

OIL CONSERVATION DIV.

## STATE OF NEW MEXICO

99 DEC -2 PM 3:16 ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

## OIL CONSERVATION COMMISSION

IN THE MATTER OF THE HEARING CALLED BY )  
 THE OIL CONSERVATION COMMISSION FOR THE )  
 PURPOSE OF CONSIDERING: ) CASE NO. 12,223  
 )  
 APPLICATION OF POGO PRODUCING COMPANY )  
 FOR APPROVAL OF A PILOT PRESSURE )  
 MAINTENANCE PROJECT AND TO QUALIFY THE )  
 PROJECT FOR THE RECOVERED OIL TAX RATE )  
 PURSUANT TO THE ENHANCED OIL RECOVERY )  
 ACT, EDDY COUNTY, NEW MEXICO )

REPORTER'S TRANSCRIPT OF PROCEEDINGSCOMMISSION HEARING

BEFORE: LORI WROTENBERY, CHAIRMAN  
 JAMI BAILEY, COMMISSIONER  
 ROBERT LEE, COMMISSIONER

November 17th, 1999

Santa Fe, New Mexico

This matter came on for hearing before the Oil Conservation Commission, LORI WROTENBERY, Chairman, on Wednesday, November 17th, 1999, at the New Mexico Energy, Minerals and Natural Resources Department, Porter Hall, 2040 South Pacheco, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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## I N D E X

November 17th, 1999  
 Commission Hearing  
 CASE NO. 12,223

## PAGE

APPEARANCES

3

APPLICANT'S WITNESS:

RON GASSER (Engineer)

Direct Examination by Mr. Bruce	5
Examination by Commissioner Bailey	13
Examination by Commissioner Lee	15
Examination by Chairman Wrotenbery	17
Further Examination by Commissioner Lee	24

REPORTER'S CERTIFICATE

29

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## E X H I B I T S

Applicant's	Identified	Admitted
Exhibit 1	6	12
Exhibit 2	7	12
Exhibit 3	7	12
Exhibit 4	8	12
Exhibit 5	10	12

\* \* \*

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

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\* \* \*

1           WHEREUPON, the following proceedings were had at  
2   9:23 a.m.:

3           CHAIRMAN WROTENBERY: Case 12,223, the  
4   Application of Pogo Producing Company for approval of a  
5   pilot pressure maintenance project and to qualify the  
6   project for the recovered oil tax rate pursuant to the  
7   Enhanced Oil Recovery Act, Eddy County, New Mexico.

8           This case is being heard on the Application of  
9   Pogo Producing Company for a *de novo* review pursuant to the  
10   provisions of Rule 1220.

11           Let me call for appearances in this case.

12           MR. BRUCE: May it please the Commission, Jim  
13   Bruce of Santa Fe, representing the Applicant. I have one  
14   witness.

15           MR. GASSER: And Ron Gasser with Pogo Producing  
16   Company.

17           CHAIRMAN WROTENBERY: I'm sorry, could you --

18           MR. GASSER: Ron Gasser, Pogo Producing Company.

19           CHAIRMAN WROTENBERY: How do you spell your name,  
20   Mr. Gasser?

21           MR. GASSER: G-a-s-s-e-r.

22           CHAIRMAN WROTENBERY: Are there any other  
23   appearances in this case?

24           MR. CARROLL: Rand Carroll, appearing on behalf  
25   of the Oil Conservation Division. I have no witnesses.

1 CHAIRMAN WROTENBERY: Thank you, Mr. Carroll.

2 Mr. Gasser, would you stay standing and be sworn  
3 in?

4 (Thereupon, the witness was sworn.)

5 MR. BRUCE: Madame Chair, as an introductory  
6 matter, in this case Pogo seeks to institute a pilot  
7 pressure maintenance project covering parts of four leases  
8 in Eddy County.

9 This matter was heard by the Division, and the  
10 Application was granted by Order Number R-12,246. However,  
11 the first page of the Exhibit package I've handed to you,  
12 highlighted in yellow is Paragraph (4) of the Order, which  
13 required Pogo Producing Company to cement the production  
14 casing in a certain offsetting well described in that  
15 paragraph.

16 The only matter on appeal today is this Paragraph  
17 4. We seek relief from that requirement, and Mr. Gasser,  
18 Pogo's engineer, will explain the reasons why.

19 RON GASSER,  
20 the witness herein, after having been first duly sworn upon  
21 his oath, was examined and testified as follows:

22 DIRECT EXAMINATION

23 BY MR. BRUCE:

24 Q. Would you please state your name and city of  
25 residence for the record?

1 A. Ron Gasser. I'm from Midland, Texas.

2 Q. What is your occupation, and who do you work for?

3 A. I'm the division petroleum engineering manager,  
4 and I work for Pogo Producing Company.

5 Q. Have you previously testified before the Division  
6 or the Commission as a petroleum engineer?

7 A. Yes.

8 Q. And were your credentials as an expert petroleum  
9 engineer accepted as a matter of record?

10 A. Yes.

11 Q. And are you familiar with the engineering matters  
12 related to this *de novo* Application?

13 A. Yes.

14 MR. BRUCE: Madame Chair, I tender Mr. Gasser as  
15 an expert petroleum engineer.

16 CHAIRMAN WROTENBERY: He is so qualified.

17 Q. (By Mr. Bruce) Mr. Gasser, would you identify  
18 Exhibit 1 for the Commission, please?

19 A. Exhibit 1 is a land plat showing Pogo acreage in  
20 yellow. Pogo produces to inject water in the Brushy Canyon  
21 member of the Delaware formation, through the Pure Gold "B"  
22 Federal Number 20. That well is located in the northeast  
23 quarter of the southeast quarter of Section 20. This well  
24 is marked with a red arrow.

25 The project area for the pressure maintenance

1 project is outlined in green. The initial producers are  
2 the eight wells surrounding the injector, marked with black  
3 dots.

4 The well that we are discussing today is the  
5 Kaiser-Francis well, located in the southwest quarter of  
6 Section 21. It is a gas well that is currently completed  
7 in the Atoka formation.

8 Q. Could you move on to Exhibit 2 and just identify  
9 that briefly for the Commission?

10 A. Exhibit 2 is a plat from the C-108 showing the  
11 wells within a half-mile radius of the injection well. As  
12 you can see, the Kaiser-Francis well is about one-half mile  
13 east of the proposed injection well.

14 Q. Okay. What does Exhibit 3 show, Mr. Gasser?

15 A. Exhibit 3 is a sketch, a wellbore diagram of the  
16 injection well. It was drilled earlier this year with the  
17 intent of producing it for a period of time. However,  
18 during completion operations the reservoir pressure was  
19 measured to be about 900 p.s.i.g., at which time Pogo  
20 decided to apply for a pilot pressure maintenance project.

21 The injection interval is shown from 7965 to  
22 7774. It's located across the lower Brushy Canyon. We  
23 anticipate an average injection rate of about 1000 barrels  
24 of water per day with a maximum approval rate of 6000  
25 barrels of water per day into this well.

1           The well has been properly cased and cemented,  
2           and no injection water can escape out of the zones.

3           Q.    Now, let's move on to your Exhibit 4 and discuss  
4           in more detail the well in question, the Kaiser-Francis  
5           Pure Gold "A" Number 1.

6           A.    Exhibit 4 is a sketch of the well in question.  
7           It was drilled in 1980 and completed in early 1981 to test  
8           the Morrow formation. It was recompleted earlier this year  
9           to an Atoka interval.

10           The well is cased and cemented with 13-3/8-inch  
11           casing to 4206. There is no cement located behind the  
12           9-5/8-inch casing from 7850 to 4206, which corresponds to  
13           the Delaware interval, which is from the base of the  
14           Delaware lime to the base of the Brushy Canyon.

15           Q.    Or to the top of the Brushy Canyon -- Or no, to  
16           the base, excuse me.

17           A.    To the base of the Brushy Canyon.

18           Q.    And so this is the interval that the Division was  
19           concerned about, the uncased interval from 4206 to 7850  
20           feet?

21           A.    That's correct.

22           Q.    Okay. Now, when this well was drilled, was it  
23           cased and cemented according to Division procedures?

24           A.    Yes, it was.

25           Q.    Okay. Now, why does Pogo make this request so



1     that it does not have to re-enter and cement this well?

2           A.     Well, there are two reasons.  First of all, the  
3     current completion ensures that there will be no crossflow  
4     between zones.

5                     Secondly, re-entry would entail killing the well,  
6     which would lead to a potential loss of reserves from the  
7     existing completion.

8           Q.     Would you discuss in more detail why leaving the  
9     well as it currently is will cause no problems?

10          A.     This well has been open to the Delaware formation  
11     for about 20 years without any problem.  We know this  
12     because when the well was recompleted earlier this year,  
13     Kaiser-Francis pressured up on the production casing and  
14     discovered no casing leak.

15                     In addition, we will be reinjecting into the  
16     Delaware water, into the Delaware formation approximately a  
17     half mile away, so there will be no change in the  
18     environment around this existing wellbore.

19                     Finally, we note that the current reservoir  
20     pressure in the Brushy Canyon, lower Brushy Canyon, at the  
21     proposed injection site is now about 900 p.s.i.g., while it  
22     was initially about 3550 pounds.  Thus, the injection will  
23     maintain current pressures which are substantially lower  
24     than the initial pressures.

25          Q.     So when this well was drilled, the Delaware

1 pressures around this wellbore were about 3550?

2 A. Yes, it's an average gradient for the area.

3 Q. Okay. Now, you also mentioned problems with re-  
4 entering the well. Regarding re-entering, does Pogo  
5 operate this well?

6 A. No, we do not operate this well, but we do have a  
7 working interest in the well. And even if we did operate  
8 the well, we'd still be here asking for the same relief.

9 Q. What are the problems with re-entering the well?

10 A. We believe re-entering the well to cement the  
11 production casing would require killing the well and risk  
12 damaging the existing completion.

13 If you'll refer to Exhibit 5, which is a  
14 production plot of the Pure Gold "A" Federal Number 1, you  
15 can see that we estimate there's remaining approximately  
16 400 million cubic feet of gas, and the well is currently  
17 producing at a rate of about 150 MCF per day.

18 Q. Now, there's a gap in production here for several  
19 years. Were any problems encountered when the well was  
20 recently re-entered and -- what? It was recompleted in the  
21 Atoka?

22 A. Yes, it was recompleted from the Morrow to the  
23 Atoka interval. And while returning the well to production  
24 this year, the Atoka interval required jetting with  
25 nitrogen to obtain production. And historically, the Atoka

1 and Morrow intervals are somewhat water sensitive. So  
2 minimizing exposure to fluids is the most prudent operation  
3 for the well.

4 Q. Okay. The problems you had earlier this year  
5 indicate that if you re-entered it again and killed the  
6 well, it might not come back

7 A. Yes, the longer it produces and the lower the  
8 reservoir pressure becomes, the more likely you are to lose  
9 the well if you were to kill it and pump fluids into it.

10 Q. And again, you said that this wellbore has  
11 maintained its integrity although it's been open to the  
12 Delaware for -- well, almost 20 years?

13 A. Yes.

14 Q. Okay. In your opinion, is the Kaiser-Francis  
15 well properly completed and will it prevent the movement of  
16 fluids to other zones?

17 A. Yes.

18 Q. Referring back to your Exhibit 4, what is the  
19 worst-case scenario that could happen with this well?

20 A. Well, because of the casing and cement at 4200  
21 feet, no fluids can move uphole to any other zones.  
22 Likewise, no fluids can move below the Delaware formation.

23 The worst case would be a casing leak occurring  
24 in the 9-5/8-inch casing string. However, in that  
25 situation any movement of fluids would be confined to the

1 annular volume within the wellbore and would be shown at  
2 the surface by an increase in casing pressure.

3 Q. Okay. So it would go up to the surface, but it  
4 wouldn't go into any other zone?

5 A. That's correct.

6 Q. In your opinion, is the granting of Pogo's  
7 request in the interest of conservation and the prevention  
8 of waste?

9 A. Yes.

10 Q. And were Exhibits 1 through 5 prepared by you or  
11 under your direction?

12 A. Yes.

13 MR. BRUCE: Madame Chair, I move the admission of  
14 Pogo's Exhibits 1 through 5.

15 CHAIRMAN WROTENBERY: Any objection?

16 MR. CARROLL: (Shakes head)

17 CHAIRMAN WROTENBERY: Pogo Exhibits 1 through 5  
18 are admitted into the record.

19 Is that all the questions you have?

20 MR. BRUCE: That's all I have.

21 CHAIRMAN WROTENBERY: Mr. Carroll, do you have  
22 any --

23 MR. CARROLL: No questions.

24 CHAIRMAN WROTENBERY: -- questions?

25 Commissioners?

## EXAMINATION

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BY COMMISSIONER BAILEY:

Q. What are the federal underground injection control rates concerning cementing of wells within the area of review?

A. Within the half-mile radius?

Q. Right.

A. I'm not totally familiar with them, but I believe that the main concern is that there will be no movement of fluids into other zones.

CHAIRMAN WROTENBERY: In the State of New Mexico, the Oil Conservation Division administers the underground injection control program, so it is Oil Conservation Division requirements, rather than EPA requirements that apply.

Q. (By Commissioner Bailey) What is the source of your injection water?

A. It's produced water from the Delaware interval within this pool.

Q. Your Application is for pressure maintenance within the Delaware and not within the Morrow?

A. Correct, the lower Brushy Canyon is the exact interval, but it's within the Delaware formation, that's correct.

Q. What type of sealing mechanisms are there between

1 the Delaware and the Morrow in this area?

2 A. In this -- Well, there's production casing and  
3 cement around the production casing.

4 Q. But can you answer any kind of geologic questions  
5 concerning the --

6 A. The intervals?

7 Q. -- between the different formations?

8 A. No, I'm really not sure where you're headed with  
9 the question.

10 Q. I'm looking for possibilities for out-of-zone  
11 migration, outside of the wellbore.

12 A. Okay. Below the Brushy Canyon is the Bone  
13 Springs, and below the Bone Springs I'm sure there are  
14 shale sections which would eliminate any movement within  
15 the reservoir down to lower sections, i.e., the Morrow.

16 MR. BRUCE: Commissioner Bailey, if I may, there  
17 was geologic testimony in the initial hearing, and I was  
18 going to ask to incorporate that record, but I'd be glad to  
19 get the transcript from that, because the geologist did  
20 address the separation of zones.

21 COMMISSIONER BAILEY: It would be very helpful.

22 MR. BRUCE: I think it would be helpful, based on  
23 the questions you're asking.

24 COMMISSIONER BAILEY: That's all I have for those  
25 types of questions, then.

1 MR. BRUCE: Madame Chair, I would ask to

2 incorporate the record from the Examiner Hearing.

3 CHAIRMAN WROTENBERY: We'll do that. And then  
4 are you planning to --

5 MR. BRUCE: What I will do is, I will get --

6 CHAIRMAN WROTENBERY: -- extract --

7 MR. BRUCE: -- the geologist's testimony and  
8 provide it to the Commissioners. And I'll make sure you  
9 have extras of the geologic exhibits, Commissioner Bailey.

10 COMMISSIONER BAILEY: Thank you.

11 EXAMINATION

12 BY COMMISSIONER LEE:

13 Q. What's the current production of your eight wells  
14 right now?

15 A. The average production, as in testimony in the  
16 previous hearing, was 19 barrels of oil per day and about  
17 -- I believe it was 20 MCF of gas per day and about 20  
18 barrels of water per day, from the existing wells.

19 Q. When you produce the 20 MCF per day, inject the  
20 1000 barrels a day, what pressure are you expecting to --

21 A. Well, initially, it will take it on a vacuum.  
22 And I don't know if you're aware, but approximately five  
23 miles away we've instituted the net pilot pressure  
24 maintenance project, which is a lower Brushy Canyon  
25 pressure maintenance project, and we've been pumping into

1 that project for approximately three and a half years, and  
2 our most recent pressure is 350 pounds p.s.i.g. at the  
3 surface. And average injection for that interval has been  
4 about 2100 barrels of water per day.

5 Q. Okay, I'm worried about your injecting 100 --

6 A. 1000.

7 Q. -- 1000 barrels a day and you produce that much  
8 of the gas. You probably won't have any pressure increase.

9 A. That's what we're seeing in the net pilot  
10 pressure maintenance project. We're not seeing pressure  
11 increases at offsetting wells, especially a half mile away,  
12 we're seeing absolutely no response. But we are seeing  
13 increase in rates, which I guess would correspond somewhat  
14 to an increase in pressure, or a maintain -- What we're  
15 seeing is a flattening of the declining, which is a  
16 maintaining of the initial -- the existing reservoir  
17 pressure.

18 And that's basically our goal with this one-point  
19 injection system, is to maintain the existing pressure and  
20 measure the corresponding production response to that.

21 Q. What's the average disposal cost for one barrel  
22 of water in this region?

23 A. If it's hauled, I believe it's about 95 cents a  
24 barrel. We have disposal wells, and I believe our cost is  
25 45 cents a barrel, including maintenance of all the



1 facilities.

2 Q. This operation, how much -- I forget about the  
3 oil production, how much the costs for your -- you are  
4 saving when you inject your water into this well?

5 A. Actually, it represents no cost savings to Pogo,  
6 because we do have an existing water disposal system in  
7 this area.

8 COMMISSIONER LEE: No further questions.

9 EXAMINATION

10 BY CHAIRMAN WROTENBERY:

11 Q. Mr. Gasser, I have a few questions. I might just  
12 ask first whether there is groundwater in this area, fresh  
13 water.

14 A. Yes, in the initial hearing we presented samples  
15 in a few locations of groundwater, and I believe the depth  
16 was approximately 650 feet.

17 Q. That's the depth of the base of the groundwater  
18 zone?

19 A. Yes.

20 MR. BRUCE: Madame Chair, if you'd look at  
21 Exhibit 2, I believe the closest fresh water was in Section  
22 14 to the northeast, about three miles away.

23 CHAIRMAN WROTENBERY: When you say the closest  
24 fresh water, that's the closest documented freshwater well?

25 MR. BRUCE: Yes, they had asked for records or --

1 They had called the State Engineer Office in Roswell, I  
2 believe, and that was the nearest documented freshwater  
3 source.

4 Q. (By Chairman Wrotenbery) I also wanted to ask a  
5 little bit about the pressures. The Division's Order  
6 authorizes, I think, a maximum surface injection pressure  
7 of 1540 p.s.i., and I believe that's the standard -- What  
8 is it? .2 --

9 A. Yes.

10 Q. -- per foot of depth to the --

11 A. -- to ensure --

12 Q. -- injection zone?

13 A. -- that we don't exceed the frac gradient at that  
14 depth.

15 Q. Right. And what does that equate to subsurface,  
16 in the injection zone?

17 A. 7770, which is about mid-perf, at an average  
18 grade of .433 p.s.i. per foot, and then you add the 1540 to  
19 that, that's approximately 4900 pounds, bottomhole.

20 Q. Okay, given your stated goal of maintaining  
21 existing pressure in the reservoir, do you need that much  
22 injection pressure?

23 A. Well, we're not seeing that much injection  
24 pressure. That's the maximum that we're allowed to have at  
25 the wellhead. As I stated, it's been our experience after

1 three years of 2000 barrels per day and an offsetting  
2 typical injector, we're measuring pressures of 350 pounds,  
3 rather than 1540 pounds. So we're at a lot less pressure  
4 than that. Initially, it will take it on a vacuum, with no  
5 pressure at all.

6 Q. If the Commission were to consider lowering the  
7 maximum authorized injection pressure in lieu of requiring  
8 remedial work on this well within the area of review, would  
9 you oppose --

10 A. No, we --

11 Q. -- that type of a limitation?

12 A. No, we wouldn't because -- It depends on how low  
13 you want to make it, but no, we really don't see the  
14 maximum injection pressure being a problem here. If  
15 anything, we believe that the pressure increase that we're  
16 seeing would be skin damage from the plugging of the  
17 perforations as we're pumping water into it.

18 With reservoir pressure maintaining at the  
19 current level, we don't see any problem or any need to get  
20 up to that maximum pressure.

21 Q. Okay. Do you have an opinion on what would be  
22 a --

23 A. -- a reasonable --

24 Q. -- reasonable maximum?

25 A. No. A thousand pounds seems to be reasonable.

1     Actually, the 1540 is a reasonable number.  There's a  
2     safety factor included in that frac gradient depth  
3     calculation to ensure that we don't fracture the existing  
4     formation.  So I really don't have any problem with 1540,  
5     but I understand the concerns.

6             I can tell you that -- maybe to ease your  
7     concerns somewhat, in the offsetting pilot pressure  
8     maintenance project, which is about five miles away, we  
9     have seen no response in wells that are within a half-mile  
10    radius of the injection point.

11            And we have seen response, some flattening of the  
12    decline, in the wells that directly offset the injection  
13    well.  And we're three and a half years into that project,  
14    so we really do not expect any fluid to move into the well  
15    that we're talking about here today.  We don't expect that  
16    to be a problem.

17            Q.    Have you done analyses of the pressure effects in  
18    the reservoir of the injection operations?

19            A.    Well, we -- You know, we've done reservoir  
20    engineering calculations basically like Buckley-Levert  
21    calculations on waterflood performance.  And in those  
22    calculations you assume that you're going to build a flood  
23    front and a bank of oil.  And I would say that the response  
24    we're seeing in our offsetting pilot pressure maintenance  
25    project is, that's not occurring.  What we're seeing is the

1 flow of fluids through the -- you know, to the offsetting  
2 wells.

3 So we've tried to model it, and that models  
4 pressures and relative permeability changes and the flow of  
5 fluids throughout the reservoir. But we're not seeing that  
6 the performance in our offsetting pilot pressure  
7 maintenance project is matching the model.

8 So we could -- You know, I would say that with  
9 the production performance that we're seeing in the  
10 offsetting pilot pressure maintenance project, all we're  
11 doing is stabilizing the reservoir pressure. We're not  
12 seeing an increase in withdrawal from the reservoir at the  
13 wells that are offsetting the injection, which to me  
14 indicates that all we're doing is stabilizing reservoir  
15 pressure at its existing condition.

16 CHAIRMAN WROTENBERY: I don't know, Commissioner  
17 Lee, would you like to see some of that information on the  
18 pressure effects and the pressure front in the reservoir  
19 and --

20 COMMISSIONER LEE: No.

21 CHAIRMAN WROTENBERY: -- what might occur at  
22 the --

23 COMMISSIONER LEE: I think basically at the same  
24 phase is 3500 pounds, and right now, they only have 900.  
25 So the injection pressure really is not a concern. So you

1 know, I don't need to see that.

2 Q. (By Chairman Wrotenbery) I was hoping too to  
3 clarify your statement that there would be no crossflow  
4 between zones, and I was a little uncertain whether you  
5 were talking about the possibility of crossflow at the  
6 location of the injection or the possibility of crossflow  
7 at the Kaiser --

8 A. I'm speaking both.

9 Q. -- well.

10 A. There will be no -- We do not anticipate, and we  
11 do not believe there will be any crossflow at the injection  
12 well because of the cement program and the perforations and  
13 the barriers within the Brushy Canyon.

14 Q. Uh-huh.

15 A. Now, at the Kaiser-Francis well, the entire  
16 Delaware interval has been open for 20 years. Production  
17 has been obtained from various Delaware sections throughout  
18 that section, so pressures within those individual lenses  
19 have been changing over the last 20 years, and there has  
20 been no adverse effects.

21 And I doubt that there's been any crossflow. If  
22 you're familiar with the Delaware, most of these wells  
23 require a sand-fracture stimulation to produce, so they're  
24 relatively tight. And I don't anticipate or expect that  
25 there's been any crossflow within the Delaware in the

1 Kaiser-Francis well over the last 20 years, or will there  
2 be as a result of our operations at the Pure Gold "B" 20.

3 Q. Now, did I understand you correctly that in your  
4 opinion, if we do have fluid leaving the injection zone  
5 through the -- What is it?

6 A. Annular volume.

7 Q. -- 9-5/8-inch --

8 A. Uh-huh.

9 Q. -- annulus, that we would see that at the --

10 A. -- at the surface?

11 Q. -- at the surface in the Kaiser-Francis well?

12 A. Yeah, you would see pressure on the Bradenhead of  
13 that 9-5/8 - 12-1/4-inch annulus.

14 Q. Would you have any objection to monitoring the  
15 pressures on that annulus?

16 A. I wouldn't, but we're not the operator of the  
17 well.

18 Q. You do have a working interest?

19 A. Yes, we're the majority working interest owner in  
20 that well, and in fact --

21 Q. Do you have access to information on it?

22 A. Yes, we do. We do have access. But, you know,  
23 we can request things from the operator, but we cannot  
24 mandate that they do certain things.

25 But we really believe that it's not going to be a

1 problem at this location.

2 CHAIRMAN WROTENBERY: Any other --

3 FURTHER EXAMINATION

4 BY COMMISSIONER LEE:

5 Q. If your water comes into that well, what would  
6 happen? Suppose, one scenario.

7 A. Okay, if water made it over to that location,  
8 first of all you would have to build up reservoir pressure  
9 for anything to change from what's going on right now, you  
10 would have to get the reservoir pressure at that location  
11 above the initial reservoir pressure of the injection one.  
12 So if that --

13 Q. I'm asking you the question, suppose the water is  
14 coming to this well. What would happen to this well? That  
15 producing gas?

16 A. Yeah, nothing would happen because it's isolated  
17 behind the --

18 Q. Behind the --

19 A. -- 9-5/8-inch casing above the Delaware and below  
20 the Delaware. The Delaware interval is the only interval  
21 that's exposed on the back side of the 9-5/8. So nothing  
22 would happen to the well.

23 CHAIRMAN WROTENBERY: That's all the questions I  
24 had. Did you have anything further?

25 COMMISSIONER BAILEY: No.



1           CHAIRMAN WROTENBERY: Anybody else have anything  
2 further?

3           Mr. Carroll?

4           MR. CARROLL: May it please the Commission, the  
5 Division would like to remind the Commission that it has  
6 been the standard policy of the Division to require  
7 cementing of these types of wells. The Division will leave  
8 it in the very capable hands of the Commission whether Pogo  
9 has met its burden of proof justifying the exception to  
10 that policy.

11           This issue was not addressed and this evidence  
12 was not presented at the Division hearing.

13           Thanks.

14           CHAIRMAN WROTENBERY: Okay, anything further?

15           MR. BRUCE: No, ma'am.

16           CHAIRMAN WROTENBERY: I believe that will do it,  
17 then. I believe what we'll do is deliberate on this case,  
18 but we'll do that after we take up the next case.

19           (Off the record at 9:55 a.m.)

20           (The following proceedings had at 11:25 a.m.):

21           CHAIRMAN WROTENBERY: And at this point I'll  
22 entertain a motion to come back into open session.

23           COMMISSIONER BAILEY: I so move.

24           COMMISSIONER LEE: Second.

25           CHAIRMAN WROTENBERY: All in favor say "Aye".

1 COMMISSIONER BAILEY: Aye.

2 COMMISSIONER LEE: Aye.

3 CHAIRMAN WROTENBERY: Aye.

4 And just let the record reflect that while we  
5 were in closed session, the only things that we discussed  
6 were the two cases that we heard today, Case 12,223, the  
7 Application of Pogo Producing Company for approval of a  
8 pilot pressure maintenance project, and then also case  
9 12,033, the Application of Public Service Company of New  
10 Mexico for review of the Oil Conservation Division  
11 directive dated March 13th, 1998, related to remediation of  
12 hydrocarbon contamination in San Juan County, New Mexico.

13 We will go ahead and discuss the Case 12,033, the  
14 Application of Public Service Company of New Mexico, since  
15 that seems to be the group that we still have here.

16 (Off the record at 11:26 a.m.)

17 (The following proceedings had at 11:27 a.m.):

18 CHAIRMAN WROTENBERY: And then on the Pogo  
19 Application, we will be deliberating on this case again at  
20 the Division's next meeting -- at the Commission's next  
21 meeting, which will be December 9th?

22 Do I have the right date, Florene? December 9th,  
23 1999.

24 In the meantime, we will be following up with Mr.  
25 Bruce as counsel for Pogo Producing, and asking him for

1 first of all, the portions of the transcript that he wanted  
2 to discuss related to the geological issues involved in  
3 this particular application.

4 And then we will also be asking him for some  
5 additional information on the pressure increases that would  
6 be expected to be observed in the injection zone,  
7 particularly in the vicinity of the Kaiser-Francis well,  
8 for we believe that we did not quite have enough  
9 information, or at least the evidence did not seem clear  
10 enough to us on the pressure effects that would be  
11 anticipated at the location of the Kaiser-Francis wellbore,  
12 and we would like a little more data on that particular  
13 issue.

14 And we will work with the Commission's legal  
15 counsel, Lyn Hebert, to draft up a request for that  
16 information here next week.

17 MS. LEACH: Mr. Carroll, I'd ask that you call  
18 Mr. Bruce, since he's not here, and tell him what we're  
19 doing and to expect a written letter requesting --

20 MR. CARROLL: Okay.

21 MS. LEACH: -- to give him as much notice as  
22 possible.

23 CHAIRMAN WROTENBERY: Okay, thank you.

24 Anything else, Commissioners?

25 COMMISSIONER BAILEY: That's all.

1 CHAIRMAN WROTENBERY: Okay. I believe that will  
2 conclude this meeting of the Oil Conservation Commission.  
3 Thank you, everybody.

4 (Thereupon, these proceedings were concluded at  
5 11:28 a.m.)

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## CERTIFICATE OF REPORTER

STATE OF NEW MEXICO    )  
                                  )   ss.  
COUNTY OF SANTA FE    )

I, Steven T. Brenner, Certified Court Reporter and Notary Public, HEREBY CERTIFY that the foregoing transcript of proceedings before the Oil Conservation Commission was reported by me; that I transcribed my notes; and that the foregoing is a true and accurate record of the proceedings.

I FURTHER CERTIFY that I am not a relative or employee of any of the parties or attorneys involved in this matter and that I have no personal interest in the final disposition of this matter.

WITNESS MY HAND AND SEAL November 21st, 1999.



STEVEN T. BRENNER  
CCR No. 7

My commission expires: October 14, 2002