

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION  
CASE 10,614

EXAMINER HEARING

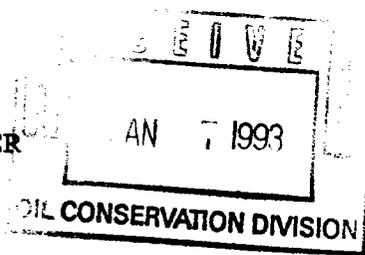
IN THE MATTER OF:

Application of WJC, Inc., for salt water disposal,  
Lea County, New Mexico

**ORIGINAL**

TRANSCRIPT OF PROCEEDINGS

BEFORE: DAVID R. CATANACH, EXAMINER



STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO  
December 3, 1992

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

A P P E A R A N C E S

FOR THE DIVISION:

ROBERT G. STOVALL  
Attorney at Law  
Legal Counsel to the Division  
State Land Office Building  
Santa Fe, New Mexico 87504

FOR THE APPLICANT:

CAMPBELL, CARR, BERGE & SHERIDAN, P.A.  
Attorneys at Law  
By: WILLIAM F. CARR  
Suite 1 - 110 N. Guadalupe  
P.O. Box 2208  
Santa Fe, New Mexico 87504-2208

\* \* \*

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

I N D E X

Page Number

Appearances

2

MICHAEL L. PIERCE

Direct Examination by Mr. Carr

5

Examination by Examiner Catanach

12

Certificate of Reporter

15

\* \* \*

E X H I B I T S

APPLICANT'S EXHIBITS:

Exhibit 1

5

Exhibit 2

8

\* \* \*

1           WHEREUPON, the following proceedings were had  
2           at 8:43 a.m.:

3  
4           EXAMINER CATANACH: Okay, at this time we'll  
5           call Case 10,614.

6           MR. STOVALL: Application of WJC, Inc., for  
7           salt water disposal, Lea County, New Mexico.

8           EXAMINER CATANACH: Are there any appearances  
9           in this case?

10          MR. CARR: May it please the Examiner, my  
11          name is William F. Carr with the Santa Fe law firm  
12          Campbell, Carr, Berge & Sheridan.

13          We represent WJC, Inc., and I have one  
14          witness.

15          Mr. Catanach, the witness is Michael L.  
16          Pierce. He has previously testified in the immediately  
17          preceding case.

18          I would request that the record reflect that  
19          Mr. Pierce remains under oath and has been qualified as  
20          an expert witness in petroleum geology.

21          EXAMINER CATANACH: The record shall so  
22          reflect.

23          Are there additional appearances in this  
24          case?

25          There being none, you may proceed, Mr. Carr.



1 page 5. Would you review the information on this plat  
2 for Mr. Catanach?

3 A. That's a land plat showing all the wells in  
4 the immediate area, with the large circle being the  
5 area of review around the D.F. Willhoit Number 2 well.

6 Q. And the well that was the subject of the  
7 immediately preceding case is located in the adjoining  
8 section to the west?

9 A. Correct.

10 Q. Okay. Does this exhibit contain wellbores,  
11 schematics for all wells within the area of review  
12 which penetrate the injection zone?

13 A. Yes, it does.

14 Q. And you have set forth on that exhibit the  
15 information required by OCD form C-108?

16 A. Yes, I have.

17 Q. Are there plugged and abandoned wells within  
18 the area of review?

19 A. Yes, there's one, the W.V. Lawrence, and  
20 that's in Section 19. It was plugged and abandoned in  
21 1987.

22 Q. That's on page 14 of Exhibit 1?

23 A. Yes, right.

24 Q. Have you reviewed this plug in detail?

25 A. Yes, sir. It appears to be plugged properly

1 also.

2 Q. Does Exhibit 1 contain a schematic drawing of  
3 the proposed injection well?

4 A. Yes, it doe.s

5 Q. And where is that?

6 A. On page 9 -- or 8A, excuse me.

7 Q. Why don't we go to page 8, and then -- which  
8 is the current completion --

9 A. Oh, right, okay.

10 Q. -- and I'd ask you to review that.

11 Then go to 8A, and show what you propose to  
12 do to the well to convert it.

13 A. Okay, on page 8 is the current status of the  
14 D.F. Willhoit Number 2 well, showing four plugs in the  
15 9 5/8 intermediate string, and three plugs in the long  
16 string, in the open-hole interval.

17 Q. And then page 8A?

18 A. Page 8A, we propose to drill out all the  
19 plugs and re-enter the well to its TD of 14,209 and set  
20 2 7/8 plastic-coated tubing, approximately 12,200 feet,  
21 with a Baker Lok-Set packer and load the back side with  
22 packer fluid.

23 Q. And you propose to inject in an open-hole  
24 interval from -- and what depth is that?

25 A. Of 12,337 to 14,209.

1 Q. At this time, why don't we move to what has  
2 been marked as WJC Exhibit Number 2, and I'd ask you to  
3 identify that and then identify on that exhibit the  
4 disposal interval for Mr. Catanach.

5 A. Okay, that's the cross-section A-A', and  
6 that's roughly a northwest-southeast trending cross-  
7 section through the north Devonian field.

8 And what that shows is this Willhoit Number 2  
9 well has the production casing set approximately 200  
10 feet lower than the productive Devonian zone in the  
11 field, and the open-hole interval from 12,237 -- 12,337  
12 to -- let's see. Have I got the wrong depth there?  
13 No, 12,337 to 14,209.

14 Q. So basically this shows you'll be disposing  
15 several hundred feet below the productive interval in  
16 the Devonian?

17 A. That's correct.

18 Q. Are you again seeking this authority to  
19 dispose of water from the Brooks wells that are  
20 operated by WJC?

21 A. Correct.

22 Q. What volumes do you propose to inject in this  
23 well?

24 A. 2000 barrels a day.

25 Q. And again, what maximum rate would you need

1 for this well?

2 A. 5000.

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

4 A. It's a closed system.

5 Q. Will you be able to inject in this well by  
6 gravity?

7 A. Yes, it will be gravity.

8 Q. Would it be appropriate for a pressure  
9 limitation to be set by the Order that results in this  
10 case?

11 A. We could -- In the event we need to pump the  
12 well at 2/10 per pound, that would be great, there's no  
13 problem with that.

14 Q. And you wouldn't need authority to go beyond  
15 that?

16 A. No.

17 Q. In this situation, you're re-injecting  
18 Devonian water back into the Devonian; is that what  
19 you'd be proposing to do?

20 A. Into the Devonian and Ellenberger.

21 Q. Do you anticipate any compatibility problems  
22 with this proposal?

23 A. No.

24 Q. There are freshwater zones in the area?

25 A. Yes.

1 Q. Again, the testimony would be the same, it's  
2 the Ogallala?

3 A. Correct.

4 Q. Do you have the same information in the  
5 exhibit in this case that was presented in Case 10,613  
6 concerning freshwater wells in the area?

7 A. That's correct.

8 Q. And you also have a water analysis on each of  
9 the two wells identified?

10 A. Correct.

11 Q. Has a log of the injection well been filed  
12 with the Division?

13 A. It has.

14 Q. Would you refer to what has been marked as  
15 page 21 in Exhibit 1 and identify this for the  
16 Examiner?

17 A. 21 is a letter from offset operator  
18 indicating that they're aware of the Application. This  
19 is Avra Oil Company and they are not opposed to it.

20 Q. Has notice of this Application been provided  
21 to all leasehold operators within a mile of the  
22 proposed disposal well?

23 A. It has.

24 Q. And to the surface owners?

25 A. Correct.

1 Q. And originally this Application was filed for  
2 administrative approval?

3 A. It was.

4 Q. And again, we're here because of an objection  
5 from F&M Oil and Gas?

6 A. That's correct.

7 Q. Mr. Pierce, have you reviewed the geologic  
8 and engineering data available on this area?

9 A. I have.

10 Q. As a result of that review, have you  
11 discovered any evidence of open faults or other  
12 hydrologic connections between the disposal zone and  
13 any underground source of drinking water?

14 A. I have not.

15 Q. In your opinion, will approval of this  
16 Application be in the best interest of conservation,  
17 the prevention of waste and the protection of  
18 correlative rights?

19 A. It will.

20 Q. Were Exhibits -- Was Exhibit 1 prepared by  
21 you?

22 A. It was.

23 Q. Have you reviewed Exhibit Number 2?

24 A. Yes.

25 Q. Can you testify as to its accuracy?

1           A.    Yes, I think it's correct.

2           MR. CARR:  At this time, Mr. Catanach, we  
3 would move the admission of WJC Exhibits 1 and 2.

4           EXAMINER CATANACH:  Exhibits 1 and 2 will be  
5 admitted as evidence.

6           MR. CARR:  And that concludes my direct  
7 examination of Mr. Pierce.

8   EXAMINATION

9           BY EXAMINER CATANACH:

10           Q.    Mr. Pierce, do you have any kind of estimate  
11 on what kind of volumes this well will accept?

12           A.    If this is a -- acts like a typical Devonian  
13 injection or SWD well, you could probably dispose of  
14 10,000 barrels a day on a vacuum in this well.

15                                   The reason we are permitting -- asking for  
16 the permit of these two wells is because, for one  
17 thing, we're not sure whether it's mechanically  
18 possible to re-enter either of the two wells.  And with  
19 the hostility of the two operators there, with one  
20 application being protested, to save time we went ahead  
21 and did both of them.  Because if we did one and we  
22 were unsuccessful at it, we would have to turn around  
23 and petition the OCD to re-enter another well, and it  
24 would have been protested also.

25                                   So that was the rationale behind doing both

1 of these wells at the same time.

2 Q. Which well does WJC plan on doing first?

3 A. The Cox -- or excuse me, the Willhoit Number  
4 1 well has better access. It's just a quarter mile off  
5 a paved road, and it's easier to get to and easier to  
6 maintain. So that's the well we're looking at doing  
7 right now.

8 Q. So you may not even do the other one?

9 A. That's correct.

10 Q. Okay. Do you know where the top of the  
11 Ellenberger formation is in this well?

12 A. Just looking at it offhand, I don't think I  
13 could pick it, Mr. Catanach. This is the only  
14 Ellenberger well in a number of miles, so I'm -- I  
15 was -- and I don't have access to the samples for --

16 Q. Okay.

17 A. At approximately 13,650 is the top of the  
18 granite wash, though. And then at 13,900 and 13,950 is  
19 granite, though, those tops are there.

20 Q. You propose to tie back into the 9 5/8, or --  
21 I'm sorry, the 5-1/2-inch casing, and set that back up  
22 inside the 9 5/8?

23 A. That's correct.

24 EXAMINER CATANACH: Okay. I believe that's  
25 all I have.

1 MR. CARR: We have nothing further.

2 EXAMINER CATANACH: The witness may be  
3 excused, and Case 10,614 will be taken under  
4 advisement.

5 (Thereupon, these proceedings were concluded  
6 at 8:57 a.m.)

7 \* \* \*

8

9

10

11

12

13

14

I do hereby certify that the foregoing is  
a complete and correct report of the proceedings in  
the Examiner hearing of Case No. 10614,  
heard by me on December 3, 1992.

15

16

David R. Catanach, Examiner  
Oil Conservation Division

17

18

19

20

21

22

23

24

25

