

1 STATE OF NEW MEXICO  
2 ENERGY AND MINERALS DEPARTMENT  
3 OIL CONSERVATION DIVISION  
4 STATE LAND OFFICE BUILDING  
5 SANTA FE, NEW MEXICO

6 23 October 1985

7 EXAMINER HEARING

8 IN THE MATTER OF:

9 Disposition of cases without testi-  
10 mony from the docket for 23 October  
11 1985.

CASES 5777  
8730, 8731  
8733, 8711  
8719, 8735  
8736, 8737  
8733, 8712  
8721, 8689  
8739, 8732

12 BEFORE: Michael E. Stogner, Examiner

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14  
15 TRANSCRIPT OF HEARING

16  
17 A P P E A R A N C E S

18  
19 For the Oil Conservation  
20 Division:

Jeff Taylor  
Legal Counsel to the Division  
Oil Conservation Division  
State Land Office Bldg.  
Santa Fe, New Mexico 87501

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22 For the Applicant:  
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I N D E X

CASES NUMBERS:

5777 - Taken under advisement	3
8730 - Continued and readvertised	4
8731 - Continued and readvertised	4
8733 - Dismissed	4
8711 - Taken under advisement	4
8733 - Dismissed	5
8712 - Continued	6
8735 - Continued	6
8736 - Continued	7
8737 - Continued	7
8721 - Dismissed	7
8689 - Continued	8
8739 - Continued	8
8732 - Dismissed	9

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MR. STOGNER: This hearing will come to order to consider Docket 32-85.

I'm Michael E. Stogner, the Examiner appointed for today's hearing.

We'll call first Case Number 3777, which is in the matter of Case Number -- I'm sorry, 5777 being reopened on the motion of the Oil Conservation Division and pursuant to Division's Order No. R-5316, which created the Horseback Pennsylvanian Gas Pool in Lea County, New Mexico, and promulgated temporary special rules and regulations as such.

We will now call for appearances in this matter.

There being none, this case will be taken under advisement.

\*

Call Case Number 8730.

MR. TAYLOR: Application of Ray Westall for salt water disposal, Eddy County, New Mexico.

MR. STOGNER: At the applicant's request this case will be continued and readvertised

1  
2 for the hearing scheduled for Thursday, November 21st, 1985.

3  
4 \*

5 MR. STOGNER: Call next Case  
6 Number 8731.

7 MR. TAYLOR: The application of  
8 Amerada Hess Corporation for compulsory pooling, Lea County,  
9 New Mexico.

10 MR. STOGNER: At the appli-  
11 cant's request Case Numbr 8731 will be continued to the Exa-  
12 miner's Hearing scheduled for November 6th, 1985.

13 This case will also be readver-  
14 tised.

15 \*

16  
17 MR. STOGNER: Call next Case  
18 Number 8711.

19 MR. TAYLOR: The application of  
20 Yates Petroleum Corporation for compulsory pooling, Roose-  
21 velt County, New Mexico.

22 MR. STOGNER: This case was  
23 heard on September 25th, 1985. Due to an error in the ad-  
24 vertisement this case was readvertised for today.  
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We will now call for any additional appearances and/or testimony.

There appear there is none. This case will be taken under advisement.

\*

MR. STOGNER: Call next Case Number 8719.

MR. TAYLOR: Application of TXO Production Corporation for compulsory pooling, Lea County, New Mexico.

MR. STOGNER: Due to an advertising error this case was continued from the hearing October 9th, which stretched into the 10th, and was readvertised to today.

We'll now call for appearances. There being none this case will be taken under advisement.

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MR. STOGNER: Call Case 8733.

MR. TAYLOR: Application of Earle M. Craig, Jr. Corporation for an unorthodox gas well

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location, Eddy County, New Mexico.

MR. STOGNER: At the applicant's request Case Number 8733 will be dismissed.

\*

MR. STOGNER: Call next Case Number 8712.

MR. TAYLOR: The application of Kimbell Oil Company of Texas for hardship gas well classification, Rio Arriba County, New Mexico.

MR. STOGNER: At the applicant's request this case will be continued to the Examiner's hearing scheduled for November 6th, 1985.

\*

MR. STOGNER: Call next Case 8735.

MR. TAYLOR: Application of Southland Royalty Company for compulsory pooling, Eddy County, New Mexico.

MR. STOGNER: At the applicant's request Case Number 8735 will be continued till the Examiner's Hearing scheduled for November 6th, 1985.

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MR. STOGNER: Call Case 8736.

MR. TAYLOR: Application of Southland Royalty Company for compulsory pooling, Rio Arriba County, New Mexico.

MR. STOGNER: At the applicant's request Case Number 8736 will be continued to the Examiner's Hearing scheduled for November 6th, 1985.

\*

MR. STOGNER: Call next Case Number 8737.

MR. TAYLOR: Application of Southland Royalty Company for compulsory pooling, Chaves County, New Mexico.

MR. STOGNER: At the Applicant's request this case will also be continued to the Examiner's Hearing scheduled for November 6th, 1985.

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MR. STOGNER: Call next Case Number 8721.

MR. TAYLOR: Application of

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Inexco Oil Company for compulsory pooling, Lea County, New Mexico.

MR. STOGNER: At the applicant's request this case is dismissed.

\*

MR. STOGNER: Call next Case Number 8689.

MR. TAYLOR: Application of Doyle Hartman for compulsory pooling, Lea County, New Mexico.

MR. STOGNER: At the applicant's request Case Number 8689 will be continued to the Examiner's hearing scheduled for November 6th, 1985.

\*

MR. STOGNER: Call Case Number 8739.

MR. TAYLOR: Application of Chama Petroleum Company to rescind Division Order No. R-7637, Eddy County, New Mexico.

MR. STOGNER: At the applicant's request this hearing -- I mean this case will be con-

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tinued to the Examiner's hearing scheduled for November 6th, 1985.

\*

MR. STOGNER: Call Case Number 8732.

MR. TAYLOR: The application of Earle M. Craig Corporation for compulsory pooling, Eddy County, New Mexico.

MR. STOGNER: We will now call for appearances in this matter.

There being there's no appearances at this moment, we will recall this later on in today's hearing.

(Thereupon at a later time during the same day Mr. Stogner announced the dismissal of Case No. 8732.)

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C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division was reported by me; that the said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability.

Sally W. Boyd CSR

*shown* I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of ~~Case No. three~~ *three* as heard by me on 23 October 19 85.  
Michael C. Boyer, Examiner  
Oil Conservation Division

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

21 November 1985

EXAMINER HEARING

IN THE MATTER OF:

Application of Ray Westall for  
dual completion and salt water  
disposal, Eddy County, New  
Mexico.

CASE  
8730

BEFORE: Michael E. Stogner, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Division:

Jeff Taylor  
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Legal Counsel to the Division  
Energy and Minerals Dept.  
Santa Fe, New Mexico 87501

For the Applicant:

Phil T. Brewer  
Attorney at Law  
JENNINGS & CHRISTY  
P. O. Box 1180  
Roswell, New Mexico 88201

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## I N D E X

RANDALL HARRIS

Direct Examination by Mr. Brewer	1
Cross Examination by Mr. Stogner	12

## E X H I B I T S

Westall Exhibit One-A, Affidavit	5
Westall Exhibit One-B, Return Receipts	5
Westall Exhibit Two, Map No. 2	8
Westall Exhibit Three, Cross Section	9
Westall Exhibit Four, Schematic	9

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MR. STOGNER: We'll call next  
Case Number 8730.

MR. TAYLOR: Application of Ray  
Westall for dual completion and salt water disposal, Eddy  
County, New Mexico.

MR. STOGNER: Call now for ap-  
pearances in this matter.

MR. BREWER: Mr. Examiner, Phil  
Brewer, with Jennings and Christy, on behalf of the appli-  
cant, Ray Westall. I have one witness to be sworn, Mr. Ran-  
dy Harris.

MR. STOGNER: Are there any  
other appearances in this matter?

Will the witness please stand  
and be sworn?

(Witness sworn.)

RANDALL HARRIS,  
being called as a witness and being duly sworn upon his  
oath, testified as follows, to-wit:

1

2

## DIRECT EXAMINATION

3 BY MR. BREWER:

4

Q

Would you state your name for the record,

5

please?

6

A

My name is Randall Harris.

7

Q

And what is your place of residence, Mr.

8

Harris?

9

A

Route 1, Box 52, Lake Arthur, New Mexico.

10

Q

What is your occupation?

11

A

Geologist.

12

Q

How long have you been a geologist?

13

A

For ten years.

14

Q

Are you employed by someone or are you

15

self-employed?

16

A

I am self-employed as an independent.

17

Q

And have you testified before the

18

Commission before?

19

A

Yes, I have.

20

Q

Did you testify as a geologist at that

21

time?

22

A

Yes, I did.

23

MR. BREWER: Are Mr. Harris'

24

credentials acceptable as a geologist?

25

MR. STOGNER: They are.

1 Q Would you please explain the relationship  
2 to Ray Westall, the applicant in this case?

3 A I am a consulting geologist for Ray  
4 Westall in this case.

5 Q Are you familiar with the application on  
6 file?

7 A Yes, I am.

8 Q Did you assist Mr. Westall in the prepar-  
9 ation of that application?

10 A Yes, I did.

11 Q Okay. Mr. Harris, what notice was given  
12 of this application and these proceedings?

13 A The notice was published in the Artesia  
14 newspaper and also certified copies of the application were  
15 sent to offset operators.

16 Q I'm going to hand you what's been marked  
17 as Exhibit One-A and ask you to identify that, please.

18 A This is an affidavit of publication in  
19 the Artesia Daily Press, notice of the water injection, the  
20 rates at which we'll be injecting and the depth of perfora-  
21 tions.

22 Q Okay. I'm going to hand you what's been  
23 marked Exhibit One-B and ask you to identify that, please.

24 A These are the return receipts from mail-  
25 ings of the copies of the application to the offset opera-

1 tors.

2 Q And who received mailings?

3 A The people who received letters are the  
4 offset operators within the one-half mile radius of the pro-  
5 posed injection well. They are Santa Fe Energy, Cantro Ex-  
6 ploration, Texas Crude, Tenneco, Incorporated, and Texaco,  
7 Incorporated.

8 The BLM was also sent a copy as they are  
9 the surface and mineral interest owners in this well.

10 MR. STOGNER: Excuse me, Mr.  
11 Brewer, would you please hold on while I mark these exhi-  
12 bits?

13 MR. BREWER: Yeah.

14 MR. STOGNER: Is this One-A,  
15 the affidavit of publication that I have here?

16  
17 (Thereupon a discussion was had off the record.)

18  
19 MR. STOGNER: Before we go any  
20 further, if any of you all have any exhibits that's not  
21 stamped, there's another stamp in my office on the table.  
22 You're more than welcome to use it.

23 Okay, please continue, Mr.  
24 Brewer.

25 Q Mr. Harris, what is the mineral content

1 of the water to be injected in the well that's the subject  
2 of this case?

3 A The mineral content, as per WESCO Company  
4 water analysis taken from our Amoco No. 2, a direct offset  
5 to the proposed injection well, hardness is running 28,000,  
6 chlorides, 26,000. There are several mineral constituents,  
7 if they're important I'll read them: Magnesium, 3800, cal-  
8 cium, 48, standard.

9 Q Okay, is the water to be injected in your  
10 proposed well fit for domestic stock, irrigation, or other  
11 general use?

12 A No, sir.

13 Q Okay, is any oil or gas being produced  
14 within a two mile radius of the proposed injection well from  
15 the Seven Rivers formation?

16 A No, sir.

17 Q I believe we are in the Seven Rivers-  
18 Yates Field. Do you have any explanation as to why it's  
19 called that if there's no production from the Seven Rivers?

20 A No, I do not. Originally the -- it was  
21 called the Hackberry Yates Seven Rivers Field; however, all  
22 the production within a two mile radius of us is from the  
23 Yates zone and there's nothing in the Seven Rivers.

24 Q Mr. Harris, have you done any study as to  
25 the compatibility of the water to be injected with the water

1 in the formation where you're planning to inject it?

2 A Yes, I have.

3 Q Okay. What -- what did you do?

4 A I obtained a copy of the New Mexico Bur-  
5 eau of Mines Area Resource Map No. 4, which is a chloride  
6 concentration map of the Permian Formation in Southeast New  
7 Mexico and West Texas.

8 I also visited with the Water Resource  
9 Board of the BLM, the OCD Office in Artesia, and Western  
10 Company, who provides the water analysis for compatibilities  
11 on production purposes and also with Dresser-Atlas, who uses  
12 a water analysis in their calculations of logs and RW's.

13 Q I'm going to hand you what's been marked  
14 Exhibit Two and ask you to identify that.

15 A Exhibit Two is a portion of the New Mex-  
16 ico Bureau of Mines Area Resource Map No. 4, Chloride Ion  
17 Concentrations in Groundwaters in the Permian Rocks in  
18 Southeast New Mexico and West Texas.

19 Q What does that map indicate?

20 A This map indicates the similarities of  
21 the waters between the Yates and the Seven Rivers forma-  
22 tions. On the map I have identified the well or the area of  
23 the well. This map is based on townships, not on sections  
24 at first appearance, so the little squares are six miles by  
25 six miles, it's a little hard to see.

1           The little orange dot on the map is the  
2 well in question and the little boxes around it are test  
3 data from existing oil wells in the Yates and Seven Rivers  
4 that shows a fairly uniform compatibility or chloride con-  
5 centration between the two formations.

6           Q           I'm going to hand you what's been marked  
7 as Exhibit Three and ask you to identify that, please.

8           A           Yes. Exhibit Three is the east/west  
9 cross section with the center well being the well in ques-  
10 tion, the Tennessee Federal No. 1.

11           On the cross section is marked the pro-  
12 duction interval from the top of the Yates to the top of the  
13 Seven Rivers formation, and in the yellow portion of the  
14 Tennessee I have marked the proposed injection interval.

15           Q           And I'm going to hand you what's been  
16 marked Exhibit Four and ask you to identify that, please.

17           A           Exhibit Four is a schematic of the well  
18 as we would complete it, along with the casing that is cur-  
19 rently in the hole. The parallel strings of tubing, the  
20 perforation of the Yates for production that we would estab-  
21 lish, and the injection in the Seven Rivers interval.

22           Q           Okay. Is the information on Exhibit Four  
23 consistent with the well data sheet attached to the applica-  
24 tion?

25           A           Yes, it is, except for the addition of

1 the Yates perforations production.

2 Q Does Exhibit Number Four indicate that  
3 accurate precautions will be taken to prevent migration of  
4 fluids vertically up the wellbore?

5 A Yes, they do.

6 Q Were Exhibits One-A through Four prepared  
7 by you?

8 A Yes, they were.

9 Q Mr. Harris, what provisions will be made  
10 for leakage detection in your proposed well?

11 A The leakage detection this will not be a  
12 standard MIT test that is generally the accepted procedure.

13 In this particular well when we re-enter  
14 it we will have to test the Hydromite (sic) plug that was  
15 set at 2581 to 2595 to make sure it does hold by pressure  
16 testing it. If it does not, then we would add additional  
17 cement on top of this plug and verify that no leakage down-  
18 hole would occur.

19 As far as upward migration of fluid, if  
20 we are producing the zone immediately above our injection  
21 horizon, if any leakage were to occur, it would flood our  
22 borehole and we'd be pumping our own produced water, so we  
23 would know it immediately.

24 Q What surface pressure do you anticipate  
25 in the injection interval?

1           A           We are anticipating a surface pressure of  
2 approximately 300 pounds.

3           Q           Based on the information before you, Mr.  
4 Harris, is there any probability of fluid migration into a  
5 potable water source?

6           A           No, there is no evidence of fracturing,  
7 faulting, or any other hydrological connection between the  
8 injection horizon which would be in the Seven Rivers, and  
9 any potable water source, which, if it exists, is at  
10 surface.

11          Q           In your opinion will the granting of the  
12 application prevent the drilling of unnecessary wells,  
13 prevent waste, and protect correlative rights?

14          A           Yes.

15                   MR. BREWER: Mr. Examiner, I'd  
16 like to move the admission of Exhibits One-A through Four,  
17 and I have no further questions.

18                   MR. STOGNER: Mr. Brewer, do  
19 you plan to submit Exhibit Number One-B for our records?

20                   MR. BREWER: Yes, sir.

21                   MR. STOGNER: Exhibits One-A  
22 through Four will be admitted into evidence.

23

24

25

## 1 CROSS EXAMINATION

2 BY MR. STOGNER:

3 Q Mr. Brewer, who's the surface owner out  
4 here?

5 A Federal government.

6 Q And their BLM office in Carlsbad has been  
7 contacted?

8 A Yes, sir.

9 Q What is the present status of the Texas  
10 Crude Oil Company Tennessee Well No. 1?

11 A It is still plugged and abandoned.

12 Q And when was that plugged and abandoned?

13 A 1959.

14 Q Okay, let's go to your Exhibit Four.  
15 Surface pipe is 13-3/8ths, is that right?

16 A Yes, sir.

17 Q And cement was circulated?

18 A Yes, sir.

19 Q And your production string and  
20 intermediate string -- well, your intermediate string was 7-  
21 inch casing, is that right?

22 A Yes.

23 Q And do you know how many sacks of cement  
24 were circulated?

25 A 1600 sacks.

1           Q           Where are you getting that information  
2 from?

3           A           I'm getting it from the sundry notices of  
4 the drilling of the well, which are attached on the original  
5 application, United States Department of Interior Sundry  
6 Notices and Reports on Wells.

7           Q           And that was a part of your C-108 when-  
8 ever this application was applied for --

9           A           Yes, sir.

10          Q           -- originally. Let's go to your Exhibit  
11 Number Three.

12                      What separates the Yates and the Seven  
13 Rivers formations?

14          A           A very small anhydrite layer.

15          Q           How thick is this anhydrite layer in this  
16 well?

17          A           In this well about four feet thick. It  
18 varies throughout the area. I might point out that there  
19 was no other well drilled in the area of review that even  
20 penetrated the Seven Rivers formation.

21          Q           Are you talking about the half mile  
22 radius?

23          A           Yes, sir.

24          Q           Okay. And I show on the C-108 and the  
25 original application you show that there's five wells within

1 the half mile radius, plus one down in the extreme south as  
2 a P & A'd well.

3 A Yes.

4 Q Okay, those five wells that you show pro-  
5 ducing, are they only -- do you know the total depths on  
6 those?

7 A Total depth on all wells are 2425 and  
8 plugbacks I do not know.

9 Q What records did you review to determine  
10 that?

11 A The drilling records of Ray Westall and  
12 of the Oil and Gas Commission, Artesia.

13 Q Now, the plugged and abandoned well down  
14 in Section 28, could you tell me a little bit more about  
15 that?

16 A This was a well drilled in the early fif-  
17 ties. it TD'ed in the Upper Yates section and that's just  
18 about all that I can tell you about it. It was plugged and  
19 abandoned and I do not recall --

20 Q Do you know the total depth on that well?

21 A It was approximately 2300 feet.

22 Q Who was the operator on that well?

23 A I do not know.

24 MR. STOGNER: I have no further  
25 questions of this witness.

1 Are there any other questions  
2 of Mr. Harris?

3 If not, he may be excused.

4 Is there anything further in  
5 Case Number 8730?

6 MR. BREWER: Nothing further,  
7 Mr. Examiner.

8 MR. STOGNER: Does anybody else  
9 have anything further in Case Number 8730?

10 If not, the case will be taken  
11 under advisement.

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13 (Hearing concluded.)

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C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division (Commission) was reported by me; that the said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability.

Sally W. Boyd CSR