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NEW MEXICO OIL CONSERVATION COMMISSION

 EXAMINER	HEARIN	īG	_	
SANTA	FE	_,	NEW	MEXICO

Hearing Date FEBRUARY 18, 1987 Time: 8:15 A.M.

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NEW	MEXICO	OIL	CONSERVATION	COMMISSION

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Hearing Date FEBRUARY 18, 1987 Time: 8:15 A.M.

NAME	REPRESENTING	LOCATION
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1	STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION
2	STATE LAND OFFICE BLDG. SANTA FE, NEW MEXICO
3	18 February 1987
4	EXAMINER HEARING
5	
6	IN THE MATTER OF:
7	Application of Yates Petroleum Cor- CASE
8	portion for a unit agreement, Lea 9076 County, New Mexico.
9	- ·
10	
11	
12	
13	
14	BEFORE: David R. Catanach, Examiner
15	
16	TRANSCRIPT OF HEARING
17 18	
19 20	APPEARANCES
21	
22	For the Commission: Jeff Taylor
23	For the Commission: Jeff Taylor Legal Counsel for the Division Oil Conservation Division
24	State Land Office Bldg. Santa Fe, New Mexico 87501
25	For the Applicant: Chad Dickerson
	Attorney at Law DICKERSON, FISK, & VANDIVER Seventh & Mahone/Suite E Artesia, New Mexico 88210

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1	
2	MR. CATANACH: Call next Case
3	Number 9076.
4	MR. TAYLOR: The application of
5	Yates Petroleum Corporation for a unit agreement, Lea Coun-
6	ty, New Mexico.
7	MR. CATANACH: Are there appear-
8	ances in this case?
9	MR. DICKERSON: Mr. Examiner,
10	I'm Chad Dickerson of Artesia, New Mexico, on behalf of the
11	applicant, and I have two witnesses.
12	MR. TAYLOR: Are there other ap-
13	pearances in this case?
14	Will the two witnesses please
15	stand and be sworn in at this time?
16	
17	(Witnesses sworn.)
18	
19	KATHY COLBERT,
20	being called as a witness and being duly sworn upon his
21	oath, testified as follows, to-wit:
22	
23	DIRECT EXAMINATION

Will you state your name, your occupation,

BY MR. DICKERSON:

. . . About Salar the state of the s ; A; $(x_1,x_2,\dots,x_{n-1},x_n) = (x_1,\dots,x_{n-1},x_n) + (x_1,\dots,x_{n-1},\dots,x_{n-1},\dots,x_{n-1})$ en de la companya de the state of the s

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and by whom you're employed, please?
2
            Α
                     My name is Kathy Colbert. I'm a landman,
   employed by Yates Petroleum Corporation in Artesia, New Mex-
3
   ico.
5
                     And, Ms. Colbert, have you previously tes-
   tified before this Division as a petroleum landman?
6
7
            Α
                     Yes, I have.
8
                      Are you familiar with the application and
        land situation surrounding the application filed by
10
   Yates in this case?
11
            Α
                      Yes, I am.
12
                                 MR.
                                      DICKERSON:
                                                  Is the witness
13
   considered qualified, Mr. Examiner?
14
                                 MR.
                                      CATANACH:
                                                  Ms. Colbert is
15
   considered qualified.
16
            Q
                      Will you state the purpose of Yates'
17
   plication in Case 9076?
18
                      Yates Petroleum Corporation wishes to ob-
19
   tain approval of their proposed Moonrise State Unit, which
20
   encompasses 1600 acres of State of New Mexico leases located
21
   in Lea County, in order to effectively explore and develop
22
   the area.
23
                     Will you refer to what we've submitted
24
   Yates Exhibit Number One and orient the Examiner with regard
```

to the location of this proposed unit?

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Yes. Exhibit Number One is a land plat that outlines the 1600-acre unit. This unit is located in Township 18 South, Range 36 East, Lea County. There are seven different leases included in this outline. They are all State leases, being 100 percent of this proposed unit.

The initial test well is the red dot location being 330 from the south, 330 from the west lines of Section 27.

Q Will you refer to what is marked as Exhibit Number Two and tell us what that instrument is?

A Exhibit Number Two is the unit agreement upon a standard form for State lands. The agreement does designate Yates Petroleum Corporation as operator and covers such subjects as the unit area, the definition of unitized substances, and rights and obligations of the opertor and nonoperators.

Q Will you refer to the exhibits attached to that proposed unit agreement and describe a little bit more detail to the Examiner with respect to the ownership of the various tracts within the unit?

A Yes. Exhibit B to the unit agreement lists all the parties and their percentages owned in each of these seven tracts.

Six of these tracts have been committed to the unit, being 90 percent of the area. The only tract

```
which has not been committed is Tract No. 7, Chevron's HBP
2
   160-acre lease located in the northwest of 27.
3
                     What is Chevron's position as far as join-
   der of this unit?
5
                      We have talked to them by phone and,
6
   course, furnished them with all these exhibits, asked them
7
   to join the unit. They have declined.
8
            Q
                      So the balance of the working
                                                        interest
9
   within the unit boundaries are 90 percent is owned or con-
10
   trolled either by Yates or its in-house related corpora-
11
   tions.
12
            Α
                      That's correct.
13
                     What, Ms. Colbert, is the expiration date
14
   of the earliest leases committed to the unit?
15
            Α
                       The earliest expiration date is March 1st
16
                   There are three leases out of the seven com-
   of this year.
17
   mitted.
18
                      And when does Yates propose to commence
19
   its drilling operations?
20
            Α
                     We propose to spud next week, prior to the
21
   first.
22
                      And you request that the Division give us
            0
23
   expedited approval, if possible, of this unit agreement?
24
            Α
                      If possible, yes.
```

Refer to Exhibit Number Three and tell the

and the control of th and the control of th Line you had been self-than the The grant of the control of the cont and the control of th عيور ورياد يوان and the second of the second o and the control of th (4) (1) (1) (1) (1) (1) (1) (1) (1)

Examiner what that is.

A Exhibit Three is the proposed unit operating agreement, which is on an AAPL Form 610, 1977. It does cover areas such as acquisition and maintenance of leases and expenditures and liabilities of the participating parties.

There is an accounting procedure attached to govern the joint operations.

The Exhibit A to this agreement again lists all the parties and their percentages, not only under the unit, but under the initial test well.

Since only 90 percent of the unit acreage will be participating in the initial test well, it shows that the four participating companies will pay for this well.

Q And there is no depth restriction for the lands proposed to be unitized.

A None.

Q There is also a provision, isn't there,
Ms. Colbert, for subsequent joinder in the event Chevron
should later decide that it desires to join the unit?

A This is correct.

Q That's contained in Exhibit Number Two, the State unit agreement?

A Yes, the unit agreement.

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1	Q Refer to what we have submitted as Exhibit
2	Number Four and tell us what that is.
3	A Exhibit Number Four is a letter from the
4	Commissioner of Public Lands, dated January 28th, 1987,
5	which grants preliminary approval for the proposed Moonrise
6	State Unit as previously outlined.
7	Q And there were no requested changes or
8	problems that the office of the Commissioner had with the
9	proposed unit?
10	A Not as to the unit or its form.
11	Q Were Exhibits One through Four either pre-
12	pared by you or compiled by you or under your direction and
13	supervision?
14	A Yes.
15	MR. DICKERSON: Mr. Examiner,
16	at this time move admission of Yates Exhibits One through
17	Four and I have no further questions of this witness.
18	MR. CATANACH: Exhibits One
19	through Four will be admitted into evidence.
20	
21	CROSS EXAMINATION
22	BY MR. CATANACH:
23	Q Ms. Colbert, when was Chevron contacted
24	and invited to join the unit?
25	A They were contacted by phone approximately

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the middle of January.

Immediately after that they were furnished all copies of the unit agreement, the proposed geology summary, and notification that there would be a hearing set for this month.

They have not responded in writing, simply by telephone.

MR. DICKERSON: Let me point out, Mr. Examiner, that Chevron's N Lease, as testified, is held by production from wells on other lands and Chevron's interest will in no way be adversely affected by the approval of this unit and Chevron does, in fact, under the terms of the unit agreement at any time subsequent have the right to join the unit, if they should change their mind and elect to do so.

MR. CATANACH: Any time after?

MR. DICKERSON: Yes, sir.

Section 2 of the unit agreement submitted as Exhibi Two.

MR. CATANACH: I have no

further questions of the witness. She may be excused.

LESLIE BENTZ,

being called as a witness and being duly sworn upon her oath, testified as follows, to-wit:

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DIRECT EXAMINATION

3 BY MR. DICKERSON:

Q Will you state your name, by whom you're employed, and your occupation, please?

A Yes. My name is Leslie Bentz. I'm a geologist employed by Yates Petroleum Corporation, Artesia, New Mexico.

Q Ms. Bentz, have you previously testified before this Division or one of its examiners and had your credentials accepted as a matter of record?

A Yes, I have.

Q Are you familiar with the geological basis for the boundaries of the proposed Moonrise State Unit?

A I am.

Q What is the primary objective that Yates seeks to test in the formation of this unit?

A The primary objective of the test well within the unit is to test the Leonardian Lower Bone Spring and Wolfcamp age bottom flow deposits.

Q Please refer to what we have submitted as Yates Exhibit Number Five and tell the Examiner what you show on that map.

A Exhibit Five shows the location of the proposed unit with respect to the Lower Leonardian Delaware

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Basin and immediately adjacent to the western edge of the Central Basin Platform.

The last major uplift of the Central Basin Platform occurred during the Wolfcamp. Shallow water carbonates deposited during the Wolfcamp were completely eroded from this positve area.

It was in this manner that a large amount of shelf generated carbonates were introduced into the Delaware Basin. Hydrocarbon production from debris flows has been established on the eastern side of the Central Basin Platform and producton is expected on the western side.

Subsidence of this platform during Abo, Lower Leonardian, time, resulted in establishemnt of a fringing reef along the shelf margin.

A major drop in sea level exposed the reef to subaerial influences. Large blocks of the reef material were carried into the basin through submarine canyons. Hydrocarbon production from allochthonous blocks of shelf margin carbonates in otherwise basinal deposits has been prolific in Lea County.

Q Refer to what we have submitted as Exhibit Number Six and tell us what that is.

A Exhibit Six illustrates the loation of the proposed unit in relationship to areas of Lower Leonardian, Abo and Bone Spring, production, and Wolfcamp production.

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The blue color denotes Abo reef production. Bone Spring production is marked in red, and Wolfcamp production is colored green.

Q So the closest production to the proposed unit area from these formations is approximately two miles away?

A Yes.

Q Refer to Exhibit Number Seven and tell us what you show by that map.

A Exhibit Seven is a structure map contoured on top of the Third Bone Spring Sand. The scale is one equals 2000 feet. The contour interval is 100 feet.

The location of the seismic lines are marked by red shot points. The proposed location and TD are so noted.

This map shows the proposed unit to be on a structural high. The proposed drill site is located within the area of maximum structural closure. The steep dip on the eastern edge of the unit delineates the western edge of the Central Basin Platform.

Q Okay, refer us to Exhibit Number Eight and tell us what that is.

A Exhibit Eight is an Isochron map of the Third Bone Spring to Strawn interval. The scale is one equals 2000 feet. The contour interval is one millisecond.

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The seismic record indicates an anomalous stratigraphic thickening of this interval. The seismic reflections within this interval are somewhat erratic but indications of westward prograding inclined bedding can be found.

This suggests the accumulation of eroded shelf and shelf margin material deposited at the basin edge. The draping of overlying sediments caused by differential compaction also indicates that the accumulation is a carbonate.

The justification for the unit outline is the closure of the time interval point .160. The proposed well site will penetrate the section at its thickest and a total depth of 10,600 feet will test both the lower Leonard Bone Spring and the Wolfcamp intervals.

Q Refer to Exhibit Number Nine and tell the examiner what you show by that instrument.

A Exhibit Number Nine is a west to east structural cross section. This cross section shows the stratigraphic relationship between the Delaware Basin and the Central Basin Platform.

Faulting is present through the Wolf-camp, which indicates the last significant movement occurred during this period.

The Gulf Lea ACF State No. 1 illustrates

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that in this vicinity on the western edge of the Central Basin Platform Wolfcampian through Mississippian sediments have been stripped away.

The L & B State "J" No. 1-33, located on the western edge of the unit, has a thicker than normal section of Wolfcamp and Lower Bone Spring, Abo equivalent, age sediments. The substantiates the seismic anomaly in this interval that justified the formation of the unit.

A well drilled at the proposed loation should penetrate a thicker section of Lower Bone Spring and Wolfcamp detrital at a structurally advantageous position.

And from your study of this data have you formed a conclusion as to the propriety of the proposed unit boundaries?

Α Yes, I have. Evaluation of extant subsurface and seismic data indicates that the proposed Moonrise State Unit is justified.

Bentz, in your opinion will the ap-Ms. proval of this proposed Moonrise State Unit be in the interest of conservation, the prevention of waste, and the protection of correlative rights?

> Α Yes, it will.

O Were Exhibits Five through Nine compiled by you or under your direction and supervision?

> Α Yes, they were.

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1
                                 MR.
                                      DICKERSON:
                                                   Mr. Examiner,
2
   move admission of Yates Exhibits Five through Nine and I
3
   have no further questions of this witness.
                                 MR. CATANACH:
                                                  Exhibits Five
5
   through Nine will be admitted into evidence.
6
                                 What was your last name?
                                                             I m
7
   sorry.
 8
                                 MS. BENTZ: Bentz.
 9
                                 MR. CATANACH: Bentz.
10
                                 MS. BENTZ: B-E-N-T-Z.
11
12
                         CROSS EXAMINATION
13
   BY MR. CATANACH:
14
             Q
                       How would you justify the unit bound-
15
   aries again?
16
             Α
                       It's by the closure of the time interval
17
                                 MR. DICKERSON; This is reflec-
18
   ted on your Exhibit Number Eight?
19
                       Yes, it is.
20
                                 MR.
                                      DICKERSON:
                                                   Why don't you
21
   describe in a little more detail how you relate that time --
22
             Α
                       Okay.
23
                                 MR.
                                      DICKERSON: -- interval to
24
   the boundaries of this unit?
25
             Α
                        Basically this is a stratigraphic cross
```

section. The structure you see is formed from a stratigraphic thickening of this interval.

I feel that the L & B State No. 1 is just outside a much thicker area where there we 'll probably get a thicker accumulation of detrital and we will be structurally high to that, but I think that the .160 shows where we are getting the real build-up that is above regional.

Q The secondary objective in the well would be the Bone Spring, is that correct?

A Actually, I feel like that both the Bone Spring and Wolfcamp would have to be considered primary objectives.

Q Are there any other formations that you've looked at that may be productive in this area?

A There could be some production from younger horizons in the Bone Spring due to the drape over this structure.

There is also San Andres production in the area.

MR. DICKERSON: The proposed unit form, Mr. Examiner, unitizes all horizons under the unit boundary.

Q That proposed well would be at a standard location for -- for 40-acre proration units, is that correct?

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17
1
                      That's correct.
            Α
2
                                 MR. CATANACH:
                                                       have no
3
   further questions of the witness. She may be excused.
                                 Is there anything further in
5
   Case 9076?
6
                                 If not, it will be taken under
7
   advisement.
8
9
                        (Hearing concluded.)
10
11
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CERTIFICATE

,

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

Saley W. Boyd CSR

I do here were to that the foregoing is a complete reache of the proceedings in the Examiner nearing of Case No. 9076, heard by me on February 18 1987.

Davidle. Calanak, Examiner

Oil Conservation Division