

1 STATE OF NEW MEXICO  
2 ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
3 OIL CONSERVATION DIVISION  
4 STATE LAND OFFICE BUILDING  
5 SANTA FE, NEW MEXICO

6 2 March 1988

7 EXAMINER HEARING

8 IN THE MATTER OF:

9 Application of Yates Petroleum Corp- CASE  
10 oration for a unit agreement, Chaves 9317  
11 County, New Mexico.

12 BEFORE: Michael E. Stogner, Examiner  
13  
14

15 TRANSCRIPT OF HEARING  
16  
17

18 A P P E A R A N C E S  
19

20 For the Division:  
21  
22

23 For the Applicant: Chad Dickerson  
24 Attorney at Law  
25 DICKERSON, FISK & VANDIVER  
Seventh & Mahone/Suite E  
Artesia, New Mexico 88210

## I N D E X

## KATHY COLBERT

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MR. STOGNER: We'll call next Case Number 73 -- I'm sorry, 9317, which is the application of Yates Petroleum Corporation for a unit agreement, Chavez County, New Mexico.

At this time I'll call for appearances.

MR. DICKERSON: Mr. Examiner, I'm Chad Dickerson of Dickerson, Fisk and Vandiver, Artesia, New Mexico, appearing on behalf of the applicant, Yates Petroleum Corporation.

MR. STOGNER: Call for other appearances.

MR. CLINE: My name is William W. Cline, appearing on my own behalf.

MR. STOGNER: How do you spell your last name, Mr. Cline?

MR. CLINE: C-L-I-N-E.

MR. STOGNER: Are you going to be presenting any evidence today, Mr. Cline?

MR. CLINE: No.

MR. STOGNER: Any other appearances?

DR. SZABO: Ernie Szabo, State Land Office; no testimony, just interest.

1 MR. STOGNER: Thank you, Mr.  
2 Szabo.

3 MR. DICKERSON: Mr. Examiner, I  
4 have two witnesses.

5 MR. STOGNER: Will your witnes-  
6 ses please stand and be sworn at this time?

7  
8 (Witnesses sworn.)

9  
10 MR. STOGNER: Mr. Dickerson.

11  
12 KATHY COLBERT,  
13 being called as a witness and being duly sworn upon her  
14 oath, testified as follows, to-wit:

15  
16 DIRECT EXAMINATION

17 BY MR. DICKERSON:

18 Q Ms. Colbert, will you state your name,  
19 your occupation, and by whom you're employed and in what  
20 capacity?

21 A My name is Kathy Colbert. I'm employed  
22 by Yates Petroleum Corporation, Artesia, New Mexico, as a  
23 landman.

24 Q Ms. Colbert, you have testified before  
25 this Division on numerous occasions and your qualifications

1 are a matter of record, are they not?

2 A That is correct.

3 Q And are you familiar with the land  
4 ownership situation within the proposed unit area of the  
5 Sunny Side State Unit?

6 A Yes, I am.

7 MR. DICKERSON: Tender Ms. Col-  
8 bert as a petroleum landman, Mr. Examiner.

9 MR. STOGNER: Ms. Colbert is so  
10 qualified.

11 Q Ms. Colbert, will you state the purpose  
12 of Yates' application in Case 9317?

13 A Yates Petroleum Corporation is requesting  
14 approval of the Sunny Side State Unit.

15 This unit contains 8,836.81 acres of  
16 State of New Mexico lands located in Township 10 South,  
17 Range 26 East, Chaves County, New Mexico.

18 We wish to obtain this approval in order  
19 to effectively explore and develop this area.

20 Q Ms. Colbert, will you identify what we  
21 have submitted to the Division as the applicant's Exhibit  
22 Number One and tell us what it is?

23 A Exhibit Number One is the unit agreement  
24 on the standard form for state lands. This agreement does  
25 designate Yates Petroleum Corporation as operator.

1 Q Okay, let me ask you to turn to Exhibit  
2 A, being the land plat attached to that unit agreement and  
3 orient Mr. Stogner with respect to the location of your Sun-  
4 ny Side State Unit.

5 A Exhibit A is a plat outlining the unit  
6 boundaries. The unit is in 10 South, Range 26 East, with  
7 one section of land being in 10, 27.

8 There are 29 different tracts in this  
9 outline, all State leases, being 100 percent of the unit.

10 Q Okay. Will you describe to the Examiner  
11 the definition of unitized substances under -- what substan-  
12 ces are unitized under your proposed unit?

13 A We are requesting that all substances be  
14 classified as unitized substances and Section II of the unit  
15 agreement covers this.

16 Q Okay, and in what manner is production  
17 allocated among these various tracts by this unit agreement?

18 A Production is allocated on an acreage  
19 basis.

20 Q What is Yates' objective in this unit,  
21 the proposed depth of the initial test well and the forma-  
22 tions to be tested?

23 A We propose to drill the well to approxi-  
24 mate TD of 6800 feet. This will probably cut into the top  
25 of the Ordovician, the main objective being the Penn and Or-

1 divician.

2 Q Okay. Will you refer to Exhibit B to the  
3 unit agreement and tell Mr. Stogner in a little more detail  
4 certain information about the various tracts committed to  
5 the unit?

6 A Exhibit B to the unit agreement sets out  
7 each tract, number of acres, their expiration date; contains  
8 not only the royalty, any override, but also gives working  
9 interest as to each tract.

10 Q And what is the expiration date of the  
11 earliest lease expiring within this unit area?

12 A The first lease expires 4-1-88.

13 Q And is it the applicant's intention to be  
14 actually conducting drilling operations on or before the ex-  
15 piration of those leases?

16 A Yes.

17 Q Okay, Ms. Colbert, identify for us what  
18 we've submitted as Exhibit Number Two and tell us what that  
19 instrument is.

20 A Exhibit Number Two is our proposed unit  
21 operating agreement for the Sunny Side State Unit. This is  
22 an AAPL Form 610, 1977. There is an accounting procedure  
23 attached as Exhibit C to govern the joint operations.

24 Q And is the location of the initial test  
25 well set forth in this instrument?

1           A           The section, township and range is set  
2 forth on Page 4. Actual footage of that location is 1980  
3 from the north line, 660 from the west line of Section 10.

4           Q           So the west half of Section 10 will be  
5 dedicated to the well.

6           A           Yes.

7           Q           Okay. Refer to Exhibit Number A-1 to this  
8 unit operating agreement, Ms. Colbert, and tell us a little  
9 bit about the working interest ownership within the unit  
10 area and the current status of commitment by the working in-  
11 terest owners to the Sunny Side Unit.

12          A           Exhibit A-1 to the unit operating agree-  
13 ment lists all the parties, total number of acres that they  
14 have in this unit outline, their percentages. At this point  
15 we have 86 percent verbally committed to this unit, being  
16 Yates Petroleum, Yates Drilling, Abo Petroleum, MYCO, and  
17 Apache.

18                   The other parties have just been notified  
19 of changes in percentages and unit outline, what we were  
20 committing to the unit, due to the recent acquisition of  
21 seismic and new geological evaluation that happened just  
22 Friday.

23                   So we do not have a response as yet from  
24 these other companies. They have all been offered the op-  
25 portunity to join. They have been furnished with these re-



1   vised papers.

2                   Q           So your exhibit assumes these participat-  
3   ing -- these cost factors are calculated assuming that all  
4   parties ultimately decide to join the unit, even though not  
5   all have done so at this point.

6                   A           That's correct. It's set up as if every  
7   party was going to participate because they have been of-  
8   fered the opportunity to join, simply because I have not had  
9   any comment to the contrary. Obviously, this would be re-  
10   vised should some parties not wish to join.

11                  Q           But if any revisions are necessary,  
12   they'll be done on a simple surface acreage calculation,  
13   will they not?

14                  A           Exactly the same calculation, that's  
15   right.

16                  Q           Okay. Ms. Colbert, refer to what we've  
17   submitted as Exhibit Number Three and tell Mr. Stogner what  
18   that is.

19                  A           Exhibit Number Three is a letter to the  
20   Commissioner of Public Lands describing our proposed Sunny  
21   Side State Unit and requesting their preliminary approval.

22                  Q           I notice that there is a very recent  
23   date. This delay in furnishing the information requested to  
24   the State Land Office was caused by the delay in obtaining  
25   the seismic data that you referred to earlier?

1           A           This is correct. On Page 2, next to the  
2 last paragraph of this letter, very simply sets it out why  
3 there was a delay and why we were forced to wait until the  
4 last minute to come.

5           Q           And prior to this meeting this morning,  
6 you met, did you not, with the staff members of the Commis-  
7 sioner of Public Lands and went over the submittals of the  
8 geological evidence supporting this unit?

9           A           Yes, we did.

10          Q           Would you request that Mr. Stogner listen  
11 to the testimony today but withhold any order pending the  
12 opportunity for the State Land Office to make a formal re-  
13 sponse to the instruments that we submitted at the meeting  
14 this morning?

15          A           That's correct.

16          Q           Ms. Colbert, were Exhibits One, Two, and  
17 Three prepared by you or under your direction and supervi-  
18 sion?

19          A           Yes, they were.

20                   MR. DICKERSON: Mr. Stogner,  
21 move admission of Yates' Exhibits One, Two and Three at this  
22 time.

23                   MR. STOGNER: Exhibits One, Two  
24 and Three will be admitted into evidence at this time.

25                   MR. DICKERSON: I have no fur-

1 ther questions at this time.

2

3

CROSS EXAMINATION

4

BY MR. STOGNER:

5

Q

Ms. Colbert, I'd like to go back to One-A  
6 of your Exhibit Number Two and have you repeat what -- what  
7 companies have just been notified again of the change?

8

A

Yes. Of the change, this was sent out  
9 Monday. The companies that were notified -- now Apache  
10 wasn't notified, however, we already have their verbal that,  
11 yes, they are joining the unit.

12

Q

Okay, now when did you talk to Apache?

13

A

Monday. We had a representative in their  
14 office.

15

Q

February 29th.

16

A

Yes, that's correct.

17

Q

You've got a verbal on their approval.

18

A

Yes.

19

Q

Okay.

20

A

Marsh Operating, who is the W. W. Cline  
21 interest, Texaco, Elk Oil Company, Chevron USA and Samedan  
22 Oil Corporation.

23

They had been previously sent our pro-  
24 posed agreement and unit operating agreement back the end of  
25 January, first part of February, but, however, Monday was

1 when the revisions went out to show their revised percent-  
2 ages.

3 Q Okay, now you have not been in verbal  
4 contact with any of these five parties?

5 A Not since Monday. Last week, yes.

6 Q But none of them had any objection prior?

7 A No, not prior, but they had not -- hadn't  
8 heard about the new geological information prior to that,  
9 no.

10 Q Now I notice on the advertisement we were  
11 seeking a unit area of a little over 11,000 acres. Now this  
12 is today being reduced to a little over 8,000 acres, in that  
13 correct?

14 A That's correct.

15 Q Now, there's no additional lands that  
16 were taken out of the original call of the application, is  
17 there?

18 A No, sir.

19 Q Okay. In reducing the acreage, are there  
20 any operators not listed that were taken out of the proposed  
21 unit?

22 A Yes, there are.

23 Q And who might they be?

24 A Okay. It would be BHP, LL&E. Those were  
25 the only parties that had lands to the east that were re-

1     duced or cut out.

2                     MR. STOGNER: I have no further  
3     questions of Ms. Colbert at this time.

4                     Are there any other questions  
5     of this witness?

6                     She may be excused.

7                     Mr. Dickerson.

8                     MR. DICKERSON: Call Leslie  
9     Bentz, Mr. Stogner.

10

11                     LESLIE BENTZ,  
12     being called as a witness and being duly sworn upon her  
13     oath, testified as follows, to-wit:

14

15                     DIRECT EXAMINATION

16     BY MR. DICKERSON:

17                     Q             Ms. Bentz, will you state your name, your  
18     occupation and by whom you're employed, please?

19                     A             Yes. My name is Leslie Bentz. I'm em-  
20     ployed as a petroleum geologist by Yates Petroleum Corpora-  
21     tion of Artesia, New Mexico.

22                     Q             And you have also testified numerous  
23     times before this Division as a geologist and your creden-  
24     tials are a matter of record, are they not?

25                     A             Yes, they are.

1 Q And have you made a geological study of  
2 the available data surrounding the formation of the proposed  
3 Sunny Side Unit?

4 A Yes, I have.

5 MR. DICKERSON: Mr. Examiner,  
6 tender Ms. Bentz as an expert petroleum geologist.

7 MR. STOGNER: Ms. Bentz is so  
8 qualified.

9 Q Ms. Bentz, will you locate us geographic-  
10 ally with respect to the geological location of the Sunny  
11 Side Unit?

12 A The proposed unit is located south of the  
13 Foor Ranch PrePermian gas pool. The field produces gas from  
14 both Pennsylvanian age alluvial channel sandstones and Ordo-  
15 vician age dolomite.

16 The most prolific reservoir is the Ordo-  
17 vician formation. Cumulative production from this formation  
18 through December 31st, 1986, is 3.5 BCF.

19 Shallower production in the area in the  
20 area is confined to the Wolfcamp and the Abo formation for-  
21 mation. The proposed unit is also located immediately south  
22 and east of the South Pecos Slope Abo Pool.

23 Q And what are Yates' principal geological  
24 objectives by the formation of this unit?

25 A The primary objective of the test well

1 within the proposed unit is to locate production in the Or-  
2 dovician age dolomite.

3 Secondary objectives could include Penn-  
4 sylvanian age alluvial sandstones, Wolfcamp dolomite porosi-  
5 ty and alluvial channel sandstones within the Abo formation.

6 Q Ms. Bentz, will you refer to the struc-  
7 ture map which we submitted as Yates Exhibit Number Four and  
8 describe for the Examiner what information you have shown on  
9 that map?

10 A Exhibit Number Four is a structural con-  
11 tour map. The mapping horizon is the PrePennsylvanian un-  
12 conformity. The contour interval is 50 feet. The proposed  
13 unit is marked by large dashed line and the proposed loca-  
14 tion of the test well is shown.

15 Datum points are noted by circles and the  
16 appropriate datum is listed.

17 The dashed/dot line reveals the termina-  
18 tion of the Ordovician formation and the small dashed line  
19 outlines the subcrop of the Mississippian formation.

20 The structure map shows an area with a  
21 complex structural history. East/west faults with lateral  
22 movement bound the proposed unit on the north and south  
23 boundaries. These faults are probably related to the tec-  
24 tonics associated with the intrusion of the Camino del Diab-  
25 lo Dike. This dike is commonly known to be of Tertiary Age

1 in origin but probably is more of an ancestral body which  
2 was later rejuvenated during the Tertiary.

3 The other dominant faults, north/south in  
4 orientation, provide a parallel series of horsts and gra-  
5 bens. These in echelon sequence of horsts and grabens are  
6 persistent throughout Chaves County.

7 A complex combination of these faults  
8 provide two large structural features with significant  
9 closure. They are located within the confines of the pro-  
10 posed unit.

11 The structures are ideally located in re-  
12 lationship to the subcrop of the Mississippian formation.

13 As most of the proposed unit lies in an  
14 area where the Mississippian is normally absent, and/or the  
15 relief of the structure is sufficient, erosional stripping  
16 of the Mississippian has provided an opportunity for the  
17 dolomite in the Ordovician to be exposed to subaerial  
18 weathering and Karst topography has developed.

19 With the absence of the Mississippian,  
20 Pennsylvanian age shales are left immediately above the  
21 weathered terrain providing an excellent source of hydrocar-  
22 bons.

23 The west boundary of the unit is defined  
24 by the normal subcrop of the Ordovician which marks the end  
25 of adequate reservoir rocks.



1 Q Ms. Bentz, will you refer to Exhibit Num-  
2 ber Five, identify it and tell us what you've shown on that  
3 cross section?

4 A Exhibit Five is a structural cross sec-  
5 tion A-A'. It is located north of the proposed unit but  
6 clearly indicates the normal subcrop pattern of the area.

7 The McClellan Penjack No. 1, located on  
8 the left of the cross section, indicates that the strati-  
9 graphy consists of the Pennsylvanian formation lying uncon-  
10 formably on the Precambrian basement.

11 The center well has encountered a full  
12 section a full section of Ordovician but the Mississippian  
13 is absent.

14 Drill stem tests indicate that the Ordo-  
15 vician is water wet but a good reservoir. There were some  
16 gas shows associated with the water recovery.

17 The final well has a normal section with  
18 the Mississippian present. The thick section of Penn Clas-  
19 tics is indicative that the well is located in a deposi-  
20 tional low. Again the Ordovician formation tested water with  
21 associated gas.

22 MR. STOGNER: And that last  
23 well, you're talking about the Harper Oil South Dallas No.  
24 1?

25 A Yes.

1           Q           Now, Ms. Bentz, refer to Exhibit Number  
2 Six and tell us what you've showed by that cross section.

3           A           Exhibit Number Six, cross section B-B',  
4 is located southwest to northeast across the proposed Sunny  
5 Side State Unit.

6                   The Ralph Lowe Humble Camance No. 1  
7 borehole encountered the Pennsylvanian section again resting  
8 unconformably on the Ordovician.

9                   The proposed location is shown to be on  
10 an upthrown horst block. The Ordovician should be  
11 productive with this type of relief. Significant closure is  
12 expected to continue through the Wolfcamp formation. The  
13 final well comon to both cross sections shows again a full,  
14 normal section.

15           Q           And, Ms. Bentz, were Exhibits Four, Five  
16 and Six prepared by you or under your direction and  
17 supervision?

18           A           Yes, they were.

19                   MR. DICKERSON: Move admission  
20 of Yates Exhibits Four, Five and Six, Mr. Examiner.

21                   MR. STOGNER: Exhibits Four,  
22 Five and Six will be admitted into evidence.

23           Q           Ms. Bentz, based on your study of this  
24 available data, what conclusion have you drawn regrding a  
25 proposed Sunny Side Unit?

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A           The proposed Sunny Side Unit is located between two east/west latgeral faults, which provide the north and south boundaries.

A major down to the east fault provides the eastern boundary.

The west line is defined by the subcrop of the Ordovician formation.

Within the confines of the unit two large structures have been identified. The initial test well will test the highest westernmost structure.

The test is designed to test the Ordovician formation, which is a significant reservoir to the northeast at the Foor Ranch Field.

Seismic also indicates that this initial penetration has an excellent chance for Wolfcamp production, as well.

Q           Ms. Bentz, in your opinion will the approval of this application be in the interest of conservation, the prevention of waste and the protection of correlative rights?

A           Yes, it will.

MR. DICKERSON: Mr. Examiner, I have no further questions of this witness.

## CROSS EXAMINATION

1  
2 BY MR. STOGNER:

3 Q Ms. Bentz, I see about wellbores within  
4 this unit area. Am I correct or is there more within the  
5 unit boundary?

6 I have one in Section 8, 15, and 14.

7 A There is also a very shallow one in Sec-  
8 tion 11 and Section 12.

9 Q Okay. How about the ones in Section 15  
10 and 14, were those deep enough to conclude geological data  
11 of what you're talking about today?

12 A Most of these wells in here have a TD of  
13 around 11-to-1200 feet, which was designed to test the San  
14 Andres. The well in Section 8 was completed as an  
15 Abo producer but it TD'ed at the very top of the Wolfcamp  
16 formation.

17 Q So therefor it wasn't any help to you in  
18 your geological --

19 A No, it was not. It also -- we weren't  
20 able to get -- it wasn't a Yates Petroleum well. We weren't  
21 able to get very good logs. We weren't able to get open  
22 hole logs, so that the data we do have from it is limited.

23 Q Any of these five wells within the unit,  
24 have they had any production from any formation, that you  
25 know of?

1           A           The well in Section 8 was completed as an  
2 Abo producer.

3           Q           Oil or gs?

4           A           Gas.

5           Q           Was it a commercial well in that it pro-  
6 duced for a long period of time or --

7           A           No.

8           Q           -- was it a short producer?

9           A           It was produced for awhile but it never  
10 made any real significant production.

11          Q           Now, these seismic lines that appear on  
12 Section 4, that was the points that I guess you just ran re-  
13 cently?

14          A           The seismic line that we recently got is  
15 the east/west line that goes across the unit.

16          Q           Okay.

17          A           We did have the other lines prior to Fri-  
18 day.

19          Q           You utilized the old information, also.

20          A           Yes. Yes.

21          Q           Now, I show a bunch of wells directly to  
22 the south in Sections 26, 27 and 22. I take it that's a  
23 shallow oil well. Was that -- was that in the Foor Ranch  
24 area that you were previously talking about?

25          A           No. That is the Brown Field. It pro-

1 duces from the San Andres and there is some Queen produc-  
2 tion; very shallow depths.

3 The Foor Ranch Pool I was speaking of  
4 produces in Section 23, 24, 25, of 9, 26, and Sections 19  
5 and 30, of 9, 27, so that's immediately to the northeast.

6 Q And some of those wells are shown in the  
7 upper portion, the upper righthand portion of your Exhibit  
8 Number Four, is that correct?

9 A Yes.

10 Q Like the Runyan Wells No. 1 and 2 --

11 A Right.

12 Q Viking State and Meredith.

13 A Right. I really didn't include the data  
14 up there because I've testified on other units, the Dragon-  
15 fly, and pretty much covered that in other units.

16 Q Now, the well, I guess that's the Ralph  
17 Lowe Humble Comanche Well, is that presently producing?

18 A No, it is plugged.

19 Q It is plugged. Okay, how about the Pen-  
20 jack Well No. 1?

21 A It is an Abo producer.

22 Q Was it commercial in the Abo?

23 A I think in the long run it's probably  
24 going to prove to be commercial.

25 MR. STOGNER: I have no further

1 questions of Ms. Bentz.

2 Are there any other questions  
3 of this witness?

4 MR. DICKERSON: No, Mr.  
5 Examiner.

6 MR. STOGNER: She may be ex-  
7 cused.

8 Mr. Dickerson?

9 MR. DICKERSON: I have nothing  
10 further, Mr. Examiner.

11 MR. STOGNER: Does anybody else  
12 have anything further in this case? Mr. Cline?

13 MR. CLINE: No.

14 MR. STOGNER: Mr. Szabo?

15 If nobody has anything further  
16 in this case before I take it under advisement I will elect  
17 to hold an order on this pending preliminary letter from the  
18 State Land Office (unclear), Mr. Dickerson.

19 MR. DICKERSON: Be fine, Mr.  
20 Examiner.

21 MR. STOGNER: If you'd see that  
22 I get a copy of that, we'll appreciate it.

23 MR. DICKERSON: We will do it.

24 MR. STOGNER: This case will be  
25 taken under advisement.

(Hearing concluded.)

## C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY  
CERTIFY that 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 the hearing, prepared by me to the best of my ability.

Sally W. Boyd CSR

I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Examiner hearing of Case No. 9317  
heard by me on March 12, 1988.

William H. Rogers Examiner  
Oil Conservation Division



## NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARINGSANTA FE, NEW MEXICOHearing Date MARCH 2, 1988 Time: 8:15 A.M.

NAME	REPRESENTING	LOCATION
Bob Fuller E. Szabo	Bryant SLB	Santa Fe Santa Fe
W. J. Kelbach Chad Durham Bob Chubb Leslie Bentz Kathy Abbott Randy Patterson William D. Chinn	Kelbach Kelbach Abrey Durham, Fink & Vordme Self Yates Pet. Yates Petroleum myself / Mark Opportunity Company	Santa Fe Artesia Midland Artesia Artesia ✓ Alamogordo

