of the 11 12 witness, Mr. Padilla. She may be excused. MR. PADILLA: We'll call Kirk Ross at this time. 13 KIRK ROSS, 14 15 the witness herein, after having been first duly sworn upon 16 his oath, was examined and testified as follows: 17 DIRECT EXAMINATION BY MR. PADILLA: 18 Mr. Ross, for the record, please state your name. 19 Q. 20 Α. Kirk Ross. 21 0. Where do you live? 22 Roswell. A. 23 0. Who do you work for? 24 Yates Energy Corporation. Α. 25 In what capacity? Q.

- A. As a petroleum engineer.
- Q. Mr. Ross, have you previously testified before the New Mexico Oil Conservation Division and had your credentials accepted as a petroleum engineer?
 - A. No, sir.

- Q. Mr. Ross, would you please tell us where you were educated, whether an advanced degree?
- A. Yes, I have a bachelor of science in mechanical engineering from Oklahoma State University.
- Q. Since that time, what experience do you have in the oil and gas industry?
- A. I have 14 years' experience in the oil and gas industry as a petroleum engineer.
- Q. Can you be more specific with whom you have worked and in what capacity and that sort of thing?
- A. I have worked for Sun Exploration and Production Company in Abilene, Texas, as a production engineer for a period of five years. I've worked for Terra Resources in Wichita Falls, Texas, for a period of three years as a drilling and production engineer. I have three years' experience with Grand Banks Energy out of Midland, Texas, as a production and reservoir engineer, two years experience with Hondo Oil and Gas in Roswell as a drilling and production engineer, and then my two years' employment with Yates Energy in the same capacity.

1	Q. Mr. Ross, have your duties for any of these
2	companies dealt with exploration activities to where you're
3	required to do geologic interpretations
4	A. Yes, I have.
5	Q and investigations?
6	Have you made geologic investigations concerning
7	this hearing, in the matters concerning the prospect that
8	you are attempting to drill initially for the unit?
9	A. Yes, I have.
10	Q. Have you prepared certain exhibits for
11	introduction here today?
12	A. Yes, I have.
13	MR. PADILLA: Mr. Examiner, we tender Mr. Ross as
14	an expert in petroleum exploration.
15	EXAMINER CATANACH: Mr. Ross is so qualified.
16	Q. (By Mr. Padilla) Mr. Ross, let's have you turn
17	to what we have marked as Exhibit Number 1 and have you
18	identify that for the Examiner, please.
19	A. Exhibit 1 is a stratigraphic cross-section from
20	west to east on the upper Penn interval. The cross-section
21	is located on wells from Section 3 to Section 1, which lies
22	just north of the prospect area.
23	Q. Mr. Ross, perhaps it might be easier for you to
24	also explain at this time what Exhibits 2 and 3 are.
25	A. Exhibit 2 is an isopach map of the Upper Penn C-3

interval, which is the primary prospective interval for 1 2 unitization purposes. Exhibit --3 What -- Go ahead. 0. 4 Exhibit 3 is a geological discussion on this 5 Α. interval and its justification for the unit outline. 6 7 Exhibit Number 2 contains the line of crosssection for the cross-section which is --8 Yes, A to A'. Α. Tell the Examiner what is that yellow 10 Q. dashed line there, or the yellow area --11 Okay, there is an existing --12 Α. -- on Exhibit 2. 13 Q. Yes, on Exhibit 2 there is an existing unit 14 consisting of 640 acres for the -- originally, the Gulf 15 Hackberry Hills well, which was drilled in 1961, in Section 16 17 1. This well was completed in 1961 and established 18 as the discovery well for the Hackberry Hills Canyon field. 19 20 This is the same prospective -- This well produces out of 21 the same prospective zone that we would like to have the unit designation for. 22 23 Q. Okay, let's go back to the cross-section, and tell us how that applies to --24 Okay, this cross-section shows a little bit --25 Α.

the basic geology of the area.

In Section 3, marked by "A" on the cross-section, shows a significant bioherm, which is an algal bioherm to the west of the prospect area. This is a reef complex. As -- Progressing to the east of the prospect area, you come out of the reef complex into an area where biograinstone aprons are draped onto the flanks of the reef, on the basin side of the reef, out into deeper water.

The bioherm which is to the west does not produce

-- does not develop significant porosity or does not have
hydrocarbons present. The biograinstones that are aproned
onto the flanks of the reef develop porosity and has served
as a trap for hydrocarbons.

There are three of these intervals in the -- that are flanked onto the eastern side of the reef, and in the third one what we designate the C-3 interval is what is produced out of the Gulf Hackberry Hills Number 1 in Section 1.

- Q. Mr. Ross, is it your opinion that this line of cross-section extends southward into the unit area?
 - A. Yes, it is.
- Q. Now, where would your initial well be located in terms of -- in going from A to A' here?
- A. Okay, our well will be located south of the cross-section in Section 12 at a location in the northwest

quarter of the south -- I mean -- yeah, the southwest 1 2 quarter. Is that a nonstandard location? 3 Q. Yes, it is, it is an unorthodox location. 4 Α. Have you received approval for that location? 5 Q. Yes, we have. We have received an administrative 6 A. approval for the unorthodox location. 7 Okay. So where would your well lie in terms of 8 Q. 9 the cross-section? In terms of the cross-section, just to the south 10 of it. 11 I understand that. But if you assume that you 12 Q. 13 have similar geology, where --14 A. Oh --15 -- between what wells in the cross-section? Q. 16 Α. Between the two on the right, the Brady Federal 17 Number 1 and the Hackberry Hills Federal Number 1. Do you have anything else to tell us about the 18 0. 19 cross-section? 20 A. No, I don't. How about the isopach? 21 0. 22 Well, the isopach shows how the upper Canyon C-3 23 interval has been mapped and justifying the outline of the unit area. 24 The wells -- The reef wells shown on the western 25

side of the prospect area where this upper Canyon C-3

interval does not develop, we have very little control in

the prospect area, but there are control wells to the east

in Section 15 and in Section 7 and 6 of 22-26. We also

have a well in Section 23 of 22-25 that serves as a control

well.

- Q. Mr. Ross, do you have anything further concerning any of these three exhibits?
 - A. I would like to point out in Exhibit 3 a typographical error.
 - Q. Where is that?

9

10

11

12

13

14

15

16

17

18

19

20

21

22

- A. In the third paragraph, at the end of the paragraph, there's a date which is the cumulative date of production of the initial well. It is stated in the exhibit that it is through October of 1994, and that's -- that should be October of 1993.
- Q. Mr. Ross, in your opinion would approval of this Application be in the best interests of conservation?
 - A. Yes, I believe it would.
- Q. In terms of your geologic discussion here today, is this a logical unit area?
- A. Yes, it is.
- Q. And would it promote, in your opinion, orderly development of these oil and gas leases that are committed to the unit area?

Yes, it would. 1 Α. MR. PADILLA: Mr. Examiner, we have nothing 2 3 further. We tender Exhibits 1 through 3. EXAMINER CATANACH: Exhibits 1 through 3 will be 4 admitted as evidence. 5 **EXAMINATION** 6 7 BY EXAMINER CATANACH: Mr. Ross, the Gulf well in Section 1, is that the 8 Q. southernmost well producing from the field? 9 Yes, it is, and it is -- actually, it's -- There 10 is only one other well producing from the well [sic], and 11 that is a Mewbourne well located in Section 6, just to the 12 13 east of that well. There's been no production established to the 14 15 north? There have been tests made in that zone, and my 16 Α. geological discussion, Exhibit 3, goes into more detail. 17 But tests were made in Section 1 in that well to 18 19 the north of the original well. That's the Amoco Brady Federal Number 1. And the well located in section 36, just 20 to the north of that, was drill stem tested but is 21 currently producing out of the Morrow formation. 22 Did you say that you had well control on the east 23 Q. 24 and west?

Yes, as you'll notice there in the north half of

25

Α.

Section 13 --

MR. PADILLA: You're looking at the isopach map?

THE WITNESS: Yes, I'm looking at the isopach

map. There is a well that penetrated this interval that

had 12 feet of net clean carbonate. It is felt like that

well did not develop enough of a carbonate to be

productive. It was a dryhole in the Morrow -- in all

formations, but it did develop carbonate in this zone, but

it was felt like 12 feet was not enough for commercial

production.

The other control wells we have are in Section 10 and 15, which were deep enough to penetrate the upper Penn Canyon interval. However, it was -- those wells were -- penetrated the reef formation, and not the porous aprons that are flanked on the sides of it.

There is a dashed line on the west-hand side -on the western side of the isopach that indicates the base
of the reef, which is what we're going to have as a cutoff
of possible porosity in the upper C-3 Canyon.

- Q. (By Examiner Catanach) What other formations do you have above the Penn that are potentially productive?
- A. We have numerous formations in the wellbore.

 Above the Penn, we'll be penetrating -- mainly the Delaware is a prospective in this area.

Below the Penn interval we'll have, you know, a

1	potential for Strawn and Atoka, and an excellent potential
2	for development of Morrow gas formations.
3	There is also I guess I should also indicate
4	that there could be some Bone Spring.
5	Q. The primary objective is the Penn?
6	A. The primary objective is the Penn. We'll be
7	drilling the well to the Morrow formation.
8	EXAMINER CATANACH: I have nothing further, Mr.
9	Padilla.
10	MR. PADILLA: We have nothing further.
11	EXAMINER CATANACH: There being nothing further
12	in this case, Case 11,066 will be taken under advisement.
13	(Thereupon, these proceedings were concluded at
14	9:24 a.m.)
15	* * *
16	
17	
18	I do hereby certify that the foregoing is
19	a complete record of the proceedings in the Examiner hearing of Case No.
20	heard by me on 1977.
21	Javid F Coul . Examina
22	Oil Conservation Division
23	
24	
25	

1	CERTIFICATE OF REPORTER
2	
3	STATE OF NEW MEXICO)
4) ss. COUNTY OF SANTA FE)
5	
6	I, Steven T. Brenner, Certified Court Reporter
7	and Notary Public, HEREBY CERTIFY that the foregoing
8	transcript of proceedings before the Oil Conservation
9	Division was reported by me; that I transcribed my notes;
10	and that the foregoing is a true and accurate record of the
11	proceedings.
12	I FURTHER CERTIFY that I am not a relative or
13	employee of any of the parties or attorneys involved in
14	this matter and that I have no personal interest in the
15	final disposition of this matter.
16	WITNESS MY HAND AND SEAL August 21, 1994.
17	Filly 1/1 Day
18	STEVEN T. BRENNER
19	CCR No. 7
20	
21	My commission expires: October 14, 1994
22	
23	
24	
25	