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STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION  
IN THE MATTER OF THE HEARING CALLED  
BY THE OIL CONSERVATION DIVISION FOR  
THE PURPOSE OF CONSIDERING:  
CASE NO: 14178  
APPLICATION OF MESQUITE SWD, INC.  
FOR AUTHORIZATION TO INJECT AND  
TO OBTAIN AN AMENDMENT TO PERMIT  
NO. SWD-180, EDDY COUNTY,  
NEW MEXICO

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING  
December 18, 2008  
Santa Fe, New Mexico

RECEIVED  
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BEFORE: DAVID BROOKS: Hearing Examiner  
TERRY WARNELL: Technical Advisor

This matter came for hearing before the New Mexico  
Oil Conservation Division, Terry Warnell, Hearing  
Examiner, on December 18, 2008, at the New Mexico Energy,  
Minerals and Natural Resources Department, 1220 South  
St. Francis Drive, Room 102, Santa Fe, New Mexico.

REPORTED BY: PEGGY A. SEDILLO, NM CCR NO. 88  
Paul Baca Court Reporters  
500 Fourth Street, NW, Suite 105  
Albuquerque, New Mexico 87102

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24		KELCEY NICHOLS, ESQ.
25		Hinkle, Hensley, Shana & Martin, LLP
		P. O. Box 2068
		Santa Fe, NM 87504
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1 HEARING EXAMINER: At this time we'll call Case  
2 No. 14178, the Application of Mesquite SWD, Inc. for  
3 Authorization to Inject into and Obtain an Amendment to  
4 Permit SWD-180, Eddy County, New Mexico, reopened.

5 Call for appearances.

6 MR. HNASKO: Good morning Mr. Hearing Examiner.  
7 Tom Hnasko and Kelsey Nichols on behalf of the Applicant,  
8 Mesquite.

9 MR. SWAZO: Sonny Swazo on behalf of the OCD.

10 HEARING EXAMINER: Okay. Witnesses?

11 MR. HNASKO: Today, Mr. Hearing Examiner, we'll  
12 be calling Mr. Clay Wilson and Dr. Kay Havenor.

13 HEARING EXAMINER: Okay. And would the  
14 witnesses please stand and identify themselves?

15 MR. WILSON: Clay Wilson.

16 DR. HAVENOR: Kay Havenor.

17 HEARING EXAMINER: Mr. Swazo, do you have any  
18 witnesses?

19 MR. SWAZO: Mr. Hearing Examiner, I'd like to  
20 make a brief statement. I don't have any witnesses. The  
21 reason why I'm here, I just want to make sure that --

22 HEARING EXAMINER: Well, let's go ahead and  
23 swear the witnesses.

24 MR. SWAZO: Sure.

25 (Note: Witnesses sworn in by the reporter.)

1 HEARING EXAMINER: Okay. You may continue with  
2 your statement, Mr. Swazo.

3 MR. SWAZO: I have filed no prehearing statement  
4 because I don't plan to present any witnesses. I really  
5 don't have any objection to the Applicant's presentation  
6 of evidence.

7 I really don't intend to challenge the evidence,  
8 and we'll just take it from there as far as how the  
9 evidence is presented by the Applicant.

10 HEARING EXAMINER: Okay.

11 MR. SWAZO: Our main concern is just to make  
12 sure that any permit that's eventually granted to the  
13 Applicant, that they are injecting within the parameters  
14 of that application.

15 And that includes making sure that any wells in  
16 the vicinity are properly plugged, and that's why the  
17 Applicant is here today, to present evidence to that  
18 matter or to that effect.

19 HEARING EXAMINER: Okay. Very good. You may  
20 proceed then.

21 MR. HNASKO: Thank you, Mr. Hearing Examiner. A  
22 brief opening statement, if I may.

23 HEARING OFFICER: Okay.

24 MR. HNASKO: We'll try to keep the matter  
25 focused, and I appreciate Mr. Swazo's comments in that

1     regard.  It's our desire, as well, to present the evidence  
2     that certain wells are properly plugged and abandoned and  
3     certain wells are active, producing wells.

4                 As a Hearing Examiner and Technical Examiner,  
5     I'm aware this matter came to hearing on October 15 for a  
6     permit to inject salt water at the Mesquite Exxon No. 8  
7     well.

8                 On November 7, the Division issued an order  
9     authorizing that injection subject to certain conditions.  
10    One of the enumerated conditions was found in Paragraph 4  
11    of the order requiring Mesquite to plug and abandon  
12    certain wells prior to commencing injection operations.

13                Those wells were enumerated as the Magnolia  
14    No. 3, API 30-015-01087, the Pure State No. 6 well, and  
15    then two wells which are actually the Exxon State Nos. 2  
16    and 7.

17                And today we'd like to present evidence first of  
18    all that the Exxon State Nos. 2 and 7 are active,  
19    producing wells.

20                There have been previous requests for temporary  
21    abandonment filed with the Division, and since that time,  
22    Mesquite has reopened the wells and filed C-103s where  
23    appropriate, and those are actively producing today.

24                Secondly, through Dr. Havernor, we would like to  
25    present some brief testimony concerning the Magnolia No. 3

1 and the Pure State No. 6.

2 With respect to the Magnolia No. 3 -- actually  
3 both these wells, the mistake is ours, the Examiners went  
4 through the record in excruciating detail and I think  
5 highlighted some areas where we made an inadvertent  
6 mistake.

7 Between the time of our application and the time  
8 of the hearing, with respect to the Magnolia No. 3,  
9 Exhibit 33 at the hearing incorrectly reported the absence  
10 of plugging and abandonment information.

11 I would note that our assessment report attached  
12 to the application did correctly report that plugging and  
13 abandonment information and had a proper plug diagram, but  
14 we wanted to clear that up to show that the Magnolia No. 3  
15 has, in fact, been properly plugged and abandoned.

16 With respect to the Pure State No. 6, this was  
17 an unusual error on our part in that it turns out that  
18 there is an API designation of 01090, which actually  
19 contains two wells. And those wells are the Pure State  
20 No. 6 and a well known as the State No. 2.

21 When we submitted our information, due to a  
22 typographical error and just a matter of keeping tract of  
23 our own internal organization, we assigned to the Pure  
24 State No. 6 an API ending in 099. And there is no 099.

25 And so, Dr. Havenor went back and reviewed the

1 files at the OCD, and in fact, the Pure State No. 6 is  
2 assigned a 01090 API. But there are two wells within that  
3 file and both have been properly plugged and abandoned.

4 So we'd like to present evidence on that, as  
5 well. And that would be the sum and substance of our  
6 presentation today.

7 HEARING EXAMINER: Okay.

8 MR. HNASKO: And with that, as soon as  
9 Ms. Nichols is ready to set up the materials -- Perhaps  
10 what I could do, counsel, do we have the exhibits handy  
11 for the -- Maybe I could just briefly run through these in  
12 the interest of time. Exhibit No. 1 is the original Order  
13 -- a copy of the Order of the Division dated November 7,  
14 2008.

15 Exhibit No. 2 is our motion for clarification of  
16 Order 13043 that was entered on November 7.

17 No. 3 was the order of the Division dated  
18 November 18 denying Mesquite's Motion for Clarification,  
19 and essentially stated that the matter should be presented  
20 on the record.

21 In response to that order, we have Exhibit No. 4  
22 which is Mesquite's Motion for Rehearing. And attached to  
23 that motion is a supplemental report of Dr. Havernor.

24 That report has been appended and modified to  
25 the extent that it has additional exhibits today in your

1 black binder, rather than the original report, and the  
2 exhibits that were submitted with the Motion for  
3 Rehearing. So there is a slight modification.

4 Exhibit 5, we did file a motion to allow  
5 temporary injection until the matter of the plugging and  
6 abandonment of the Magnolia No. 3 and the Pure State No. 6  
7 could be placed on the record and evidence presented as to  
8 the continued production from the Exxon 2 and 7.

9 And Exhibit No. 6 is the Division's Order  
10 granting the amended motion to allow temporary injection.

11 And Exhibit No. 7 is a recent report from  
12 Dr. Havernor of Geosciences, and he's showing cross-  
13 sections and a clarification report on these wells and the  
14 total depth of the Mesquite well. That report has been  
15 submitted as a bit of icing on the cake.

16 Even though these wells at issue have been  
17 properly plugged and abandoned and the Exxon 2 and 7 are  
18 producing wells, Dr. Havernor, nonetheless, submitted the  
19 cross-section to show no hydrodynamic connection between  
20 the depth of the Exxon 8 disposal well and the other wells  
21 at issue.

22 HEARING EXAMINER: I would note for the record  
23 that the temporary order that was issued on December 9  
24 states that injection will be allowed quote, "pending the  
25 results of the rehearing in this matter currently docketed



1 for December 18."

2 So I would interpret that to mean that the  
3 temporary order remains in effect until such time as  
4 another order is issued as a result of this hearing.

5 MR. HNASKO: That's my interpretation, too,  
6 Mr. Hearing Examiner.

7 HEARING EXAMINER: Okay. You may continue.

8 MR. HNASKO: Thank you very much. And No. 8 is  
9 simply a compilation of our Power Point presentation that  
10 should make the matter proceed more smoothly today.

11 And with that, I would offer Exhibits 1 through  
12 8 into the record at this time.

13 HEARING EXAMINER: Okay, 1 through 8 are  
14 admitted, there being no one present to object. Well,  
15 Mr. Swazo, do you object?

16 MR. SWAZO: I have no objection.

17 MR. HNASKO: And with that, Mr. Hearing  
18 Examiner, we'd like to call Mr. Clay Wilson.

19 CLAY WILSON,  
20 the witness herein, after first being duly sworn upon  
21 his oath was examined and testified as follows:

22 DIRECT EXAMINATION

23 BY MS. NICHOLS:

24 Q. Mr. Hnasko has given us a background.  
25 Mr. Wilson, you received the order that was the outcome of

1 your last application which required you to plug four  
2 wells?

3 A. Yes.

4 Q. And which four wells were you required to plug?

5 A. Exxon 2, 7, Magnoila State No. 3, and Pure State  
6 No. 6.

7 Q. And can you tell us what you know about Exxon  
8 States No. 2 and 7?

9 A. Since January of '07, they've been in  
10 production. We put them back in production in January of  
11 '07. The C-103s, we sent them in to the office in  
12 Artesia. They have, since May, been shut in due to not  
13 being able to get rid of or produce water.

14 Q. And are those wells operating now?

15 A. They are operating now.

16 HEARING EXAMINER: Which wells are these?

17 THE WITNESS: Exxon 2 and 7.

18 Q. And Mr. Wilson, did you submit production data  
19 for Exxon States No. 2 and 7 with the Motion for  
20 Rehearing?

21 A. We did.

22 MS. NICHOLS: I'd like to refer the Hearing  
23 Examiners to Exhibit 4, which is Mesquite's Motion for  
24 Rehearing and the production data for the Exxon States  
25 No. 2 and 7, our Exhibits B and C, which is also on Power

1 Point 5, Slide 2.

2 Q. Mr. Wilson, we're looking at Exhibit B to  
3 Exhibit 4, Power Point Slide 2. Is this the production  
4 data for Exxon State No. 2?

5 A. Yes, it is.

6 Q. We're looking at Exhibit C to Exhibit 4.  
7 Mr. Wilson, is this the production data for the Exxon  
8 State No. 7?

9 A. Yes, it is.

10 Q. And are both these wells active, producing wells  
11 again?

12 A. Yes, they are.

13 Q. And Mr. Wilson, you mentioned that you had gone  
14 out to locate the Magnoila State No. 3 and the Pure State  
15 No. 6?

16 A. Yes, I did.

17 Q. Did you find those wells?

18 A. We did.

19 Q. Okay. And were you accompanied by someone from  
20 the Artesia office of the Oil Conservation Division?

21 A. Yes, I was. I was with Richard Inga, that's his  
22 last name, the kind of field supervisor for that area.

23 Q. And you and Mr. Inga took photographs of what  
24 you found?

25 A. We did, of the Magnoila State 3 and the Pure

1 State 2.

2 MS. NICHOLS: I'd like to refer the Hearing  
3 Examiners to Power Point Slide 8.

4 Q. Mr. Wilson, are these your photographs of the  
5 Magnoila State No. 3?

6 A. They are.

7 Q. What did you find at the location for the  
8 Magnoila State No. 3?

9 A. That it has a dry hole marker and it's plugged.

10 Q. And you would not expect to see a dry hole  
11 marker if the well were not plugged and abandoned?

12 A. One would think so, unless it's, you know, been  
13 pushed over or destroyed.

14 Q. Did you examine the dry hole marker to make sure  
15 it was solid?

16 A. We did. It was.

17 Q. And Mr. Wilson, were you able to locate the  
18 plugged and abandoned Pure State No. 6?

19 A. We did.

20 Q. And what did you find at that location?

21 A. You could see the cement and surface casing and  
22 that the dry hole marker had rotted off and was lying by  
23 it.

24 Q. And referring you to Power Point Slides 12  
25 through 15, these are your photographs of Pure State

1 No. 6?

2 A. Yes, they are.

3 Q. And did it appear to you that the well had been  
4 plugged and abandoned?

5 A. Yes, it does. You can see the cement surface.

6 Q. And this is a closeup of the cement for the Pure  
7 State No. 6?

8 A. The surface casing and the cement.

9 MS. NICHOLS: I have no further questions for  
10 Mr. Wilson.

11 HEARING EXAMINER: Okay. Mr. Swazo?

12 MR. SWAZO: I don't have any questions at this  
13 time.

14 HEARING EXAMINER: Okay. The dry hole marker  
15 doesn't tell you anything about how it was plugged, right?

16 THE WITNESS: No, sir.

17 HEARING EXAMINER: Mr. Warnell?

18 MR. WARNELL: Do you have any records of it  
19 actually be being plugged, is there --

20 THE WITNESS: Yes, sir.

21 MR. HNASKO: Dr. Havernor will be addressing  
22 that issue.

23 MR. WARNELL: Okay.

24 THE WITNESS: It was just a visual observation,  
25 for what that's worth.

1 HEARING EXAMINER: I did have one more question.  
2 These producing wells, Exxon State 2 and 7, these are  
3 producing from the Yates; is that correct?

4 THE WITNESS: Yes.

5 HEARING EXAMINER: And I believe the date of it,  
6 you pointed out, is only -- before you shut them in in  
7 May, and you said you started them on production again?

8 THE WITNESS: Yes, sir.

9 HEARING EXAMINER: Are they going to produce  
10 commercial quantities now that they're back in production,  
11 in your opinion, if you have any feel for how much they're  
12 producing.

13 THE WITNESS: Probably a barrel a day each.

14 HEARING EXAMINER: Okay. Thank you. That's all  
15 I have.

16 MR. HNASKO: At this time, Mr. Hearing Examiner,  
17 we would call Dr. Kay Havenor.

18 DR. KAY HAVENOR,  
19 the witness herein, after first being duly sworn upon  
20 his oath, was examined and testified as follows:

21 REDIRECT EXAMINATION

22 BY MR. HNASKO:

23 Q. Would you state your name for the record,  
24 please?

25 A. Kay Havenor.

1 Q. And what's your profession, sir?

2 A. I'm a geoscientist.

3 Q. Okay. And where do you work?

4 A. I'm a consultant under the name of Geoscience  
5 Technologies.

6 Q. And where is Geoscience Technologies located?

7 A. Roswell, New Mexico.

8 Q. And could you briefly explain your educational  
9 background, please?

10 A. I have a Bachelors Degree in Geology from  
11 Colorado College. Masters in Geology from the University  
12 of Arizona. And a PhD in Geoscience from the University  
13 of Arizona.

14 Q. I take it you've been accepted as an expert  
15 witness to testify in various state agencies including the  
16 Oil Conservation Division in the past?

17 A. Yes, I have.

18 Q. And you were, in fact, offered and accepted as  
19 an expert witness to render opinions concerning  
20 geohydrology at our hearing on October 15th of this year?

21 A. That's correct.

22 MR. HNASKO: Mr. Hearing Examiner, I would at  
23 this time tender Dr. Havernor to render expert opinions  
24 concerning geohydrology as it relates to the location of  
25 the wells at issue and the disposal depths of the Exxon

1 State No. 8.

2 HEARING OFFICER: Okay. Well, inasmuch as he  
3 was qualified in the previous hearing, I believe he  
4 continues to be qualified.

5 MR. HNASKO: Thank you, sir.

6 Q. Dr. Havernor, upon receipt of Order No. 13043  
7 issued on November 7, 2008, you are aware that the  
8 Division, however, imposed certain conditions on the  
9 approval of the application to pour salt water in the  
10 Exxon State No. 8, correct?

11 A. Yes.

12 Q. And are you aware of finding No. 4 where the  
13 Division required certain wells be plugged and abandoned  
14 prior to beginning salt water disposal operations?

15 A. Yes, that is correct.

16 Q. And could you tell me what those wells were?

17 A. They were the Pure State No. 6 and the Magnolia  
18 State No. 3.

19 Q. Okay. And the Exxon State Nos. 2 and 7,  
20 correct?

21 A. Yes.

22 Q. Now, with respect to the Magnolia No. 3, after  
23 you received the Division's order imposing as a condition  
24 to dispose of the plugging and abandonment of that  
25 particular well, what did you do?



1           A.    Well, first I realized that the wells had been  
2 plugged properly and filed as such. And so I had to  
3 determine what happened, and it turned out I just had made  
4 a mistake in the plotting of the plugging and abandonment  
5 diagrams that were previously submitted.

6           Q.    And that was in Exhibit 33 to the hearing  
7 exhibits that we submitted on October 15th?

8           A.    Yes, it was.

9           Q.    All right. And how was that exhibit incorrect?

10          A.    I had indicated on that exhibit that they were  
11 either not plugged or I had no record of the plugging, and  
12 that was incorrect on my part. I made a mistake.

13          Q.    All right. And did the original assessment  
14 report submitted with the Mesquite application have the  
15 same mistake?

16          A.    No. No, it indicated they were plugged.

17          Q.    All right. And could you explain to the Hearing  
18 Examiners the genesis of the mistake and what you have  
19 done in your efforts to rectify that reporting error?

20          A.    As to the Magnolia State No. 3, I really don't  
21 know how I missed that. I just -- all of the plugged and  
22 abandoned diagrams were completed in a sequence and I  
23 messed up on that one.

24          Q.    All right. Let me turn your attention,  
25 Dr. Havernor, if I may, to Exhibit No. 4 that has been

1 submitted and accepted today. And Exhibit No. 4 is  
 2 Mesquite's Motion for Rehearing of Order 13043 in which  
 3 Mesquite requests that the Division remove as a condition  
 4 of approval the plugging and abandonment of the four wells  
 5 at issue. And attached to Exhibit 4 is your Exhibit A.  
 6 Could you identify that for the Hearing Examiners, please?

7 A. This is the review that I made of the plugging  
 8 and abandonment of the Magnolia State No. 3 and the Pure  
 9 No. 6.

10 Q. And this is dated November 21, 2008?

11 A. Yes, November 21st.

12 Q. And do you have certain information attached to  
 13 your November 21st report demonstrating the manner of  
 14 plugging and abandonment of the Magnolia No. 3 well?

15 A. Yes, I submitted a corrected plug and abandon  
 16 well diagram.

17 Q. And that is on Page 3 of your report, sir?

18 A. Yes it is.

19 MR. HNASKO: And we also have that up as Power  
 20 Point Slide No. 18, Mr. Hearing Examiners.

21 Q. And could you explain to the Hearing Examiners  
 22 what Page 3 of 3 of your November 21st report depicts?

23 A. Well, it indicates that there was a -- that the  
 24 bottom of the hole was plugged with ten sacks of cement  
 25 and was plugged from a depth of 560 feet back to a depth

1 of 530 feet. And then there was a surface plug in which  
2 three sacks at the top in which a marker was installed.

3 Q. And where did this information come from?

4 A. This came from the OCD files, a copy of which is  
5 shown on the next page.

6 Q. And this plugged and abandoned well diagram  
7 references the Magnoila State No. 3; is that correct?

8 A. Yes, it does.

9 Q. And would you turn to Page 4 of 10, please, and  
10 explain to the Hearing Examiners what that page depicts?

11 A. This is the filing that the operator made on the  
12 Magnoila State No. 3 reporting the total depth of 560 feet  
13 and a cement plug from 560 to 530 and the surface plugging  
14 cement, and it was submitted on September 30, 1953.

15 Q. And was this approved by the Oil Conservation  
16 Commission at that time?

17 A. Yes, it was.

18 Q. And it bears the signature of a Mr. Hanson, I  
19 believe?

20 A. Yes, Mr. L. A. Hanson.

21 Q. All right. And based on your experience, does  
22 the documentation that you've submitted in your opinion  
23 adequately and conclusively demonstrate that the Magnoila  
24 State No. 3 has already been plugged and properly  
25 abandoned?

1           A.    Yes, it does.

2           Q.    I'd turn your attention to the Pure State No. 6.  
3   This is a bit more of a -- perhaps a clerical mistake  
4   matter.  Could you explain to the Hearing Examiners the  
5   genesis of the issue with the order referencing in  
6   Paragraph 4 that this well, the Pure State No. 6, was not  
7   properly plugged and abandoned and should be properly  
8   plugged and abandoned before commencing disposal  
9   operations?

10          A.    The well file under the last five digits of  
11   01090 is for the Pure State No. 6, but the file also  
12   contains another well, which is the State No. 2, a well  
13   that has also been plugged and abandoned located directly  
14   east of the Pure State No. 6.

15          Q.    So this file, if I may interject, the file with  
16   this particular API number ending in 1090, actually  
17   contains two wells?

18          A.    It contains two separate wells --

19          Q.    All right.  And what did you do with the  
20   information you found in that in terms of preparing the  
21   exhibits we submitted at the hearing?

22          A.    Well, because I keep my well files under an API  
23   number just as -- because you do, I mean that's the easy  
24   way, this presented a little bit of a dilemma.  Because  
25   now I had two wells and one of them did not have an API

1     number.

2                   And so I did a brief investigation and I found  
3     that a number very close to this one, which would be  
4     01099, was not in use. So I thought, well, I'll just  
5     assign that to one of these wells and then retain the  
6     01099 for the other one.

7                   In hindsight, I assigned the 01099 to the Pure  
8     State No. 6, and then retained this number, the 01090,  
9     which I arbitrarily assigned to the Brennan Stool State  
10    No. 2. And that was simply for my own recordkeeping.

11           Q.     And that recordkeeping assignment carried  
12    forward in your reports?

13           A.     Yes, it carried forward in the plugging  
14    diagrams.

15           Q.     I see.

16           A.     And I reverted back to the records again for the  
17    plugging data and I couldn't find a 01099 and just forgot  
18    that I had arbitrarily assigned that. And so on the  
19    original plugging diagram with that report, I just said,  
20    "No record not plugged."

21                   I recognized this occurred when the State's  
22    order or rejection of amendment that was submitted came  
23    back using the arbitrary number that I signed, 099.

24           Q.     I take it there is no 099?

25           A.     There is no 099. I would seriously recommend

1 they use it for this, for the State No. 2, because it's  
2 available and it's close to the age and location of this  
3 one.

4 Q. All right.

5 A. But that's beside the point.

6 Q. All right.

7 A. Anyway, it was an unfortunate choice on my part  
8 that I used the 01090 on the State 2 instead of on the  
9 Pure State.

10 Q. All right. So we did that. That's the genesis  
11 of the problem. In response to the Division's order  
12 rejecting the Motion for Clarification and in a sense  
13 telling Mesquite, "You got to go through the rehearing  
14 process on this issue and put it on the record," what did  
15 you do to clarify that error?

16 A. I prepared the plugging diagram that you see on  
17 Page 5.

18 Q. All right. And that is Exhibit A to Exhibit 4,  
19 Page 5 of 10, correct?

20 A. Yes.

21 Q. And that is a correct plugging and abandonment  
22 well diagram for the Pure State No. 6?

23 A. Yes, it is.

24 Q. And what does that diagram depict?

25 A. It indicates that the total depth of the well

1 was 586 feet and ten sacks of cement were used to plug the  
2 bottom of the hole, and five sacks at the surface with a  
3 marker.

4 Q. And you got this information from where, sir?

5 A. From the OCD file.

6 Q. All right. Directing your attention to Page 6  
7 of 10, which is the following page, Page 21 on the Power  
8 Point demonstration, what do we see here?

9 A. This is a copy of the operator's notice to the  
10 Artesia District that the well was plugged in accordance  
11 with their requirements and was accepted by Mr. Armstrong  
12 of the OCD.

13 Q. And the date of that acceptance is what?

14 A. July 3, 1957.

15 Q. All right. And based on your review of the  
16 documentation and the OCD records, do you have an opinion  
17 as to whether the Pure State No. 6 well was properly  
18 plugged and abandoned?

19 A. Yes, it was.

20 Q. All right. Now, you also mention in this file  
21 API 01090 that it contained two wells and you referenced a  
22 well called the State No. 2?

23 A. Correct.

24 Q. All right. On that well, did you also look at  
25 the information pertaining to that well as to whether it

1 too had been properly plugged and abandoned?

2 A. Yes, I did.

3 Q. All right. Let me direct your attention to  
4 Page 7 of your exhibit -- of the attachments to your  
5 report which is Exhibit A to Exhibit 4. And could you  
6 tell us what Page 7 depicts?

7 A. This is a report on the State No. 2 well as to  
8 plugging. It's a very poor quality. It was received by  
9 the OCD on July 11, 1957. And after very careful  
10 examination and reexamination, I went back to the original  
11 paper document, which we have available in Roswell, and  
12 confirmed that this was, in fact, a plugging order. It's  
13 a little difficult to read.

14 Q. Yes.

15 A. But it has all of the pertinent information.

16 Q. And the following page indicates what?

17 A. This was a report on the same well at the same  
18 time, and it was the onsite field report of plugging of  
19 that well.

20 Q. And what does this report tell us with respect  
21 to the plugging of the well, the characteristics of it?

22 A. That it was done as reported with ten sacks at  
23 the bottom and five sacks at the surface and was observed  
24 by the OCD representative.

25 HEARING EXAMINER: May I interrupt a minute?



1 This Page 7, does that refer to the Pure State No. 6?

2 THE WITNESS: No. This is on the second well  
3 that is in that file. This is the Brennan Stool State 2.

4 HEARING EXAMINER: Okay. Very good. Go ahead.

5 Q. And so based on your review of the documents, do  
6 you have an opinion as to whether the Brennan State 2 was  
7 properly plugged and abandoned in 1957?

8 A. Yes, it was.

9 Q. And just to reiterate and follow up on the  
10 Hearing Examiner's question, the Magnolia State 6  
11 documentation that you've discussed today and concluded  
12 that it demonstrates proper plugging and abandonment as  
13 well as the State No. 2 documentation that you've just  
14 discussed as demonstrating proper plugging and  
15 abandonment, both are found in the same API file number,  
16 correct?

17 A. In the same file folder.

18 Q. And that's 0190?

19 A. Yes, that's correct.

20 Q. All right. And that is the source of the  
21 confusion, at least with respect to that part of Paragraph  
22 No. 4 in the order requiring -- or suggesting that this  
23 well had not been properly plugged and abandoned, correct?

24 A. Yes, that is correct.

25 Q. All right.

1           A.    And it also gives the State the opportunity to  
2   pick up the data on one additional well in the area that  
3   they don't have in their records.

4           Q.    And assign a different API?

5           A.    And assign a different API.

6           Q.    Okay, got you. All right. Doctor, I would also  
7   ask you to look at the -- Putting aside the issue of the  
8   fact that these wells were properly plugged and abandoned,  
9   I'd asked you to look at some potential hydrodynamic  
10   relationships between the Exxon No. 8, the Magnolia No. 6,  
11   the Magnolia No. 3, the Pure State No. 6, and the Exxon  
12   wells; did you do that, sir?

13          A.    Yes, I did.

14          Q.    And I'd like to direct your attention to  
15   Exhibit 7, if I may, please. Could you review and  
16   identify that for the Hearing Examiners?

17          A.    This is a letter addressed to you on  
18   December 9th in which I discussed the problem and how it  
19   arose on the Pure State No. 6 and the Magnolia State  
20   No. 3.

21                And then I additionally prepared a cross-section  
22   to show the relationships of these wells and included in  
23   that the State No. 2 which was the second well in that  
24   folder.

25          Q.    Correct. All right. And would you direct us to

1 the exhibit to your report containing the cross-section  
2 and the relationships among these various wells?

3 A. Yes. On the next page there is a location map  
4 and it shows in dark line on the lower right-hand corner  
5 of the map the Exxon State in the upper left. That is the  
6 disposal well.

7 Down to the -- just almost directly down beneath  
8 it is the Pure State No. 6. And to the right of that is  
9 the State No. 2. And then back up to the northeast is the  
10 Magnolia State No. 3.

11 Q. And that is on Page 2 of 4 of your exhibits to  
12 Exhibit 7, correct?

13 A. Yes, it is.

14 Q. All right. And did you then endeavor to prepare  
15 a cross-section of the relationships among these wells?

16 A. Yes. This cross-section is on Page 3, the next  
17 page, and what it shows is to vertical scale the Exxon  
18 State on the left, the Pure State next, the Brennan Stool  
19 State No. 2, and the Magnolia State No. 3.

20 Q. All right.

21 A. And this section does not show an accurate  
22 separation horizontally, but they are quasi equally  
23 spaced. And so, the vertical relationship is the  
24 important part.

25 This diagram shows the surface relationship, the

1 surface topography. It also shows the subsurface depths  
2 of each of those wells, the Exxon State, the disposal well  
3 on the left. It shows the depth of the cemented casing.

4 And right above the base of the casing, you see  
5 a horizontal line which denotes the elevation of the  
6 Magruder pay zone which is the oil bearing zone. It's  
7 very thin -- 2 to 4 feet usually -- in these wells.

8 And then the next well over is the Pure State.  
9 It shows the plugging of the Pure State with ten sacks,  
10 and it also shows the location of the Magruder porosity  
11 pay zone, which is behind cement.

12 And then the next well over for just general  
13 plugging information is the State No. 2 and shows the  
14 subsurface relationship to the Exxon State No. 8 and where  
15 the Magruder pay zone passes through the cement plug, ten  
16 sacks on the bottom.

17 And lastly on the right, the Magnolia No. 3,  
18 showing again the scaled depth of plugging in the area  
19 which is plugged. Based upon the fact that the ten sacks  
20 of cement in that hole plugged it back 40 feet, I used 30  
21 feet on the other two wells because they didn't tag the  
22 top of the cement. So I was a little more conservative.

23 The point of this diagram is to illustrate,  
24 number one, that in straight depths as well as subsurface  
25 relationships, none of these other three holes -- and this

1 is true of the other wells in the general area surrounding  
2 the Exxon State -- do not penetrate to a stratigraphic  
3 horizon that is equal to or greater than the base of the  
4 cemented casing in Exxon State.

5 It also shows that in the three wells that have  
6 been plugged, the Magruder pay zone is covered with  
7 cement. And again, it is a very thin horizon. And so,  
8 that is not an avenue for communication from any of the  
9 wells into the Exxon State or vice versa.

10 Q. Dr. Havenor, is that the reason why you're  
11 depicting the top of the Magruder pay zone on the  
12 diagram --

13 A. Yes, it is.

14 Q. -- to show that that is, in fact, cemented in?

15 A. Yes. And that's significant in the area,  
16 because in all of the holes in this area, including these  
17 specific four wells, there was no water reported from the  
18 surface down to the Magruder horizon.

19 Q. All right. And I take it these depths are  
20 expressed in terms of mean sea level?

21 A. Well, we have both straight depths and  
22 graphically in mean sea level relationship.

23 Q. All right. And based on this diagram, do you  
24 have a conclusion as to -- or give an opinion as to  
25 whether there is any hydrogeological or hydrodynamic

1 communication between the Exxon State No. 28 and these  
2 other three wells which have, in fact, been plugged and  
3 abandoned?

4 A. Yes, I do.

5 Q. And what is that?

6 A. That these three wells, in addition to the four  
7 producing wells which we've testified to earlier, have no  
8 actual communication between them and no potential  
9 communication between them.

10 Q. All right. And just to make sure the record is  
11 clear on this, we've said it a few times today, but two  
12 of the wells, Pure State No. 6 and the Briston Stool  
13 No. 2, are the wells we've previously discussed as having  
14 confused somewhat because they bear the same API number  
15 0190, I believe?

16 A. Yes, that is correct.

17 Q. All right. Any further information you would  
18 like to add concerning your cross-section depicted on  
19 Page 3 of 4 of this exhibit?

20 A. I just feel that it's strong evidence that we're  
21 not going to have any problems from disposal into the  
22 Exxon State No. 8 in any of the wells surrounding this  
23 region and very specifically as shown here in this  
24 document.

25 Q. All right. Thank you, Dr. Havernor.

1 MR. HNASKO: Mr. Hearing Examiner, I would pass  
2 the witness at this time.

3 HEARING EXAMINER: Mr. Swazo?

4 MR. SWAZO: I have no questions.

5 HEARING EXAMINER: Mr. Warnell?

6 MR. WARNELL: Remind me where we're injecting in  
7 that disposal well, the Exxon State No. 8.

8 THE WITNESS: Approximately 82 -- I believe it's  
9 82 percent of the water is going out at -- in the bottom  
10 10 feet of the Exxon State.

11 MR. WARNELL: Bottom 10 feet, and according to  
12 your diagram here, you got a TD of 6 --

13 THE WITNESS: 694. So the bottom 10 feet is  
14 where that porosity zone is.

15 MR. WARNELL: So well below the Magruder pay  
16 zone.

17 THE WITNESS: There's a very small amount of  
18 water that appears to be taking in a couple of spots a  
19 little higher, but I think that's just ephemeral storage,  
20 and as soon as it goes on back in again, it comes right  
21 out of those upper and goes on out.

22 MR. WARNELL: Have you ever known an operator to  
23 go in to one of these wells similar to the Pure State  
24 No. 6 or the State No. 2, a well that was drilled back in  
25 the mid '50s and try to reenter it?

1 THE WITNESS: Oh, yes. Yeah.

2 MR. WARNELL: This is an open hole. There's no  
3 casing in this other than surface?

4 THE WITNESS: That's correct. But because  
5 there's essentially no water moving into the well, it's  
6 really duck soup to go in. It's easy to go in. It's  
7 usually a little caved but that's about all.

8 MR. WARNELL: No further questions.

9 HEARING EXAMINER: Okay. I had forgotten what  
10 occurred at the previous hearing, which I remember mostly  
11 about the discussion of Capitan Reef which isn't involved.  
12 But the Mesquite Exxon State 8 disposal well you have here  
13 shown as cased to 587 feet, now, is it open hole below  
14 that?

15 THE WITNESS: Yes, it is.

16 HEARING EXAMINER: And there's tubing --  
17 interjected through tubing?

18 THE WITNESS: Yeah, with a packer in the casing.

19 HEARING EXAMINER: Okay. Now, geologically when  
20 you're below the Magruder, is that the same formation or  
21 is that a different -- is there a --

22 THE WITNESS: Actually, this was part of the  
23 work that we did before to demonstrate that the base of  
24 the 8 is -- in all probability another hundred feet below  
25 the bottom of this hole.



1           HEARING EXAMINER: Okay, so both the  
2 injection -- the injection formation and the Magruder pay  
3 zone are both members of the HES?

4           THE WITNESS: That is correct.

5           HEARING EXAMINER: And is it your opinion that  
6 there is some barrier to communication that prevents the  
7 water from migrating up into anything above the Magruder,  
8 is that why you --

9           THE WITNESS: It's just a hydrologic situation  
10 that the well has always taken the water on back. There's  
11 no head to drive it to any other elevation, just  
12 momentarily while the water is going in the hole.

13          HEARING EXAMINER: But you're not saying that  
14 geologically, you're just saying it's just not enough  
15 water?

16          THE WITNESS: Well, geologically, most of the  
17 zone above the porosity in which the major disposal is  
18 going is hard, dense --

19          HEARING EXAMINER: Yeah.

20          THE WITNESS: I cannot imagine any reasonable  
21 effective permeability or hydrologic connection between  
22 the upper zones. We don't see that even in the four wells  
23 that immediately surround the injection well. There's  
24 no -- The water qualities that we see are just -- don't --  
25 just confirm that there there's nothing coming back up

1 from the injection.

2 HEARING EXAMINER: And that's in what wells?

3 THE WITNESS: That would be in the Exxon State  
4 Nos. 1, 2, 3, and 7.

5 HEARING EXAMINER: And those are the wells that  
6 you're producing that -- or the same operator is producing  
7 currently?

8 THE WITNESS: Yes, sir. They were returned to  
9 production a couple years ago.

10 HEARING EXAMINER: And are those producing from  
11 the Magruder pay zone?

12 THE WITNESS: Yes, sir, they are.

13 HEARING EXAMINER: Okay. In looking at this --  
14 I'm not sure it makes any difference, but when you look  
15 back at Exhibit No. 4, Page 6 of Exhibit A to Exhibit 4 --  
16 there are a lot of different pages here, but Page 6 of  
17 Exhibit A to Exhibit 4, summary notice, this is on Pure  
18 State No. 6 --

19 THE WITNESS: Yes, sir.

20 HEARING EXAMINER: It looks to me like this is a  
21 Notice of Intent, not a report. Is your understanding  
22 different from that? It's checked to "Notice of Intention  
23 to Plug Wells," and then it says, "Full details of  
24 proposed plan of work."

25 THE WITNESS: Yes, sir, that was the -- that is

1 a Notice of Intent, but the next page is -- Excuse me --

2 HEARING EXAMINER: The next page, you said,  
3 belonged to another well?

4 THE WITNESS: Yes, that belongs to another well.

5 HEARING EXAMINER: So you don't actually -- in  
6 this exhibit, at least, you don't actually have a plugging  
7 report on the Pure State No. 6. Did you find one in the  
8 file?

9 THE WITNESS: I can't honestly say there was an  
10 additional document in the file, no.

11 HEARING EXAMINER: Okay. Thank you. I believe  
12 that's all I have.

13 MR. HNASKO: Thank you Mr. Hearing Examiners.  
14 And based on our presentation today, we would request that  
15 the order be modified to remove Paragraph 4 concerning the  
16 requirement of plugging and abandoning the four wells at  
17 issue, the Magnolia No. 3, Pure State No. 6, and the  
18 Exxons 2 and 7.

19 HEARING EXAMINER: Okay. Mr. Swazo, do you have  
20 anything?

21 MR. SWAZO: I don't have anything further to  
22 add.

23 HEARING EXAMINER: Very good. Case No. 14178  
24 Reopened will be taken under advisement and the interim  
25 order that was issued on December 9th, Order No. 13043A,

1 will remain in effect until such time as an order is  
2 entered pursuant to this hearing.

3 MR. HNASKO: Thank you very much for your time.

4 HEARING EXAMINER: Thank you, sir.

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I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Examiner hearing of Case No. 14178  
heard by me on Dec 18, 2008.  
David K. Brupp, Examiner  
Oil Conservation Division

\* \* \*

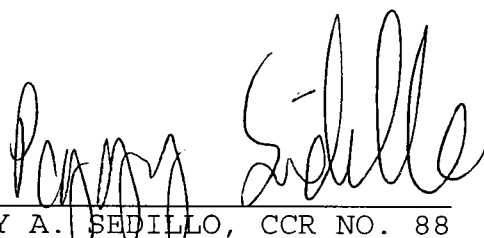
1 STATE OF NEW MEXICO )  
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REPORTER'S CERTIFICATE

I, PEGGY A. SEDILLO, Certified Court  
 Reporter of the firm Paul Baca Professional  
 Court Reporters do hereby certify that the  
 foregoing transcript is a complete and accurate  
 record of said proceedings as the same were  
 recorded by me or under my supervision.

Dated at Albuquerque, New Mexico this  
 8th day of January, 2008.



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