

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

25 September 1985

EXAMINER HEARING

IN THE MATTER OF:

Application of Dwight A. Tipton for      CASE  
salt water disposal, Lea County,      8708  
New Mexico.

BEFORE: Michael E. Stogner, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Division: Jeff Taylor  
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For the Applicant: R. W. Gallini  
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P. O. Drawer 1599  
Lovington, New Mexico 88260

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MR. STOGNER: Call next Case  
Number 8708.

MR. TAYLOR: The application of  
Dwight A. Tipton for salt water disposal, Lea County, New  
Mexico.

MR. STOGNER: Call for  
appearances.

MR. GALLINI: I'm R. W. Galli-  
ni, of Heidel, Samberson, Gallini, and Williams, P. O. Draw-  
er 1599, Lovington, New Mexico, and have two witnesses, Dale  
Gandy and H. G. Starling.

MR. STOGNER: Are there any  
other -- is this all the witnesses you have?

MR. GALLINI: Yes, sir.

MR. STOGNER: Will the witnes-  
ses please stand and be sworn?

(Witnesses sworn.)

MR. GALLINI: First witness  
will be Dale Gandy.

1                                   DALE GANDY,  
2 being called as a witness and being duly sworn upon his  
3 oath, testified as follows, to-wit:

4  
5                                   DIRECT EXAMINATION

6 BY MR. GALLINI:

7                   Q               Would you state your name, address, and  
8 occupation, please?

9                   A               Dale Gandy, Gandy Corporation, Lovington,  
10 New Mexico.

11                  Q               And what is the business of Gandy? What'  
12 your occupation with them, or what's your title?

13                  A               I am President and owner and we are in  
14 the water hauling and contract, oilfield contract business.

15                  Q               Okay, and do you have a Certificate of  
16 Public Convenience and Necessity from the New Mexico State  
17 Corporation Commission to transport water?

18                  A               Yes, sir, we do, Permit Number 142225.

19                  Q               Okay. Now, this application that's in  
20 question here in Case Number 8708 is filed in the name of  
21 Dwight Tipton. Is he the owner of the leasehold where this  
22 proposed disposal well is to be located?

23                  A               Yes, sir, he is at the present time but I  
24 have well bought contingent to the application and hearing.

25                  Q               All right, is the surface owner, Mr. Earl

1 Levelle, is he aware of your arrangement with Mr. Tipton re-  
2 garding the use of this well as a salt water disposal well?

3 A Yes, he is. Mr. Levelle is an older  
4 gentleman in his late eighties and not in good health, and  
5 his daughter Mrs. Erlene Roberts is taking care of his busi-  
6 ness and she's aware of it.

7 Q And you've been negotiating with her re-  
8 garding the use of that surface and she's fully aware of  
9 this application?

10 A Yes, sir, again as a contingent to our  
11 application approval.

12 Q Right. And it is your request and -- or  
13 you do have the authority from Mr. Tipton, the owner of this  
14 leasehold to appear at this hearing and have your consul-  
15 tant, Mr. Starling, present evidence in support of this ap-  
16 plication?

17 A Yes, sir, I do.

18 Q And are you asking that if this applica-  
19 tion is approved that the order be issued in the name of  
20 Gandy Corporation?

21 A Yes, I am.

22 Q All right, and this would be with the ap-  
23 proval of Mr. Tipton?

24 A Yes, it would.

25 MR. GALLINI: Do you have any

1 questions, Mr. Examiner?

2 MR. STOGNER: I have no ques-  
3 tions regarding Mr. Gandy's qualifications but I will have  
4 some questions regarding other matters with Tipton and the  
5 well and such.

6 MR. GALLINI: We're going to go  
7 through that with Mr. Starling.

8 MR. STOGNER: Okay, and that  
9 will probably be helpful and then I'll save those questions.

10 MR. GALLINI: I might state  
11 that the purpose of having Mr. Gandy present this was I  
12 talked with Mr. Catanach yesterday about it and made him  
13 aware of this in view of the fact that the application was  
14 made in the name of Dwight Tipton, and he recommended that  
15 we make the Division aware of this at this hearing today and  
16 that's the purpose of this testimony.

17 MR. STOGNER: One question be-  
18 fore we do start, Mr. Gallini.

19 MR. GALLINI: Okay.

20

21 CROSS EXAMINATION

22 BY MR. STOGNER:

23 Q Mr. Gandy, do you or your corporation  
24 have a plugging bond on this well or plan to get one?

25 A Yes, sir, we plan to get one.

1 MR. STOGNER: Okay, that's all  
2 the questions I have right now, so you may proceed, Mr. Gal-  
3 lini.

4 MR. GALLIN: Okay, I'm through  
5 with this witness and then I'll ask Mr. Starling to --

6  
7 H. G. STARLING,  
8 being called as a witness and being duly sworn upon his  
9 oath, testified as follows, to-wit:

10  
11 DIRECT EXAMINATION

12 BY MR. GALLINI:

13 Q Would you state your name and address and  
14 occupation, please?

15 A My name is H. G. Starling. I'm a private  
16 consultant for the time being for my own --

17 Q I tell you, would you tell the Division  
18 about your educational and professional experience and  
19 qualifications?

20 A I do not hold a college degree but my ex-  
21 perience, careerwise, I was production supervisor for a ma-  
22 jor company, namely Shell Oil, for some thirty-one plus  
23 years. I was overseer of numerous waterflood projects, many  
24 disposal well sites, along with conventional production of  
25 oil and gases.

1                   Upon retirement from Shell I formed a  
2 corporation, Basin Oil Consultants, Incorporated, and it  
3 became a bit burdensome on me, and after eight years I dis-  
4 solved it as a corporation and I continued as a private con-  
5 sultant.

6                   Q           All right, have you previously testified  
7 before the Commission on any other matters before?

8                   A           No, I have not.

9                   Q           And this prior experience that you've had  
10 in working for Shell, has this been in southeast New Mexico?

11                  A           I've been in -- I've been in southeast New  
12 Mexico for a little over 34 years.

13                  Q           Also would include the area of review of  
14 this application?

15                  A           Yes, of course, and some other in West  
16 Texas.

17                  Q           All right, and have you been retained by  
18 the Gandy Corporation as a consultant in connection with  
19 this application?

20                  A           That is correct.

21                  Q           And are you familiar with this applica-  
22 tion and did you assist in its preparation?

23                  A           Yes, I am and I did.

24                               MR. GALLINI: Will Mr. Star-  
25 ling's qualifications be accepted by the Division in connec-



1     tion with this matter?

2                             MR.   STOGNER:   Mr.   Starling,  
3     when did you terminate your employment with Shell?

4             A             1st of January, '77.   I retired at that  
5     time.

6                             MR.   STOGNER:   Okay.   In your  
7     employment with Shell were you in southeast New Mexico?

8             A             I came to southeast New Mexico, employed  
9     in July of 1951.

10                            MR. STOGNER: With Shell --

11             A             Yes, sir, that is correct.

12                            MR. STOGNER: -- until 1977.

13             A             And I remained in southeastern until re-  
14     tirement.

15                            MR. STOGNER: Okay. I do know  
16     Shell has a lot of operations in southeast New Mexico, need-  
17     less to say, and a lot of waterflood operations --

18             A             That's correct.

19                            MR. STOGNER: -- and disposal  
20     wells.

21             A             Yes, sir.

22                            MR. STOGNER: Were you overseer  
23     of those?

24             A             Yes, sir.

25                            MR. STOGNER: When you say an

1   overseer of these, were you essentially doing the same type  
2   of work on putting salt water disposal applications together  
3   and doing the actual overseer of plugging back operations and  
4   such as this as what you're seeking here today?

5                   A           That is correct, you bet.

6                               MR. STOGNER:   Okay, from 1977  
7   until essentially now, you either ran a business, a consul-  
8   ting business or you were consulting yourself?

9                   A           That's correct, sir.   The corporation,  
10   Basin Oil Incorporated, became liable on the 1st of Febru-  
11   ary, '77.   The the attorneys, I asked them to dissolve it  
12   the first of this year, and that after its dissolution it  
13   became just H. G. Starling, Consultant.

14                               MR. STOGNER:   Okay.   Have you  
15   made applications since you have been away from Shell for  
16   salt water disposal wells in New Mexico?

17                   A           Not per se, no, sir.

18                   Q           How about Texas or any other states?

19                   A           No.   I've made -- let me qualify that;  
20   not to file permits or applications, not as such, but I've  
21   worked on, done repair, things of that sort, you know.

22                               MR. STOGNER:   Okay, the actual  
23   mechanical work --

24                   A           Yes, all hand things and (not under-  
25   stood.)

1 MR. STOGNER: Have you ever  
2 appeared before the Texas Railroad Commission or another  
3 state body, regulatory agency?

4 A Texas Railroad Commission, Midland, but I  
5 couldn't give you the date. It was so long ago, I -- it was  
6 quite a spell ago.

7 MR. STOGNER: Were you with  
8 Shell or --

9 A Yes, it was on a hearing about some pro-  
10 ject and to tell you the truth, I can't recall what it was;  
11 back in the forties, and that's -- I've slept two or three  
12 times.

13 MR. STOGNER: But you did tes-  
14 tify at that hearing with the Railroad Commission regardless  
15 of how long ago it was.

16 A Yes, it was some -- to some degree. Again,  
17 it's been so long I forget what it was all about. I never  
18 recall, it was some sort of a hearing, a royalty thing, as I  
19 recall.

20 MR. STOGNER: I find Mr. Gan-  
21 dy's qualifications acceptable as a practical oil man and  
22 vast experience in southeast -- Mr. Starling, I'm sorry, and  
23 his experience in southeast New Mexico for the -- for these  
24 past years.

25 Q Thank you. Would you, Mr. Starling,

1 would you explain the purpose of this application that  
2 you're attempting to accomplish?

3 A Well, we -- we seek to -- to convert an  
4 existng well that was drilled as a producer or oil and/or  
5 gas and we seek to -- to -- the approval to convert it over  
6 into a salt water disposal well.

7 Q And where is the location of this well?

8 A The location of this well is in the North  
9 Shoe Bar Field, approximately four, four-and-a-half miles  
10 south and west of the village of Lovington.

11 It's in Section 23, Section 23, 16 South,  
12 and Range 35 East.

13 Q Is this also known as the Leavelle --

14 A Leavelle No. 1, which is in Unit B, let-  
15 ter B, (not understood) well.

16 Q All right. Now are you familiar with the  
17 well data on that -- on that well?

18 I refer you to Exhibit A.

19 A Exhibit A.

20 Q Why don't you explain Exhibit A, if you  
21 would.

22 A Okay. I'm going to take time to put  
23 these on. I'll ask the court's indulgence here.

24 All right, this -- this represents the  
25 wellbore as it is now and will be should this application be

1 approved.

2 In other words, it was drilled to the Mis-  
3 sissippian and 5-1/2 casing was set at 12,160 feet. And then  
4 their various attempts to produce, this well was initially  
5 potentialed, as I recall, in September of 1980 in the Mis-  
6 sissippian as a fairly low producer of gas, but after they  
7 felt like it was a failure, an economic failure there, it  
8 was plugged off with a cast iron bridge plug with 30 feet of  
9 cement on it, sealing off the Mississippian.

10 This bridge plug is at 12,050 feet with  
11 30 feet of cement on top.

12 Then the Lower Morrow was perforated at  
13 11,0932 to 11,949, another attempted producer made there, in  
14 attempt to have a producer, and that was unsuccessful. It  
15 was squeezed off with 40 sacks of cement into the formation  
16 and another cast iron bridge plug, similar or exactly like  
17 the one below was set there at 11,800, and there were 30  
18 feet of cement on top of that.

19 And then they went into the Upper Morrow  
20 at 11,676 to 11,684, which ended in another failure there.

21 Then they came up the hole, set another  
22 cast iron bridge plug at 11,250 feet with 20 feet of cement  
23 on top of that.

24 Then they made another attempt at com-  
25 pleting in the pool that they call, I guess, the Lower Wolf-

1 camp, which is at that particular zone, 10,298 to 10,308 and  
2 attempted completion as an oil producer.

3                   They got water in this -- in this attempt  
4 initially and they felt like that they had a channel, that  
5 the water, according to lab analyses, was coming from below,  
6 so they did a squeeze job on this -- on these perfs and  
7 drilled out and reperforated in the same zone and then an-  
8 other attempt was made, and that's where -- that's where it  
9 was left as far as production attempts are concerned.

10                   And for all purposes or substance, the  
11 attempts really ceased along about the end of January of  
12 1983. It became a matter of just testing until it apparent-  
13 ly was noneconomical to continue.

14                   But all reports as far as remedial steps  
15 and whatever, pretty well came to cessation about the end of  
16 January of '83.

17                   Then we began to look at it at earlier  
18 this year as a possible for water disposal.

19                   And this, the rest of your question is  
20 proposed steps that we would take. The other perfs that are  
21 shown there from 10,082 down to the existing ones, which are  
22 10,308, are steps that we would take and the Model D, I  
23 don't -- somebody got the Model D but to me (not clearly un-  
24 derstood) a Baker Model D drillable will be set there at  
25 10,030 plus or minus, and then, of course, some plastic

1 lined 2-3/8ths inch tubing will be run to surface and on  
2 casing, the surface pipe and the intermediate, being the 13  
3 and 3 and 18 and 5, or 8 and 5, rather, with both circulated  
4 to surface with cement.

5 Q Now, the pool and formation that you're  
6 going to be using is what?

7 A You mean the pools that we're going to be  
8 --

9 Q You're going to be injecting into.

10 A The fluid from it?

11 Q No, the one you're going to be injecting  
12 into is what?

13 A Well, it will be --

14 Q The formation.

15 A It will be the Wolfcamp.

16 Q All right, and again what's your proposed  
17 injection interval?

18 A The proposed injection interval, why, it  
19 -- of course, this states here from 10,082 to 10,308, but it  
20 will actually be in intervals, coming from the bottom up, it  
21 will be from 10,308 to 10,298.

22 Then it will come up from 10,145 to  
23 10,135.

24 Then from 10,130 to 10,121.

25 And lastly, on top it will be from 10,088

1 to 10,082; in those, in those four intervals.

2 Q But that will be within the realm of  
3 what's contained in your application?

4 A It should be exactly, and these perfora-  
5 tions will be only two shows per foot in the existing perfs  
6 because it already has the holes there. We feel like we  
7 should go ahead and knock the two extra holes.

8 The other remaining zones, which will be  
9 new, pristine, if you would call it, will be four shots per  
10 foot.

11 Q Now is this an expansion of any existing  
12 project that Gandy Corporation has out there?

13 A No.

14 Q And, now, in regard to wells and leases  
15 within a 2-mile radius, I'd like to direct you now to Exhi-  
16 bit B and ask you to explain to the Division what this exhi-  
17 bit shows.

18 A Well, it's -- in this exhibit, Exhibit B,  
19 the whole map is so microscopic you may need one of these  
20 glasses, but the only -- it's spelled out here in another  
21 sheet -- but the only producing well in this -- in the re-  
22 view area is the Elk Oil Company, a farmout from Mesa, which  
23 is approximately a half mile.

24 Q Do you want to refer to that other, the  
25 data on that particular well?



1           A           Yes, I think so.

2           Q           How many -- how many is there?

3           A           There's only one.

4           Q           Okay.

5           A           And it's a farmout by Mesa operated by  
6 Elk out of --

7           Q           That's the only one that penetrates the  
8 proposed injection zone.

9           A           That is correct. That is correct.

10          Q           All right.

11                   And would you explain the data on that as  
12 it would affect this application?

13          A           Okay. Elk Oil, it is -- we've got the 5-  
14 1/2 started at 10,600 feet. It was cemented with 350 sacks,  
15 with a 7-7/8ths hole and 5-1/2 inch casing, and calculated  
16 fill using those two factors you would get about 6, 6.1 to  
17 6.5 feet per sack of cement, which would put the cement, of  
18 course, well above anything we're going to touch.

19                   And then they're producing from that  
20 zone, too, so we -- we feel that the well is -- I mean, you  
21 know, they're still -- still pumping it at a low rate. I  
22 understand it makes four barrels a day or something of that  
23 sort.

24          Q           Well, it says here pump 44 barrels of  
25 oil, no water.

1           A           Well, that was on potential, though.

2                           MR. STOGNER:   Mr. Gallini.

3                           MR. GALLINI:   Yes, sir.

4                           MR. STOGNER:   Are we referring  
5 to an exhibit?

6                           MR. GALLINI:   It's -- well, we  
7 were looking at Exhibit B.

8                           MR. STOGNER: Right, the map.

9           A           Yes, sir.

10                          MR. GALLINI:   And in the appli-  
11 cation for the authorization it's attached to that applica-  
12 tion. It would be under Item VI.

13           A           That would be the only well that was in-  
14 volved, really.

15                          MR. GALLINI:   It's the Mesa  
16 State No. 1, that Elk Oil Company well.

17           A           It's in Section 14, nearly north from us.

18                          MR. STOGNER:   But where's the  
19 information on that well? I can't seem to find it.

20                          MR. GALLINI:   It's Item -- it  
21 would be under Item VI in the Application for Authorization.  
22 It should be attached to it.

23           A           It's on the same page, Item VI.

24           Q           Right.

25                          MR. GALLINI:   You don't have

1 it?

2 MR. STOGNER: Okay, the Elk Oil  
3 Company, Mesa State No. 1.

4 A Right, sir, now that 44 barrels of oil,  
5 no water, this was on potential right in the beginning.

6 Q So you're saying it's about 4 today.

7 A That's what I understand.

8 Q Does --

9 A To the best of my knowledge.

10 Q Would converting this well to a salt  
11 water disposal well in your opinion pose any hazard to this  
12 well?

13 A I don't -- I don't see that it would.  
14 There's no evidence of fractures or anything of that sort  
15 that would lead us to believe there would be any trouble  
16 with it --

17 Q Okay.

18 A -- that I know about.

19 Q Now, is there any -- are there any plug-  
20 ged wells in this area of review?

21 A No, sir, not that (not clearly under-  
22 stood).

23 Q Now, would you describe the proposed ave-  
24 rage daily volume of fluid that would be injected in the  
25 Leavelle No. 1 Well?

1           A           Yes, sir. That figure would be pretty  
2 well tied to -- to circumstances. Right now we look upon it  
3 as what we need right now, and that would be anywhere from  
4 600 to 1000 barrels a day and that is what we need at this  
5 present time, but let me say this, that is -- of course, I  
6 know, if you'll excuse the expression, a fluid, fluid fig-  
7 ure, because not only is the water fluid but it could very  
8 well change.

9                       That would be our daily requirement right  
10 now, is what I'm saying.

11           Q           Okay, so your average daily volume would  
12 be 600 barrels to 1000 barrels a day?

13           A           To 1000 barrels a day.

14           Q           All right. What will the -- will the  
15 system be an open system or a closed system?

16           A           Be closed.

17           Q           And what would be your proposed average  
18 injection pressure?

19           A           Well, we have aspirations that it would  
20 be zero, a vacuum, but then certainly not to exceed 1000  
21 pounds under any condition, because we feel that at that  
22 point it would become an uneconomical operation.

23           Q           All right, and what are the sources of  
24 the injection fluids that you'll be injecting into that  
25 well?

1           A           Well, I would refer you to Exhibits C  
2 through G, one of them being from the South Shoe Bar Field.

3                   The first one being a lab analysis from  
4 the South Shoe Bar, which lies adjacent to this -- to this  
5 lease to the south over into the (not clearly understood)  
6 Cattle Company area.

7           Q           Now this, let me ask you first off, this  
8 would be water, though, that would be transported by Gandy  
9 Corporation or other tank trucks into this --

10          A           By truck; by road, yes, sir.

11          Q           Okay, go ahead.

12          A           All right. And then the next analysis is  
13 from the North Lovington.

14          Q           That's Exhibit D?

15          A           Exhibit --

16          Q           D?

17          A           -- D, yeah.

18          Q           Okay.

19          A           North Lovington being the area, oh,  
20 there's some wildcat stuff up there and it's part of the old  
21 Caudell system is in the North Lovington area, and areas on  
22 southwest toward the old Saunders Field, up in that area  
23 would be the North Lovington.

24                   And Exhibit E is the East Hobbs Field,  
25 which would include possibly the old King Field and on down

1 toward Hobbs, toward the wildcat between Hobbs and Lovington  
2 and part of the San Andres Field in Hobbs, north of Hobbs,  
3 east of Hobbs.

4 Q How about Exhibit F?

5 A Exhibit F would be South Lovington.  
6 That's in the area that -- they have a disposal well or  
7 something, they have a big disposal well in that area but  
8 there's much water to be moved out of that, but you have the  
9 Abo water there and the San Andres waters, and various  
10 others through the South Lovington Field.

11 It's over there in that area where the  
12 refinery's built, if you'll recall.

13 Q The Famariss?

14 A Yeah, it's in that area, so this particu-  
15 lar analysis is in the San Andres but there's the Abo, Glor-  
16 ieta.

17 Q Now let's go to Exhibit G.

18 A Exhibit G is in the Lower Wolfcamp of  
19 West Lovington. This West Lovington includes, well, the old  
20 West Lovington Field, but mainly the old Townsend Field,  
21 which extends to some seven miles, seven or eight miles west  
22 of Lovington, and includes much of the Pennsylvanian. This  
23 particular -- this particular sample was taken was called  
24 Lower Wolfcamp, but the Lower Wolfcamp and the Pennsylvanian  
25 are, what, synonymous; same, same area.

1                   So basically, the rest of them would be  
2   Wolfcamp and the Penn of the Townsend field.

3                   Q               Now in connection with this application  
4   there is also an analysis of compatibility testing that was  
5   done and this would be illustrated on Exhibit H, is this  
6   correct?

7                   A               Exhibit H, the geological survey on it by  
8   Roswell Geological Society. It spells out in the Wolfcamp  
9   and I'm not a geologist but on the type of trap, I'll read  
10  it to you, if I may.

11                                "Stratigraphic Wolfcamp Three Brothers  
12  shelf edge crosses a broad ridge. This is a younger paral-  
13  lel shelf edge similar to the one which produces in Townsend  
14  Field.

15                                Field limited by stratigraphic up dip and  
16  down dip pinchout of porosity and by oil/water contact off  
17  of broad ridge."

18                                Which, in a layman's knowledge of it, is  
19  certainly not indicative of any troubles as far as -- as far  
20  as fractures or faults. There's no indication of a fault  
21  there that would permit any undesirable results.

22                   Q               Okay, and what is the geologic name of  
23  that underground source of drinking water in that area?

24                   A               Ogalalla.

25                   Q               And what's the depth to the bottom?

Q            Okay.    And would you describe the pro-  
mulation program that you're planning for this dis-  
11?

Q Now, in connection with the logging and  
data on this well, are you familiar when the last  
performed on this well when it was in production?

A            Item X, oh, yeah. Okay, this is more or  
report on it awhile ago when I said approximately 4  
This was logs filed by the U. S. Operating Com-  
By the way, they were the owner; the well's in their  
this time and this (not understood). December 18,  
Last test was on October 2nd, '83, 3 barrels of oil  
rrels of water.

And the last report I had on it, the oil



1 was approximately 4 barrels and this is basically what it  
2 is.

3 Now this was in October 2, '83, and as I  
4 pointed out earlier, it seems as far as I can find in the  
5 records that the remedial attempts or whatever pretty well  
6 ceased at the end of January of that year.

7 So that's -- that's about where it stands  
8 right now, as far as I know, about the last test, I mean.

9 Q And to your knowledge were the well logs  
10 filed with the Division as required by regulation?

11 A Yes, according to the best of my know-  
12 ledge.

13 Q Now, I want to point you out to Exhibit I  
14 that's attached to the application.

15 A Okay, on Exhibit I has to do with fresh  
16 water wells. I picked up the samples personally from these  
17 two wells. They were the only two that were in this review  
18 area that I could get a sample from.

19 Q Where is water well number one located?

20 A Water well number one is approximately  
21 one-half mile due east in this -- from the well in the  
22 northwest quarter northwest quarter of 24 of the same town-  
23 ship and range, and that water was turned over to a lab.

24 And then water well number two is located  
25 at the hole by the Leavelle ranch house, probably less than

1 a half a mile from -- from the subject well.

2 And then, of course, there's the lab an-  
3 alyses on those two wells.

4 And these people were informed of what  
5 the test was being made for.

6 Q Now, you may have already testified, but  
7 let me ask you again, did you examine the available geologic  
8 and engineering data for the area of review?

9 A Yes, I did.

10 Q All right. Did you find any evidence of  
11 any open faults or other hydrologic connection between the  
12 proposed injection zone and any fresh water source in this  
13 area?

14 A To the best of my -- my observation, no,  
15 I didn't; there is none.

16 Q Okay. Now was a copy of this application  
17 furnished to the owner of the surface of the land on which  
18 the well is to be located and to each of the leasehold oper-  
19 ators within one-half mile of this well location?

20 A To the -- there's a copy of these that  
21 were mailed out, so -- registered mail, so I would have to  
22 say yes to your question because they were mailed back by  
23 certified mail and the -- all I have back from so far that's  
24 in this file was the one from Yates, Yates Petroleum.

25 Q Okay, and --

1           A           Shall I read it?

2           Q           Yes, go ahead and read it.

3           A           To Dwight Tipton, Care of Oil Reports and  
4 Gas Service, Inc., Leavelle No. 1, Section 23, 16 South, 35  
5 East, Lea County.

6                       Gentlemen:   Yates Petroleum Corporation  
7 has no objection to the conversion of the Leavelle 1 Well to  
8 a disposal well.

9                       Yours truly,   Yates Petroleum by Randy G.  
10 Patterson, Land Office.

11           Q           Okay.   In your working on this applica-  
12 tion have you received any or are you aware of any objec-  
13 tions to this well being converted?

14           A           Up to today, no.

15           Q           Okay, and Mr. Starling, in your opinion  
16 will the granting of this application be in the interest of  
17 conservation, the prevention of waste, and the protection of  
18 correlative rights?

19           A           In my opinion that's correct.

20                       MR. GALLINI:   At this time we'd  
21 move for the introduction of Exhibits A through J.

22                       MR.    STOGNER:   Exhibits   A  
23 through J will be admitted into evidence.

24

25

## CROSS EXAMINATION

BY MR. STOGNER:

Q Let's refer to Exhibit A first. When was the well first spudded?

A I didn't hear the question.

MR. GALLINI: When was it first spudded.

A I would have to go back to the files, which I have, if you'll allow me time, to give the exact time. It would be in the early eighties.

Q That will be sufficient.

A January, February of '80.

Q We'll take administrative notice of my well file here in the Santa Fe office.

5-1/2 inch casing was set at 12,160 feet according to your exhibit with 500 sacks of cement. Do you know what the top of the cement on 5-1/2 is?

A It was not -- they had no TOC exact. In other words, what I'm saying, they had no temperature survey run, so a TOC was done by calculation, of course, and this pretty well -- the final result on that because there was no TOC established.

Q What is the calculated TOC with 500 sacks?

A Well, your calculation is shown over

1 here. I'm going to have to look at it to see.

2 It would be about 94-9500 feet.

3 Q What percentage of fill did you use in  
4 that calculation?

5 A Well, that would -- that would be based  
6 on about 6.2 feet per sack, which would be 100 percent cal-  
7 culation.

8 You've got -- it's spelled out here where  
9 it's calculated out if I could find it.

10 Q Well, in Item III, paragraph (2), last  
11 sentence, last words, are 9,275, calculated.

12 A Yes, that's where it is.

13 Q So that's using 6.2 feet per sack. What  
14 size of hole?

15 A 7-7/8ths, 5-1/2.

16 Q Now Item Number VI. I'm sorry, Item --  
17 yeah, Item Number VI, which you discussed, the Elk Oil Com-  
18 pany Mesa Well No. 1.

19 A Uh-huh.

20 Q Okay, that well is located in Section 14.

21 A Yes, immediately -- immediately north.

22 Q Okay. Who's the lease operator on that?

23 A The lease operator? The boy's name is --  
24 well Elk Oil Company is the operator.

25 Q Okay, Elk Oil Company is the --

1           A           I thought you meant the person. Yeah,  
2 it's a farmout from Mesa.

3           Q           Was Elk notified? I do not see a return  
4 receipt for Elk Oil Company in Roswell, New Mexico.

5                       MR. GALLINI: We had one to  
6 Mesa but I don't see one for Elk.

7           A           Yeah, had one to Mesa because they were  
8 the holder of the lease.

9           Q           But they are no longer the operator, is  
10 that right?

11          A           The Elk Oil is operating the well but of  
12 course Mesa still holds the, you know, still holds the  
13 mineral lease on it, to the best of my knowledge.

14          Q           Well, who would be the lease operator?  
15 Elk or Mesa?

16          A           It would be Elk, I'm sure.

17          Q           Okay, we'd need to send this application  
18 to Elk Oil Company.

19          A           Let me ask one question on that.

20          Q           No, sir, you may not at this time.

21          A           Okay.

22          Q           We'll send it to Elk Oil Company and we  
23 will have a return receipt and we will await that informa-  
24 tion and we will hold this case file open pending tha infor-  
25 mation, at least.

1           A           Very good.

2           Q           Okay, in that particular well the 5-1/2  
3 inch casing was set at 10,600 feet.

4           A           Right.

5           Q           Do you have a calculated top of cement on  
6 that well?

7           A           It wasn't in their file of what they'd  
8 calculated out, but again using our same factor it would  
9 bring it to 8000 feet, or so, so you've got from 10,600 with  
10 350 sacks, that would put you approximately 21-2200 feet  
11 from the 10,600, would be about 8400 feet would be the cal-  
12 culated top.

13          Q           In your opinion is the casing in that in-  
14 terval or additional intervals that are not perforated ade-  
15 quately cemented through the information that you have?

16          A           I have no reason to believe that it is  
17 not. They did the squeeze job in the -- in the existing  
18 perfs 10,298 to 10,308, and following the entrance of water,  
19 it was not intrinsic, not Wolfcamp water; it was strange  
20 water, and the official survey showed that it was coming  
21 from beneath in a lower zone. They thought it was coming up  
22 from the Morrow, perhaps.

23          Q           So we can answer that question "no" or  
24 "yes", in your opinion?

25          A           In my opinion it has a cement job, an

1 okay cement job on it.

2 Q Okay. Let's go back to Exhibit Number A.  
3 This 2-3/8ths inch tubing, the operator of this well, which  
4 will be Gandy Corporation, will there be fluid between the  
5 tubing and the casing?

6 A Yes, sir.

7 Q Okay. Do you have any idea of what depth  
8 the packer will be set?

9 A Be set at approximately 10,030 feet.

10 Q Be set at what?

11 A 10,030 feet.

12 MR. STOGNER: I have no further  
13 questions of this witness.

14 Are there any other questions  
15 of Mr. Starling at this time?

16 MR. GALLINI: No, sir.

17 MR. STOGNER: If not, he may be  
18 excused.

19 Anything further in this case,  
20 Mr. Gallini?

21 MR. GALLINE: No, sir. We will  
22 take care of what you directed there.

23 MR. STOGNER: Please do and  
24 send me carbon copies of anything you get.

25 Case Number 8708 will be --



1 record will be left open pending the information from Elk  
2 Oil Company and to Elk Oil Company.

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(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 (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 W. Boyd CSR

I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Examiner hearing of Case No. 8708,  
heard by me on 25 Sept. 19 85.

Michael P. Stogner, Examiner  
Oil Conservation Division