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1 2 3	STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION STATE LAND OFFICE BLDG. SANTA FE, NEW MEXICO
	3 October 1984
4	EXAMINER HEARING
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6	
7	IN THE MATTER OF:
8 9	Application of Yates Petroleum CASE Corporation for a unit agreement, 8356 Santa Fe and Sandoval Counties, New Mexico.
10 11	DEROTE: Cilbert D. Quintana Evaminor
12	BEFORE: Gilbert P. Quintana, Examiner
13	TRANSCRIPT OF HEARING
14 15	
16	APPEARANCES
17	
18	
19	For the Oil Conservation Jeff Taylor Division: Attorney at Law
20	Legal Counsel to the Division State Land Office Bldg. Santa Fe, New Mexico 87501
21	·
22	For the Applicant:
23	
24	
25	

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2
                                MR. QUINTANA: We'll call next
3
    Case 8356.
4
                                       TAYLOR: That's the
                                MR.
5
    application of Yates Petroleum Corporation for unit
6
    agreement, Santa Fe and Sandoval Counties. The applicant
7
    has asked that that be continued till October 17th.
8
                                MR. QUINTANA: Case 8356 will
    so be continued to October 17th, 1984.
9
10
                        (Hearing concluded.)
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SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY Ι, that the foregoing Transcript of Hearing before the Oil Conservation Division was reported by me; that the said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability.

Saley W. Boyd COR

I do hereby certify that the foregoing is a comple e record of the proceedings in the Examiner hearing of Case No. 8356. heard by me on Oct.

orna Examiner Oil Conservation Division

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5	EXAMINER HEARING
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G	Application of Yates Petroleum CASE Corporation for a unit agreement, 8356
9	Santa Fe and Sandoval Counties, New Mexico.
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20	For the Oil Conservation Jeff Taylor Division: Attorney at Law
21	Legal Counsel to the Division
21	State Land Office Bldg. Santa Fe, New Mexico 87501
22	
23	For the Applicant: Chad Dickerson
24	Attorney at Law
25	LOSEE, CARSON, & DICKERSON P.A. Post Office Drawer 239 Artesia, New Mexico 88210

1		j.	
2			
3	I N O E X		
4			
5	JANET RICHARDSON		
6	Direct Examination by Mr. Dickerson	Ą	
7	Cross Examination by Mr. Quintana	7	
	Cross Examination by Mr. Taylor	7	
8			
9	BRUCE BLACK		
10	Direct Examination by Mr.Dickerson	8	
11			
12			
13			
14	EXHIBITS		
15			
16	Yates Exhibit One, Map	5	
	Yates Exhibit Two, Unit Agreement	5	
17	Yates Exhibit Three, Operating Agreement	6	
18	Yates Exhibit Four, Letter	6	
19	Yates Exhibit Five, Geologic Report	9	
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2	
3	MR. QUINTANA: We'll call next
4	Case 8356.
5	MR. TAYLOR: The application of
6	Vates Petroleum Corporation for a unit agreement, Santa Pe
7	and Sandoval Counties, New Mexico.
	MR. DICKERSON: Mr. Examiner,
8	I'm Chad Dickerson of Artesia, New Mexico, on behalf of the
9	applicant.
10	We have two witnesses.
11	I might point out, Mr.
12	Examiner, that this case was advertised in the name of Yates
13	Petroleum Corporation but Yates Petroleum Corporation
14	intends to designate Peyton Yates as actual unit operator.
	MR. QUINTANA: Are there other
15	appearances in this case?
16	If not, will the witness please
17	stand and be sworn in.
18	MR. DICKERSON: Two witnesses.
19	MR. TAYLOR: Is your other
20	witness here, too?
21	MR. DICKERSON: Uh-huh, yeah.
22	MR. TAYLOR: Would they both
23	stand and we'll swear them both at the same time.
j	
24	(Witnesses sworn.)
25	

1	4
2	JANET RICHARDSON,
3	being called as a witness and being duly sworn upon her
4	oath, testified as follows, to-wit:
5	
6	DIRECT EXAMINATION
U	BY MR. DICKERSON:
7	Q Will you state your name, your occupa-
8	tion, and where you reside, please?
9	A Yes. My name is Janet Richardson. I
10	work for Yates Petroleum Corporation as a landman from Arte-
11	sia, New Mexico.
12	Q Ms. Richardson, you're appearing here on
13	behalf of Peyton Yates, the proposed unit operator?
14	A Yes, I am.
	Q And you have testified before this Divi-
15	sion as a landman before, have
16	A Yes, I have.
17	Q you not?
18	MR. DICKERSON: Mr. Examiner,
19	is this witness satisfactory?
20	MR. QUINTANA: The witness is
21	qualified as an expert petroleum landman.
22	Q Ms. Richardson, would you please briefly
	state the purpose of Peyton Yates' application in Case 8356?
23	A Yes. Mr. Yates would like to have the

Caja del Rio Grande Unit designated as a unit for production

in Santa Fe and Sandoval Counties.

24

Q Would you refer to what we have marked as Exhibit Number One and tell the Examiner what that exhibit consists of?

A Exhibit Number One is a map of the Caja del Rio Grande Unit and it splits up the number of Federal lands, which is 94 percent of the unit; the number of State lands, which is 3.8 percent of the unit; and the number of fee lands, which is 1.6 percent of the unit.

Q And what is the total number of acres contained in this proposed unit?

A 122,857.15 acres.

Q Okay. Refer to what is marked Exhibit

Number Two and tell the Examiner what that document is.

A Exhibit Number Two is a -- our proposed unit agreement. It's on the form which has been previously approved for State, Federal, and fee unitization.

Q What is the status of approval of this proposed unit agreement by the Bureau of Land Management and the Land Commissioner of the State of New Mexico?

A We have submitted this unit agreement to both parties and we have had meetings with the Bureau of Land Management and have obtained a tentative approval of our unit outline.

Q The Bureau of Land Management has tentatively approved the boundaries of the unit.

A Yes, it has.

Q Okay, would you refer to Exhibit A to

MR.

25

DICKERSON:

Mr. Examiner,

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1	7	
2	we would move admission of Exhibits One through Four at this	
3	time.	
4	MR. QUINTANA: Exhibats One	
5	through Four will be admitted into evidence.	
6	MR. DICKERSON: And, Mr. Exami-	
7	ner, our next witness will testify to some geology and the	
-	proposed drilling program, which I know you'll be interested	
8	i. F.	
9	MR. QUINTANA: I have one quick	
10	question of the witness in clarification.	
11		
12	CROSS EXAMINATION	
13	BY MR. QUINTANA:	
14	Q How many total acreage did you say would	
15	encompass this unit?	
	A 122,857.15.	
16	Q Thank you.	
17	MR. TAYLOR: I have a question.	
18		
19	CROSS EXAMINATION	
20	BY MR. TAYLOR:	
21	Q You said that you talked to the Commis-	
22	sioner of Public Lands. Have you got tentative approval	
23	from them or	
24	A No, we haven't gotten approval from them	
	yet.	
25	Q Have they you have talked to them,	

1	8
2	haven't you?
3	A Yes, we have.
4	Q They just haven't sent you a letter or
5	something?
	A Yes.
6	MR. DICKERSON: The because
7	of the time, the paperwork, getting the paperwork done has
8	just recently been accomplished and so that submittal will
9	be made immediately, the formal application for preliminary
10	approval.
11	MR. QUINTANA: Any other ques-
12	tions of the witness?
13	The witness may be excused.
14	MR. DICKERSON: Call Mr. Bruce
	Black, Mr. Examiner.
15	
16	BRUCE BLACK,
17	being called as a witness and being duly sworn upon his
18	oath, testified as follows, to-wit:
19	
20	DIRECT EXAMINATION
21	BY MR. DICKERSON:
22	Q Mr. Black, will you state your name, your
23	occupation, and where you reside?
24	A Yes, Bruce L. Black, Farmington, New Mex-
	ico. My occupation is a consulting geologist with Black
25	Oil, Incorporated.

1		9
2	Q	And you're consulting at the request of
3	Mr. Peyton Yates in	this case?
4	A	Yes, that's right.
	Q	Okay. You have previously testified be-
5	fore this Division	as a geologist, have you not, Mr. Black?
6	Α	Yes.
7		MR. DICKERSON: Mr. Examiner,
8	tender this witness	s as an expert geologist.
9		MR. QUINTANA: You say you have
10	testified before?	
11	A	Yes, sir, I have.
12		MR. QUINTANA: Could you tell
·	me approximately w	nen?
13	A	Several years ago on two occasions. I
14	can't tell you wha	t the exact date is.
15		MR. QUINTANA: It's in the re-
16	cord, anyway.	
17	A	Yes, sir.
18		MR. QUINTANA: And you're con-
19	sidered as an expe	rt geologist.
20	A	Yes.
	Q	Mr. Black, refer to what we have marked
21	as Exhibit Number	Five and identify that for the Examiner,
22	please.	
23		Just the complete report. What is that
24	that you have in f	ront of you?

Okay, this is the geologic report on the

25

A

Caja del Rio Grande Unit, dated June 15th, 1984.

Q Okay. Would you briefly summarize the geological basis for the unit boundaries proposed in this

unit?

A Okay. To do that I'd like to draw your attention to some diagrams here that will show the San Juan Basin. Actually, this shows the northwest part of New Mexico from the Four Corners area to the vicinity of Santa Fe, New Mexico.

Q You are referring to Figure 1 in your map so the Examiner can follow you?

A No, I'm not. I'm just giving him the --

Q Oh.

A -- general background right now. I will refer to the figures in here. I'll try to give you a general background to -- what I was trying to do is just show the relationship of the San Juan Basin, these oil and gas fields, to the Espanola Basin and the area that we'll be talking about this morning.

In Cretaceous time there was a -- the Cretaceous rocks, of course, are the big producers in the San Juan Basin. They produce out of the whole Cretaceous package from fractured shales and bar sands in the Dakota and Mesaverde fluvial non-marine section.

That stratigraphy at Cretaceous time, 160-million years ago, actually went clear across the State of New Mexico, and it did that through a series of trans-

gressions and regressions which encompass the area we're going to talk about this morning.

So I put those stratigraphy strand lines simply on here to show you that, indeed, that stratigraphy is in this area and we can document that in the field in some detail.

This shows, then, our area, shown as this general area right in here around Santa Fe that we're going to talk to, and now I'd like to go to a specific exhibit to show you what we're attempting to do.

And now I'll refer you to Figure Number 1, which is a regional index map in the report.

This shows the Caja del Rio Grande Unit outline and the three proposed locations that we have on it, the one at the north, one at the central portion, and one at the southern part of the area.

The next figure is Figure Number 2 -pardon me, it's Figure Number 3 in this case. The land map
is Figure Number 2. But Figure Number 3 shows a blowup of
that and shows the actual geology. I think you all have
that in your report right there.

This shows a -- our best estimate on the contours on the top of the Cretaceous subcrop and a pre-Ter-tiary Cretaceous subcrop map and structure contours.

What you're looking at here is the depth to Cretaceous Dakota -- well, let me -- let me kind of back up.

On the east side the area is bounded by the -- where we believe the Cretaceous is subcropping under the Tertiary unit, that's on the east side. You can see where we have that little stippled line that says "Cretaceous", we know that that is there from our seismic and you can see that on seismic, so it comes down and bounds the east side of the unit.

On the north side, if we project the favorable facies in the Niobrara formation out of the San Juan Basin in on these, go back to this other map right here, if we look where the fractured shale production is in the Niobrara formation in the San Juan Basin and project that into the Espanola Basin, that favorable facies for both Dakota production and for Niobrara fractured shale production is that projection line on the northern side. That's our northern limit.

The western limit is the -2000 foot contours on the top of the Niobrara -- pardon me, on the top of the Niobrara.

What that represents is approximately 9000 -- or approximately 7000 feet drilling depth to the top of the Niobrara. We don't want to get any deeper than that because open fractures normally don't exist in the shales belwo that. So we want to be sure that we keep ourselves shallow enough to find open fractures in our objective Niobrara and yet not so deep that we're out of our objective.

On the south end, the south is defined

primarily by areas of igneous intrusion and we don't want to get too close to those because we know that would mess up the section, plus, as you can see, the section is coming up so shallow that if we get too shallow we won't have pressures. We know that there's an optimum window of between about 2000 and 7000, 7-to-9000 feet, that Niobrara production comes from.

Also to the south we run out of data. There is no data whatsoever down there and it's completely covered.

We don't see, and have no reason to believe there is any fractured structural noses, either synclines or anticlines, in that area, so we've drawn the southern boundary as shown on that map.

Q Mr. Black, would you briefly summarize the proposed drilling program that Peyton Yates proposes to conduct to -- for the initial exploration of this unit?

A Okay. We propose to drill a 6000-foot well, a wildcat, in Section 21 of 18 North, 8 East.

Then we propose a second 6800-foot wild-cat in Section 31 of 17 North, 8 East, and a 5000-foot wild-cat in Section 26 of 16 North, 7 East. We propose to test all of the Cretaceous section on structural noses and synclinal noses where we think the fracturing is the best, and where we can potentially hit bar sands that are trending that way from the San Juan Basin.

I would like to say one thing. There is

25 | know?

absolutely no well control in this area and it's obviously an area that is -- is a real wildcat area, and so we're going off of the seismic work that we have, the surface geology that we have, and projecting in the stratigraphy and structure from outside areas.

MR. DICKERSON: Mr. Examiner, I move admission of the Applicant's Exhibit Number Five at this time.

MR. QUINTANA: The Applicant's Exhibit Number Five will be admitted into evidence.

MR. DICKERSON: And I have no further questions of Mr. Black.

MR. TAYLOR: Would you explain the land ownership situation here? I know there's --

MR. DICKERSON: Refer to Exhibit Number One, Mr. Taylor, and it sets forth the percentage of Federal lands, State lands, and patented lands, as the total percent of the unit acreage.

MR. TAYLOR: Are any of these Federal lands Indian lands?

MR. DICKERSON: No.

MR. TAYLOR: This does not -this does not -- this doesn't include a portion of one of
those grants that was going to be turned over to Cochiti?

MR. DICKERSON: No.

MR. TAYLOR: As far as you

MR. DICKERSON: No.

MS, RICHARDSON: No.

MR. TAYLOR: I know there was a

bill in Congress to turn some land over here over to Cochiti but I don't know where it is.

MR. DICKERSON: No, as far as --

MR. BLACK: I tentatively

looked at that and that's south of this particular proposed (not understood.)

MR. TAYLOR: Okay. Have you got any follow-up correspondence from the government? I notice in the -- in the one letter they've said they will not accept a two-well commitment for this. Is that why you've moved to three wells, and have you since reached agreement with them?

MR. DICKERSON: Yes. Ms. Richardson can elaborate, let's say, if you'd like, but the Bureau of Land Management has tentatively approved the drilling program and the unit boundaries, and so we're at the point that except for the fact of our time problems which necessitated us proceeding with this hearing now, we would have already made application for formal approval to the BLM, but that will be done very shortly, and this has all been tentatively approved by the BLM.

MR. TAYLOR: How much of the -- what percentage of the fee lands that are included in this, which are 1900 acres, are signed up for?

provide us that?

MR. DICKERSON: Yes, sir, Exhi-

bit B to the unit agreement breaks down --

MR. TAYLOR: I see.

MR. DICKERSON: -- lease by

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17
1
    lease, which names the lessor, lessee, and the present own-
2
    ership of each lease.
3
                                  MR. TAYLOR: Okay.
4
                                  MR. QUINTANA: Anybody have any
5
    further questions of Mr. Black?
6
                                  Is there anything further in
7
    this case?
8
                                  In that case, Mr. Black, you
9
    may be excused.
                                 Case 8356 will be taken under
10
    advisement.
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12
                         (Hearing concluded.)
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CERTIFICATE

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division was reported by me; that the said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability.

Sary William Core

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 8356, heard by me on OCT. 17 19.84.

Oll Conservation Division