STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION 1 STATE LAND OFFICE BLDG. SANTA FE, NEW MEXICO 2 9 July 1986 3 EXAMINER HEARING 4 5 6 IN THE MATTER OF: 7 Application of Verde Grande, Inc. CASE for salt water disposal, Lea County, 8935 8 New Mexico. 9 10 11 BEFORE: David R. Catanach, Examiner 12 13 14 TRANSCRIPT OF HEARING 15 16 APPEARANCES 17 18 For the Division: 19 Jeff Taylor Attorney at Law 20 Legal Counsel to the Division State Land Office Bldg. Santa Fe, New Mexico 87501 21 22 For the Applicant: Roland E. Caudill, Pro Se 23 24 25

•	2	
1 2		
3	INDEX	
4	STATEMENT BY MR. CAUDILL 3	
5	Questions by Mr. Taylor 4	
6	Questions by Mr. Catanach 6	
7	Questions by Mr. Taylor 11	
8	Questions by Mr. Catanach 16	
9	Questions by Mr. Taylor 17	
10	Questions by Mr. Stockton 18	
11		
12		
13		
14		
15		
16		
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MR. CATANACH: Call next Case

MR. TAYLOR: Application of

Verde Grande, Inc., for salt water disposal, Lea County, New Mexico.

MR. CATANACH: Ar

Are there

appearances in this case?

MR. CAUDILL: Yes, sir, there

e. I'm Roland Caudill, President of Verde Grande.

MR. SABO: Ernie Sabo with the

State Land Office.

MR. STOCKTON: Burce Stockton,

State Land Office.

MR. CATANACH: Are there other

appearances?

(Mr. Caudill sworn.)

MR. TAYLOR: Why don't you go through your application, more or less; you saw part of the last case; go through the various parts of the application and I think the main question we have is the offset -- what is it, offset wells within two miles?

MR. CATANACH: Well, we need to

But specifically,

1 go through the whole application and --2 MR. TAYLOR: 3 I mean you need to go into detail on the other producing wells in the area. 5 MR. CAUDILL: Okay. Well, there 6 are several producing wells in the area. There are only two 7 that are producing in the Wolfcamp. Both of those are real-8 ly noncommercial wells. They are lease retainers. They're producing but below commercial value.

MR. TAYLOR: You can just go through the application form step by step and --

MR. CAUDILL: Oh, step by step.

All right.

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MR. TAYLOR: -- give us that information, unless the examiner has other --

> MR. CATANACH: No, that's fine. We need that on the record.

MR. CAUDILL: Okay. All of the wells in that -- within the two mile zone are in the Strawn, which is approximately 500 feet below the zone we're wanting to propose to inject into.

We also already have an proved disposal one location to the northeast of this Aztec State Com No. 3. That is Aztec No. 1. We are proposing, if this one is accepted, to plug that well back because we do have some casing problems on it and it would be more expensive to fix it than to put this well into operation.

The Aztec State Com No. 1 is a 16-year old well and this Aztec -- I mean Aztec State No. 1 is a 16-year old well and the Aztec State Com No. 3 is 4-year old well, so we feel like by getting the packer fluid in behind that, that that casing will last a lot longer and be a lot safer.

Also this well takes, by our present tests, we ran a 700-barrel rate test on it with Pennzoil's permission, to determine how it was going to take water. It did take 3.8 barrels of water a minute on a vacuum; no pressure, which severely minimizes the possibility of fracing out anything within that formation; also severely limits the possibility of contamination in the fresh water zone.

Okay, all of the offset operators were notified no later than June 21st -- I mean, I'm sorry, May 21st. That was the latest signed for certified mailed copy, notification. I did, however, personally call all of the offset operators ahead of time and they verbally also said that they had no objection.

Later on Yates came back and decided -- of course I didn't talk to their particular engineer there -- decided they had some sort of objection

but we got that straightened out with them. They no longer have an objection.

Okay, as you can see, we -- the well is already perforated between the intervals of 10,230 feet to 10,726 feet. There are 21 perforations at various intervals in those zones. That is all considered the Wolfcamp, as verified by the geologist at the State OCD office, Oil Conservation Commission office.

MR. TAYLOR: Who did you talk to at our office?

MR. CAUDILL: Well, Jerry Sexton and also your geologist. He went through the logs and verified that the top of the Wolfcamp is at 9,480 foot is the top of the Wolfcamp.

This well has been plugged back. It was originally in the Strawn; was plugged back with a cast iron bridge plug and 25 foot of cement at 11,125 foot.

MR. CATANACH: Mr. Caudill, you said -- is there Wolfcamp production in the area?

MR. CAUDILL: There are two marginal Wolfcamp wells. The other offset operator, I talked to her, and she is just hoping for some kind of kick out of this as a waterflood, because it is a below marginal operational well. They are what we call lease retainers,

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but they're producing them at the required level to retain
1
    the leases.
                                 MR.
                                      CATANACH: Okay. You have
3
    another disposal well located to the north of this proposed
    well?
5
                                 MR.
                                      CAUDILL: To the north and
6
    east.
7
                                 MR. CATANACH: Okay.
8
                                 MR. CAUDILL: The next location
9
    to the north and east.
10
                                 MR. CATANACH: And do you plan
11
    on --
12
                                 MR. CAUDILL: Plugging it back.
13
                                      CATANACH: -- plugging it
                                 MR.
14
    -- plugging it?
15
                                 MR. CAUDILL: Well, plugging it
16
    back to 4000 foot. We hope to later on make a brine (sic)
17
    well out of that if -- if the EID agrees, and we go through
18
    all -- all that they require.
19
                                 MR.
                                      CATANACH:
                                                  Whose water or
20
    what water are you currently disposing off into the --
21
                                 MR.
                                      CAUDILL: We are a commer-
22
    cial --
23
                                 MR.
                                      CATANACH: It is a commer-
24
    cial well?
25
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1 MR. CAUDILL: It is a commercial well. It's various water from all over. 2 3 MR. CATANACH: And this well 4 you're proposing is going to be commercial also? 5 MR. CAUDILL: Yes, but it will 6 be more so pipeline to the various producers in the area. 7 MR. CATANACH: What formation 8 water do you generally dispose of? MR. CAUDILL: Wolfcamp and 10 Strawn. 11 CATANACH: You haven't had MR. 12 any compability problems with that water in the other well? 13 MR. CAUDILL: No, sir. 14 MR. CATANACH: Approximately 15 what volume do you anticipate on disposing? 16 MR. CAUDILL: Between 1500 and 17 I seriously doubt at the moment whether there 2000 a day. 18 is anything in excess of 1500 barrels a day; however, with 19 major disposal within the Lovington area fixing to get 20 shut off because of the plant kicking off, then there's 21 going to be 10,000 extra barrels that's got to go somewhere 22 daily. 23 MR. CATANACH: Mr. Caudill, are 24 there any wells within a half mile that penetrate the Wolf-25 camp?

CAUDILL: Oh, yes, all of MR. 1 Every -- every Strawn well penetrates the Wolfcamp. them. 2 The Strawn formation is below the Wolfcamp. 3 MR. CATANACH: So there are several. 5 MR. CAUDILL: Oh, yes. All of 6 the cement in all of the surrounding wells that do penetrate 7 that zone, according to their engineers, is -- is in excess 8 of the 10,000 feet that we expect to set our packer at. CATANACH: But you haven't MR. 10 submitted anything to substantiate that. You haven't 11 mitted any schematics or any detail on these wells at all, 12 have you? 13 MR. CAUDILL: Yes. and they 14 were all submitted in the prior application for that Aztec 15 State No. 1. 16 MR. CATANACH: Well, they 17 weren't all submitted because the area of review is differ-18 ent for the two wells. 19 MR. CAUDILL: Well --20 CATANACH: You're supposed MR. 21 to submit information on wells that penetrate the injection 22 zone in a one-half mile radius of the --23 MR. CAUDILL: Right. Well, 24 when I did the Aztec State No. 1 I went a little excess of 25

the one-half mile and so most of those were covered in this 1 one. MR. CATANACH: When did you ob-3 tain approval for the No. 1? 4 MR. CAUDILL: That Aztec State 5 No. 1 was in 1983. No, '84, I'm sorry; 1984. 6 MR. CATANACH: And in reviewing 7 information for that location, you said that the cement tops 8 in those wells were well above the injection zone? 9 MR. CAUDILL: Proposed injec-10 tion zone, yes, sir. 11 And this is also, besides what 12 I reviewed, that your department was talking to their 13 engineers of the various offset operators. None of them 14 expressed any concern that the cement was below that. 15 MR. CATANACH: The logs have 16 been submitted on this well? 17 MR. CAUDILL: Yes. 18 MR. CATANACH: Did you submit 19 any fresh water analysis? 20 MR. CAUDILL: No. those were 21 all submitted with the Aztec State 1. The same fresh water 22 wells are right in this exact area. 23 So they should give us a longer 24 25 review time if there is any contamination at all it would

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show up quicker.
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                                 MR. TAYLOR: Who is the surface
2
   owner of the area here, is that the state?
3
                                 MR. CAUDILL:
                                                 The Aztec State
4
   No. 1 is myself.
5
                                 MR. TAYLOR: Okay.
6
                                 MR. CAUDILL:
                                                 The Aztec State
7
    Com No. 3 is Shelby Gilmore and we have an agreement with
   him, a signed agreement with him, so this is with his
   approval.
10
                                 MR.
                                      TAYLOR:
                                                Let's see,
                                                             you
11
    lost me. Which well is this application for?
12
                                 MR.
                                      CAUDILL:
                                                 For
                                                      the Aztec
13
    State Com No. 3.
14
                                 MR.
                                      TAYLOR: Okay, and that's,
15
   Mr. Gilmore is the --
16
                                 MR. CAUDILL:
                                                 Is the surface
17
   owner?
18
                                 MR. TAYLOR: -- surface owner?
19
                                 MR. CAUDILL: Yes.
20
                                 MR. TAYLOR: Well, let's see, I
21
    don't see a proof of notice in here to him. Why don't you
22
23
                                 MR.
                                      CAUDILL:
                                                 Well, because I
24
    had a signed agreement with him.
25
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1 MR. TAYLOR: Why don't you give 2 us a copy of that agreement so we'll --3 MR. CAUDILL: Oh, okay, I think 4 I have one with me. 5 TAYLOR: -- have it in our MR. 6 files to show that the surface owner --7 MR. CAUDILL: Right. 8 MR. TAYLOR: -- is in agreement with this. 10 MR. CAUDILL: Right. 11 MR. TAYLOR: Let's see, so on 12 the area of review you drew a curve that's slightly to the 13 southwest. 14 MR. CAUDILL: Right, that is 15 correct. 16 Okay, is that a MR. TAYLOR: 17 what, a one mile radius? 18 CAUDILL: That's a half MR. 19 mile radius. 20 MR. TAYLOR: Half mile radius? 21 MR. CAUDILL: One mile right 22 through there. 23 MR. TAYLOR: Yeah. Let's see, 24 just right off I see that Bass Enterprises may get -- need 25 to get notice. Did you notify them?

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MR.
                                      CAUDILL: Yes, I did, both
1
   verbally and by certified mail.
2
                                 And Skelton Oil,
                                                   which is
                                                             the
3
   other Wolfcamp producer
                               in there was also notified,
                                                              as
   you'll notice.
5
                                 MR.
                                      TAYLOR: Oil companies are
6
   changing their names so quickly --
7
                                 MR.
                                       CAUDILL:
                                                  This
                                                        is Mrs.
8
   Skelton, an independent operator --
                                 MR. TAYLOR: Okay.
10
                                 MR.
                                      CAUDILL:
                                                 -- and she owns
11
    that well and I spoke with her personally.
12
                                 MR.
                                      TAYLOR: You've got Texaco
13
   or --
14
                                 MR.
                                      CAUDILL:
                                                 It used to be
15
   mostly Getty but now it's Texaco.
16
                                 MR.
                                      TAYLOR:
17
                                               I was just trying
    to figure out who is who in here.
18
                                 Well, that -- your notice
19
20
   pears appropriate on that . I think maybe -- I don't have
   any other questions but maybe I'll have a statement.
21
22
                                 MR.
                                       CAUDILL:
                                                   The
                                                         mineral
   rights
           tnere is still Pennzoil.
                                       They retain the mineral
23
24
           and they are selling us this well for this
                                                        specific
25
    purpose of salt water injection.
                                        Their water is pipelined
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to us. 1 MR. TAYLOR: Okay. Could you 2 give us a copy of that agreement, too? 3 MR. CAUDILL: Sure thing. MR. TAYLOR: If you want to 5 cross out any dollar amounts that's all right with me --MR. CAUDILL: Okay. 7 MR. TAYLOR: -- just so we can 8 see --9 MR. CAUDILL: Right. 10 MR. TAYLOR: -- you have a pro-11 perty right to use the well. 12 MR. CAUDILL: Okay. 13 MR. TAYLOR: I quess that's all 14 I have. 15 Oh, let me check, there are 16 fresh water wells within the area of the southwest --17 MR. CAUDILL: Oh, yes, in fact 18 for the Aztec State 1 --19 MR. TAYLOR: -- of the little 20 circle you have? 21 MR. CAUDILL: -- we have our 22 own water well for our stock within, oh, 60 yards of the 23 wellhead. 24 25 MR. TAYLOR: And is that all

1 the information relative to those wells in the file for the 2 3 MR. CAUDILL: Yes, for the --MR. TAYLOR: -- Aztec --5 MR. CAUDILL: -- Aztec State No. 1. 7 MR. CAUDILL: Okay. You have no problem with the fact that those wells are either shallow or all the wells are adequately plugged so that there'd be 10 no movement of water? 11 MR. CAUDILL: No, there's no 12 problem with any coming back up or any contamination in that 13 area. 14 MR. TAYLOR: Let's see, isn't 15 there a statement in here that you reviewed the -- what does 16 it say you have to do? 17 MR. CAUDILL: It says that --18 MR. TAYLOR: You've examined 19 the records and find no evidence of open faults? 20 MR. CAUDILL: They were all 21 submitted upon -- for the Aztec State No. 1 in early 1984. 22 That's one of the deals that 23 was prior submitted. 24 MR. TAYLOR: Okay, we'll have 25 to review that file and see if anything may be lacking.

1 MR. CAUDILL: Okay. 2 Let's see if the MR. TAYLOR: 3 Land Office has any questions. MR. CATANACH: Mr. Caudill, in 5 your No. 1 have you been injecting under pressure? 6 MR. CAUDILL: Yes, we do have 7 to because water -- right after we started we had a casing 8 We cemented it in and we also cemented off our vacuum leak. zone, the zone that was taking water on a vacuum originally, 10 and we have never been able to get it back. 11 MR. CATANACH: That was the 12 Wolfcamp? 13 CAUDILL: MR. Yes, it was in 14 the Wolfcamp. 15 MR. CATANACH: I see, so you 16 don't anticipate you needing to inject under pressure? 17 MR. CAUDILL: We really do not 18 expect it at all; not taking that fantastic a rate. It may 19 slow down a bit but I think it will continue taking it. 20 And I visited with a couple of 21 geologists and they tell me the same thing. 22 Of course there are no quaran-23 tees. 24 MR. CATANACH: What was this 25 well originally drilled for? Was it a producer?

some

not

MR. CAUDILL: They had 1 production in the Strawn. They then plugged it back, moved 2 up the Wolfcamp, tried to make a producer out of it, and got 3 nothing but just a little bit of gas. MR. CATANACH: I see. 5 MR. CAUDILL: Same way with the 6 Aztec State 1. 7 MR. CATANACH: For the record, 8 we have a letter from Yates concerning objection that previously had and have withdrawn now. They requested that 10 the injection pressure in the well be restricted so as 11 to exceed fracture pressure. 12 Just for the record I thought I 13 should read that on the record. 14 That would be at MR. CAUDILL: 15 2120 pounds, I believe, would be is what you all's allowable 16 would be. 17 MR. CATANACH: But if you don't 18 foresee injecting under pressure I don't think that will be 19 a problem. 20 MR. CAUDILL: 21

MR. TAYLOR: I'm kind of concerned on this affirmative statement because our rules require that we have one. Would it be your testimony that the review you made for your previous application on the Aztec

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No. 1 is adequate to cover the area that -- that would be 1 affected by the Aztec No. 3? 2 CAUDILL: Oh, yes, defin-MR. 3 itely. MR. TAYLOR: So that --5 MR. CAUDILL: Especially 6 visiting with you all's geologist, the whole area is gener-7 ally running the same. It's at a slant, a slope, but there are no open fractures that have been discovered in that area. 10 MR. TAYLOR: You guys from the 11 Land Office have any questions you want to ask? Any con-12 cerns or --13 MR. STOCKTON: Mr. Caudill, you 14 provided notice to the Land Office of this application, did 15 you not? 16 MR. CAUDILL: No. They don't 17 18 own the surface rights so according to Jerry I didn't have to do that. 19 MR. STOCKTON: Jerry? 20 MR. CAUDILL: Sexton, in Hobbs. 21 MR. STOCKTON: Sexton? I am 22 not personally real clear on that but I believe that 23 we're a mineral right owner we should have notice. 24 25 MR. TAYLOR: Oh, the State owns

the minerals there? 1 MR. STOCKTON: Yes. 2 MR. CAUDILL: Well, we will be 3 sure and send you notification on it so if you object --MR. STOCKTON: Uh-huh. 5 MR. CAUDILL: He said he didn't 6 feel it was necessary. 7 MR. STOCKTON: Do you intend to 8 request an easement for salt water injection for this well? 9 MR. CAUDILL: From -- from who? 10 MR. STOCKTON: From the Commis-11 sioner of Public Lands? 12 MR. CAUDILL: No. 13 STOCKTON: I believe that MR. 14 is also necessary. 15 MR. Okay, when did CAUDILL: 16 that rule come back? 17 It wasn't on our No. 1. 18 MR. STOCKTON: Well, we're 19 going to look into that. You may need one there, too. 20 MR. CAUDILL: Okay. The reason 21 I say this is because it was determined that salt water in-22 jection came under the landowner's act instead of the min-23 eral rights act. This was ruled in a court of law some two 24 years ago. 25

1 MR. STOCKTON: Would you --2 MR. CAUDILL: And this is the 3 only reason I didn't even think to ask permission for an easement. 5 MR. STOCKTON: Would you care 6 to stop and visit with us --7 MR. CAUDILL: Yeah, no problem 8 at all. MR. STOCKTON: -- after this 10 hearing? 11 MR. CAUDILL: In fact I was 12 wanting to visit you all, anyway. 13 MR. TAYLOR: Ιf you have a 14 mineral lease you have the right to -- this can be off the 15 record. 16 17 (Thereupon a discussion was had off the record.) 18 19 MR. CATANACH: Yes, I'll take 20 administrative notice of Administrative Order SWD 275. 21 MR. CAUDILL: Right. 22 CATANACH: And I have no MR. 23 further questions of the witness. 24 Is there anything else in this 25 case?

All right, we'll leave this case open for a period of time so that I may review the in-formation and if I have any further questions of the witness, which may have to be put on the record, we may have to call you back. MR. CAUDILL: Okay. MR. CATANACH: You may be ex-cused, Mr. Caudill. MR. CAUDILL: Thank you. (Hearing concluded.)

CERTIFICATE

I, SALLY W. BOYD, C.S.R., DO HEREBY

CERTIFY the foregoing Transcript of Hearing before the Oil

Conservation Division (Commission) 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 les Boyd Core

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 8731 neard by me on 1986

Davill Cataret, Examiner