

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: )  
APPLICATION OF SEELY OIL COMPANY FOR )  
AMENDMENT OF THE REMEDIAL CEMENTING )  
REQUIREMENTS OF DIVISION ORDER NUMBER )  
R-11,929, WHICH APPROVED WATERFLOOD )  
OPERATIONS IN THE EK PENROSE SAND UNIT, )  
LEA COUNTY, NEW MEXICO )

CASE NO. 13,406

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

February 17th, 2005

Santa Fe, New Mexico

2005 MAR 3 AM 8 09

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH, Hearing Examiner, on Thursday, February 17th, 2005, at the New Mexico Energy, Minerals and Natural Resources Department, 1220 South Saint Francis Drive, Room 102, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

\* \* \*

I N D E X

February 17th, 2005  
Examiner Hearing  
CASE NO. 13,406

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APPLICANT'S WITNESS:

<u>DAVID L. HENDERSON</u> (Engineer)	
Direct Examination by Mr. Carr	3
Examination by Examiner Catanach	10

REPORTER'S CERTIFICATE	14
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E X H I B I T S

Applicant's	Identified	Admitted
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Exhibit 5	8	9

\* \* \*

A P P E A R A N C E S

FOR THE APPLICANT:

HOLLAND & HART, L.L.P., and CAMPBELL & CARR  
 110 N. Guadalupe, Suite 1  
 P.O. Box 2208  
 Santa Fe, New Mexico 87504-2208  
 By: WILLIAM F. CARR

\* \* \*

1           WHEREUPON, the following proceedings were had at  
2 10:05 a.m.:

3           EXAMINER CATANACH: Okay, call Case 13,406, the  
4 Application of Seely Oil Company for amendment of the  
5 remedial cementing requirements of Division Order Number  
6 R-11,929, which approved waterflood operations in the EK  
7 Penrose Sand Unit, Lea County, New Mexico.

8           Call for appearances.

9           MR. CARR: May it please the Examiner, my name is  
10 William F. Carr with the Santa Fe office of Holland and  
11 Hart, L.L.P. We represent Seely Oil Company in this  
12 matter, and I have one witness.

13           EXAMINER CATANACH: Okay, any additional  
14 appearances?

15           Okay, there being none, can I get the witness to  
16 stand and be sworn in?

17           (Thereupon, the witness was sworn.)

18                         DAVID L. HENDERSON,  
19 the witness herein, after having been first duly sworn upon  
20 his oath, was examined and testified as follows:

21                                 DIRECT EXAMINATION

22 BY MR. CARR:

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

24           A.    David L. Henderson.

25           Q.    Mr. Henderson, where do you reside?

1 A. Forth Worth, Texas.

2 Q. By whom are you employed?

3 A. Seely Oil Company.

4 Q. And what is your current position with Seely Oil  
5 Company?

6 A. Executive vice president.

7 Q. Have you previously testified before the New  
8 Mexico Oil Conservation Division?

9 A. I have.

10 Q. At the time of that testimony, were your  
11 credentials as an expert witness in petroleum engineering  
12 accepted and made a matter of record?

13 A. They were.

14 Q. Are you familiar with the Application filed in  
15 this case?

16 A. Yes.

17 Q. Are you familiar with the status of lands  
18 involved in the EK Penrose Sand Unit area and the EK-Yates-  
19 Seven-Rivers-Queen Pool?

20 A. Yes.

21 Q. Have you made a technical study or review of the  
22 portion of this unit that is involved in this hearing?

23 A. Yes, I have.

24 MR. CARR: May it please the Examiner, we would  
25 tender Mr. Henderson as an expert witness in petroleum

1 engineering.

2 EXAMINER CATANACH: He is so qualified.

3 Q. (By Mr. Carr) Mr. Henderson, would you briefly  
4 state what it is that Seely seeks with this Application?

5 A. We seek the approval to convert a well to water  
6 injection and not have to perform remedial cementing on an  
7 offset well.

8 Q. When the EK Penrose Unit waterflood project was  
9 approved, the order that authorized waterflood operations  
10 required that certain cementing be done and certain  
11 remedial work on a couple of wells; is that right?

12 A. That's correct.

13 Q. And what we're here today seeking is an amendment  
14 of that underlying R order to eliminate certain cementing  
15 requirements on the McElvain Federal Well Number 3; is that  
16 right?

17 A. That is correct.

18 Q. Would you identify what has been included in the  
19 exhibit packet as Seely Exhibit Number 1?

20 A. Exhibit Number 1 is the approved waterflood order  
21 for R-11,929, authorizing the waterflood project known as  
22 the EK Penrose Sand Unit in Lea County, New Mexico.

23 Q. If we look at this order -- in particular,  
24 Findings 12 through 14 -- this order actually required  
25 additional remedial work on the McElvain Federal Number 3

1 and the Howe "TG" Federal Well Number 2; is that correct?

2 A. That is correct.

3 Q. And we're seeking relief from the requirements  
4 imposed on the McElvain but not on the Howe well; is that  
5 right?

6 A. That is correct.

7 Q. Let's go to Exhibit Number 2. Would you identify  
8 that and review that for Mr. Catanach?

9 A. Exhibit Number 2 is the plan of development for  
10 the approved waterflood project, which includes all the  
11 proposed injection wells in a peripheral pattern.

12 Q. If we look at this exhibit, could you point out  
13 for Mr. Catanach the location of the McElvain well and also  
14 the Howe Federal Number 2?

15 A. The Howe Federal Number 2 is in the southeast of  
16 the southwest of Section 30, and the McElvain Number 3 is  
17 in the southwest of the southwest of Section 30 --

18 Q. And we've placed --

19 A. -- and they're in orange on the map.

20 Q. -- around each of those two particular wellbores.

21 Let's go to Exhibit Number 3. What is this?

22 A. Exhibit Number 3 is the net pay isopach for the  
23 Penrose sand within the proposed unit.

24 Q. Now, this is the same isopach map that was  
25 presented in the original hearing seeking authority for the

1 waterflood project; is that right?

2 A. That is correct.

3 Q. How did you determine these thicknesses? Was it  
4 from well information, or did you integrate seismic into  
5 the review?

6 A. It was strictly from log and core data.

7 Q. If we look at this isopach on the Penrose sand,  
8 the zero contour as it relates to the McElvain well places  
9 that well just outside the zero contour; is that correct?

10 A. That is correct.

11 Q. Let's go to your next exhibit, the east-west  
12 cross-section, A-A', and I'd like to have you take that out  
13 and first review the line of cross-section for Mr.  
14 Catanach, and then the information on that exhibit, noting  
15 both the Howe and the McElvain Number 3 well.

16 A. This is a stratigraphic cross-section that shows  
17 the development of the Penrose sand from the proposed  
18 producer right in the middle of the unit, known as the  
19 McElvain Federal Number 8, located at A'. And you can  
20 follow the Penrose sand all the way across through both of  
21 the Howe TG Federal wells, as well as the McElvain Number 3  
22 well on the extreme left. And you can see the development  
23 of the Penrose sand where we're waterflooding and the lack  
24 of the development of the sand in the McElvain Federal  
25 Number 3 well.

1 Q. Is it your opinion that there is simply no  
2 porosity development in the Penrose sand at the location of  
3 the C.W. McElvain Federal Well Number 3?

4 A. Yes.

5 Q. If -- when you implement -- As you implement the  
6 water injection in this area, is it possible just from a  
7 geological point of view for the injected water to enter  
8 the McElvain wellbore?

9 A. We don't believe so.

10 Q. In your opinion, are any additional remedial --  
11 is any remedial work required on that well, to confine the  
12 injected water to the injection zone?

13 A. No.

14 Q. What are your plans for the Howe Well Number 2?

15 A. We will perform remedial cementing operations  
16 prior to the conversion of the Howe Federal Number 1 to  
17 water injection.

18 Q. And what is the status of your plans to make that  
19 conversion?

20 A. Sometime within the next quarter, second quarter  
21 of this year.

22 Q. Is Exhibit Number 5 an affidavit from Holland and  
23 Hart confirming that notice of this hearing has been  
24 provided in accordance with the Rules of the Oil  
25 Conservation Division?

1 A. Yes.

2 Q. And to whom was notice provided?

3 A. All lease owners of record within the unit  
4 boundary, as well as all lease owners of record offsetting  
5 the unit, as well as all surface owners, including the  
6 State Land Office and the Bureau of Land Management.

7 Q. In your opinion, will approval of this  
8 Application and the amendment of the order as requested be  
9 in the best interests of conservation, the prevention of  
10 waste and the protection of correlative rights?

11 A. Yes.

12 Q. Will amendment of this Application as requested  
13 in any way affect your operations or result in water being  
14 able to escape from the injection interval?

15 A. No.

16 Q. Were Exhibits 1 through 5 either prepared by you  
17 or compiled under your direction and supervision?

18 A. Yes.

19 MR. CARR: May it please the Examiner, at this  
20 time we would move the admission into evidence of Seely Oil  
21 Company Exhibits 1 through 5.

22 EXAMINER CATANACH: Exhibits 1 through 5 will be  
23 admitted.

24 MR. CARR: That concludes my direct examination  
25 of Mr. Henderson.

## EXAMINATION

1  
2 BY EXAMINER CATANACH:

3 Q. Mr. Henderson, the Yates well, the Howe -- That  
4 is a Yates well, right, the Howe Federal?

5 A. Yes.

6 Q. And you've talked to Yates about that well?

7 A. They're participating in the unit. They'll be a  
8 working interest owner.

9 Q. Okay, and they've consented to let you perform  
10 operations on that well?

11 A. They have.

12 Q. Okay, and they agree that it's necessary?

13 A. They agree.

14 Q. Okay. And that well shows four feet of sand; is  
15 that right?

16 A. That's right.

17 Q. Okay. Who operates the McElvain well?

18 A. C.W. Trainer. The McElvain Number 3?

19 Q. Uh-huh.

20 A. C.W. Trainer.

21 Q. Have you spoken to C.W. Trainer about that well?

22 A. No.

23 Q. Is Trainer aware of any of this situation?

24 A. Yes, he is aware. He was notified of the  
25 original formation of this unit, as well as this hearing

1 today.

2 Q. So he is aware that there was a requirement that  
3 that well needed to be fixed?

4 A. I assume so when he drilled it.

5 Q. When he drilled it.

6 A. Uh-huh. It was drilled prior to us forming the  
7 unit, so I don't -- I'm not privy to what he did.

8 Q. But you have not talked to him about having to  
9 cement that well?

10 A. No.

11 Q. Do you know if Mr. Trainer has any concerns  
12 regarding his wellbore?

13 A. Not to my knowledge.

14 Q. But you haven't talked to him?

15 A. No.

16 Q. And I don't recall what the situation was, but  
17 that interval, the production casing is not cemented across  
18 the -- what is it, Queen formation?

19 A. The Penrose.

20 Q. Penrose. But it's your testimony that there's  
21 not enough permeability to transmit any water to that  
22 wellbore?

23 A. There's no gray sand at all reported in that  
24 wellbore.

25 Q. It's not just that there's not any permeable

1 sand, there's no sand at all?

2 A. There's no -- not to my knowledge, there's no  
3 sand at all.

4 Q. It just pinches out towards that wellbore?

5 A. It pinches out to the southwest.

6 Q. When do you plan to convert the well to  
7 injection, the well in the southwest quarter of Section 30?

8 A. Sometime within the second quarter of this year.  
9 We're going to actually begin injection on the east end of  
10 the unit and convert that one in the second quarter. The  
11 two wells in the east unit will be converted this year -- I  
12 mean this quarter.

13 Q. And the injection that you have planned at this  
14 point is going to be only limited to that one --

15 A. Penrose --

16 Q. -- small interval?

17 A. That's correct.

18 Q. Mr. Henderson, what happens if sometime in the  
19 future water does reach that wellbore somehow? What  
20 happens? Are you prepared to deal with it at that time?

21 A. I suppose we'd have to. I'd never thought of  
22 that.

23 Q. Everything else is completed to keep that water  
24 in that Penrose section, right?

25 A. Yes.

1 EXAMINER CATANACH: Okay, I think that's all I  
2 have.

3 Mr. Carr?

4 MR. CARR: Thank you, Mr. Catanach. That  
5 concludes our presentation in this case.

6 EXAMINER CATANACH: Okay, there being nothing  
7 further, Case 13,406 will be taken under advisement.

8 (Thereupon, these proceedings were concluded at  
9 10:18 a.m.)

10 \* \* \*

11  
12  
13  
14 I do hereby certify that the foregoing is  
15 a complete record of the proceedings for  
16 the Examiner hearing of Case No. 13406,  
17 heard by me on February 17, 2005.  
18 David R. Catanach, Examiner  
19 Oil Conservation Division  
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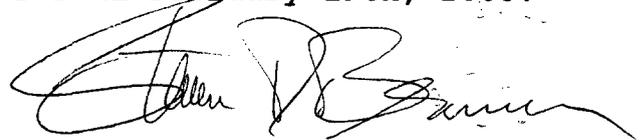
## CERTIFICATE OF REPORTER

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 Division 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 February 19th, 2005.



STEVEN T. BRENNER  
 CCR No. 7

My commission expires: October 16th, 2006