## STATE OF NEW MEXICO

# ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

CASE NO. 12,637

APPLICATION OF TEXACO EXPLORATION AND PRODUCTION, INC., FOR COMPULSORY POOLING, EDDY COUNTY, NEW MEXICO

ORIGINAL

#### REPORTER'S TRANSCRIPT OF PROCEEDINGS

#### EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

April 5th, 2001

Santa Fe, New Mexico

OI APR 19 ATT

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH,
Hearing Examiner, on Thursday, April 5th, 2001, at the New Mexico Energy, Minerals and Natural Resources Department,
1220 South Saint Francis Drive, Room 102, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7
for the State of New Mexico.

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# I N D E X

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APPLICANT'S WITNESSES:  MICHAEL R. MULLINS (Landman)  Direct Examination by Mr. Carr  Examination by Examiner Catanach	4 12
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## EXHIBITS

Applicant's	Identified	Admitted
Exhibit 1 Exhibit 2 Exhibit 3	6 7 9	11 11 11
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## APPEARANCES

## FOR THE APPLICANT:

HOLLAND & HART, L.L.P., and CAMPBELL & CARR 110 N. Guadalupe, Suite 1 P.O. Box 2208
Santa Fe, New Mexico 87504-2208
By: WILLIAM F. CARR

\* \* \*

1 WHEREUPON, the following proceedings were had at 2 11:10 a.m.: 3 EXAMINER CATANACH: Call the next case, 12637, 4 the Application of Texaco Exploration and Production, 5 Incorporated, for compulsory pooling, Eddy County, New 6 Mexico. 7 Call for appearances in this case. MR. CARR: May it please the Examiner, my name is 8 9 William F. Carr with the Santa Fe office of the law firm 10 Holland and Hart, L.L.P. We represent Texaco Exploration 11 and Production, Inc. I have two witnesses. 12 EXAMINER CATANACH: Any additional appearances? 13 Okay, will the witnesses please stand to be sworn 14 in? (Thereupon, the witnesses were sworn.) 15 16 MR. CARR: At this time, Mr. Examiner, we call 17 Mike Mullins. 18 MICHAEL R. MULLINS, 19 the witness herein, after having been first duly sworn upon 20 his oath, was examined and testified as follows: 21 DIRECT EXAMINATION BY MR. CARR: 22 Will you state your full name for the record? 23 Q. It's Mike Mullins. 24 Α. 25 Q. Where do you reside?

1 A. At 4426 Lanham, L-a-n-h-a-m, Midland, Texas 2 79705. 3 Q. Mr. Mullins, by whom are you employed? 4 Α. Texaco Exploration and Production, Inc. And what is your position with Texaco? 5 Q. I'm a landman on the Hobbs asset team. 6 Α. 7 Have you previously testified before this Q. Division? 8 Yes, I have. 9 Α. 10 At the time of that testimony, were your Q. 11 credentials as an expert in petroleum land matters accepted and made a matter of record? 12 1.3 A. Yes, they were. Are you familiar with the Application filed in 14 0. 15 this case on behalf of Texaco? 16 Α. Yes, I am. 17 Q. And are you familiar with the status of the lands in the area which is the subject of this hearing? 18 19 Α. Very familiar. 20 MR. CARR: Are Mr. Mullins' qualifications 21 acceptable? 22 EXAMINER CATANACH: They are. (By Mr. Carr) Could you briefly summarize what 23 0. it is that Texaco seeks with this Application? 24 Yes, sir, we're seeking an order pooling all 25 Α.

minerals from the surface to the base of the Wolfcamp formation underlying the Section 24, Township 23 South, Range 29 East, Eddy County, New Mexico, the south half to form a standard spacing unit and proration unit for any and all formations developed on 320-acre spacing, being in the Remuda-Wolfcamp Pool, the southwest quarter to form a standard spacing and proration unit for any and all formations developed on 160-acre spacing, and the southeast, southwest quarter to form a standard spacing and proration unit for any and all formations developed on 40-acre spacing units, which will be dedicated to our Remuda Basin 24 State Well Number 1, which will be drilled at a standard location 750 feet from the south line and 1900 feet from the west line of Section 24.

- Q. Mr. Mullins, let's go to what has been marked as

  Texaco Exhibit Number 1, and I'd ask you to identify it and

  review the information on that exhibit for Mr. Catanach.
- A. Yes, our Exhibit Number 1 is a shot blown up a little bit from a land map of this portion of Eddy County. What we have, acreage in yellow is all of the same State of New Mexico base lease, which covers Sections 24, 25 and actually covers all of 36. Texaco's ownership is limited to the east half of 36.

We have outlined in red the spacing unit, being the south half of Section 24, and noted -- the location of

our well is also noted on there. We have also noted some of the offset ownership in here.

- Q. To the east we have a couple of Texaco-Bass tracts --
  - A. Yes.

- Q. -- and a Bass-Maralo tract, correct?
- A. Yes, to the east the acreage in blue is acreage owned 50-50 by Texaco and Bass. The acreage in red in the northwest quarter of Section 30 is a little more complicated; that's Bass, Maralo, Texaco, et al. in there.

All the acreage in yellow, the acreage is owned identically from surface. From surface to 10,300 feet is owned identically, below 10,300 feet is also owned identically, which I'll explain later on.

- Q. What is the primary objective in the well?
- A. The Wolfcamp formation.
- Q. Could you refer to Texaco Exhibit Number 2 and review the status of the ownership and the spacing and proration units which are the subject of this hearing?
- A. Yes, my Exhibit Number 2 shows the ownership of the south half of 24. There again, it talks about the -- first it talks about the oil and gas lease that was issued in 1952. It actually covers all of Sections 24, 25 and 26. We're referring only to the south half of Section 24.

The first part of it talks about the ownership of

this lease in the south half of 24 from the south half of 24 from the surface down to a depth of 10,300 feet.

One half of that ownership as to those depths is owned by the group headed by BK Exploration Corporation, and Texaco has obtained a farmout from them for the drilling of this well as to the southeast quarter, southwest quarter of Section 24.

A 3/8 interest or 37-1/2-percent interest as to the shallow rights is owned by Bass Enterprises Production Company, et al., which includes Sid R. Bass, Inc.; Thru Line, Inc.; Lee M. Bass, Inc., Keystone, Inc.; and Perry R. Bass, Trustee.

And the remaining 1/8 or 12-1/2-percent is owned by Devon Energy Production Company, L.P.

The ownership of this lease in the south half of Section 24 as to rights below 10,300 feet are almost identical except for Texaco Exploration and Production,

Inc., controls the 50-percent ownership as to rights below 10,300 feet.

- Q. With this Application, what interests are we seeking to pool?
- A. We have agreements with everybody except for the Bass Enterprises Production Company, et al., group, which totals 37-1/2-percent interest.
  - Q. And that is a 37-1/2-percent interest in all the

spacing and proration units which are the subject of this hearing?

A. Yes, sir.

- Q. And so what percent of the working interest is voluntarily committed to the well in all of the spacing units?
  - A. 62 1/2 percent.
- Q. Could you summarize for Mr. Catanach the efforts you have made to obtain the voluntary participation in the development of this acreage from Bass Enterprises?
- A. Yes, sir, by letter dated December 27th of 2000, we faxed and mailed a copy of our original proposal for this well and AFE to Bass and to Devon, outlining our idea to drill this well.

And subsequently to that, we also sent letters dated January 30th and March 12th and had numerous conversations with them, the latest of which being on Monday morning.

- Q. In your opinion, have you made a good faith effort to reach voluntary agreement with the Bass interests?
  - A. Yes, we have.
- Q. Is Texaco Exhibit Number 3 a copy of each of the letters which was referenced?
  - A. Yes, it is.

- Q. Is Exhibit Number 4 an affidavit confirming that notice of this hearing has been provided to the Bass Group in accordance with the rules and regulations of the Oil Conservation Division?
  - A. Yes, it is.

- Q. Has Texaco drilled or participated in other Wolfcamp wells in this area?
- A. In this immediate area, no, but in Eddy and Lea Counties, yes, we have. We've drilled and participated in many.
- Q. Let's go to what has been marked Texaco Exhibit Number 5. Would you identify that, please?
- A. This is our most recent AFE for the drilling of the Remuda Basin 24 State Number 1 well, which identifies the cost to drill this well to total depth. The cost to drill the well is \$1.45 million, the completion cost would be \$417,000, for a total completed well cost of \$1.868 million.
- Q. Are these costs in line with what's incurred by other operators for drilling similar wells?
  - A. Yes, they are.
- Q. Have you made an estimate of the overhead and administrative costs to be incurred while drilling the well and also while producing it if it is successful?
  - A. Yes, I have.

1 And what are those figures? Q. We recommend \$5500 a month for a drilling well 2 Α. and \$550 a month for a producing well. 3 How do these figures actually compare with what 4 other operators charge? 5 They actually are lower, and they're actually 6 Α. 7 lower than the Ernst and Young figures. Do you recommend that these figures be 8 0. incorporated into the order that results from today's 9 hearing? 10 Yes, I do. 11 Α. Does Texaco Exploration and Production, Inc., 12 0. 13 seek to be designated operator of the well? 14 Α. Yes, we do. Will Texaco call a geological witness to review 15 0. the risk associated with this effort? 16 Yes, sir. 17 Α. Were Exhibits 1 through 5 either prepared by you 18 0. or compiled under your direction and supervision? 19 20 Α. Yes, sir. Mr. Catanach, at this time we move the 21 MR. CARR: 22 admission into evidence of Texaco Exhibits 1 through 5. EXAMINER CATANACH: Exhibits 1 through 5 will be 23 admitted as evidence. 24 25 MR. CARR: And that concludes my direct

examination of Mr. Mullins.

## **EXAMINATION**

## 3 BY EXAMINER CATANACH:

- Q. Mr. Mullins, is there any particular reason that you know that Bass hasn't committed to the well?
- A. No particular reason. We've discussed a trading of acreage, a trading of assignments of acreage. We haven't reached an amicable solution. They don't really want to participate in our well, so they're looking at some other acreage of ours that they want of ours. So that's the direction this is headed.
- Q. Now, there's several different Bass Entities.

  Have you just been dealing with Bass Enterprises Production

  Company?
- A. Yes, basically -- You send a bill to Bass
  Enterprises, they speak for everybody, these are all
  entities of the Bass family, basically, that Bass
  Enterprises -- You send an AFE to Bass Enterprises, they
  take care of all the accounting measures, so forth and so
  on.

You speak to Bass Enterprises, and they speak for all those entities.

EXAMINER CATANACH: Okay, no further questions.

MR. CARR: At this time, Mr. Catanach, we call

25 | Kim Moore.

1 KIM MOORE, 2 the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows: 3 DIRECT EXAMINATION 4 BY MR. CARR: 5 Would you state your full name for the record, 6 0. 7 please? My name is Kim Moore. 8 A. Where do you reside? 9 Q. 10 A. I live in Midland, Texas. By whom are you employed? 11 Q. I'm employed by Texaco. 12 Α. Mr. Moore, what is your position with Texaco? 13 Q. I'm a petroleum geologist. 14 Α. Have you previously testified before this 15 Q. 16 Division? 17 Α. No, I have not. 18 0. Could you summarize your educational background 19 for Mr. Catanach? 20 I received a BS degree in geology from 21 California State College in Pennsylvania in 1973. went on to graduate school where I earned a master's degree 22 in geology from Miami University in Ohio. I received that 23 degree in 1977. 24 Since graduation, for whom have you worked? 25 Q.

- A. I have worked for Texaco since 1977.
- Q. And does the geographical area of your responsibility include the portion of southeastern New Mexico involved in this case?
  - A. Yes, it does.
- Q. Are you familiar with the Application filed in this case?
  - A. I am.

- Q. And have you made a geological study of the area which is the subject of this Application?
  - A. Yes, I have.
- Q. Are you prepared to share the results of that work with the Examiner?
- A. Yes, I am.
- MR. CARR: We tender Mr. Moore as an expert in petroleum geology.

EXAMINER CATANACH: He is so qualified.

- Q. (By Mr. Carr) Mr. Moore, could you, before we get into the exhibits, generally describe the nature of the Wolfcamp formation in this area?
- A. I would be glad to. The Wolfcamp formation is a relatively thick formation in this area, approximately 1900 feet thick. The upper portion of the formation comprises mostly shales. As you move further into the formation you begin to pick up thin stringers of limestone, ranging in

thickness from 15 to 20 feet.

As you progress even further into the formation, getting closer to the bottom, within about 500 feet of the bottom, you encounter a massive carbonate interval that's approximately 200 feet thick but does vary in thickness in this area.

And then finally, the very basal part of the formation becomes shaly again.

- Q. Let's go to what has been marked for identification as Texaco Exhibit Number 6, your isopach, and I'd ask you to identify and review that.
- A. Yes, this is an isopach map of the massive carbonate sequence near the basal part of the Wolfcamp formation in this area. It is our primary target for our proposed well. This map shows the thickness of that unit varying from approximately 150 feet to the north northeast and increasing in thickness to as much as 224 feet as we move to the south.

Now, Mr. Examiner, the wells shown on this map are only deep wells in this area, deeper than 11,000 feet, which is sufficient to encounter the Wolfcamp. There is a set of shallower wells producing from the Delaware formation that does exist in this area but has been removed from this exhibit for clarity. And those wells generally exist off to the east and to the north of this particular

area. They're on the east side of this map and on the north side of the map.

The thickness numbers for the massive Wolfcamp unit that I'm referring to are shown in red underneath the data train for the wells. There are several numbers to observe immediately under the wellspots.

The first number is total depth for the well.

The second number is the depth at which this Wolfcamp -- I will refer to it as the Wolfcamp "A" Unit that we have mapped here -- occurs in that particular wellbore.

And then the final number in red is the actual thickness number for this unit in that particular well.

- Q. If we look at the exhibit, there is also a spot for a well that previously was drilled and completed in this Wolfcamp interval; is that correct?
- A. Yes, there is. That well exists in the southwest quarter section of Section 24. It's designated as the Texaco, Inc., Remuda Basin Unit Number 1 well, drilled in 1960, to a depth of 15,141 feet, actually encountered the Devonian formation.

Numerous completion attempts were made in the deeper formations, such as the Devonian-Morrow-Atoka intervals. Finally, in 1960, the Wolfcamp interval was perforated and brought onto production.

And then two years later some additional perforations were added in 1962 in this massive unit that I'm referring to with this map. And those perforations continued to produce until 1994. Texaco has subsequently sold this wellbore to BK Exploration, and they are the current operators of the well and have recompleted the well in the Delaware formation, which is why it's shown as a black dot on the map, as an oil well.

Let's go to Texaco Exhibit Number 7. Would you identify and review this?

A. This is a structure map that I made on the top of this massive Wolfcamp "A" Unit.

It's basically a relatively simple structural picture of -- typical throughout southeast New Mexico, of dip changing, increasing in depth from the west towards the east. As you move to the east you're moving downdip.

And we're looking at approximately -- We're looking at 50-foot contours on this map, so you're looking at dips of approximately 100 to 150 feet per mile to the east.

Q. Are you prepared to make a recommendation to Mr. Catanach as to the risk penalty that should be assessed against the Bass interests if they are not voluntarily committed to this well?

A. Yes.

Q. And what penalty do you recommend?

- A. I believe the 200-percent penalty would be appropriate.
- Q. Could you summarize for the Examiner your geological conclusions and also your justification for this recommended penalty?
- A. I'd be happy to. I'd like to refer you back to the well that Texaco drilled in the southwest quarter section of Section 24 where we did actually make a Wolfcamp completion.

Now that completion, of course, took place in 1960 and was abandoned in 1994. And during that period of time the Wolfcamp produced -- and I'm going to round these numbers off -- a half a BCF of gas and 49,000 barrels of oil.

This formation was only given an acid stimulation. This is not enough production under current pricing scenarios to give you an economic well under today's conditions.

What we're proposing to do at our proposed location, which is shown as the open circle in the southwest quarter section of Section 24, is to drill a new well to the same formation. And as you can see from the isopach map, we're increasing in thickness slightly to the south.

So we want to stay generally in the vicinity of this old wellbore but not too close because of some depletion issues that may exist, redrill the well in a slightly thicker area and use modern completion techniques and stimulation techniques to enhance the deliverability of the formation to the wellbore, and I'm referring to fracture stimulation with proppant.

That has never been done to the Wolfcamp in this area, and we think that we could get ourselves an economic well, if we are able to utilize these kinds of completion techniques.

- Q. Mr. Moore, in your opinion could you drill a well at the proposed location that, in fact, would not be a commercial success?
- A. There is a lot of risk associated with what we're proposing to do.

As I've stated, the existing well in this area, producing from the Wolfcamp, has not produced, I don't believe, quantities of hydrocarbon that would give you a commercial success here.

- Q. In your opinion, will the granting of this pooling Application and the drilling of the proposed well be in the best interest of conservation, the prevention of waste and the protection of correlative rights?
  - A. Yes, I do.

1 Q. Were Exhibits 6 and 7 prepared by you? 2 Yes, they were. Α. MR. CARR: Mr. Catanach, at this time we move the 3 admission into evidence of Texaco Exhibits 6 and 7. 4 EXAMINER CATANACH: Exhibits 6 and 7 will be 5 admitted into evidence. 6 7 MR. CARR: And that concludes my direct examination of Mr. Moore. 8 EXAMINATION 9 10 BY EXAMINER CATANACH: Mr. Moore, the well that you were talking about 11 0. that produced 49,000 barrels of oil, that is the well in 12 13 Section 24 that's now the BK well? Α. Right. 14 15 Okay. Within this nine-section map, are there 16 other wells that have economically produced from the 17 Wolfcamp? 18 Α. No, sir, there have been no other completion 19 attempts within this nine-section area. The gas wells that 20 you see to the north are Morrow-Atoka gas wells, and we are 21 not going to those depths. The well in Section -- the southeast 22 0. Okay. there, what section is that? 23 That -- I'm sorry, the --24 Α.

That Maralo well?

25

0.

A. Yes, that is Section 30, and I'm sorry that the section numbers got omitted from this exhibit, and the section to the north of that is also not numbered, but that is Section 19.

That Maralo well is currently a Delaware sand well. Completion attempts were a failure. There was a completion attempt in the Wolfcamp, I'm sorry, in that well, but it was a failure.

- Q. Okay. Is there some uphole potential for a 160-acre completion anywhere?
- A. A 160? No, sir, I don't believe. The only other uphole potential that I see at this time would be the Delaware, which is -- The formation that's productive is the lower Brushy Canyon sand. It's the very basal sand in the Brushy Canyon sequence, just on top of the Bone Springs lime.

We are out of the fairway for that production.

That fairway sits in Section 18, 19 and 30, as well as to
the north in Section 13. The sand thins in the vicinity of
Section 24.

BK has recompleted the well in the southeast quarter section in the Delaware sand, but it has not -
It's a workover candidate, but it is not something, I don't think, of quality that you would drill for in this area.

EXAMINER CATANACH: Okay, I have nothing further.

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1
                 MR. CARR:
                              That concludes our presentation in
 2
      this case.
 3
                  EXAMINER CATANACH: There being nothing further
 4
      in this case, Case 12,637 will be taken under advisement.
 5
                  (Thereupon, these proceedings were concluded at
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      11:31 a.m.)
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                                 I do hereby carrily that the foregoing is
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                                 e-complais record of the proceedings in 37.
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#### CERTIFICATE OF REPORTER

STATE OF NEW MEXICO )
) ss.
COUNTY OF SANTA FE )

I, Steven T. Brenner, Certified Court Reporter and Notary Public, HEREBY CERTIFY that the foregoing transcript of proceedings before the Oil Conservation Division was reported by me; that I transcribed my notes; and that the foregoing is a true and accurate record of the proceedings.

I FURTHER CERTIFY that I am not a relative or employee of any of the parties or attorneys involved in this matter and that I have no personal interest in the final disposition of this matter.

WITNESS MY HAND AND SEAL April 13th, 2001.

STEVEN T. BRENNER

CCR No. 7

My commission expires: October 14, 2002