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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. 10939  
and  
CASE NO. 10940  
APPLICATION OF MEWBOURNE OIL COMPANY

REPORTER'S TRANSCRIPT OF PROCEEDINGS  
EXAMINER HEARING

BEFORE: Jim Morrow, Hearing Examiner  
March 17, 1994  
Santa Fe, New Mexico

This matter came on for hearing before the Oil  
Conservation Division on March 17, 1994, at Morgan Hall,  
State Land Office Building, 310 Old Santa Fe Trail,  
Santa Fe, New Mexico, before Diana S. Abeyta, RPR, Certified  
Court Reporter No. 168, for the State of New Mexico.

APR 4 1994

## I N D E X

March 17, 1994  
 Examiner Hearing  
 CASE NO. 10939 and  
 CASE NO. 10940

## PAGE

## APPEARANCES

3

## MEWBOURNE OIL COMPANY'S WITNESSES:

## D. PAUL HADEN

Examination by Mr. Bruce

4

Examination by Examiner Morrow

7

## DAVID SHATZER

Examination by Mr. Bruce

8

Examination by Examiner Morrow

15

## REPORTER'S CERTIFICATE

17

## E X H I B I T S

## ID ADMTD

Exhibit 1

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Exhibit 2

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Exhibit 3

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Exhibit 4

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Exhibit 5

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Exhibit 6

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Exhibit 7

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Exhibit 8

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Exhibit 9

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## A P P E A R A N C E S

FOR THE DIVISION:

ROBERT G. STOVALL, ESQ.

General Counsel

Oil Conservation Commission

State Land Office Building

310 Old Santa Fe Trail

Santa Fe, New Mexico 87501

FOR THE APPLICANT:

HINKLE, COX, EATON

COFFIELD &amp; HENSLEY

Post Office Box 2068

Santa Fe, New Mexico 87504-2068

BY: JAMES G. BRUCE

1 EXAMINER MORROW: Call cases 10939 and 10940.

2 MR. STOVALL: And each of those is the  
3 application of Mewbourne Oil Company for an unorthodox gas  
4 well location in Eddy County, New Mexico.

5 EXAMINER MORROW: Call for appearances.

6 MR. BRUCE: Mr. Examiner, Jim Bruce, from the  
7 Hinkle law firm in Santa Fe, representing the applicant. I  
8 have two witnesses to be sworn.

9 EXAMINER MORROW: Witnesses please stand and be  
10 sworn.

11 (Witnesses sworn.)

12 D. PAUL HADEN  
13 the witness herein, after having been first duly sworn  
14 upon his oath, was examined and testified as follows:

15 EXAMINATION

16 BY MR. BRUCE:

17 Q. Would you please state your name for the record.

18 A. My name is Paul Haden.

19 Q. Who do you work for and in what capacity?

20 A. I work for Mewbourne Oil Company in the capacity  
21 of petroleum landman.

22 Q. Have you previously testified before the  
23 division?

24 A. Yes, I have.

25 Q. Were your credentials as an expert landman

1     accepted as a matter of record?

2             A.     Yes, they were.

3             Q.     Are you familiar with the land matters involved  
4     in this these two cases?

5             A.     Yes.

6                     MR. BRUCE:   Mr. Examiner, I tender Mr. Haden as  
7     an expert landman.

8                     EXAMINER MORROW:   We accept Mr. Haden.

9             Q.     (BY MR. BRUCE)   Mr. Haden, what is Exhibit 1?

10            A.     Exhibit No. 1 is a land plat.   It shows our  
11     proposed locations, both which are indicated by red dots.  
12     The first case would be Case No. 10939.   This is in regard  
13     to our proposed Vandagriff 23 Federal No. 1 well.   The  
14     proposed proration unit is the southwest quarter of Section  
15     23 of Township 16 South, Range 28 east.   This well is  
16     located at 2,210 from the west line and 330 feet from the  
17     south line of said Section 23.   We're seeking approval for  
18     an orthodox gas well location for that well.

19                    Also, regarding Case No. 10940, our well location  
20     is 2,140 from the north line -- excuse me -- 2,140 from the  
21     west line, and 1,667 feet from the north line of Section 26,  
22     also located in Township 16 South, Range 28 East, of which  
23     the proration unit is the northwest quarter.

24            Q.     And the target zone is the Vandagriff Keys Gas  
25     Pool?

1           A.     Right; that's correct, at approximately 2,300  
2 feet.

3           Q.     Who are the offset operators?

4           A.     Mewbourne Oil Company is the offset operator for  
5 all of these. In Section 23, Mewbourne Oil Company owns  
6 approximately 60 percent of the working interest, of which  
7 Mewbourne Oil Company is the operator of all of Section 23.  
8 The section to the immediate west, being Section 22,  
9 Mewbourne Oil Company, again, is the operator and owns  
10 approximately 60 percent of the working interest. Section  
11 26, Mewbourne Oil Company owns all Section 26 outright.  
12 Also, in Section 27, Mewbourne Oil Company owns the oil and  
13 gas lease covering that land also.

14          Q.     As a result of Mewbourne Oil Company being the  
15 only offset operator, no notice was given to any other  
16 party; is that correct?

17          A.     That's correct.

18          Q.     What does Exhibit 2 constitute?

19          A.     Exhibit No. 2 is our Application for Permit to  
20 Drill for each of these wells, both of which have been  
21 approved by the Bureau of Land Management subject to  
22 approval by the Oil Conservation Division.

23          Q.     In your opinion, is granting of both applications  
24 in the interest of conservation and the prevention of waste?

25          A.     Yes, that's right.

1 Q. And were Exhibits 1 and 2 prepared by you or  
2 compiled from company records?

3 A. Yes, they were.

4 MR. BRUCE: Mr. Examiner, I move the admission of  
5 Mewbourne's Exhibits 1 and 2.

6 EXAMINER MORROW: Exhibits 1 and 2 are admitted  
7 into the record.

8 MR. BRUCE: I have nothing further.

9 EXAMINATION

10 BY EXAMINER MORROW:

11 Q. What depth did you say the wells would be?

12 A. Approximately 2,300 feet is their proposed total  
13 depth for both of these wells.

14 Q. Is this production around, is it at that depth,  
15 what's shown on your Exhibit 1, is some of that at least  
16 produced from that shallow depth?

17 A. Some of that, and our geologist will go into that  
18 in more detail.

19 MR. STOVALL: Just one question, Mr. Haden. I'll  
20 just ask you for a yes or no answer on it. These locations  
21 are unorthodox for -- I'm assuming, since you've got  
22 archaeological and topographical exhibits, for those reasons;  
23 is that correct?

24 A. That is correct.

25 Q. And are there --

1           A.       Essentially, for Section 26, especially. And  
2       Section 23, is also geologic.

3           MR. STOVALL:  Answers my question.

4           EXAMINER MORROW:  Thank you, sir.

5                       DAVID SHATZER,  
6       the witness herein, after having been first duly sworn  
7       upon his oath, was examined and testified as follows:

8                       EXAMINATION

9       BY MR. BRUCE:

10           Q.       Would you please state your name and city of  
11       residence.

12           A.       My name is David Shatzer.  I live in Midland,  
13       Texas.

14           Q.       Who do you work for and in what capacity?

15           A.       I'm a petroleum geologist for Mewbourne Oil  
16       Company.

17           Q.       Have you previously testified before the  
18       division, as a geologist, and had your credentials accepted  
19       as a matter of record?

20           A.       Yes, I have.

21           Q.       And are you familiar with the geological matters  
22       involving these two case?

23           A.       Yes, I am.

24           Q.       Are you also familiar with the topographic and/or  
25       archeological matters involved in these applications?



1           A.       Yes, I am.

2                   MR. BRUCE: Mr. Examiner, is the witness  
3 acceptable?

4                   EXAMINER MORROW: Yes, sir.

5           Q.       (BY MR. BRUCE) Mr. Shatzer, looking at the  
6 Exhibit 3, let's discuss these proposed well locations, and  
7 why don't you start with the well in the southwest quarter  
8 of Section 23?

9           A.       All right. Exhibit 3 is a combination  
10 archaeological-topographic map on a 1 to 1,000 scale. And  
11 therefore, the dashed outlines in Section 23, and also in  
12 the northwest of Section 26, represent 160-acre gas  
13 proration unit outlines. And the proposed location for the  
14 Section 23 well is located within the open circle in the  
15 southeast portion of that, southeast portion of that box.

16          Q.       What does the X to the northwest represent?

17          A.       The X represents where the nearest -- we will  
18 show geological reasons why we don't want to drill very far  
19 to the northwest in Section 23, but that X is the nearest  
20 location that would be a legal location for 160-acre  
21 spacing, and it is unacceptable, as you can see, because it  
22 is located in a ravine or draw that make topographic  
23 considerations impossible to put a well site there.

24          Q.       And the BLM would not want you to drill there; is  
25 that correct?

1           A.     That is correct.

2           Q.     Why don't you move on to Section 26.

3           A.     Section 26, the proposed location is located in  
4     the east half of the southeast quarter of that quarter  
5     section, and it is also in a low spot or ravine coming off  
6     of this Pavo Mesa.  However, it is wide enough, and we did  
7     obtain approval from the BLM to be able to put a well  
8     located in that east-facing ravine.  I would point out that  
9     most of the areas in the west half of Section 26 are largely  
10    unacceptable because the topography is too rough because of  
11    this ravine.

12                   And then outlined in green, we have the first of  
13    our two archaeological sites that were designated by the  
14    archeologist, and Site 102,922 is located on the top of this  
15    mesa, so that flat area becomes condemned for archaeological  
16    reasons.  The sides are condemned because of topographic,  
17    and then on top of the mesa, there in the northwest quarter  
18    of 26, that became condemned archeologically.

19          Q.     Is Exhibit 4 a copy of the archaeological report  
20    for Site LA 102,922?

21          A.     Yes, is it is.

22          Q.     Now you've also marked on the map a separate  
23    site.  Has that affected -- and it's outlined in red on your  
24    Exhibit 3 -- has that affected, to a certain extent, your  
25    drilling in this area?

1           A.     Yes, it has. I will show in subsequent maps that  
2     the nearest production in the area from the Penrose, and  
3     most of the production in the area is Penrose production, to  
4     answer -- clarify an earlier question, most of it is  
5     Penrose. The nearest wells are in the southwest corner of  
6     27 -- the southeast corner of 27, and in the southwest  
7     corner of 26. Those are the nearest wells that produced  
8     from this. They are shown as gas symbols. And those are  
9     the nearest wells. And our initial location that we would  
10    have preferred to drill would have been an offset, a direct  
11    offset from those wells.

12               And proposed locations that were approved by the  
13    BLM concerning topography are shown in open circles just  
14    north of each of those wells, in open circles in 27 and 26.  
15    Those locations are inside the red outline, which is  
16    archaeological site LA 102,411. And these sites were  
17    acceptable from a topographic standpoint, but became  
18    condemned by being in the outline of the archaeological  
19    site.

20               And even a third location slightly north in  
21    Section 27 was also condemned for the same reasons. And the  
22    dashed outline shows that it was not checked in great  
23    detail, but that this site seems to continue north on the  
24    west face of the lower slope of this mesa.

25           Q.     And the second archeological report is submitted

1 as Exhibit 5?

2 A. Yes, it is.

3 Q. Why don't you move on to your Exhibit 6, then,  
4 Mr. Shatzer, and discuss the production in this area and so  
5 forth.

6 A. Exhibit No. 6 is a production study of the  
7 Vandagriff area. And to answer an earlier question, most of  
8 the production is in the Penrose, some wells being labeled  
9 as gas wells, and the wells to the east, that trend is  
10 mostly designated as oil wells, but it's all out of the  
11 Penrose sands.

12 On this map, this is a 1 to 2,000 scale, and the  
13 outline of our two proration units are in yellow in 26, and  
14 Section 23. This map shows the cumulative production for  
15 oil and gas and, also, a daily rate for those wells that are  
16 still producing. Most of the wells closest to our proposed  
17 location are plugged and abandoned.

18 Q. What is Exhibit 7?

19 A. Exhibit 7 is a structure map on top of the  
20 Penrose, and it has a contour interval of 50 feet. And the  
21 contouring generally shows an even dip rate with dip to the  
22 east, southeast. And the proposed locations are roughly on  
23 strike to the northeast of the nearest producers that I have  
24 pointed out previously in the corners of Sections 27 and 26.

25 Q. Could you move on to Exhibit 8 and discuss the

1 geological need for the well location you proposed in the  
2 southwest quarter of Section 23.

3 A. Exhibit 8 is a Penrose Net Sand Isopach, and the  
4 data points are the total porosity from the Penrose sands  
5 greater than or equal to 9 percent from all the Penrose  
6 sands. The porosity trends are northeast southwest, and  
7 nearly parallel each other.

8 The porosity trend that we are attempting to  
9 extend is roughly parallel to the one to the east of it, and  
10 we're attempting to go to the northeast of the last  
11 producers in this trend. The porosity does, however, thin  
12 going to the northwest. The last well on cross section G-G'  
13 has only 16 feet of porosity, and it was a dry hole, and  
14 this is located in Section 23. And that is the reason that  
15 Section 23, we don't want to drill any farther to the  
16 northwest than we have to.

17 So that we would like to drill in 26; it should  
18 be in the heart of the porosity trend. And it's location  
19 was merely limited by topography and archeology, but in  
20 Section 23, we are limited somewhat by topography, but also  
21 desire to stay in what we contour as the thickest portion of  
22 the porosity isopach.

23 Q. Why don't you then move on to your cross section  
24 marked Exhibit 9, and discuss that briefly.

25 A. Cross section G-G' runs southwest to northeast

1 across the prospect area, and it just confirms and shows the  
2 type of porosity that we were picking in the area. The  
3 Penrose Sand is shown colored in blue, again. And the  
4 porosity that was pertinent to our data points is colored in  
5 red. And it shows the intervals that have been perforated  
6 in some of the other wells, and that our proposed location  
7 is located to the northeast of one of the better wells,  
8 closest to the prospect, the Gross Southern Union Federal  
9 No. 2, and the kind of porosity that it had, and that  
10 porosity diminishes, especially in the upper Penrose package  
11 as you go to the northwest in that last well, the Tomsco  
12 Promitory B in Section 23. And therefore, again, the reason  
13 for our wanting to stay in the southeast quarter of that  
14 quarter section of Section 23.

15 Q. In your opinion, is the granting of both of these  
16 applications in the interest of conservation and the  
17 prevention of waste?

18 A. Yes, it is.

19 Q. And were Exhibits 3 through 9 prepared by you or  
20 compiled from company records?

21 A. Yes, they were.

22 MR. BRUCE: Mr. Examiner, I move the admission of  
23 Mewbourne Exhibits 3 through 9.

24 EXAMINER MORROW: Exhibits 3 through 9 are  
25 admitted.

1                   MR. BRUCE: I have nothing further of the  
2 witness.

3                                   EXAMINATION

4 BY EXAMINER MORROW:

5           Q.       What well did you expect to make when you  
6 calculated the economics; what did you predict would be the  
7 initial producing rate and recovery?

8           A.       These are, obviously, shallow wells that should  
9 be cheap to drill and they also are going to have -- the  
10 type of average cumulative reserves that we ran the prospect  
11 on are in the neighborhood of the 300- to 330 million at the  
12 closest two wells to us. The initial rates might be in the  
13 order of 300 to 500 mcf a day, half a million a day. I mean  
14 this is a low area, and this really would point out another  
15 reason that we're -- we're already taking some more risk  
16 going farther to the northeast than what we wanted to, but  
17 those archaeological sites, the BLM requires an  
18 archeological mitigation before they can be drilled on, and  
19 that adds extra expense to already wells that have economics  
20 that can't stand too much increased cost to them. So those  
21 are the kind of rates that we expect and why we're asking to  
22 drill where we are.

23           Q.       Would a standard location be 660; is that  
24 correct?

25           A.       Yes, 660 out of each of the boundaries.

1 EXAMINER MORROW: Bob, have you got something?

2 MR. STOVALL: No, I don't have any questions.

3 EXAMINER MORROW: Anything else, Mr. Bruce?

4 MR. BRUCE: No, sir.

5 EXAMINER MORROW: Cases 10939 and 40 will be  
6 taken under advisement.

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1 CERTIFICATE OF REPORTER

2 STATE OF NEW MEXICO )  
 3 ) ss.  
 4 COUNTY OF SANTA FE )

5 I, Diana S. Abeyta, Certified Shorthand Reporter  
 6 and Notary Public, HEREBY CERTIFY that I caused my notes to  
 7 be transcribed under my personal supervision, and that the  
 8 foregoing transcript is a true and accurate record of the  
 9 proceedings of said hearing.

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

14  
 15 WITNESS MY HAND AND SEAL, March 28, 1994.

16  
 17  
 18   
 19 DIANA S. ABEYTA  
 CCR No. 168

20  
 21 I do hereby certify that the foregoing is  
 22 a complete record of the proceedings in  
 the Examiner hearing of Case No. 10939 + 10940  
 23 heard by me on March 17, 1994.

24   
 Examiner  
 Oil Conservation Division

25  
 CUMBRE COURT REPORTING  
 (505) 984-2244