

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

APPLICATION OF YATES PETROLEUM)
CORPORATION FOR A UNIT)
AGREEMENT, LEA COUNTY,) CASE NO. 10383
NEW MEXICO.)
-----)

REPORTER'S TRANSCRIPT OF PROCEEDINGS
EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner
 September 19, 1991
 8:15 a.m.
 Santa Fe, New Mexico

This matter came for hearing before the Oil Conservation Division on September 19, 1991, at 8:15 a.m. at the State Land Office Building, 310 Old Santa Fe Trail, Santa Fe, New Mexico, before Linda Bumkens, CCR, Certified Court Reporter No. 3008, in and for the County of Bernalillo, State of New Mexico.

FOR: OIL CONSERVATION
DIVISION

BY: LINDA BUMKENS CCR
Certified Court Reporter
CCR NO. 3008

I N D E X

September 19, 1991
 Examiner Hearing
 CASE NO. 10383

APPEARANCES

2

WITNESSES

MICHAEL R. BURCH

Direct Examination by Mr. Carr

4

Examination by Mr. Catanach

9

Direct Examination by Mr. Stovall

10

LESLEY BENTZ

Direct Examination by Mr. Carr

11

Examination by Mr. Catanach

19

RECESS

21

REPORTERS CERTIFICATE

22

E X H I B I T S

Yates Petroleum Corporation

Exhibit 1

9

Exhibits 2 - 4

18

A P P E A R A N C E S

FOR THE DIVISION:

ROBERT G. STOVALL, ESQ.

General counsel

Oil Conservation Commission

310 Old Santa Fe Trail

Santa Fe, New Mexico

87501

FOR YATES

CORPORATION:

CAMPBELL, CARR, BERG &

SHERIDAN P.A.

BY: MR. WILLIAM F. CARR, ESQ.

110 North Guadalupe

Santa Fe, New Mexico

1
2 EXAMINER CATANACH: Call the hearing to order
3 this morning for Docket number 27-91. We'll go
4 ahead and call the continuances and dismissals
5 first. Case 10379 is continued to October 17th.
6 Case 10370 is continued until October 31st. Case
7 10360 is dismissed. Case 10384 is dismissed. 10385
8 is dismissed. Case 10372 is continued until October
9 3rd, and Case 10352 is continued until October 3rd.
10 We'll go ahead and call the first case this morning.
11 Call case 10383.

12 MR. STOVALL: Application of Yates Petroleum
13 Corporation for a unit agreement, Lea County, New
14 Mexico.

15 EXAMINER CATANACH: Any appearances in this
16 case?

17 MR. CARR: May it please the Examiner, my name
18 is William F. Carr with the law firm Campbell, Carr,
19 Berge & Sheridan of Santa Fe. I represent Yates
20 Petroleum Corporation and I have two witnesses.

21 EXAMINER CATANACH: Any other appearances?
22 Will the witnesses please stand and be sworn?

23 (At which time Michael R. Burch and were
24 sworn.).

25 MR. CARR: At this time I call Michael Burch

1 B-u-r-c-h.

2 MICHAEL R. BURCH,
3 the Witness herein, being previously duly
4 sworn, was examined and testified as follows:

5 DIRECT EXAMINATION

6 BY MR. CARR:

7 Q. Will you state your full name for the
8 record, please?

9 A. Michael R. Burch.

10 Q. Where do you reside?

11 A. I live in Artesia, New Mexico.

12 Q. Mr. Burch, by whom are you employed and in
13 what capacity?

14 A. Employed as a land man by Yates Petroleum
15 Corporation.

16 Q. Have you previously testified before this
17 division?

18 A. Yes, I have.

19 Q. And at the time of that prior testimony
20 were your credentials as a land man accepted and
21 made a matter of record?

22 A. Yes, they were.

23 Q. Are you familiar with the application filed
24 in this case on behalf of Yates Petroleum
25 Corporation?

1 A. Yes, I am.

2 Q. Are you familiar with the proposed
3 Moonshine State Unit and the acreage contained
4 therein?

5 A. Yes.

6 MR. CARR: Are the witness's qualifications
7 acceptable?

8 EXAMINER CATANACH: They are.

9 Q. (By Mr. Carr) Mr. Burch, will you briefly
10 state what Yates Petroleum Corporation seeks with
11 this application?

12 A. With this application, Yates Petroleum
13 Corporation seeks approval of the Moonshine State
14 Unit agreement for an area comprising 2,238.08
15 acres, more or less, of state land in portions of
16 Township 19 South, Range 36 East, Lea County, New
17 Mexico.

18 Q. Mr. Burch, when this case was originally
19 advertised it was for a unit comprised of
20 approximately 4800 acres. Will Yates call a
21 geological witness to explain why this area has been
22 contracted?

23 A. Yes, they will.

24 Q. Have you prepared, or has there been
25 prepared under your direction, certain exhibits for

1 presentation in this case?

2 A. Yes.

3 Q. Will you refer to what has been marked as
4 Yates Petroleum Corporation Exhibit Number 1?
5 Identify that and review it for Mr. Catanach?

6 A. This is a State approved form for our
7 Moonshine Unit with no amendments or modifications.
8 Attached to it are Exhibits A, which is a land plat
9 outlining the unit area, and Exhibit B with a
10 detailed description of the state lease, expirations
11 and royalties, and leasehold owners.

12 Q. Okay. Let's go to Exhibit A. What is the
13 nature of all of this land? Are there any fee or
14 Federal land included in the unit area?

15 A. In this outline on Exhibit A those are all
16 State lands that are contributed to the unit.

17 Q. And the leasee on all of these lands is
18 Yates Petroleum Corporation?

19 A. The Yates Petroleum Corporation and their
20 entities as outlined on Exhibit B.

21 Q. Okay. So Exhibit Number --

22 A. Which include Abo Petroleum Corporation,
23 Yates Drilling Company, and Myco Industries Inc.

24 Q. What is the status of these leases in terms
25 of their expiration dates?

1 A. We have two critical expiration dates. One
2 in Section 10 of expiration of 10-1-91, and one
3 80-acre tract in Section 9, which also has an
4 expiration of 10-1-91.

5 Q. Have you reviewed this proposed Moonshine
6 State Unit with the Land Office?

7 A. We met with the representatives from the
8 State Land Office yesterday for preliminary
9 approval. We don't anticipate problem. However,
10 the State Land Office reserved preliminary approval
11 until Floyd Prondo returns Monday. He's out of town
12 right now. Due to the imminent expirations of our
13 lease on October the first of '91, we presented all
14 of our final executed documents on this unit
15 agreement so that the Land Office could expedite the
16 final approval once we receive an order from the
17 OCD.

18 Q. Now, 100 percent of the acreage in this
19 unit has been committed to it; is that correct?

20 A. That's correct.

21 Q. And Yates desires to be designated the
22 operator of the unit?

23 A. That's correct.

24 Q. What's the primary objective?

25 A. Our primary objective on our initial well

1 is a 5,000 foot Grayburg test.

2 Q. And what formations do you propose to
3 unitize?

4 A. We propose to unitize all formations.

5 Q. Could you just briefly summarize what your
6 plans for development of this unit are?

7 A. Well, our plans for development will be
8 determined by our first well. We'll drill our first
9 well, and then within six months of a commercial
10 determination we'll look at filing a development
11 plan, a plan of development.

12 Q. And the unit agreement provides for filing
13 these plans of development?

14 A. Yes, sir, it does.

15 Q. And does it provide that the plans will
16 also be filed with the Oil Conservation Division?

17 A. Yes, it does.

18 Q. And how often do you say they were to be
19 filed?

20 A. Well upon commercial determination we'll
21 file a plan of development within six months, and
22 then it needs to be filed every 12 months
23 thereafter.

24 Q. When do you propose to actually spud the
25 initial well on the unit?

1 A. We're looking at spudding the well on or
2 before September the 30th.

3 Q. Does Yates therefore request that order in
4 this case be expedited to the extent possible?

5 A. Yes, sir, it does.

6 Q. In your opinion, will granting this
7 application be in the best interest of conservation,
8 the prevention of waste, and the protection of
9 correlative rights?

10 A. Yes, it will.

11 Q. Was Exhibit Number 1 prepared by you?

12 A. Yes, it was

13 MR. CARR: At this time, Mr. Catanach, we will
14 move the admission of Yates Petroleum Corporation
15 Exhibit Number 1.

16 EXAMINER CATANACH: Exhibit Number 1 will be
17 admitted as evidence.

18 (Yates Exhibit 1 was
19 admitted into evidence.)

20 MR. CARR: That concludes my direct
21 examination of Mr. Burch

22 EXAMINATION

23 BY EXAMINER CATANACH.

24 Q. Mr. Burch, the personnel you met with at
25 the Land Office, did they have any reservations

1 about this State unit at all?

2 A. Weren't indicated to us if there were.

3 Q. Final approval has to be given by
4 Mr. Prondo; is that correct?

5 A. Well, our understanding was that
6 preliminary approval had to be given by Mr. Prondo
7 and they reserved that until he returned, and final
8 approval will not be given until they got your order
9 here.

10 Q. I have no further questions.

11 MR. STOVALL: Just one question.

12 DIRECT EXAMINATION

13 BY MR. STOVALL:

14 Q. How come this is coming through a hearing
15 on September 19th when you have an
16 October 1st lease deadline?

17 A. Sometimes when you deal with as much
18 acreage as we deal with, that's the nature of the
19 beast sometimes. These things come up with a short
20 fuse on them. We don't like to work them that way,
21 but in this case that happened.

22 MR. STOVALL: Nothing further.

23 EXAMINER CATANACH: Witness may be excused.

24 MR. CARR: At this time I will call Lesley
25 Bentz.

1 LESLEY BENTZ

2 the Witness herein, being previously duly sworn, was
3 examined and testified as follows:

4 DIRECT EXAMINATION

5 BY MR. CARR:

6 Q. Will you state your name for the record,
7 please?

8 A. Yes. My name is Lesley Bentz.

9 Q. Where do you reside?

10 A. In Monticello, Arkansas.

11 Q. And by whom are you employed?

12 A. Yates Petroleum Corporation.

13 Q. And do you commute from Monticello,
14 Arkansas?

15 A. Yes, I do.

16 Q. Have you previously testified before the
17 New Mexico Oil Conservation Division?

18 A. Yes, I have.

19 Q. And at that time, were your credentials as
20 an expert witness accepted and made a matter of
21 record?

22 A. Yes, they were.

23 Q. And how were you qualified at that time? As
24 a petroleum geologist?

25 A. Yes.

1 Q. Are you familiar with the application filed
2 in this case on behalf of Yates Petroleum
3 Corporation?

4 A. Yes, I am.

5 Q. And are you familiar with the area which is
6 included in the proposed Moonshine State Unit?

7 A. Yes, I am.

8 Q. Have you made a geological study of that
9 area?

10 A. I have.

11 MR. CARR: Are the witness's qualifications
12 acceptable?

13 EXAMINER CATANACH: They are.

14 Q. (By Mr. Carr) Have you prepared certain
15 exhibits for presentation here today?

16 A. Yes, I have.

17 Q. Could you review to what has been marked
18 for identification as Yates Petroleum Corporation
19 Exhibit Number 2? Identify that and review it for
20 Mr. Catanach.

21 A. Okay. Exhibit Number 2 is a structural
22 contour map. The mapped horizon is the top of the
23 Queen formation, and the contour interval is 50
24 feet. The datum points to use are denoted by
25 circles and the appropriate datums were posted

1 beside them. Siesmic lines critical to the unit are
2 marked with the converted subsea depths beside the
3 shot point location.

4 Q. Generally, where is this unit located?

5 A. The unit is located in Sections 3, 10, 9,
6 and the north half of 16, Township 19 South, Range
7 36 East.

8 Q. This is basically a unit for the
9 development of what formation?

10 A. Mainly for the shallow formations, the
11 Queen formation, and the Grayburg formation.

12 Q. And there is shallow production throughout
13 this area, is there not?

14 A. Yes, there is. Areas highlighted in the
15 yellow recognize the Queen production. The green
16 marks the Yates Seven Rivers production, and the
17 blue area denotes the San Andres Grayburg
18 production.

19 Q. Now, on this Exhibit Number 2, you have
20 outlined the unit area?

21 A. Yes, I have. It is shown by the dashed
22 lines.

23 Q. And is this geological interpretation the
24 basis for the contraction of the unit boundary as
25 opposed to what was originally sought?

1 A. Yes, it is.

2 Q. Okay.

3 A. We have received data in the past two weeks
4 that altered our geological interpretation, and
5 therefore we contracted the unit area.

6 Q. Could you just explain to Mr. Catanach the
7 importance of structure in obtaining production in
8 this area?

9 A. Yes, I can. The unit area is located on a
10 compressional force fold off the Central Basin
11 Platform. There are numerous shallow reservoirs in
12 the area, but without some sort of structure whether
13 it be low relief structural closure or broad
14 structural nose in the unit, or an uplifted area
15 like the Central Basin Platform, there is really
16 very little shallow production, so structure is
17 critical.

18 Q. Now, this unit appears to be located
19 basically on a structural nose; is that right?

20 A. That's correct. At the shallow depth it is
21 on a broad structural nose.

22 Q. You also have on this map traces for a
23 cross section; is that right?

24 A. Yes. Cross section north\south and
25 east\west are noted across Section A A', cross

1 section B B'.

2 Q. Are you ready to go to those cross
3 sections?

4 A. Yes. I'd like to explain a little bit more
5 about the shallow production in the area. The unit
6 area is located between the Pearl Queen field. The
7 Pearl field has made 20 million barrels of oil to
8 date and 10 BCF of gas. It is also located adjacent
9 to the Central Basin Platform where the Queen has
10 made, and the Yates San Andres has made, 67 million
11 barrels and 401 BCF of gas. The Grayburg production
12 there is 369 million barrels and 629 BCF, so this is
13 an area of very prolific shallow production.

14 Q. Why don't we go to Exhibit Number 3, your
15 A A' cross-section, the north\south cross-section,
16 and just ask you to review that with Mr. Catanach?

17 A. Okay. Exhibit Number 3 is a structural
18 cross-section A A', and it provides a north to south
19 southwest line across the unit area. The sections
20 confirm the broad structural nose, but more
21 importantly it illustrate the potential pay zones
22 over the unit area.

23 The first well is the Yates Petroleum
24 Moonrise State Unit Number 1, and it's located north
25 of the unit in Section 27 of 18 South, 36 East.

1 This unit well was completed as a gas well with
2 initial potential of 1500 MCF a day. The second
3 well, the Tammarak Petroleum Morrow 3 State was
4 completed as a Grayburg well and is immediately
5 adjacent to the unit. It was completed for a
6 potential of 17 barrels of oil a day, 9 MCF, and 24
7 barrels of water. This well was never really
8 produced before it was plugged.

9 The final well, the John Trig Well, the
10 Federal Pl 1-20 was completed, the Pennrose, with
11 cumulative production of 6,000 barrels of oil and
12 95,000 barrels of water, and as indicated by the
13 structure map, we will be significantly up dip to
14 that well.

15 Q. Is the proposed location for the initial
16 well also indicated on this exhibit?

17 A. Yes, it is. The areas shown in gray are
18 the areas we expect hydrocarbon accumulation on the
19 actual shallow reversal -- dip reversal.

20 Q. Okay. Then the blue shading is what?

21 A. That represents porous but water bearing.

22 Q. Okay. Let's move on now to Exhibit
23 Number 4, the cross section B B', and, again, I'd
24 ask you to review that for Mr. Catanach?

25 A. Cross-section B B' is very similar to

1 cross-section A A' with the exception that it's a
2 west to east cross-section across the unit area.

3 The western most well illustrates
4 productive zone in the Pear Queen field accumulating
5 production of 62,000 barrels of oil. This well
6 shows how significant Pennrose production can be in
7 this area. The second well is located on the
8 western edge of the San Simone Channel, and it
9 illustrates excellent reservoir development in the
10 Queen, however, big on the edge of that channel is
11 structurally low position and the Queen's water
12 bearing. Our unit is up dip to that well.

13 And the final two wells are actually
14 located on the Central Basin Platform. Again, they
15 illustrate good reservoir development, and they show
16 associated high carbon production in the Platform
17 area.

18 Q. Based on your geological study of this
19 area, what conclusions have you been able to reach?

20 A. Well, I believe that the Moonshine Unit is
21 located on an anticlinal compressional force fold in
22 an area that has excellent shallow reservoirs. The
23 north, south and western boundaries are defined by
24 the subtle dip which also has anticlinal features.
25 The eastern boundary is limited by the edge of the

1 uplifted Central Basin Platform.

2 The initial test is located in a very
3 structurally advantageous location. The initial
4 test well will test the Queen and Grayburg
5 formations in an area that has excellent reservoir
6 potential and outstanding shallow hydrocarbon
7 production.

8 Q. Do you believe that approval of this
9 application will enable Yates to produce
10 hydrocarbons that otherwise may not be recovered?

11 A. I believe this offer is a very prudent and
12 effective means for exploration in this area.

13 Q. In your opinion, will approval of this
14 application be in the best interest of conservation,
15 the prevention waste, and protection of correlative
16 rights?

17 A. Yes, it will.

18 Q. Were Exhibits 2 through 4 prepared by you?

19 A. They were.

20 MR. CARR: At this time, Mr. Catanach, I will
21 move the admission of Yates Exhibits 2 through 4

22 EXAMINER CATANACH: Exhibits 2 through 4 will
23 be admitted as evidence.

24 (Yates Exhibits 2 through 4
25 were admitted in evidence.)

1 MR. CARR: And that concludes my direct
2 examination of Miss Bentz.

3 EXAMINATION

4 BY EXAMINER CATANACH:

5 Q. Miss Bentz, where's the initial well going
6 to be located?

7 A. Initial well is located 990 from the north
8 line and 990 from the west line Section 10, Township
9 19 South, Range 36 East.

10 Q. 990 from the west line?

11 A. Uh-huh.

12 Q. Structurally that well will be about as
13 high as the Tammarak well?

14 A. Structurally that well should be
15 approximately 20, possibly even 30 feet up dip to
16 the Tammarak well.

17 Q. Do you know, was the Tammarak well -- was
18 it plugged?

19 A. It was plugged.

20 Q. It was never produced. Was that deemed
21 noncommercial, or do you know anything about it?

22 A. I'll really don't know other than they
23 completed it for something that looked like it could
24 be produced, and they never showed any production,
25 and then it was plugged. There could have been

1 other extenuating circumstances I don't know about.

2 Q. Is that the only well in the unit that's
3 penetrated the Grayburg?

4 A. The Getty well in Section 9 also penetrated
5 the Grayburg. One zone in the Grayburg was tested,
6 but for the most part the Getty well was not tested
7 in the shallow section. It was drilled as a deep
8 test. The Ant well was, but it was also -- it's on
9 the Central Basin Platform in the edge of the unit.
10 Again, no shallow zones were tested and that well
11 was drilled as a deep test.

12 Q. So you believe you've got potential in the
13 Queen and the Grayburg?

14 A. Yes, I do. The Upper Queen and then
15 several different porosity zones in the Pennrose
16 member of the Queen.

17 Q. Anything above the Queen?

18 A. There is slight potential for Yates in the
19 Rivers production. It does produce in the Platform.

20 Q. Anything below the Grayburg?

21 A. Not in the immediate area.

22 Q. Is it my understanding that all formations
23 are going to be unitized, even below the Grayburg?

24 A. As we are drilling the well, if something
25 exceptional happened that will give us an option at

1 a later date to go ahead and drill a deeper well if
2 it's more dip.

3 EXAMINER CATANACH: I have nothing further of
4 the witness. You may be excused.

5 MR. STOVALL: I Have nothing further in this
6 case.

7 EXAMINER CATANACH: Having nothing further in
8 this case, Case 10383 will be taken under
9 advisement.

10 (The foregoing case was concluded at the
11 approximate hour of 8:35 a.m.)
12
13
14
15
16

17 I do hereby certify that the foregoing is
18 a complete report of the proceedings in
19 the above case, heard on Case No. 10383,
heard by me on September 19, 1991

20 David L. Catanch, Examiner
21 Oil Conservation Division
22
23
24
25

1
2 STATE OF NEW MEXICO)
) ss.
3 COUNTY OF BERNALILLO)


4 REPORTER'S CERTIFICATE

5 BE IT KNOWN that the foregoing transcript of
6 the proceedings were taken by me, that I was then
7 and there a Certified Shorthand Reporter and Notary
8 Public in and for the County of Bernalillo, State
9 of New Mexico, and by virtue thereof, authorized to
10 administer an oath; that the witness before
11 testifying was duly sworn to testify to the
12 whole truth and nothing but the truth; that the
13 questions propounded by counsel and the answers of
14 the witness thereto were taken down by me, and that
15 the foregoing pages of typewritten matter contain a
16 true and accurate transcript as requested by counsel
17 of the proceedings and testimony had and adduced
18 upon the taking of said deposition, all to the best
19 of my skill and ability.

20 I FURTHER CERTIFY that I am not related to
21 nor employed by any of the parties hereto, and have
22 no interest in the outcome hereof.

23 DATED at Bernalillo, New Mexico, this day
24 November 11, 1991.

25 My commission expires
April 24, 1994


LINDA BUMKENS
CCR No. 3008

NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARING

SANTA FE, NEW MEXICOHearing Date SEPTEMBER 19, 1991 Time: 8:15 A.M.

| NAME | REPRESENTING | LOCATION |
|------------------|-------------------------------|--------------------|
| Jack Ahlen | Steno Operating Corp | Roswell |
| MIKE BURCH | YATES PETRO. CORP. | ARTESIA |
| Mecca Mounts | Yates Petroleum Corp | Artesia |
| Randy Patterson | Yates Petroleum | Artesia |
| Leslie Bontz | Yates Petroleum | Artesia |
| J. D. Kelleher | Kelleher Kelleher Ambler | Santa Fe |
| William L. Fay | Samuel, Fay, Fray & Stender | Santa Fe |
| Mark H. Wolbrink | Garco | Albuquerque, Texas |
| W. Kerry Pearce | Montgomery, Anderson & Co. | Santa Fe |
| Bice Selzer | Chi Energy | Midland, TX |
| Bill Hering | Unocal | Farmington, NM |
| Bill Bergman | Chi Energy | Midland TX |
| Roy Moly | Moly Oil Corp | Roswell |
| Pinson McWhorter | Yates Petroleum Corp | Artesia |
| David Fine | Matador Petroleum Corp | Artesia |
| Joe Young | MATADOR PETROLEUM CORPORATION | Dallas |
| Sarah Smith | GCNM | ALB |
| Paul Nallo | " | " |
| Rick Faddino | USA TNC | Midland |

NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARING

SANTA FE, NEW MEXICOHearing Date SEPTEMBER 19, 1991 Time: 8:15 A.M.

| NAME | REPRESENTING | LOCATION |
|-------------------|--------------------|-------------------|
| Jeffrey B. Hemmen | Amerada Hess Corp. | Tulsa, OK |
| Gary L. Kline | Amerada Hess Corp | Tulsa, OK. |
| Robert Williams | Amerada Hess Corp | Seminole, Tx. |
| Jim Almud | Amerada Hess Corp | Seminole, Tx |
| Charles Sanders | McKay Oil Corp. | Albuquerque, N.M. |
| George Reddy | McKay Oil Corp. | Roswell, NM |
| Jim Schully | McKay Oil Corp. | Roswell, NM |
| Ray Beck | Yates | Albia |