

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 SOUTHWEST ROYALTIES,)
 INC., FOR A WATERFLOOD PROJECT,)
 LEA COUNTY, NEW MEXICO)

CASE NO. 12,022

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

RECEIVED

BEFORE: DAVID R. CATANACH, Hearing Examiner

SEP 10 1998

August 20th, 1998 Oil Conservation Division

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH, Hearing Examiner, on Thursday, August 20th, 1998, 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.

* * *

I N D E X

August 20th, 1998
Examiner Hearing
CASE NO. 12,022

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APPLICANT'S WITNESS:	
<u>JAMES BLOUNT</u> (Engineer)	
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* * *

A P P E A R A N C E S

FOR THE DIVISION:

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 Santa Fe, New Mexico 87505

FOR THE APPLICANT:

EASTHAM, JOHNSON, MONNHEIMER and JONTZ, P.C.
 500 Marquette, NW, Suite 1200
 P.O. Box 1276
 Albuquerque, New Mexico 87103-1276
 By: PAUL A. COOTER

ALSO PRESENT:

MARK W. ASHLEY
 NMOCD Petroleum Geologist
 2040 South Pacheco
 Santa Fe, New Mexico 87505

* * *

1 WHEREUPON, the following proceedings were had at
2 8:56 a.m.:

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6
7 EXAMINER CATANACH: Tt this time call Case Number
8 12,022.

9 MR. CARROLL: Application of Southwest Royalties,
10 Inc., for a waterflood project, Lea County, New Mexico.

11 EXAMINER CATANACH: Call for appearances in this
12 case.

13 MR. COOTER: Paul Cooter, appearing on behalf of
14 the Applicant, Southwest Royalties.

15 I have one witness, Jim Blount.

16 EXAMINER CATANACH: Any additional appearances?

17 Okay, let the record reflect that Mr. Blount has
18 previously been sworn in, in the previous case, and
19 qualified as an expert engineer.

20 MR. COOTER: Mr. Examiner, once again I would ask
21 that you take administrative notice of the application for
22 authorization to inject, your Division's Form C-108 that
23 was filed in this case.

24 EXAMINER CATANACH: Okay. Again, that's the
25 Application dated May 6th, 1998, Mr. Cooter?

1 MR. COOTER: And again, I would ask you to take
2 administrative notice of that part of the prior case where
3 this witness explained his education and professional
4 background.

5 EXAMINER CATANACH: Yes, as I stated, this
6 witness is considered qualified in this case, and
7 administrative notice will be taken of the C-108 dated May
8 6th, 1998.

9 JAMES BLOUNT,
10 the witness herein, after having been previously duly sworn
11 upon his oath, was examined and testified as follows:

12 DIRECT EXAMINATION

13 BY MR. COOTER:

14 Q. Mr. Blount, state what Southwest Royalties seeks
15 by the Application in this case, 12,022.

16 A. We seek to get an authorization to inject into
17 the Eilliams Federal Number 14 well, located in Unit Letter
18 G of Section 34, Township 17 South, Range 33 East. And
19 we'd like for the injection project to encompass the entire
20 north half of the Section 34.

21 Q. Attached to that Application was a landmap. Let
22 me direct your attention to Exhibit 1. Does this reflect
23 the same information that was shown on --

24 A. Yes, sir, it's the same information, with the
25 wells inside the half-mile radius highlighted with colored

1 stickers.

2 Q. Explain what the different colors refer to.

3 A. The light blue indicates the well that we're
4 proposing to convert to injection.

5 The green circles represent wells that are
6 currently producing from the San Andres-Grayburg interval
7 that we're going to be injecting into.

8 The red dots indicate wells that penetrated the
9 San Andres-Grayburg but are currently producing from a
10 deeper interval, basically the Abo.

11 The orange circles represent wells that
12 penetrated the San Andres, that have currently been
13 P-and-A'd.

14 And the red triangle indicates a well that is
15 currently an injector/saltwater disposal well that we
16 operate.

17 Q. Let's go through the information shown on that
18 Form C-108. First, the injection well data sheet. Explain
19 that, if you would.

20 A. Okay, the injection well data sheet is a
21 schematic and a tabulation of the current setup of the Well
22 Number 14 -- or, I'm sorry, the proposed setup of the
23 Number 14 well.

24 We're proposing to run 2-3/8-inch plastic-coated
25 tubing, with a packer set 70 feet above the perforations,

1 and inject into a zone from 4325 to 4833, that consisting
2 of both the San Andres and the Grayburg intervals. And the
3 schematic shows the casing design that is currently in the
4 well.

5 Q. Following your Form C-108, have you listed the
6 wells in the area of review and given the relevant
7 information called for about each well?

8 A. Yes, sir, I have. I've got a tabulation of data
9 of all the wells that penetrated the San Andres that are
10 currently producing, whether being from the San Andres or
11 from a deeper interval. And I've also attached schematics
12 of the two P-and-A'd wells within that half-mile radius of
13 review.

14 Q. Is that exhibit -- or does that exhibit correctly
15 set forth all of the wells and the correct information
16 about each of those wells?

17 A. Yes, sir, it does.

18 Q. And the schematics are attached to the two
19 plugged-and-abandoned wells?

20 A. That's correct.

21 Q. What is Southwest's proposed plan of operation?

22 A. We propose to inject into this well at
23 approximately 500 barrels of water a day, at an anticipated
24 rate of -- or an anticipated pressure of 1200 pounds. We
25 anticipate a maximum rate of 1000 barrels of water per day

1 at 1935 pounds.

2 Q. Will the system be an open or closed one?

3 A. It will be a closed system.

4 Q. What -- Well, you've covered the geological data.
5 The San Andres consists of what?

6 A. The San Andres is a dolomite in this particular
7 area, and the Grayburg is a sandstone.

8 Q. Are there any known sources of underground
9 drinking water in this area?

10 A. There are no known sources in this area, within
11 our mile -- mile around the well.

12 Q. What do you propose to do in stimulation?

13 A. We don't propose to have to stimulate this well.
14 It's currently a producer, and we have frac'd the well in
15 the past and acidized the San Andres. We expect the zone
16 will take water on a -- readily basis.

17 Q. Once again, have you examined the available
18 geologic and engineering data with reference to faults or
19 any connections between the injection zone and any
20 underground source of drinking water?

21 A. Yes, I have, and it doesn't appear to be that
22 there are any open faults or other hydrological
23 connections.

24 Q. Attached to this Form C-108 was a list of offset
25 operators. Who compiled that, sir?

1 A. That was compiled by my regulatory tech, Beverly
2 Hatfield, under my supervision.

3 Q. She's with Southwest Royalties?

4 A. Yes.

5 Q. And was -- were copies of this form mailed to all
6 of those offset operators?

7 A. Yes, they were, along with the surface owner.

8 MR. COOTER: Mr. Examiner, I think I handed to
9 you an affidavit which reflects that filing as well as the
10 original return receipts received.

11 Q. (By Mr. Cooter) Were the Exhibits Numbers 1
12 through 4 -- We haven't covered those. We covered 1.

13 Let's go back and take Exhibit 2.

14 A. Okay, Exhibit 2 is a structure map of the top of
15 the Premier sand, which is also the producing Grayburg
16 interval. It shows that it's downdip as it goes to the
17 south. The majority of our producers, our good producers,
18 are in the north half of that Section 34, and there's a
19 relief of approximately 100 feet between the south half of
20 that lease and the north half of that lease.

21 Q. Does the arrow point out your proposed injection
22 well?

23 A. That's correct.

24 Q. Or disposal well? Okay.

25 Let's go to Number 3.

1 A. The Number 3 is a structure map of the top of the
2 San Andres dolomite, and once again, the trend is downdip
3 to the south, with again about a 100- to 150-foot relief
4 between the southmost well and the northmost well of the
5 north half of the section, arrows indicating the well we're
6 converting.

7 Q. Exhibit Number 4?

8 A. Exhibit Number 4 is a gross isopach of the
9 Premier sand, and it shows that it gets thicker to the
10 south. But as you saw earlier, it's downdip to the south
11 and tends to be a lot wetter as it goes south.

12 The best producers in this Grayburg interval are
13 in the north half of the section.

14 Q. Now my question: Were Exhibits Number 1 through
15 4 either prepared by you or under your direction and
16 supervision?

17 A. Yes, they were.

18 Q. And do they accurately reflect the data and
19 information shown thereon?

20 A. Yes, sir.

21 MR. COOTER: Mr. Examiner, we tender Exhibits 1
22 through 4, and I've filed the affidavit of mailing with
23 you.

24 EXAMINER CATANACH: Exhibits 1 through 4 will be
25 admitted as evidence.

EXAMINATION

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BY EXAMINER CATANACH:

Q. Mr. Blount, this is -- this project area consists of two federal leases?

A. That's correct.

Q. Okay --

A. Actually, I believe there may be three. I'm not absolutely sure of that, but I know that the one in the west half consists of the Wyatt Phillips lease, which are the north two wells, and then the Wyatt A lease, which is the south well that we have drilled. And to be honest with you, I'm not absolutely sure if that's a single lease or if that's two leases.

Q. Okay, you're talking about the northwest quarter?

A. That's correct.

Q. That may be two separate leases?

A. That's possible. I'll have to double-check that. Apparently -- Well, the lease numbers indicate they're the same number, so I'm not sure if that's -- I'll have to visit my landman to determine if that's a single lease.

Q. Okay. Could you check that out and let us know --

A. Yes, sir.

Q. -- what you come up with on that?

And that is owned all by Southwest; is that

1 correct?

2 A. Yes, sir, it is.

3 Q. Have you talked to the BLM about any of this?

4 A. Yes, sir, we notified the BLM, although we didn't
5 notify them with the original application. We have
6 notified them last week; we sent them an application of the
7 full -- or a copy of the full Application. And we have an
8 affidavit showing that we have sent that out.

9 Q. You haven't spoken to BLM at all?

10 A. No, sir, I have not.

11 Q. I'm not sure if they have a procedure for
12 combining one or more federal leases into a project area
13 like this. You might want to contact them --

14 A. Okay.

15 Q. -- in Roswell -- I think it's the Roswell office
16 -- and talk to them about that --

17 A. Okay.

18 Q. -- just to make sure that you've covered all your
19 bases. Armando Lopez would be a good one to talk to down
20 there.

21 A. Could you repeat that name?

22 Q. Armando Lopez.

23 The SWD that you guys operate in Unit A of that
24 section, is that injecting into the San Andres?

25 A. Yes, sir, it is. It's injecting into the San

1 Andres and the Grayburg.

2 Q. So that essentially would be an additional
3 injection well within the project?

4 A. That's correct.

5 Q. Okay. Is it your wish to actually convert that
6 from disposal to injection?

7 A. Yes, sir.

8 Q. Okay.

9 A. Do we have to re-permit that for -- to do that?

10 Q. You wouldn't have to re-permit it. We could
11 probably handle it in this order. We could just reclassify
12 that to injection.

13 A. We'd like to do that.

14 Q. Do you know what the average producing rate in
15 that north half would be, Mr. Blount?

16 A. Yes, I do. The average or the per-well?

17 Q. Give me the per-well, if you want.

18 A. Okay, the -- In just the north half --

19 Q. Right.

20 A. -- in our lease?

21 Okay, the 15 -- I'm sorry, the Wyatt Phillips 15,
22 which is located in Unit Letter B, is currently producing
23 15 barrels of oil, 20 MCF and 80 barrels of water.

24 The Wyatt Phillips 14 in Unit Letter C is
25 currently making 30 barrels of oil, 25 water -- I'm sorry,

1 25 MCF and 90 barrels of water.

2 The Number 11 in Unit Letter C is currently
3 making 17 oil, 50 MCF and 50 barrels of water.

4 The Number 10 well, also in Unit Letter C,
5 directly south of the Number 11, is making 7 barrels of
6 oil, 30 barrels of water, 90 -- or 30 MCF and 90 barrels of
7 water.

8 And the Number 5, the Eilliams Number 5, which is
9 located in Unit Letter A, is currently producing 7 barrels
10 of oil, 10 MCF and 7 barrels of water.

11 The Eilliams Number 8, directly south of that in
12 Unit Letter H, is currently making 5 barrels of oil, 8 MCF
13 and 80 barrels of water.

14 The Eilliams Number 14, the well we're proposing
15 to convert to injection, is currently making -- Well,
16 actually, it's currently shut in, but the last production
17 was 3 barrels of oil, 7 MCF and 150 barrels of water.

18 And the Wyatt A Number 1, which is located in
19 Unit Letter E, is currently producing 10 barrels of oil, 17
20 MCF and 200 barrels of water.

21 Okay, I'm sorry, the unit -- the Number 11 and 10
22 are both in Unit Letter B, not C.

23 Q. D?

24 A. No, B, as in boy.

25 Q. B, okay.

1 Mr. Blount, have you looked at the area of review
2 wells and satisfied yourself that they both provide an
3 avenue for escape of the injected water?

4 A. I'm sorry, could you repeat that?

5 Q. Have you looked at the area-of-review wells and
6 satisfied yourself that they're cased and cemented
7 adequately?

8 A. Yes, sir, they've all been cemented across this
9 San Andres-Grayburg.

10 Q. Have you looked at the P-and-A'd wells and
11 satisfied yourself that those are plugged adequately?

12 A. Yes, sir, they appear to be plugged across the
13 San Andres and Grayburg zones of interest.

14 Q. Is your project close to another waterflood
15 project in this area?

16 A. Yes, sir, it is. There's a -- The Wiser Caprock
17 Maljamar Unit is to the northwest of this, and it's
18 currently being drilled onto 20-acre spacing and is a major
19 waterflood project.

20 Q. Same interval?

21 A. Yes, sir, San Andres and the Grayburg.

22 Q. Have you estimated any recoveries for this
23 project?

24 A. No, sir, I sure haven't.

25 Q. Mr. Blount, there's a well that looks like it's

1 in Unit Letter C on your Exhibit Number 1. It looks like a
2 P-and-A'd well that you don't have outlined in a color. Do
3 you see that? I can't read the number on that.

4 A. Is that the Number 9 well --

5 Q. Yeah, that's --

6 A. -- just southeast -- or southwest of the Number
7 14?

8 Q. Yes, sir.

9 A. Actually, that's not a P-and-A'd well, and I've
10 listed it in my tabulated data. It's not a producing well
11 right now, but it's apparently a T-and-A'd [sic]. It has
12 not penetrated the San Andres or the Grayburg. It was a
13 Queen producer at one time.

14 Q. Okay.

15 A. It's on, let's see, the third page of the
16 tabulated data in the Application.

17 Q. So it is in your tabulation of wells?

18 A. That's correct, although it didn't penetrate --
19 I'm sorry, hold on just a second. No, that's the Eilliams
20 Number 9, I'm sorry. It's on the fourth page, it's the
21 Wyatt Phillips Federal Number 9. The total depth of that
22 well is 3892, and it has not been P-and-A'd. But it's not
23 producing either.

24 Q. There's also another well -- it looks like the
25 Number 8 -- directly west of there.

1 A. That's correct.

2 Q. Will that -- Okay, that's outside the area of
3 review, though.

4 A. That's correct. That's also a nonproductive
5 well, although I'm not sure if it was P-and-A'd or not.

6 EXAMINER CATANACH: Okay, I think that's all the
7 questions we have of this witness.

8 Is there anything further in this case, Mr.
9 Cooter?

10 MR. COOTER: No, sir, that concludes our
11 presentation.

12 EXAMINER CATANACH: Okay, there being nothing
13 further in this case, Case 12,022 will be taken under
14 advisement.

15 (Thereupon, these proceedings were concluded at
16 9:15 a.m.)

17 * * *

18
19 I do hereby certify that the foregoing is
20 a complete record of the proceedings in
the Examiner hearing of case no. 15022,
heard by me on August 20, 19 98.

21 David K. Catanach, Examiner
22 ON Conservation Division
23
24
25

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 August 30th, 1998.



STEVEN T. BRENNER
 CCR No. 7

My commission expires: October 14, 1998