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NEW MEXICO OIL CONSERVATION DIVISION  
STATE LAND OFFICE BUILDING  
STATE OF NEW MEXICO  
CASE NO. 10433

IN THE MATTER OF:

The Application of Geodyne Operating  
Company to Amend Division  
Administrative Order No. SWD-449,  
Eddy County, New Mexico.

BEFORE:

DAVID R. CATANACH  
Hearing Examiner  
State Land Office Building  
January 9, 1992

REPORTED BY:

CARLA DIANE RODRIGUEZ  
Certified Shorthand Reporter  
for the State of New Mexico

**ORIGINAL**

## A P P E A R A N C E S

FOR THE NEW MEXICO OIL CONSERVATION DIVISION:

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FOR THE APPLICANT:

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BY: WILLIAM F. CARR, ESQ.

APPEARING PRO SE:

JESSE F. RAYROUX

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1                   EXAMINER CATANACH: At this time we'll  
2 call Case 10433.

3                   MR. STOVALL: Application of Geodyne  
4 Operating Company to amend Division  
5 Administrative Order No. SWD-449, Eddy County,  
6 New Mexico.

7                   EXAMINER CATANACH: Are there  
8 appearances in this case?

9                   MR. CARR: May it please the Examiner,  
10 my name is William F. Carr with the law firm  
11 Campbell, Carr, Berge & Sheridan of Santa Fe. We  
12 represent Geodyne Operating Company and I have  
13 one witness.

14                   EXAMINER CATANACH: Are there other  
15 appearances in this case?

16                   MR. STOVALL: State your name and tell  
17 briefly who you are.

18                   MR. RAYROUX: Jesse F. Rayroux. I'm a  
19 landowner right near this well, and I have a  
20 protest for it.

21                   MR. STOVALL: Would you spell your name  
22 for the court reporter so she can get that?

23                   MR. RAYROUX: J-E-S-S-E, F,  
24 R-A-Y-R-O-U-X.

25                   MR. STOVALL: Let me explain briefly,

1 if you don't mind, Mr. Carr. Since you are  
2 representing yourself and I assume you're not  
3 well familiar with our process here--is that a  
4 correct assumption here?

5 MR. RAYROUX: Yes.

6 MR. STOVALL: Mr. Carr will put on his  
7 witnesses who will try to establish a case to  
8 authorize what they request in the application.  
9 I think you're familiar with what the application  
10 requests, probably more so than I am at this  
11 point.

12 After he's questioned each witness, you  
13 will have the opportunity to ask them any  
14 questions you want to about what they have  
15 testified about. You can't use them to testify  
16 for your protest or your opposition to it, but  
17 you can certainly ask them questions about what  
18 they've presented and where they got their  
19 information. If you have any other information,  
20 any reason to question anything they've asked or  
21 want to clarify it, you can do that.

22 After he's finished with all his  
23 witnesses, do you intend to put on any actual  
24 testimony about facts and information, other than  
25 just an opinion and a protest? Do you have some

1 specific things you want to tell us about that?

2 MR. RAYROUX: I have some letters from  
3 individuals that I want to present.

4 MR. STOVALL: But you're not planning  
5 to put on any technical or scientific or geologic  
6 or engineering-type testimony, is that correct?

7 MR. RAYROUX: No, I don't have any of  
8 that kind of information.

9 MR. STOVALL: After Mr. Carr is  
10 finished with all his witnesses, I'll ask you to  
11 be sworn as well when I go ahead and swear the  
12 witnesses, and you can present whatever you have,  
13 and then he'll have the opportunity to question  
14 you if he has any questions about that.

15 Any questions about how we're going to  
16 proceed with this?

17 MR. RAYROUX: No.

18 EXAMINER CATANACH: You may proceed,  
19 Mr. Carr.

20 MR. STOVALL: Let's swear the  
21 witnesses.

22 EXAMINER CATANACH: Will the witnesses  
23 please stand to be sworn in?

24 MR. STOVALL: Go ahead and stand up to  
25 be sworn.

1 (The witnesses were duly sworn.)

2 RICHARD L. STAMETS

3 Having been first duly sworn upon his oath, was  
4 examined and testified as follows:

5 EXAMINATION

6 BY MR. CARR:

7 Q. Would you state your full name for the  
8 record, please.

9 A. I'm Richard L. Stamets.

10 Q. By whom are you employed and in what  
11 capacity?

12 A. I'm an independent oil and gas  
13 consultant, petroleum geologist, employed by  
14 Geodyne Operating Company in this case.

15 Q. Have you previously testified before  
16 this Division and had your credentials as a  
17 geologist accepted and made a matter of record?

18 A. Yes.

19 Q. Are you familiar with the well and the  
20 area that is the subject of this application?

21 A. Yes.

22 Q. Are you familiar with the application  
23 filed in this case on behalf of Geodyne?

24 A. Yes.

25 MR. CARR: Are the witness's

1 Qualifications acceptable?

2 EXAMINER CATANACH: They are.

3 Q. Mr. Stamets, would you briefly state  
4 what Geodyne seeks with this application?

5 A. In this application, it seeks to  
6 convert its Amoco "19" Well No. 2 in Section 19,  
7 22, 26, Filaree Dome (Delaware) Field in Eddy  
8 County from temporary abandoned status to salt  
9 water disposal.

10 Q. Could you refer to what has been marked  
11 for identification as Geodyne Exhibit No. 1--it's  
12 marked on the second page, Mr. Catanach--and  
13 identify this, please?

14 A. Yes. This is the 108 and all the  
15 attachments that were filed as a part of the  
16 standard application process.

17 Q. Now, this application is indicated to  
18 be an amended application, is that correct?

19 A. That's correct.

20 Q. Could you, before we get into the  
21 application, provide a brief background of the  
22 events that have resulted in today's hearing?

23 A. Right. Geodyne contacted me, I guess,  
24 in early October for help with this application,  
25 and I helped them put it together. We filed it



1 then October 16th for administrative approval.

2           There was one well within a half-mile  
3 of the proposed salt water disposal well that was  
4 not cemented across all the injection interval.  
5 So when the order was issued, then, Salt Water  
6 Disposal Order 449, it had a provision that this  
7 offset operator's well had to be cemented across  
8 that part of the injection interval.

9           Geodyne did not want to go to this  
10 expense and they did not want to try and enter  
11 into another operator's well and take the  
12 liability that was associated with that.

13           Q.       So how have you amended the  
14 application?

15           A.       Well, Geodyne came up the hole, as far  
16 as their injection well was concerned. What  
17 they're proposing now is to inject only into an  
18 interval which is cemented in all the offset  
19 wells within the half-mile radius.

20           Q.       Let's go to what is numbered page 3 of  
21 Exhibit No. 1 and I would ask you to identify  
22 that and review it, please.

23           A.       That is the map of the area. The  
24 injection well is marked by the big black arrow.  
25 The half-mile radius circle is shown on there,

1 identifying the wells which would be in the area  
2 of review. It shows the leases and wells at  
3 least within two miles of the proposed well.

4 Q. And the leasehold ownership is  
5 indicated on this plat?

6 A. That's correct.

7 Q. Let's move now to the next page in this  
8 exhibit, and I would ask you to review that for  
9 the Examiner.

10 A. Starting with item 6, the area of  
11 review wells, what we see there are the  
12 completion information on all the wells within  
13 the half-mile area of review. It shows all the  
14 wells have been cemented through the proposed  
15 injection interval, and most of them circulated  
16 back through the surface. I believe all of them  
17 are.

18 There is one P & A well, which we'll  
19 get to in a minute, and we have the schematic on  
20 that as we move along. Let's see, we do have  
21 that Bob Enfield well that is noted on the second  
22 page, and that is right above number 7.

23 You can see the well on the map and  
24 it's indicated to be plugged and abandoned at 618  
25 feet. There was no record of that well in this

1 office. I did call the district office in  
2 Artesia and did confirm that that well had not  
3 been drilled any deeper than that. Since it does  
4 not penetrate the injection interval, we have not  
5 gone ahead and included any data on it.

6 Q. What rates does Geodyne propose to  
7 inject in the proposed well?

8 A. Rates would be between 50 and 110  
9 barrels of water per day.

10 Q. Will this be an open or a closed  
11 system?

12 A. The system will be closed.

13 Q. Will they be injecting under pressure  
14 or by gravity?

15 A. They expect that the zone will take  
16 water on the vacuum. However, they would like  
17 the authority to use pressure, if necessary.

18 Q. Would a pressure limitation of  
19 two-tenths pound per foot of depth to the top of  
20 the injection interval be satisfactory for their  
21 purpose?

22 A. Yes, it would.

23 Q. What is the source of the water that  
24 Geodyne proposes to inject?

25 A. Water will be the produced water coming

1 from the #3Y and the #4 well on the same lease.

2 Q. These are Geodyne-operated wells?

3 A. That's correct.

4 Q. And into exactly what formation will  
5 you be injecting this water?

6 A. The producing formation, the one  
7 currently producing the oil and water, is the  
8 Delaware Mountain Group, which is found in the  
9 area from 2300 to 4700 feet. The water will be  
10 injected right back into the producing horizon.

11 Q. Are there fresh water zones in the  
12 area?

13 A. Yes. The Capitan Reef does provide  
14 fresh water in the area, and that is located no  
15 deeper than 1700 feet.

16 Q. Does Geodyne propose to stimulate the  
17 proposed injection well?

18 A. They do propose to acidize the new  
19 perforations, but it's not an extensive  
20 stimulation at all.

21 Q. And the acid treatment is indicated in  
22 Exhibit No. 1?

23 A. That's correct.

24 Q. Are the logs on the proposed injection  
25 well on file with the Division?

1           A.       That's correct.

2           Q.       Let's go now to page 6 of Exhibit No. 1  
3 and I would ask you to identify that.

4           A.       Page 6 is the schematic of the one  
5 plugged and abandoned well which was drilled into  
6 the proposed disposal zone. That was a well  
7 which was lost during drilling. The 8-5/8 casing  
8 has been cemented with something like, looks like  
9 650 sacks, which brought the top up to around  
10 1430 feet, which was above the injection  
11 interval.

12                   Then you can see that there is a cement  
13 retainer, there's been some perforations  
14 squeezed, and then there's a pretty substantial  
15 plug up from about 527 feet down to 744. So this  
16 well looks to be well plugged and well cemented  
17 across the injection interval and shouldn't cause  
18 any problems.

19           Q.       This is the only plugged and abandoned  
20 well in the area of review?

21           A.       That penetrates the injection zone.

22           Q.       Do you have now in this exhibit,  
23 schematic drawings on the proposed injection well  
24 showing present proposed completions?

25           A.       That's correct.

1 Q. Would you refer to those, please?

2 A. The next two pages have that  
3 information. The first page shows how the well  
4 was completed initially. You can see there that  
5 there's 13-3/8" casing, set at 623 feet, with 855  
6 sacks of cement which circulated back to the  
7 surface. There's 8-5/8 intermediate set at 2190,  
8 cemented with 950 sacks cemented back to the  
9 surface, and 5-1/2 casing set to 4600 feet, and  
10 that was cemented with 650 sacks, and the top of  
11 the cement is above 2200 feet.

12 They did run a cement bond log but the  
13 log did not come all the way up to the top of the  
14 cement; so the cement is above that point.

15 Q. If we go to the next page, what does  
16 that show?

17 A. The next page has the original  
18 completion shown to the left and the recompletion  
19 shown on the right. What they will be doing is  
20 coming in and setting a cast-iron bridge plug  
21 about 2510 feet and put 20 feet of cement on top  
22 of that, and then perforating some additional  
23 interval there.

24 They're currently perforated at 2332 to  
25 2360. They'll be coming on down to 2446.

1 Q. And that's the new injection interval  
2 in the well?

3 A. That's right. And then there'll be a  
4 packer at 2300 feet, and the annulus will be  
5 filed with an inhibited fluid.

6 Q. Let's go to page 9. What does page 9  
7 cover?

8 A. Is that the water sample or the  
9 completion?

10 Q. Just the summary.

11 A. Page 9 is a summary of how they intend  
12 to do the recompletion.

13 Q. Let's move on to page 10, your water  
14 analysis, and I would ask you to review that.

15 A. On this page we have the analyses from  
16 three wells. The first two are fresh water wells  
17 in the area. If you look at the total dissolved  
18 solids line, you'll see that runs from 298 to 646  
19 TDS. The third column is an analysis of the  
20 produced water in the area, and it's typically  
21 high in solids, Delaware water, over 168,000  
22 parts per million.

23 Q. Let's go now to the last page in  
24 Exhibit No. 1, the two log sections, and I would  
25 ask you to explain to Mr. Catanach why these log

1 sections have been included in this exhibit.

2 A. This is an exhibit that I requested  
3 Geodyne to prepare, to show the relationship  
4 between the injection interval and the cased  
5 interval in the Mitchell Energy well to the  
6 south. That was the one well that the lower part  
7 of the casing was not cemented across the  
8 injection interval.

9 Here you can see in the right-hand set  
10 of logs that the casing seat is below the  
11 injection interval in the offset disposal well.

12 Q. Is Exhibit No. 2 a copy of an affidavit  
13 with attached letters and return receipts  
14 confirming that notice of this hearing and  
15 application have been provided in accordance with  
16 OCD rules and regulations?

17 A. It is.

18 Q. Are you aware of any similar  
19 applications that have been granted for injection  
20 in this same general area?

21 A. I'm not certain about the same general  
22 area, but I wouldn't be surprised. There are  
23 salt water disposal wells all over Eddy County.

24 Q. Have you examined the available  
25 geologic and engineering data on this area?



1           A.     Yes.

2           Q.     As a result of this examination, have  
3 you found evidence of any open faults or other  
4 hydrologic connections that run between the  
5 injection zone and any underground source of  
6 drinking water?

7           A.     No, I have not.

8           Q.     In your opinion, will the granting of  
9 this application be in the best interest of  
10 conservation, the prevention of waste and the  
11 protection of correlative rights?

12          A.     It definitely will. It will allow the  
13 operator to lower his costs of disposal of the  
14 produced water, and should allow for greater  
15 ultimate recovery from this small field.

16          Q.     Were Exhibits 1 and 2 either prepared  
17 by you or compiled under your direction and  
18 supervision?

19          A.     They were.

20                 MR. CARR: At this time, Mr. Catanach,  
21 we would move the admission of Geodyne Exhibits 1  
22 and 2.

23                 EXAMINER CATANACH: Exhibits 1 and 2  
24 will be admitted as evidence.

25                 MR. CARR: That concludes my direct

1 examination of Mr. Stamets.

2 EXAMINER CATANACH: Mr. Rayroux, do you  
3 have any questions of this witness?

4 MR. RAYROUX: Yes. I would like to  
5 question him on this--let me find the right page  
6 here, on page--

7 MR. STOVALL: It will be the second  
8 page of the summary detail of the wells in the  
9 area of review.

10 MR. CARR: It's page 5.

11 EXAMINATION

12 BY MR. RAYROUX:

13 Q. On the statement #12, where you have  
14 examined the geologic and engineering data, now  
15 this probably is just on that one well or maybe  
16 similar wells in that area, but my recollection  
17 is that all this area is strictly one big cavity  
18 of caves and crevices and cracks in the  
19 formations all over that whole area because of  
20 the fact that there's caves in this area. It may  
21 not come from this depth up to where this fresh  
22 water is. There may be a barrier in between  
23 there. I do not know that geologic myself.

24 It seems to me like if there's any  
25 pressure put on this formation at all, it would

1 break off into this fresh water zone. This is my  
2 concern.

3 A. I think you've got a grasp of the  
4 situation. Definitely there are caves in the  
5 upper part, especially in the Capitan Reef  
6 itself, which is where the fresh water is.  
7 Indeed, you've got Carlsbad Caverns south of  
8 there, which is located in this same horizon.

9 The one well in here that is plugged  
10 and abandoned had a loss circulation zone up at  
11 the top which seemed to be a cave-type interval.  
12 However, all of that is totally isolated from the  
13 producing horizon itself. If there hadn't been  
14 some sort of seal, there would not have been an  
15 accumulation of oil at this particular location.  
16 It would have leaked off. The operator does not  
17 propose to use any particular higher pressure in  
18 the horizon, and water will go right back to  
19 where it's being produced, so there really  
20 shouldn't be any great pressure increase.

21 Q. Yes, sir, I understand that. Now, I  
22 have a water well that is converted from Yates  
23 Oil & Gas Well No.--I don't know. It's in  
24 Section 29, which is very close to this well.

25 And I had, I made application to the

1 State to get a permit to use this well as a ranch  
2 water well. When we went into it to perforate  
3 it, the casings, we found that there was no plugs  
4 put into the well. This well was supposed to  
5 have been plugged off at 1650 feet, and another  
6 plug at 2650.

7 Whenever they come in, I got ahold of  
8 the Oil Conservation Commission in Artesia, and  
9 they come down and they checked the well, and  
10 there was no plugs. They went clear down to 4600  
11 feet and there were still no plugs.

12 I'm wondering how many other wells in  
13 this area that are not plugged properly to let  
14 this water mix with the surface water?

15 A. In the original--well, let me back up.  
16 The one well that's plugged within a half-mile of  
17 the proposed injection well, the plugging was  
18 witnessed by the Bureau of Land Management  
19 according to the well files, so I feel confident  
20 that that one was properly plugged. I don't  
21 anticipate that with projection and injection  
22 going back into the same interval, that there  
23 will be any movement of water outside the  
24 half-mile area around this proposed well.

25 So everything within the half-mile is

1 in good shape. I just don't visualize that there  
2 can be a problem here.

3 Q. The only other comments I have to make  
4 is about this Enfield well which is located  
5 within about 300 feet of where this disposal well  
6 is supposed to be. This well, as far as I know,  
7 has never been cemented. It was put in as an  
8 exploratory well. It was cased, and later on  
9 they was supposed to come in and put a rotary rig  
10 on this well and drill it on down, and this was  
11 never done.

12 I'm wondering why this well has never  
13 been cemented?

14 A. I don't know, but in any event it can't  
15 be any problem here because it doesn't penetrate  
16 the injection interval and doesn't even penetrate  
17 the entire reef.

18 Q. You don't think that this injection  
19 well will break off into this one?

20 A. No. There's too much interval between  
21 the injection zone and this.

22 Q. Well, that was one of my primary  
23 concerns, and if it did get into the fresh water,  
24 why, we would have problems.

25 MR. RAYROUX: Well, I don't have any

1 further questions for Mr. Stamets.

2 MR. CARR: I have no redirect.

3 EXAMINATION

4 BY EXAMINER CATANACH:

5 Q. Mr. Stamets, do you know if that  
6 Enfield well has been plugged?

7 A. I couldn't find any file on it here so  
8 I'm not sure what the status of that well is.  
9 Since it didn't penetrate the injection well, I  
10 ignored it further.

11 Q. Has anyone from Geodyne, to your  
12 knowledge, inspected the location? Is the  
13 wellbore, does it have a wellhead on it?

14 A. The Enfield well?

15 Q. Yes, sir, or do you know anything about  
16 that?

17 A. No, I don't know.

18 Q. Mr. Stamets, you've examined the log  
19 for the proposed injection well. Is it your  
20 opinion that the proposed injection zone or zones  
21 are geologically isolated--

22 A. Yes.

23 Q. --so that no migration would occur out  
24 of the zones?

25 A. That is correct.

1 Q. By what kind of isolation?

2 A. Just simply the fact that it's there.  
3 You've got this situation throughout Southern New  
4 Mexico, with the Delaware line below the Capitan  
5 Reef, and they just don't mix. You've got this  
6 saline water, 180,000 or so that's pretty  
7 constant throughout the Delaware.

8 If you had that moving vertically, you  
9 would know it. You wouldn't have all that fresh  
10 water in the Capitan Reef all the way from  
11 Carlsbad over into Texas.

12 Q. Within the Delaware formation itself,  
13 are you satisfied that you have isolation in your  
14 injection zone so as it's not going to go into  
15 other portions of the Delaware?

16 A. Yes. You've got a series of shales and  
17 sands in the Delaware, and they should provide  
18 for isolation vertically.

19 Q. Do you know why the cement bond log on  
20 the proposed well was only run to 2200?

21 A. No, I don't know why. That's what they  
22 did, and when they found it was above that point,  
23 they were satisfied.

24 Q. Have you examined the cement bond log  
25 for that well?

1           A.       I think I did but I didn't pay a lot of  
2 attention to it. I was looking at it when I was  
3 looking at these other logs, and I didn't go  
4 further.

5           Q.       Can I get you to get a copy of that  
6 cement bond log and submit it?

7           A.       Sure.

8           Q.       Maybe check the quality of that cement  
9 in that 2200 interval?

10                    The proposed injection well is just for  
11 use by Geodyne? It's not going to be open for  
12 any kind of commercial disposal?

13           A.       That's correct.

14           Q.       And do you expect the disposal rate to  
15 go up substantially?

16           A.       It's been a few months since we started  
17 this process and I've looked at the production  
18 and the production seems fairly stable at the  
19 present time. It's always possible that it might  
20 go up, but I haven't seen that.

21           Q.       How is the water going to get from the  
22 produced wells to the disposal well? Do you know  
23 anything about that?

24           A.       There's a central tank barrel there at  
25 the present time, and the water currently goes to



1 two, 500-barrel tanks. It's trucked from that  
2 location. The only change here will be that  
3 they'll lay flow lines from the tanks over to the  
4 wellhead.

5 Q. So there won't be any trucking involved  
6 in the process?

7 A. No.

8 EXAMINER CATANACH: I believe that's  
9 all I have of the witness. Mr. Carr?

10 MR. CARR: One more question.

11 FURTHER EXAMINATION

12 BY MR. CARR:

13 Q. Mr. Stamets, would Geodyne request an  
14 administrative procedure whereby the pressure on  
15 the injection could be increased above two-tenths  
16 pound per foot of depth, after the Commission  
17 witnessed a step rate test to assure that the  
18 confining strata can take the water at a higher  
19 pressure?

20 A. Yes. I would assume that that's  
21 standard procedure anymore. Yes, they would like  
22 to have that ability.

23 MR. CARR: That's all I have.

24 MR. STOVALL: I just have one question  
25 to make sure I understand what you said, Mr.

1 Stamets.

2 EXAMINATION

3 BY MR. STOVALL:

4 Q. As I understand, you're putting  
5 produced water back into the formation from which  
6 it's produced?

7 A. That's correct.

8 Q. You believe that under the current plan  
9 that, essentially, the pressure in the formation  
10 shouldn't be significantly higher than the  
11 original pressure in the formation?

12 A. We're taking more fluid out than we're  
13 putting in.

14 Q. So it ought to be lower than the  
15 original pressure?

16 A. Right.

17 Q. And lower volumes of fluid back in  
18 the--

19 A. That's correct.

20 Q. That's part of your reason for your  
21 conclusion that it's not likely to break through  
22 vertically into a fresh water zone?

23 A. That's right.

24 Q. One other question is, Mr. Rayroux  
25 testified as to his former producing well which

1 had been converted to a water well. Are you  
2 aware of any other wells in the area, oil or gas  
3 wells that have penetrated this formation that  
4 have been taken over by the surface owners and  
5 converted?

6 A. I didn't find any files within this  
7 half-mile radius, and I did not do any careful  
8 examination beyond that point. I suspect there  
9 are, it's happened over the years, but I have no  
10 idea within it's within a mile or 20 miles.

11 MR. STOVALL: I have no further  
12 questions of Mr. Stamets.

13 EXAMINER CATANACH: Do you have  
14 anything else, Mr. Rayroux?

15 MR. RAYROUX: Yes, sir. I started to  
16 say on this Enfield well, whenever the Amoco came  
17 in there and wanted to drill this first  
18 exploratory gas well, I suggested to them that  
19 they go into this Enfield well and get water out  
20 to use to drill with.

21 They took the--cut the wellhead off,  
22 not the wellhead, but the plug that they had on  
23 top with just a welded piece of steel on top of  
24 the casing, and they cut it off and went into it  
25 and for some reason or other, which I do not

1 know, they did not use the well for water  
2 production to drill the well with.

3 Then they rewelded the cap back on this  
4 casing. As far as I know, it was never cemented,  
5 but that's the information I have on that well.

6 Now, in regards to other wells in the  
7 area, there is one well located about  
8 three-quarters of a mile west/southwest of this  
9 present one they've only used for an injection  
10 well. It is used for a water well, and it's a  
11 converted well that was drilled for gas and oil  
12 and then it was closed back.

13 EXAMINATION

14 BY MR. STOVALL:

15 Q. Do you know the location of that, Mr.  
16 Rayroux? Why don't you look at page 3 of their  
17 exhibit. That might be helpful. It's the map.

18 A. Yes, sir. Let's see here. It would be  
19 in Section 13, Range 25.

20 Q. 6 and 13 to the northwest there, just  
21 west of the heavy line?

22 A. Yes.

23 Q. What part of Section 13?

24 A. I've got to get my directions straight  
25 here on this map. It would be in Section 24,

1 which is right directly west of 19, only it's in  
2 Range 25. It's this--would be in the south,  
3 southeast--it would be the southeast quarter of  
4 Section 24. I presume it's that Exxon well that  
5 shows on this map. Looks like Exxon, but I can't  
6 read that.

7 Q. It says Exxon, but I don't see a well  
8 symbol in there. But you think it's somewhere in  
9 the southeast of Section 24?

10 A. Yes, sir.

11 Q. Do you know whether it's in the west  
12 half of the southeast or the east half of the  
13 southeast? Do you have any idea?

14 A. It would be in the east half,  
15 southeast.

16 Q. Where is your well? You said your well  
17 was in 29?

18 A. My well is in Section 20. The water  
19 wells, I've got three water wells in Section 20,  
20 and this other well that I was talking about that  
21 they didn't plug, was in Section 29 on the east,  
22 which would be the south half of Section 29.

23 Q. What has happened to that well since?  
24 You said you took that over as a water well, is  
25 that correct?

1           A.       Yes, sir.

2           Q.       When you went in and found it, it did  
3 not have plugs in it. Did you go plug it so you  
4 could use it as a water well?

5           A.       I got ahold of Yates Petroleum because  
6 they was the ones that drilled it. They came in  
7 and put in two plugs. They put in a plug at 2650  
8 feet and put a hundred foot of cement on top of  
9 it, and put another plug in at 1600 feet and put  
10 50 foot of cement on top of it. I know they did  
11 that because I was right there when they did it  
12 and watched it, and I helped put the cement in.

13          Q.       How deep are the wells that you're  
14 getting the water from? What depth are you  
15 getting the water from, do you know?

16          A.       They're 265 feet.

17          Q.       And that's about as deep as the wells  
18 go? You've got them either plugged or just  
19 drilled them to that depth?

20          A.       They're bottomed out at that.

21          Q.       Do you have any specific information,  
22 other than your general knowledge that there is  
23 some caving and open areas in there, do you have  
24 any specific information where you've seen  
25 contamination get into some of these fresh water

1 wells?

2 A. Yes, sir. This is located south of  
3 White's City. I don't know what they call that  
4 Basin in there, but the El Paso Natural Gas come  
5 in there and they declared that was a closed  
6 Basin so they didn't want to use it. They wanted  
7 to pump their gas in for a storage unit.

8 So they started pumping the gas in, and  
9 I know three neighboring water wells down there  
10 that the gas evidently leaked through and come up  
11 into these water wells and ruined the water wells  
12 and they can't use the water for drinking  
13 purposes or washing or anything.

14 Q. How far away is that?

15 A. That's about, oh, 15 miles south of  
16 this area.

17 Q. So it is, to the best of your knowledge  
18 and I understand you're not a geologist, but  
19 you've been down there a while and know the  
20 countryside, I assume?

21 A. Yes.

22 Q. To the best of your knowledge, would  
23 that be actually the same Basin, the same  
24 reservoir, if you will? Or is it a different--

25 A. Like I told Mr. Stamets, that whole

1 country in there is one big crack of crevices and  
2 caves. The way I understand what happened with  
3 El Paso, they exceeded the pressure that they  
4 were supposed to put into the well for the  
5 storage of gas, and it broke off into different  
6 formations. I'm surprised it hasn't come out in  
7 Carlsbad Caverns, which it probably will  
8 eventually.

9 Q. That's why we have the concern about  
10 the injection pressure here, to make sure that  
11 sort of thing doesn't happen. I explained to you  
12 when we talked about the step rate test, which  
13 Mr. Stamets talked about as a way of going in and  
14 determining what pressure, how high a pressure or  
15 that if you increase the pressure, rather, that  
16 it won't cause the rock to break apart and allow  
17 this kind of communication and flowing. You  
18 understand that?

19 A. Yes, sir.

20 MR. STOVALL: Mr. Stamets, I would like  
21 to ask you one question on that Enfield well.  
22 You're familiar with the Division's requirements  
23 as far as plugging wells, are you not?

24 MR. STAMETS: Sure. Generally speaking  
25 I am.



1 MR. STOVALL: Those requirements are  
2 specifically applicable to wells that have  
3 penetrated in oil and gas zones, is that correct?

4 MR. STAMETS: Wells drilled for oil or  
5 for gas would be appropriate, and if that--I  
6 don't remember this instance exactly where that  
7 well was located, but it's on federal land. I'm  
8 not sure what the federal requirements are on  
9 that and why it may or may not have been  
10 plugged. I'm just not certain.

11 MR. STOVALL: Based upon your  
12 information with respect to depth, did I  
13 understand you correctly that even if it's not  
14 properly plugged that it's high enough above the  
15 reservoir, provided all these other things are  
16 satisfied, that we won't break through in any  
17 way?

18 MR. STAMETS: It never penetrated the  
19 oil and gas reservoirs probably, oh, 1400 feet or  
20 more above the oil and gas reservoir.

21 MR. STOVALL: I don't have any other  
22 questions of either of these gentlemen.

23 MR. RAYROUX: Can I present these  
24 letters that I have--

25 MR. STOVALL: Oh, yeah. I'm sorry.

1           MR. RAYROUX: --from individuals that  
2 live and have water wells in that area? They  
3 wrote letters here and--

4           MR. STOVALL: Why don't you mark them  
5 as a single exhibit, and we'll staple them  
6 together.

7           MR. CARR: Mr. Examiner, these have  
8 been marked as Rayroux Exhibit No. 1. There are  
9 two letters?

10          MR. RAYROUX: Yes, sir.

11          MR. STOVALL: Those letters, would you  
12 tell us, for the record, who they are from?

13          MR. RAYROUX: This one is from a man  
14 that's lived down there on McKittrick Canyon,  
15 Little McKittrick Canyon, which is down the draw  
16 from where this well is, and he is concerned  
17 about the fact that if this water should ruin  
18 his--get into his water well, that he couldn't  
19 use it for domestic purposes.

20          MR. STOVALL: And the other letter is  
21 from?

22          MR. RAYROUX: It's another man and his  
23 wife that live just above where this other well  
24 is. They have a similar well and they do not  
25 want their water to be contaminated.

1           MR. STOVALL: Those letters, you know  
2 that those people whose names appear on the  
3 letters wrote them, and they gave them to you and  
4 and asked you to deliver them to the Division, is  
5 that correct?

6           MR. RAYROUX: Yes. Can I bring up  
7 another thing? I've talked to the City of  
8 Carlsbad about this because this well is within  
9 three miles of the city water wells where they  
10 get the water for the whole city of Carlsbad, and  
11 they were real interested in it and they were  
12 supposed to have gotten on to this and sent a man  
13 up here to this hearing, but he, I guess, didn't  
14 make it.

15           And then the BLM man, I've talked to  
16 BLM and I gave them all this information, of  
17 course they would get most of it anyway as far as  
18 the injection well on BLM land, and they were  
19 supposed to have a man here at this hearing. As  
20 far as I know, there's no one here from the BLM.

21           EXAMINER CATANACH: I believe there  
22 is.

23           MR. STOVALL: Are you here in this  
24 matter?

25           MR. SALZMAN: Yes, I am, but we have no

1 statement to make at this time. I believe that  
2 the Resource Area Office in Carlsbad has approved  
3 this injection project.

4 MR. STOVALL: Just put your name in the  
5 record, would you please?

6 MR. SALZMAN: Yes. My name is Steve  
7 Salzman. I work here in the State office in  
8 Santa Fe.

9 MR. STOVALL: For your information, Mr.  
10 Rayroux, Steve is a petroleum engineer with the  
11 BLM. It's not really testimony, but that's just  
12 to let him know that you are here and that you  
13 know he had this. Is that correct, Steve?

14 MR. SALZMAN: That's correct.

15 MR. STOVALL: Go ahead, if you have  
16 anything else.

17 MR. RAYROUX: I really don't have any  
18 objection to this well being used as an injection  
19 well if they do not use it with any other  
20 companies and just use these wells that they now  
21 have and maybe any future wells that they might  
22 drill in this particular area.

23 And then, if they don't exceed that  
24 pressure, that 400-and-some-odd pounds of  
25 pressure, I feel like it probably would be to the

1 advantage of the environment and everything if  
2 they did use this well for that and not let any  
3 other companies come in there and use it for an  
4 injection well.

5 MR. STOVALL: Mr. Rayroux, we  
6 appreciate your coming. The purpose of these  
7 hearings is to ensure that wells, such as your  
8 fresh water wells, are, in fact, protected. And  
9 that's what these rules are. They will not be  
10 permitted, under this application, to use it  
11 except as they've stated and as you've heard Mr.  
12 Stamets say here for their own purposes and  
13 subject to the limitations.

14 We do appreciate your concern and the  
15 fact that you've come up. Very often people such  
16 as yourself who have been in the area, have got  
17 information which is helpful to us. That will be  
18 the primary concern of the Examiner and the  
19 Division in evaluating this application, is to  
20 ensure that your water and the City of Carlsbad  
21 water and your neighbors' water is all  
22 protected.

23 I think your comments have been helpful  
24 to us, and we appreciate your coming. Are there  
25 any other questions you have or anything you

1 would like to add?

2 MR. RAYROUX: No, sir.

3 EXAMINER CATANACH: Is there anything  
4 further in this case?

5 MR. CARR: Just a very brief  
6 statement. Geodyne recognizes that produced  
7 water is a problem not only for oil and gas  
8 operators but for ranchers and landowners in the  
9 areas where these waters are actually produced.

10 We believe what we have here is a  
11 proposal that will enable us to dispose of water  
12 produced from the Filaree Dome (Delaware) Field  
13 in a fashion that will avoid contamination of  
14 fresh water and will actually meet the concerns  
15 of both operators and landowners, and we request  
16 that the application be approved.

17 EXAMINER CATANACH: Thank you, Mr.  
18 Carr. Mr. Rayroux.

19 There being nothing further in this  
20 case, Case 10433 will be taken under advisement.

21 (And the proceedings concluded.)  
22

23 I do hereby certify that the foregoing is  
24 a complete record of the proceedings in  
the Examiner hearing of Case No. 10433,  
25 heard by me on January 9 1985.

David L. Catanch, Examiner  
Oil Conservation Division

