

NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARINGSANTA FE, NEW MEXICOHearing Date JUNE 5, 1985 Time: 8:00 A.M.

NAME	REPRESENTING	LOCATION
W. Perry Pearce	Montgomery Andrews P.A. (Lubilee Energy)	Santa Fe
Bob Hahn	Bryant	Santa Fe
William L. Jan	Sampbell and Beck, P.A.	Santa Fe
Michael E. Stagner	OCD	Santa Fe
R.M. Reddick	MORRIS CO	Roswell
Stephen F. Mitchell	Morales	Roswell
Paul M. Burdell	El Paso Natural Gas	El Paso, TX.
T. J. Hahn	-Lubilee Energy	McAlester, TX.
Ernest L. Paville	ATTORNEY AT LAW	SF
Guspen Rex	Southern Union Explor	Dallas
K. A. Hahn	Kellahan, Kellahan	SF
Jan W. Hahn	Other Service Station	McAlester, TX.

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

5 June 1985

EXAMINER HEARING

IN THE MATTER OF:

Application of Jubilee Energy Cor-
poration for salt water disposal,
Lea County, New Mexico.

CASE
8613

BEFORE: Gilbert P. Quintana, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation
Division:

Maryann Lunderman
Attorney at Law
Energy and Minerals Dept.
Santa Fe, New Mexico 87501

For the Applicant:

W. Perry Pearce
Attorney at Law
MONTGOMERY & ANDREWS
Santa Fe, New Mexico 87501

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MR. QUINTANA: We'll call next

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Case Number 8613.

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MS. LUNDERMAN: Application of

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Jubileee Energy Corporation for salt water disposal, Lea

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County, New Mexico.

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MR. PEARCE: May it please the

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Examiner, I am W. Perry Pearce of the law firm of Montgomery

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and Andrews, P. A., Santa Fe, New Mexico, appearing in this

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matter on behalf of Jubilee Energy Corporation.

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I have one witness who needs to

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be sworn.

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MR. QUINTANA: Are there other

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appearances in Case 8613?

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If not, would you have your

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witnesses or witness please stand up to be sworn in at this

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time?

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(Witness sworn.)

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T. B. GARBER,

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being called as a witness and being duly sworn upon his

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oath, testified as follows, to-wit:

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DIRECT EXAMINATION

BY MR. PEARCE:

Q For the record, sir, would you please state your name, your employer, and place of employment?

A T. B. Garber. I'm employed by Jubilee Energy Corporation, Midland, Texas.

Q And, Mr. Garber, what is your relationship to the applicant in this matter, Jubilee?

A I am a petroleum engineer and President of Jubilee Energy.

Q Mr. Garber, have you previously testified before the Division or one of its examiners and had your credentials made a matter of record?

A Yes, sir, I have.

Q Would you briefly tell the examiner the purpose of appearing today?

A We've made application for a routine salt water disposal well, converting a well that was drilled for the purpose of oil and gas production that was nonproductive.

We want to convert the well for water disposal in the North Mason Delaware.

MR. PEARCE: Mr. Examiner, are the witness' qualifications acceptable?

MR. QUINTANA: Yes, they are.

1 MR. PEARCE: Thank you.

2 Q Mr. Garber, at this time I'd ask you to
3 refer to what has been marked as Applicant's Exhibit Number
4 One in this case and describe for the examiner what this ex-
5 hibit is.

6 A It's the application for Authorization to
7 Inject. It's the well data on the Exxon Federal No. 2 Well,
8 located in Section 9 of 26 South, 32 East, Lea County, the
9 proposed injection well, and it is in accordance with Form
10 C-108 for a water disposal well.

11 Q All right, sir, looking at the second
12 page of that exhibit, some of the items of information re-
13 quired by Form C-108 are addressed on that page.

14 Would you briefly summarize for the exam-
15 iner what those items of data are?

16 A The well data; the casing on this well,
17 you want me to go through the details of these?

18 Q If you would, please.

19 A The Exxon Federal No. 2 Well was drilled
20 in July of 1983 and the surface casing was 8-5/8ths 24-pound
21 casing that was run and cemented at 1389 feet, which was in-
22 to the top of the anhydrite. 450 sacks of cement were used
23 and the cement was circulated to the surface.

24 Then a 5-1/2 inch production string was
25 run and cemented with 150 sacks of cement, which brought the

1 top of the cement up to 3800 feet, which was well above the
2 base of the salt.

3 The casing was set in a 7-7/8ths hole and
4 the well was then perforated and we attempted to complete
5 the well. The well made a small amount of oil and a lot of
6 water, and it was temporarily abandoned pending conversion
7 to salt water injection.

8 If we're successful in this application,
9 we propose to set 2-7/8ths tubing at a depth of 4500 feet,
10 which will be approximately 50 feet above the perforations
11 and we will then inject salt water below a Baker Model-R
12 packer into the Delaware Ramsey zone. The injection inter-
13 val will be 4482 to 4502, and, Mr. Examiner, let me make a
14 correction. I think there was a typographical error.

15 That packer was supposed to be set at
16 4400 and not at 4500.

17 Q Thank you, sir.

18 A And an injection interval will be 4482 to
19 4502, which has been perforated, jet perforated, with one
20 shot a foot.

21 The well, as I said, was drilled for pro-
22 duction and resulted in a dry hole. No other zones indi-
23 cated possible production in this well.

24 The well, we had proposed to inject ap-
25 proximately 200 barrels of the water per day with a maximum

1 of 400 barrels a day.

2 It will be an open system. We propose to
3 inject, gravity injection, but if it requires a pump, we re-
4 quest that we be permitted to go to .2 pounds per foot of
5 depth, or 800 pounds injection pressure.

6 The water injected into the formation
7 will be Delaware production water produced from surrounding
8 wells in the area. The water will be produced and re-in-
9 jected into the same formation.

10 The lithologic detail of the Ramsey Sand,
11 the Ramsey is a fine-grained, silty sandstone, with
12 excellent porosity, approximately 20 percent porosity, but
13 it has low permeability.

14 This well was stimulated by hydraulic
15 fracturing so it has very good permeability.

16 Again, the name of the sand is the
17 Delaware Sand. The overall thickness is approximately 68
18 feet from the top, from 4482 to total depth of 4550.

19 There is no known fresh water in the area
20 and this well will not require any additional stimulation.

21 Now with our application we submitted
22 copies of the logs that were run on the well when it was
23 completed, and as I've previously stated, on the production
24 test the well recovered salt water with some show of oil and
25 gas. The well now produces 100 percent water.

1 Again, there are no producing water wells
2 in the area. We find no evidence of any open faults or any
3 other hydrologic connection between the disposal zone and
4 any underground source of drinking water.

5 Our proof of notices, we notified all of
6 the area -- all of the operators in the proximity of this
7 well and we will submit copies of those notices.

8 We've contacted the other operators. We
9 have no objection from those operators; in fact, they all
10 have requested to participate in this disposal program.

11 The wells in this area are marginal wells
12 and the permission to dispose of this water will enhance the
13 recovery of those wells by reducing operating costs and per-
14 mit us to perpetuate production for a greater length of
15 time.

16 The water in that area is now being
17 hauled out by truck to a commercial disposal system.

18 Q All right, sir, if you'd turn to the next
19 page of the schematic and describe, I believe, the contents
20 of that schematic are largely contained on the previous
21 page, but if you'd run through that very quickly, sir.

22 A All right, sir.

23 As the Commission requires, we've set
24 this up as a standard disposal well. There's a schematic of
25 the way the well was drilled.

1 A 12-1/4 inch hole was drilled to 1389
2 feet. 8-5/8ths casing, 24-pound, was run to that depth; ce-
3 mented with 450 sacks and the cement circulated.

4 Then a 7-7/8ths hole was drilled to a to-
5 tal depth of 4550 feet and 5-1/2 inch casing was run to 4545
6 and cemented with 150 sacks of 50/50 Poz mix and the cement
7 top was calculated at 3800 feet.

8 We then, as I stated, perforated from
9 4482 to 4502 and attempted to complete the well. We will
10 use these same perforations for injection.

11 We'll run 2-7/8ths tubing that will be
12 plastic-lined to total depth and we will set the packer,
13 again let me correct that, at a depth of 4400 feet and we
14 will put KCL water, or an inert substance, behind the tubing
15 above the packer.

16 There will be a casing gauge placed on
17 this well and a tubing gauge on the well to monitor the
18 casing-annulus pressure and the tubing pressure.

19 Q Excellent, sir. The next page of the
20 exhibit is a plat. Would you describe what that plat shows
21 and what the circle indicates?

22 A The circle indicates a radius of 1/2 mile
23 around the proposed injectio well, the Jubilee-Exxon Federal
24 No. 2, and it indicates the operators in that area that we
25 have contacted and notified of this application.

1 Q All right, sir. Beginning on the next
2 page is well data on some wells contained within that area
3 of review. Would you briefly run through that data for the
4 examiner?

5 A All right. The first well shown on the
6 plat on this exhibit is the Equitable Petroleum Exxon Feder-
7 al No. 1. That well was drilled as a producing oil well and
8 it is currently producing. It was drilled in 19 -- August
9 of 1981. It's located in Unit M of Section 8, 26 South, 32
10 East, Lea County. It was drilled to a depth of 4444 feet.
11 It was completed by running 4-1/2 inch casing to 4399 and
12 cemented with 50 sacks of cement.

13 I calculated the top of the cement to be
14 at 4179, which is about 220 feet of fill, which puts the ce-
15 ment up above the base of the salt.

16 Now this well was fractured, stimulated
17 by fracture treatment, and is currently producing less than
18 10 barrels of oil per day.

19 The second well on the exhibit is the MSM
20 Producers Exxon Federal No. 1. It is a producing oil well
21 drilled in February of 1983. It is located in Unit I of
22 Section 9, 24 South, 32 East, Lea County.

23 It was completed as a producing oil well
24 at a depth of 4452 by running 4-1/2 inch casing to 4438. We
25 made a correction on that, Mr. Examiner. That is in 26

1 South. We had a typographical error on that.

2 Q That, by the way, is correct on the exhibit the Examiner has.

3 A That you have. I'm sorry, I read it off of my exhibit and I had to correct it.

4 Q Yes.

5 A This well was stimulated by fracture treatment and is producing less than 10 barrels of oil per day.

6 The top of the cement on this well was calculated at about 933 feet. They almost circulated cement on this well. They had about 3500 feet of fill and they cemented with 860 sacks of cement.

7 The third well on the exhibit is the Equitable Petroleum Ohio State No. 1. It was drilled as an oil well and is currently producing less than 10 barrels a day.

8 It was drilled in March of 1982. It's located in Unit A of Section 16, 26 South, 22 East, Lea County.

9 It was drilled to a total depth of 4449 feet and completed by running 5-1/2 inch casing to 4425 and cemented with 300 sacks of cement.

10 The well was perforated and stimulated by fracture treatment and is currently producing less than 10

1 barrels a day.

2 The top of the cement was calculated at
3 2925, which was well up into the salt section, being cemen-
4 ted with 200 sacks of cement.

5 The next exhibit is the Equitable Ohio
6 State No. 2. This well was drilled as a producing oil well
7 in June of 1932.

8 It's located in Unit H of Section 16, 26
9 South, 32 East, Lea County.

10 It was drilled to a depth of 4508 feet
11 and completed by running 5-1/2 inch casing to total depth
12 and cemented with 150 sacks of cement.

13 The well was perforated in the Delaware
14 Sand from 4442 to 4465 and stimulated with a fracture treat-
15 ment.

16 The cement was calculated to come up to
17 3755 feet, which was well up into the salt section there,
18 being cemented with 150 sacks.

19 The only other dry hole in the area is on
20 the exhibit. It was the Holt and Hissom Drilling Company
21 State No. 1.

22 This well was drilled as a dry hole and
23 never produced any oil or gas. It was drilled in January of
24 1963 and I've prepared -- it's located in Unit A of Section
25 16, 26 South, 32 East; was drilled to a depth of 4584 feet

1 and it was plugged in accordance with State requirements and
2 I've drawn a schematic sketch of the way the well was drill-
3 led and cased and plugged and abandoned.

4 Q All right, sir, turning to the next page,
5 there is an Affidavit of Publication. That's the publica-
6 tion of your intend to convert this well to salt water dis-
7 posal, is that correct?

8 A That is correct.

9 Q The next page of the exhibit is a letter
10 signed by you to five parties. Are those the parties oper-
11 ating withing the area of review?

12 A That's correct.

13 Q And also attached to that on the follow-
14 ing two pages are the return receipts from each of those ad-
15 dressed parties, is that correct?

16 A That's correct, yes, sir.

17 Q Thank you. Do you have anything further
18 at this time?

19 A I believe that's all unless the examiner
20 has some questions.

21 MR. PEARCE: Mr. Examiner, I
22 have nothing further of the witness.

23 MR. QUINTANA: I have a couple
24 of questions.

25 MR. PEARCE: Yes, sir.

CROSS EXAMINATION

BY MR. QUINTANA:

Q Mr. Garber, is it your testimony that offset operators have all agreed to this disposal well, that they're in favor?

A Yes, sir, they're in favor of it. In fact, they will participate with us in the system, as I said, to perpetuate their production by being able to inject water in this well rather than to have to truck the water.

Q So they don't anticipate any adverse effects on their production?

A No, sir, I don't think so.

Q I have one quick question, and I know that you showed the notice of -- proof of the notice of application, but now I was looking at the map there, the southwest quarter of that half a mile circle --

A Uh-huh.

Q -- where it says, I guess, is that owned by Highland Production Company, or somebody?

A Yes. Down in Section 17?

Q Yes.

A Yes. In fact Highland is going to participate in this well with us, also.

Q Okay. I was looking to see if there was

1 notice to them. I didn't notice in there if there was a
2 notice to Highland. Have they been notified?

3 A Well, yes, they have, because they're
4 going to participate in the well, but I didn't include a
5 copy of it since they had no wells in that area.

6 Q All right.

7 A But they are going to participate in the
8 disposal well with us.

9 MR. PEARCE: Just -- just for
10 clarification, if I may, Mr. Examiner.

11 Down in that Section 17, Mr.
12 Garber, there's some lettering indicating Conoco HBP and
13 some numbers. There is not a well at that location, is
14 there?

15 A No, there is not.

16 MR. PEARCE: So there is not --
17 Highland does not have a well within the area of review.

18 A That's correct.

19 MR. PEARCE: Thank you, sir.

20 MR. QUINTANA: I would like to
21 point out that the rules state everybody within the half
22 mile of the well should be notified, all operators, and an
23 operator is considered somebody that is in the business to
24 operate whether they have a well or not, and if you -- if
25 you could provide me with some -- I just don't want it to

1 come back and hit me --

2 A Okay.

3 MR. QUINTANA: -- say, hey, --

4 A I'll check. I think Highland has a
5 farmout from Conoco on that and Highland is going to parti-
6 cipate but I'll -- I'll clear that up for you, yes,
7 sir.

8 MR. QUINTANA: I've just run
9 into some problems in the past where I -- and I can think of
10 a couple of cases to mind where we had a whole bunch of
11 hearings after that to clarify some -- I granted somebody
12 some water disposal well and never actually clarified notice
13 of publication and I just don't want to -- just in case; I
14 just want to make sure.

15 A I think that's a good point. That was my
16 oversight. I thought they had to have a well in there to be
17 notified; however, coincidentally, as I say, Highland is
18 going to participate, but -- and I think they have a farmout
19 from Conoco on that, and I'll clear it up and write you a
20 letter on it.

21 MR. QUINTANA: Okay, thank you.

22 I have no further questions of
23 the witness.

24 Are there any other questions
25 of the witness?

1 If not, Mr. Garber, you may be
2 excused.

3 Case 8613 will be taken under
4 advisement.

5 MR. PEARCE: Thank you, Mr.
6 Examiner.

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8 (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.

I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No. 8613
heard by me on JUNE 5 1985
Silvest P. Quintana, Examiner
Oil Conservation Division