

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

25 May 1983

EXAMINER HEARING

IN THE MATTER OF:

Application of Yates Petroleum Corpor-
ation for salt water disposal, Lea
County, New Mexico.

CASE
7874

BEFORE: Richard L. Stamets, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation
Division:

W. Perry Pearce, Esq.
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

For the Applicant:

Chad Dickerson, Esq.
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I N D E X

NELSON MUNCY

Direct Examination by Mr. Dickerson

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E X H I B I T S

Applicant Exhibit One, C-108

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Applicant Exhibit Two, Documents

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MR. STAMETS: We'll call next Case 7874.

MR. PEARCE: That case is on the application of Yates Petroleum Corporation for salt water disposal, Lea County, New Mexico.

MR. DICKERSON: Chad Dickerson on behalf of the applicant, Mr. Examiner, and I have the same witness, Mr. Muncy, who previously testified in the previous case.

MR. STAMETS: He is considered qualified in this case as well.

NELSON MUNCY,

being called as a witness and having been previously sworn upon his oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. DICKERSON:

Q. Mr. Muncy, very briefly state the purpose of Yates' application in this case.

A. Okay. The purpose of this application is to seek approval to dispose of produced water into the subject well, the LDM Amoco "GX" State No. 1.

Q. Would you refer the Examiner to your marked Exhibit Number Two and point out the subject well on that exhibit and what else is reflected by that exhibit?

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2 A. Okay. Again we have a map which is on the
3 scale of 1-inch to 2000 feet, and we have the half mile
4 radius circle drawn, the center of the circle being the sub-
5 ject well, and we have the two mile radius circle drawn.

6 Q. So again there are no other wells within the
7 area of review which affect this application?

8 A. This is correct.

9 Q. Turn to your Exhibit Number One, your C-108
10 filed with your application, Mr. Muncy, and tell the Examiner
11 at what depth and at what interval Yates proposes to inject
12 this water.

13 A. Okay, the -- the injection zone again will
14 be within the vertical limits of the Saunders Upper Permo-
15 Penn Pool and we again note the subject type well for the
16 field, and the proposed injection well, or the proposed in-
17 jection interval will be stratigraphically lower than the
18 oil production zone in the area.

19 Q. What rates of injection do you project for
20 this proposed well?

21 A. We would ask for between 2000 and 4000
22 barrels per day and the rates will be on the order of 2077
23 psig, and that's computed based upon .2 per foot to the top
24 perforation.

25 Q. Mr. Muncy, the lithology of this producing

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2 formation, I assume, is the -- is similar to that that you
3 described in the previous case. Would you very briefly sum-
4 marize why that formation in your opinion is not conducive
5 to migration of this injected water, either up or down?

6 A. Okay. This is ~~the~~ the zone that we propose
7 to inject into is stratigraphically lower than the oil pro-
8 ductive zones in the area. It's separated with shales and
9 dolomites from these oil production zones and there are no
10 known zones, oil zones, within the immediate area below the
11 interval, and on this well we have our surface casing and our
12 intermediate casing that both have the cement circulated be-
13 hind them and this would affect, or would not let the dis-
14 posal affect the fresh water in any way. We feel it would
15 be protected.

16 Q. What is the source of underground drinking
17 water in this area?

18 A. Okay. We -- we found that there were no
19 fresh water wells which existed within a one mile radius of
20 this injection well and the source of the water would be the
21 Ogallala, which is of tertiary age, and again the Chinle
22 falls in below this and there's some question as to whether
23 there would be any fresh water in that zone.

24 Q. Have you submitted any available water
25 analyses, Mr. Muncy, in order to reflect the relative compa-

stability of the water to be injected with that contained in the formations?

A. Yes, we have, and the analyses are attached to Exhibit One. They are probably not attached to the ones that we just handed out but the ones that were submitted they are, and the chlorides in those analyses range from around 11,000 to 92,000 mg per l and the average is 17,900. And we have a drill stem test that came off of this proposed well which listed the chlorides from the proposed injection zone at 18,000 mg per l, and we feel that this would be compatible

Q. Mr. Muncy, have you studied all available and appropriate geological and engineering data so that you are prepared to state your opinion that there is no indication of any faults or other hydrologic connection between the injection interval and any source of fresh water in the area in these two applications?

A. Yes, I have and I don't feel that there will be any problems.

Q In your opinion, Mr. Muncy, would the granting of this application be in the interest of conservation, the prevention of waste, and the protection of correlative rights?

A. Absolutely.

MR. DICKERSON: At this time, Mr. Exa-

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2 miner, I would move the admission of Yates Exhibit One and
3 Two.

4 MR. STAMETS: The exhibits will be ad-
5 mitted.

6 Are there any questions of the witness?

7 He may be excused.

8 Anything further in this case?

9 The case will be taken under advisement.

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11 (Hearing concluded.)
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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 Examination of Case No. 7874 heard by me on 5/26/83.
Richard R. [Signature], Examiner
Oil Conservation Division