## STATE OF NEW MEXICO

# ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

MAY A

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

CASE NO. 11,239

APPLICATION OF MARBOB ENERGY CORPORATION

# ORIGINAL

# REPORTER'S TRANSCRIPT OF PROCEEDINGS

# **EXAMINER HEARING**

BEFORE: DAVID R. CATANACH, Hearing Examiner

April 6th, 1995

Santa Fe, New Mexico

This matter came on for hearing before the Oil
Conservation Division on Thursday, April 6th, 1995, at the
New Mexico Energy, Minerals and Natural Resources
Department, Porter Hall, 2040 South Pacheco, Santa Fe, New
Mexico, before Steven T. Brenner, Certified Court Reporter
No. 7 for the State of New Mexico.

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# APPLICANT'S WITNESS:

# MICHAEL G. HANAGAN

Direct Examination by Mr. Carr
Examination by Examiner Catanach

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# REPORTER'S CERTIFICATE

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## EXHIBITS

	Identified	Admitted
Exhibit A	5	8
Exhibit B	6	8
Exhibit C	7	8

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## APPEARANCES

#### FOR THE DIVISION:

RAND L. CARROLL Attorney at Law Legal Counsel to the Division State Land Office Building Santa Fe, New Mexico 87504

## FOR THE APPLICANT:

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

\* \* \*

WHEREUPON, the following proceedings were had at 1 2 10:17 a.m.: 3 4 EXAMINER CATANACH: At this time we'll call Case 5 6 11,239. 7 MR. CARROLL: Application of Marbob Energy Corporation for an unorthodox oil well location, Chaves 8 9 County, New Mexico. 10 EXAMINER CATANACH: Are there appearances in this case? 11 12 MR. CARR: May it please the Examiner, my name is William F. Carr with the Santa Fe law firm Campbell, Carr 13 and Berge. 14 We represent Marbob Energy Corporation in this 15 16 matter, and I have one witness. 17 I would ask that the record reflect that the 18 witness is Mr. Mike Hanagan, that he testified in the 19 previous case, that his qualifications as an expert witness 20 in petroleum geology have been accepted and made a matter of record and that he remains under oath. 21 The record shall so reflect. 22 EXAMINER CATANACH: 23 Are there any additional appearances in this 24 case? 25 There being none, you may proceed, Mr. Carr.

# 1 MICHAEL G. HANAGAN, 2 the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows: 3 DIRECT EXAMINATION 4 5 BY MR. CARR: 6 Mr. Hanagan, are you familiar with the Q. 7 Application filed in this case on behalf of Marbob Energy? 8 Α. Yes, I am. And have you made a geological study of the area 9 0. 10 surrounding the proposed Havasu well in the Devonian 11 formation? 12 Α. Yes, sir, I have. 13 Q. Would you briefly review for Mr. Catanach what 14 Marbob seeks with this location? 15 We seek an unorthodox location based on geologic Α. considerations. 16 And this is for the Havasu Federal Well Number 1? 17 Q. 18 Yes, sir, it is. Α. And what is the proposed location for that well? 19 Q. 2588 feet from the south line and 2309 feet from 20 Α. 21 the east line of Section 11, Township 13 South, Range 27 22 East. 23 And what acreage does Marbob propose to initially Q. dedicate to the well? 24 25 The northwest quarter of the southeast quarter of Α.

that section.

- Q. And this is a wildcat well in the Devonian formation?
  - A. Yes, sir, t is.
- Q. So under statewide rules, the normal setback would be a 330-foot setback?
  - A. Yes, sir.
- Q. Have you prepared exhibits for presentation here today?
  - A. Yes, sir.
- Q. Let's go to what has been marked Marbob

  Exhibit A. I'd ask you to identify and review that,

  please.
  - A. Okay, Exhibit A is a leasehold map showing the outline of the standard proration unit attributable to this well, as well as the location. The location is orthodox to any sectional or lease boundaries, but is unorthodox to the quarter-quarter boundary and to the proration unit boundary.

This exhibit also shows lease ownership. Marbob owns all acreage within the area of this. The white lease or yellowish lease, that is a federal lease, NM92161. The adjoining blue lease is a fee lease owned by Calumet Ranch Company. Like I said, both of those are owned by Marbob.

Q. Marbob has all operating rights in the entire

section?

- A. Yes, sir.
- Q. The only difference is in the royalty?
- A. Yes, sir, and they both have the same royalty, just different owners.
- Q. Let's go to Marbob Exhibit B. Will you identify that, please?
- A. This is a structural contour map on the top of the Devonian pay zone, which is our primary objective in this well, and this is also based on 3-D seismic information.

The primary features, it's a fault-bounded structure. There's a fault on both the east and west side, having around 100 to 150 foot of throw on that fault, and then a larger fault bounding it on the south side with around 200 feet of throw.

- Q. Here again, we're looking at a small Devonian feature; is that right?
  - A. Yes, sir.
- Q. And as in the last case, again we're dealing with bottom water drive?
  - A. Very strong bottom water drive.
- Q. This proposed location will, in fact, enable you to maximize your structural position, and therefore most effectively drain this feature; is that not the objective?

- A. Yes, sir, we feel one well can effectively drain this structure.
- Q. When I look at this, Mr. Hanagan, will that well drain the 40 acres dedicated to it?
- A. Yes, sir, it's been our experience in looking at the Devonian in Chaves County that that one well will drain much more than the 40 acres that it's located on.
- Q. Is it possible that this well in fact is going to drain the entire feature in the offsetting 40-acre tracts?
  - A. That's our opinion at this time.
  - Q. And how do you propose that be handled?
- A. Should this well be a successful -- completed as a successful producer and appear similar to the nearby Long Arroyo Siluro-Devonian field, which is located two miles to the east, we would anticipate going immediately -- applying immediately for 160 -- special pool rules with 160-acre proration units, and probably nonstandard.
- Q. So if you get the well, then, you'll immediately attempt to change the pool rules so that they coincide with the way the reservoir is performing?
  - A. Yes, sir.

- Q. Is Exhibit C an affidavit confirming that notice of this Application has been provided in accordance with OCD rules?
  - A. Yes, it is.

In fact, the parties to whom you've given notice 1 Q. of this matter are the royalty owners, the Calumet Ranch, 2 and the Bureau of Land Management? 3 Yes, sir, they are. 4 Α. 5 Q. In your opinion, will approval of this Application and the drilling of this well result in the 6 7 recovery of hydrocarbons that otherwise would be wasted? 8 Α. Yes, sir. 9 Is approval of the Application otherwise in the 0. best interest of conservation and the protection of 10 11 correlative rights? Α. Yes, it is. 12 Were Exhibits A through C prepared by you or 13 Q. compiled under your direction? 14 15 Yes, they were. Α. MR. CARR: At this time, Mr. Catanach, we move 16 admission of Marbob Exhibits A through C. 17 EXAMINER CATANACH: Exhibits A through C will be 18 admitted as evidence. 19 MR. CARR: And that concludes my examination of 20 21 Mr. Hanagan. **EXAMINATION** 22 BY EXAMINER CATANACH: 23 Mr. Hanagan, just out of curiosity, assuming that 24 Q. you do make a well and come in for 160-acre spacing, what 25

do you think you had want to dedicate to that well?

- A. It would be the 160 acres in the middle of the section there, which would be the -- let's see, that would be the southeast of the northwest, the northeast of the southwest, the northwest of the southeast, and the southwest of the northeast.
- Q. Okay. At your proposed location, as opposed to a standard location, how much structure do you think you're gaining?
- A. At the nearest -- At the nearest legal location, we believe we're gaining in excess of 20 feet.

As Devonian oil columns in Chaves County are sometimes as small as 30 feet, 30 to 50 feet is the most common productive range, so 20 feet can be a significant amount.

- Q. What's the closest Devonian well to this?
- A. It's the Long Arroyo, it's the Number 1 Charlie State, also operated by Marbob, located almost exactly two miles east from here in the Long Arroyo Siluro-Devonian field, which we have also tied within this seismic survey.
- Q. Do you believe that this one well will drain this entire Devonian structure?
- A. Yes, sir, based on how the Charlie State has performed over in the Long Arroyo Siluro-Devonian field, we've tied this feature with that feature on seismic.

That's also around a 160- to 180-acre feature. 1 It's all within one spacing block, so -- I mean, within one 2 3 lease -- so we never applied for any special proration boundaries on that feature. 4 But we take a bottomhole pressure test every 5 50,000 barrels or six months, and so far we've experienced 6 7 no pressure drop. And recovery has been 100-percent oil so far, no water, and it appears to be effectively draining 8 9 that structure, which appears very similar to this 10 structure. 11 EXAMINER CATANACH: That's all I have, Mr. Carr. 12 MR. CARR: That concludes our presentation in 13 this matter, Mr. Catanach. EXAMINER CATANACH: All right, there being 14 nothing further in this case, 11,239 will be taken under 15 16 advisement. 17 (Thereupon, these proceedings were concluded at 18 10:25 a.m.) 19 I do hereby certify that the foregoing is 20 a complete record of the preceedings, in 21 the Examinar recorning of 22 heard by me on Examiner Oil Conservation Division 23 24 25

## 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 15th, 1995.

STEVEN T. BRENNER

CCR No. 7

My commission expires: October 14, 1998