

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION  
STATE LAND OFFICE BLDG.  
SANTA FE, NEW MEXICO

9 May 1984

EXAMINER HEARING

IN THE MATTER OF:

Application of Mabee Petroleum	CASE
Corporation for downhole com-	8179
mingling, Lea County, New Mexico.	

BEFORE: Richard L. Stamets, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation  
Division:

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For the Applicant:

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I N D E X

JOHN C. McDERMETT

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3 MR. STAMETS: We'll call next  
4 Case 8179.

5 MR. PEARCE: That case is on  
6 the application of Mabee Petroleum Corporation for downhole  
7 commingling, Lea County, New Mexico.

8 MR. KELLAHIN: If the Examiner  
9 please, I'm Tom Kellahin of Santa Fe, New Mexico, appearing  
10 on behalf of the applicant and I have one witness to be  
11 sworn.

12 MR. PEARCE: Are there other  
13 appearances in this matter?

14 (Witness sworn.)

15 JOHN C. McDERMETT,  
16 being called as a witness and being duly sworn upon his  
17 oath, testified as follows, to-wit:

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19 DIRECT EXAMINATION

20 BY MR. KELLAHIN:

21 Q Mr. McDermett, for the record would you  
22 please state your name and occupation?

23 A My name is John C. McDermett. I'm with  
24 Mabee Petroleum, Midland, Texas, and I'm a petroleum en-  
25 gineer.

Q Mr. McDermett, have you previously testi-

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2 fied as a petroleum engineer before the New Mexico Division?

3 A Yes, sir, I have.

4 Q And pursuant to your employment with Ma-  
5 bee Petroleum Corporation have you made a study of the facts  
6 surrounding this particular well?

7 A Yes, I have.

8 MR. KELLAHIN: We tender Mr.  
9 McDermett as an expert petroleum engineer.

10 MR. STAMETS: He is considered  
11 qualified.

12 Q Mr. McDermett, let me direct your atten-  
13 tion to Exhibit Number One and have you identify for us the  
14 location and spacing unit for the well that's the subject of  
15 this case.

16 A The well we're considering here is our  
17 Belcher No. 1, which is in Unit M of Section 7, Township 22  
18 South, Range 33 East, in Lea County, just southeast of Eu-  
19 nice.

20 And another well on there we'll refer to  
21 briefly is our Belcher 1-A, which is the direct east offset.

22 Q What do you propose to obtain from the  
23 Commission with regards to the Belcher No. 1 Well, Mr. Mc-  
24 Dermett?

25 A Well, Mabee's seeking permission to open  
a Blinbry completion interval and commingle it downhole  
with the existing Tubb and Drinkard completion intervals,  
which are already commingled downhole.

Q All right, sir, the Tubb and Drinkard have been approved previously by an administrative order issued by the Commission. It's Downhole Commingling Order 39, is it not?

A Yes, sir, it is.

Q The spacing unit applied to all three formations is a 40-acre spacing unit?

A Yes, sir.

Q And is the ownership common with regards to all three of those formations as to individuals and percentages?

A Yes, sir.

Q Let me direct your attention to Exhibit Number Two, Mr. McDermett, and have you identify that.

A Okay. This is a wellbore schematic of the Belcher No. 1 and it has the casing depths that are in the well and also the Tubb and Drinkard perfs that are open right now and above those are the proposed Blinebry perforations.

Q All right, sir, let's turn to Exhibit Number Three and have you identify Exhibit Number Three for us.

A Okay. This exhibit is a proposed procedure for doing what we have planned, opening the Blinebry and commingling all three zones.

Q All right, sir, you currently have not yet tested the Blinebry formation, have you?

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A That's right.

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Q And you propose to isolate the Tubb and the Drinkard from the Blinebry separately, production test the Blinebry, and then after production stabilizes to commingle production in all three zones.

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A That's correct. And that's also when we'll obtain our pressure data on those zones.

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Q All right, let's look at Exhibit Number four, Mr. McDermett, and have you identify that for us.

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A Okay. That's a shutdown type log of the Belcher No. 1 still in the three zones and the Tubb and the Drinkard are what are already there, completed in, and the Blinebry is the proposed completion interval.

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Q Currently what is the average daily production out of the Tubb and Drinkard as a combined production rate?

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A Okay. We recently restimulated the Drinkard and sent the Commission a letter requesting a change in that allocation formula, but our total production is 11 barrels of oil per day for both the Tubb and the Drinkard and 9 barrels of water and 289 Mcf a day.

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Q What do you anticipate, Mr. McDermett, to be the production volumes in the Blinebry?

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A We've estimated initial rate of 25 barrels of oil per day and 100 Mcf a day and due to just the advanced stage of the reservoir, it will probably fall on off pretty fast, as what we have seen in other wells.

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Q Do you anticipate that the commingled production of the Blinebry, Tubb, and Drinkard is the most effective and efficient method to produce all three formations?

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A Yes, I do.

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Q Let's turn to Exhibit Number Five and Six, Mr. McDermett, and let's look at them simultaneously, or at least together, and have you describe for us what's contained on those exhibits.

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A These are the production histories since 1976 on the Belcher No. 1 Tubb and Drinkard and as they've been the same allocation formula all along, well, they're identical except for the numbers that follow each other.

Q All right, sir, if you'll turn to Exhibit Number Seven and identify that one for us.

A Okay. This exhibit is a study we had done to check on the fluid compatibility and the comments down there show or indicate that the formation fluids from the Blinebry and Tubb and Drinkard are all compatible. The source of them, the Tubb and Drinkard sample was from this Belcher No. 1 and the -- it was a wellhead sample. And the other sample, the Blinebry and Tubb combination which came from the Belcher 1-A. They're commingled in that well.

And those two show to be compatible.

Q All right, sir, and Exhibit Number Eight is your letter on the allocation formula between the Tubb and the Drinkard and also attached to that is a copy of the

1970 administrative approval for the downhole commingling of the Tubb and the Drinkard.

A Yes, sir.

Q And you would propose to consult with the District Office of the Commission with regards to the allocation percentages among all three zones and to satisfy the District Office as to the pressure differentials between the Blinebry and the commingled Tubb and Drinkard at such time as you production test the Blinebry.

A That's correct.

Q All right, sir. Were Exhibits One through Eight prepared by you or compiled under your direction and supervision?

A They were prepared by me.

Q In your opinion will approval of this application be in the best interests of conservation, the prevention of waste, and the protection of correlative rights?

A Yes, sir.

MR. KELLAHIN: We move the introduction of Exhibits One through Eight.

MR. STAMETS: The exhibits will be admitted.

#### CROSS EXAMINATION

BY MR. STAMETS:

Q Mr. McDermett, how long do you anticipate that you would have to produce the Blinebry zone to have a



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good idea of ultimate production?

A Well we put on our -- that exhibit with the procedure just tested for a short period. I don't think -- I think we'll know pretty much from the initial rate how that's going to perform and as long as we produce it down long enough to where we can then shut it in and get an accurate pressure, so I think that will be sufficient.

We're not planning on an extensive test at this time.

Q You can work that out with the District Supervisor as well.

Do you anticipate pressures are going to be relatively close?

A I haven't prepared anything to present on the pressure. I have looked back at the -- I've always had its fluid level data. I had some from this recent work we did on the Drinkard and we had some from the Belcher 1-A when it was initially completed and the depths are different but I -- from what I've seen, the chances are they're not going to present a problem since all zones are oil and it will be pumping.

MR. STAMETS: Any other questions of the witness? He may be excused.

Anything further in this case?

The case will be 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 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. 8179  
heard by me on 5-9 19 84.  
D. Graham F. Starn, Examiner  
Oil Conservation Division