

dearnley-meier

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS  
209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103  
FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
CONFERENCE ROOM, STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO  
MAY 5, 1972

EXAMINER HEARING

IN THE MATTER OF:  
  
Application of Petroleum Corporation  
of Texas for an exception to Order  
No. R-3221, as amended, Eddy County,  
New Mexico.

CASE NO. 4689

BEFORE: Elvis A. Utz  
Examiner

TRANSCRIPT OF HEARING

1 MR. UTZ: Case 4689.

2 MR. HATCH: The Application of Petroleum Corporation  
3 of Texas for an exception to Order No. R-3221, as amended,  
4 Eddy County, New Mexico.

5 MR. CAMPBELL: Mr. Examiner, Jack M. Campbell,  
6 attorney from Santa Fe, New Mexico, representing the  
7 Applicant. I have one witness, Mr. Ken Freeman.

8 KENNETH FREEMAN,  
9 was called as a witness and, after being duly sworn, testified  
10 as follows:

11 MR. UTZ: Any other Appearances in this Case?

12 (No response.)

13 MR. UTZ: You may proceed.

14 DIRECT EXAMINATION

15 BY MR. CAMPBELL:

16 Q Will you state your name, please?

17 A Kenneth Freeman.

18 Q Where do you live, Mr. Freeman?

19 A Midland, Texas.

20 Q By whom are you employed?

21 A The Petroleum of Texas.

22 Q In what capacity?

23 A District Superintendent and Petroleum Engineer.

24 Q What is your professional background?

25 A As a Petroleum Engineer, I graduated from the University

1 of Texas and I have worked primarily along the Gulf  
2 Coast.

3 Q Have you testified before this Commission previously?

4 A Yes, I have.

5 MR. CAMPBELL: Do you want any further qualifications?

6 MR. UTZ: The witness is qualified. I will ask  
7 your last name again.

8 THE WITNESS: Freeman, F-r-e-e-m-a-n.

9 Q (By Mr. Campbell) Are you acquainted with the properties  
10 owned by your Company and generally, with the other  
11 properties in the Grayburg-Jackson Pool in Eddy County,  
12 New Mexico, particularly Section 20, Township 17 South,  
13 Range 30 East?

14 A Yes, I am.

15 Q Did you testify before this Commission previously  
16 seeking an exception to Order Number R-3221?

17 A Yes, I have on two different occasions.

18 Q Can you give the Examiner a very quick review of the  
19 history of this pool in terms of how long it has been  
20 in production and the nature of the early drilling  
21 programs, and so forth?

22 A Well, this old pool was drilled in the early thirties,  
23 primarily the bulk of the development and drilling was  
24 with cable tools as well as rotary tools and the reason  
25 we are asking for this exception is there is no fresh

dearnley-meier

dearnley-meier

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS  
 209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87108  
 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

1 water in the area that I am aware of.

2 Q Have you previously obtained approval for the disposal  
 3 of produced water in this area?

4 A Yes, we have.

5 Q For what wells?

6 A One well was the Flint, located in Unit "M", Section  
 7 14, 17, 30. The other well was the Dexter J located  
 8 in Unit "J", Section 22, 17, 30.

9 Q I will hand you what has been identified or refer to  
 10 what has been identified as Applicant's Exhibit Number 1,  
 11 and I will ask you to state what that is, please.

12 A It is a generalized plat showing the area with a three  
 13 mile circle around the subleases we are trying to  
 14 obtain approval for.

15 Q How are the leases identified on this plat, the leases  
 16 you are seeking approval for?

17 A They are outlined in red with hash marks.

18 Q What other wells are identified on that plat?

19 A What I have done is selected a typical log from the  
 20 Dexter J located in Section 22. The reason for this  
 21 is from the surface down, it is a complete log and the  
 22 other wells that have triangles around them are subject  
 23 wells and the other wells that we have logs on.

24 We have correlated these altogether and made a  
 25 generalized section for the area.

dearnley-meier

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS  
209 SIMMS BLDG. P.O. BOX 1092 PHONE 243-8691 • ALBUQUERQUE, NEW MEXICO 87103  
FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

- 1 Q I am going to ask you to refer to what has been  
2 identified as Applicant's Exhibit Number 2 and ask  
3 you to state what that is.
- 4 A It is a well log on the Dexter 15, located in Section  
5 15, 17, 30. The main thing this shows is there is no  
6 fresh water that we can detect.
- 7 Q Referring to what has been identified as Applicant's  
8 Exhibit 3, I will ask you to state what that is, please.
- 9 A It is also a gamma-ray neutron log of the Federal Well  
10 Number 3 located in Section 20, and it is drawn with the  
11 various tops of the salt beds located on the log.
- 12 Q I refer you to what has been identified as Applicant's  
13 Exhibit 4 and ask you to state what that is.
- 14 A This is a log on the Dexter J located in Section 22,  
15 17, 30, and that is what I have used, or have called  
16 the typical log because if you note, it goes from the  
17 surface on down and is the best log that we have.
- 18 Q Have you, Mr. Freeman, carefully examined all of these  
19 logs?
- 20 A Yes, I have.
- 21 Q In your examination, have you found any indication of  
22 any bed which might bear fresh water and which is  
23 reflected in the logs?
- 24 A No, I haven't.
- 25 Q I refer you now to what has been marked as Exhibit 5

dearnley-meier

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103  
FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

1 and ask you to state what that is, please.

2 A This is a stratographic section that has been made  
3 up from these various logs and from Well Number 3  
4 that is located in Section 22 and that was a cable  
5 tool hole and we have not noticed any water bearing  
6 sands.

7 Q I will refer you now to what has been marked Applicant's  
8 Exhibit 6 and ask you to state what that is, please.

9 A This is a copy of the individual well tests. You will  
10 notice the date, the barrels of oil and water that the  
11 wells make, and these are all marginal wells.

12 The Dexter 15 is three and one-half barrels a  
13 day with ten barrels of water.

14 The Jenkins B is nine barrels of water per day.

15 Q What is the total amount of water reflected as being  
16 produced from these five wells?

17 A About eighteen to nineteen barrels of water per day.

18 Q What is the total amount of oil, approximately?

19 A About seventeen barrels of oil.

20 Q Have you -- well, let's move on and I will ask you to  
21 look at what has been identified as Applicant's Exhibits  
22 7 and 8, and ask you to state what those are, please.

23 A These are just water analyses which we took at the  
24 wellhead and had a surface company analyse the water.

25 Q What do they reflect in terms of the quality of the water?

dearnley-meier

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS  
 209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-8691 • ALBUQUERQUE, NEW MEXICO 87103  
 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

1 A Just breakish, saline type of water.

2 Q Is it potable water?

3 A No, it is salt water.

4 Q Now, have you made inquiries as to the alternative  
 5 for disposing of this water, other than disposing of  
 6 it in unlined pits?

7 A Well, on the Dexter Federal J, which is located in  
 8 Section 22, we, at one time, hauled water from the  
 9 gathering tank and the resulting cost was twenty-five  
 10 cents per barrel.

11 Q Would that additional cost and, considering the marginal  
 12 nature of these wells, would it be economical for you  
 13 to follow that procedure and still operate the wells?

14 A No, it would not.

15 Q So that you would have to abandon the wells unless you  
 16 found some other choice, or disposition of this water?

17 A Either that or shut the majority of them down.

18 Q Do you believe that if you are permitted to dispose of  
 19 this water in unlined pits, such as are shown in Order  
 20 R-33-321, that there will be any risk of damage to any  
 21 fresh water, potable water in the area?

22 A I do not because, to my knowledge, there is not any  
 23 fresh water in this area.

24 It is being piped in to the local Hill Town site  
 25 to my knowledge, and there are no windmills in the

dearnley-meier

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS  
 209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103  
 FIRST NATIONAL BANK BLDG. • EAST • ALBUQUERQUE, NEW MEXICO 87108

1 general area.

2 Q Is there any indication to you that, should you be  
 3 permitted to do this, that the correlative rights of  
 4 the other producers in the area would be in any way  
 5 adversely affected?

6 A Not to my knowledge.

7 MR. CAMPBELL: Mr. Examiner, I would like to  
 8 offer Applicant's Exhibits 1 through 8.

9 MR. UTZ: Without objection, Exhibits 1 through  
 10 8 will be entered into the record of this Case.

11 (Whereupon, Applicant's Exhibits 1 through 8  
 12 were admitted, in evidence.)

13 MR. CAMPBELL: That's all I have, at this time.

14 MR. UTZ: Any questions of the witness?

15 CROSS-EXAMINATION

16 BY MR. PORTER:

17 Q Did you testify as to the proximity of any fresh water  
 18 wells in this area?

19 A Would you restate the question.

20 Q How close are your wells here to any fresh water wells  
 21 in the area?

22 A I don't know of any fresh water wells in the area.

23 I mean, we have looked around and there are no windmills,  
 24 that I know of.

25 Q You said that, within a two or three mile radius, that

dearnley-meier

1 you don't have any fresh water wells?

2 A That is correct. Our information man has said that  
3 south of Loco Hills, about four or five miles, he knew  
4 of one windmill and that is the closest I know of.

5 Q How does Loco Hills get fresh water?

6 A It is piped in from Tap Rock, as far as I know.

7 MR. PORTER: That's all I have.

8 CROSS-EXAMINATION

9 BY MR. UTZ:

10 Q Did you make a thorough search as to fresh water in  
11 the area in a three mile radius around each site?

12 A Yes, we have.

13 MR. UTZ: Any further questions?

14 (No response.)

15 MR. UTZ: If not, the witness may be excused.

16 (Witness excused.)

17 MR. UTZ: Any statements in the Case?

18 (No response)

19 MR. UTZ: The Case will be taken under advisement.  
20  
21  
22  
23  
24  
25

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS  
209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103  
FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108



dearnley-meier

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS  
209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103  
FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

I N D E X

<u>WITNESS:</u>	<u>PAGE</u>
<u>KENNETH FREEMAN</u>	
Direct Examination by Mr. Campbell	3
Cross-Examination by Mr. Porter	9
Cross-Examination by Mr. Utz	10

E X H I B I T S

<u>APPLICANT'S</u> (Petroleum Corp.)	<u>OFFERED</u>	<u>ADMITTED</u>
Exhibit Number 1	5	9
Exhibit Number 2	6	9
Exhibit Number 3	6	9
Exhibit Number 4	6	9
Exhibit Number 5	6	9
Exhibit Number 6	7	9
Exhibit Number 7	7	9
Exhibit Number 8	7	9