

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. 13,139  
APPLICATION OF GRUY PETROLEUM MANAGEMENT )  
COMPANY TO EXPAND THE WHITE CITY- )  
PENNSYLVANIAN GAS POOL, EDDY COUNTY, )  
NEW MEXICO )

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

RECEIVED

BEFORE: DAVID R. CATANACH, Hearing Examiner

DEC 4 2003

November 20th, 2003  
Santa Fe, New Mexico

Oil Conservation Division  
1220 S. St. Francis Drive  
Santa Fe, NM 87505

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH, Hearing Examiner, on Thursday, November 20th, 2003, 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

November 20th, 2003  
Examiner Hearing  
CASE NO. 13,139

	PAGE
EXHIBITS	3
APPEARANCES	3
APPLICANT'S WITNESSES:	
<u>ROBERT DAWS</u> (Landman)	
Direct Examination by Mr. Feldewert	4
Examination by Examiner Catanach	12
<u>H.C. LEE</u> (Geologist)	
Direct Examination by Mr. Feldewert	15
Examination by Examiner Catanach	22
REPORTER'S CERTIFICATE	26

\* \* \*

## E X H I B I T S

Applicant's	Identified	Admitted
Exhibit 1	6	12
Exhibit 2	7	12
Exhibit 3	7	12
Exhibit 4	9	12
Exhibit 5	10	12
Exhibit 6	17	22
Exhibit 7	19	22

\* \* \*

## 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: MICHAEL H. FELDEWERT

\* \* \*

1           WHEREUPON, the following proceedings were had at  
2 8:58 a.m.:

3           EXAMINER CATANACH: At this time I'll call Case  
4 13,139, the Application of Gruy Petroleum Management  
5 Company to expand the White City-Pennsylvanian Gas Pool,  
6 Eddy County, New Mexico.

7           Call for appearances in this case.

8           MR. FELDEWERT: May it please the Examiner,  
9 Michael Feldewert with the Santa Fe office of the law firm  
10 of Holland and Hart, appearing on behalf of Gruy Petroleum  
11 Management Company, and I have two witnesses here today.

12           EXAMINER CATANACH: Any additional appearances?  
13 Okay, will the witnesses please stand to be sworn  
14 in?

15           (Thereupon, the witnesses were sworn.)

16                         ROBERT DAWS,  
17 the witness herein, after having been first duly sworn upon  
18 his oath, was examined and testified as follows:

19                                 DIRECT EXAMINATION

20           BY MR. FELDEWERT:

21           Q.    Would you please state your full name and place  
22 of residence for the record, please?

23           A.    My name is Robert Daws, I reside in Jacksboro,  
24 Texas.

25           Q.    And by whom are you employed and in what

1 capacity?

2 A. I'm employed by Gruy Petroleum Management Company  
3 as a landman.

4 Q. Have you previously testified before this  
5 Division?

6 A. No, sir, I have not.

7 Q. Why don't you briefly outline your educational  
8 background?

9 A. I graduated in 1982 with a bachelor of science  
10 degree in business management from Oral Roberts University.

11 Q. And then did you begin your employment in the  
12 field in 1982?

13 A. Yes, sir, I sure did. I actually began in 1982  
14 in the Rocky Mountain region, working mostly the Rocky  
15 Mountain. As far as Permian Basin, which is pertinent to  
16 this case, I began in 1993 working for Burlington Resources  
17 through 1996. Then I worked for Bettis, Boyle and Stovall  
18 from 1996 to 2001, and then worked -- I've been working  
19 with Gruy Petroleum since March of this year.

20 Q. Since 1993 have you been employed as a landman?

21 A. Yes, sir.

22 Q. Okay. Are you certified?

23 A. Yes, sir, certified professional landman.

24 Q. Okay, and are you familiar with the Application  
25 that was filed by Gruy in this case and the status of the

1 lands in the subject area?

2 A. Yes, sir.

3 MR. FELDEWERT: Mr. Examiner, I would tender Mr.  
4 Daws as a petroleum landman.

5 EXAMINER CATANACH: He is so qualified.

6 Q. (By Mr. Feldewert) Mr. Daws, would you please  
7 turn to Gruy Exhibit Number 1. Would you identify that and  
8 review that for the Examiner, please? And at the same  
9 time, identify for the Examiner what Gruy seeks with this  
10 Application.

11 A. Okay, Exhibit Number 1 displays the White City-  
12 Pennsylvania Pool in Eddy County, outlined in yellow. It  
13 actually extends further to the south, but for our purposes  
14 here in what we're trying to attain, it basically show what  
15 we're trying to do here.

16 Outlined in red is Section 14, which we're  
17 wanting to include, have the pool expanded and include  
18 Section 14. In that red circle [sic] there's numbers 1, 2,  
19 3 and 4. Number 1 well is the Bradley 14 Number 1, has  
20 been drilled in the northwest quarter.

21 We have currently had permits approved by the BLM  
22 on the Number 2 and the Number 3 well. Number 2 permit was  
23 approved by the BLM March 4th of this year. Number 3 well  
24 up in the northeast quarter has been approved by the BLM  
25 10-17-03, last month. Number 4 well in the southeast

1 quarter is pending approval. It was sent to the BLM  
2 September 5th of this year.

3 We also have a master drilling plan that's been  
4 approved for the White City area, approved 8-26-03 by the  
5 BLM.

6 Q. Is this a -- This White City-Penn, is this a 640-  
7 acre pool?

8 A. Yes, sir.

9 Q. All right. And you're asking to include Section  
10 14. Has this pool been previously expanded by the  
11 Division?

12 A. Yes, it has. If you turn to Exhibit Number 2,  
13 under Order R-11,013, in July of 1998 they expanded the  
14 pool to include Section 7. Section falls off the corner,  
15 the right-hand corner of this map, and we'll have an  
16 exhibit later on that you'll be able to see it in full,  
17 White City-Penn Pool area. But that was expanded in July  
18 of 1998 to include Section 7.

19 Q. Okay, and you're asking today to include Section  
20 14 in this pool?

21 A. Yes, sir, I sure am.

22 Q. Are there special pool rules for this 640-acre  
23 pool?

24 A. Yes, there sure are. Exhibit Number 3 shows  
25 Order Number R-2429-E, and -- which was issued in October

1 of 2002. And Rule Number 4 and Number 4.(A) were both  
2 amended by this order that allowed infill wells in each  
3 quarter section.

4 Q. So by virtue of this order, is this pool now  
5 being developed with the same well density and the well-  
6 location requirements as pools that are spaced on 320  
7 acres?

8 A. Yes, sir.

9 Q. You're allowed now to have an infill well in each  
10 quarter section?

11 A. Yes, sir.

12 Q. With 660 setbacks?

13 A. You bet.

14 Q. Okay. Now, is Section 14 comprised entirely of  
15 federal lands?

16 A. Yes, it is, it's comprised by two leases. BLM  
17 Lease OC-065421 covers the east half and the northwest  
18 quarter. And the second federal lease is LC-0402170, which  
19 covers the southwest quarter.

20 Q. And so the royalty is uniform throughout this  
21 section?

22 A. Yes, sir, it is.

23 Q. Okay. Now, let's talk about the working  
24 interests. Is there a joint operating agreement that has  
25 been signed by all parties, that includes Section 14?

1           A.    Yes, there's a joint operating agreement that was  
2           executed back in October 15th of 1968, which covers the  
3           entire section, and the predecessors of current working  
4           interest owners executed this.

5           Q.    Now, have all the working interest owners signed  
6           this agreement?

7           A.    Yes, all working interest owners have signed this  
8           agreement. In that agreement contractual interests were  
9           established, on page 2 and 3 of the Exhibit A to the JOA,  
10          which made the working interest ownership uniform  
11          throughout the whole section.

12          Q.    Okay, now just for purposes of the record,  
13          Exhibit Number 4 is just the front page and the signature  
14          page of the JOA and then the amendment that included  
15          Section 14; is that right?

16          A.    Yes, sir.

17          Q.    Okay. Now, you mentioned that there is two  
18          federal leases. What is the status of a communitization  
19          agreement for this federal acreage?

20          A.    Well, currently we have circulated a  
21          communitization agreement among the working interest  
22          owners.

23                   All have signed, with the exception of one who  
24          had gone nonconsent in the Number 1 well, and that's  
25          Burlington Resources. And so we just need to continue to

1 pursue them. They have not in any way indicated they would  
2 not sign.

3 So we do have signatures on a majority of the  
4 parties, and upon receipt of their signature we'll then  
5 submit it to the BLM for approval.

6 Q. Okay. So from the BLM perspective they've  
7 approved a master plan --

8 A. Yes, sir.

9 Q. -- master drilling plan?

10 A. Yes, sir, they sure have.

11 Q. They've approved the drilling -- They've issued  
12 APDs for three or four of your four wells?

13 A. Yes, sir.

14 Q. You're in the process of filing paperwork for the  
15 fourth?

16 A. Yes, sir.

17 Q. And then you soon will have a communitization to  
18 provide to me?

19 A. Yes, sir.

20 Q. All right. Now, I want to talk just briefly  
21 about the overriding royalty interest owners. Has notice  
22 been provided -- Well, let me ask you this.

23 Is Gruy Exhibit Number 5 the notice affidavit  
24 signed by the esteemed member of the bar, Mr. James Bruce,  
25 providing notice to all of the overriding royalty interest

1 owners?

2 A. Yes, sir.

3 Q. Okay. Now, have you been able to locate all of  
4 the overriding royalty interest owners?

5 A. We were able to locate all of them except one, an  
6 M.M. Bradley and his wife. Last place of residence was  
7 Archer City, Texas, which I personally went and searched  
8 the public records and the probation records there, in  
9 Archer City, Texas, and found indication that Mr. Bradley  
10 had -- was residing and/or doing business in Eddy County,  
11 New Mexico, as of 1984.

12 We then hired a landman, Pete Cabella from Jones  
13 and Zweiner, to go and search the records in Eddy County,  
14 to try to locate Mr. Bradley and/or his wife, and were  
15 unsuccessful.

16 Q. So you have provided, though, notice to all the  
17 working interest owners you've been able to -- or the  
18 overriding royalty interest owners you've been able to  
19 locate?

20 A. Yes, sir, we sure have.

21 Q. The only exception is Mr. Bradley, who you've  
22 been unable to locate?

23 A. Yes, sir.

24 Q. All right. Now, you mentioned that you have  
25 drilled the existing well in the northwest quarter and you

1 have permits to drill remaining wells. Are all of the  
2 overriding royalty interest owners going to share equally  
3 in these four wells?

4 A. Yes, sir, they sure will.

5 Q. In your opinion, will approval of this  
6 Application and expansion of this pool be in the best  
7 interests of conservation, the prevention of waste and the  
8 protection of correlative rights?

9 A. Yes, sir.

10 Q. Were Gruy Exhibits 1 through 5 prepared by your  
11 office or compiled under your direction and supervision?

12 A. Yes, sir.

13 MR. FELDEWERT: Mr. Examiner, at this time I  
14 would move the admission into evidence of Gruy Exhibits 1  
15 through 5.

16 EXAMINER CATANACH: Exhibits 1 through 5 will be  
17 admitted.

18 MR. FELDEWERT: And that concludes my examination  
19 of this witness.

20 EXAMINATION

21 BY EXAMINER CATANACH:

22 Q. Mr. Daws, the two separate federal leases in this  
23 section -- is the ownership between those two leases  
24 different, or is it the same?

25 A. It is the same established by the JOA where

1 contractual interests were established where they would be  
2 uniform throughout the whole section. And so the ownership  
3 of those two leases are uniform.

4 Q. Okay. The JOA covers the whole section. What  
5 would be the effect of not having a 640-acre spacing unit  
6 but rather having two 320-acre spacing units? Would that  
7 have an effect on anything?

8 A. Well, we feel like that the location of Section  
9 14 in relation to the White City-Penn Unit indicates that  
10 the same trend found there flows over into Section 14, and  
11 we feel like that -- in my best judgment -- of course,  
12 geologically it's confirmed and you'll hear that in a  
13 minute, but that that would be best served by having a 640-  
14 acre for Section 14 included in the White City-Penn Pool  
15 Unit.

16 Q. Putting the geology aside, though, is there a  
17 difference in terms of interest ownership and anything else  
18 that would be adversely affected by having two 320-acre  
19 spacing units instead of one 640-acre unit?

20 A. Probably not. In essence, they are -- You know,  
21 we feel like that everything is already joined together by  
22 virtue of the operating agreement, and we'd really like to  
23 bring this in direct alignment with that operating  
24 agreement, and we feel like there's no reason for -- not  
25 to, in essence -- you know, there's still infill drilling.

1 We feel like that the pool, the whole 640 acres with infill  
2 spacing in each quarter would complement and that -- the  
3 current JOA. And so we feel like that from that aspect it  
4 would be beneficial.

5 Q. Okay, at this point in time, Gruy does plan to  
6 drill all four wells within this section?

7 A. Yes, sir. As was mentioned before, we drilled  
8 the first well in the northwest quarter. We have permitted  
9 already approved by -- permit's been approved already by  
10 the BLM, two other quarters, and the southeast quarter is  
11 permit-pending an arch. study right now. So we have  
12 permitted -- asked for permits on all -- either been  
13 permitted or asked for permits on all four quarter  
14 sections.

15 Q. Did you say that Burlington -- They are a working  
16 interest owner. Did you say they went nonconsent in the  
17 first well?

18 A. Yes, sir, they sure did.

19 Q. Are they subject to a penalty for going  
20 nonconsent?

21 A. Yes, sir, they sure are subject to the JOA.

22 Q. What is that?

23 A. I believe it's 300 percent.

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

1 MR. FELDEWERT: We'll then call our next witness.

2 H.C. LEE,

3 the witness herein, after having been first duly sworn upon  
4 his oath, was examined and testified as follows:

5 DIRECT EXAMINATION

6 BY MR FELDEWERT:

7 Q. Would you please state your name and residence  
8 for the record?

9 A. Yes, sir, my name is H.C. Lee. I'm residing in  
10 Arlington, Texas.

11 Q. H period, C period, Lee?

12 A. Yes, sir.

13 Q. And by whom are you employed and in what  
14 capacity?

15 A. I'm employed by Gruy Petroleum Management company  
16 as a petroleum geologist since May, 1997.

17 Q. Have you previously testified before this  
18 Division as a petroleum geologist and had your credentials  
19 accepted as a matter of record?

20 A. Yes, sir.

21 Q. Are you familiar with the Application that has  
22 been filed by Gruy in this case, the status of the lands,  
23 and are you familiar in particular with the White City-Penn  
24 Pool in Section 14?

25 A. Yes, I am.

1 MR. FELDEWERT: Okay. Mr. Examiner, are the  
2 witness's qualifications acceptable?

3 EXAMINER CATANACH: They are.

4 Q. (By Mr. Feldewert) Would you -- What producing  
5 intervals, Mr. Lee, are within the vertical limits of the  
6 White City-Pennsylvanian Gas Pool?

7 A. Pool cover the Cisco, Canyon, Strawn, Atoka and  
8 Morrow formations.

9 Q. So wells within the White City-Penn Gas Pool are  
10 allowed to commingle all five of these intervals in the  
11 event that they have the right well?

12 A. That's correct, sir.

13 Q. Okay. What are the prominent producing intervals  
14 in this pool?

15 A. That will be the Strawn and Morrow formations.

16 Q. Has -- Now, we mentioned the fact that Gruy has  
17 mentioned a well in the northwest quarter, Section 14; is  
18 that right?

19 A. That's correct, sir.

20 Q. Is that the Bradley Fed Com Well Number 1?

21 A. Yes, sir.

22 Q. What intervals are presently producing from this  
23 well?

24 A. This well currently producing from Strawn and  
25 Morrow formations.

1 Q. Is this well in Section 14 producing from the  
2 same Strawn and Morrow intervals as are producible in the  
3 White City-Penn Gas Pool?

4 A. Yes, sir.

5 Q. On what do you base this opinion?

6 A. Opinion based on since June, year 2002, Gruy  
7 Petroleum Management Company already drill total 14 wells,  
8 which is 13 of the 14 wells are located inside the White  
9 City field, the plus additional one well in Section 14.  
10 That's Bradley 14 Com Number 1 well. Thirteen of the 14  
11 wells as of today already produce as commercial producers.  
12 The latest well is C and K Number -- Federal Com Number 3  
13 well, which is located in Section 8, 24 South, 26 East.  
14 That well is under completion stage right this moment.

15 Based on all those 14 wells, compare with the  
16 geological evidence, logs, producing intervals, I believe  
17 this is common source as the White City-Penn field.

18 Q. Do you have some exhibits here today?

19 A. Yes, sir, I sure do.

20 Q. Okay, why don't you turn to Gruy Exhibit Number  
21 6? Would you identify that for the Examiner and review it  
22 for us?

23 A. Yes, sir. The Exhibit 6, the red dot in Section  
24 14 is represent the Bradley 14 Com Number 1 well, which is  
25 located 990 from west, 1650 from north line, is due

1 offsetting the Section 15, which 15 is located in White  
2 City-Pennsylvania Gas Pool. Then the White City-  
3 Pennsylvania Gas Pool is represent our line by cross-  
4 shading cover the whole field areas.

5 Additional that one, I put in a well name and the  
6 cumulative production side by side with each one wells.  
7 You can see inside the White City-Pennsylvania Gas Pool,  
8 you only officially represented by Pennsylvania gas  
9 cumulative production, not divided by any individual  
10 horizons, because this pool is combine all different  
11 formation together.

12 If we moving from the pool to the north, those  
13 areas is under the so-called South Carlsbad field rule.  
14 You can see each individual formations have its own  
15 cumulative productions number, because they cannot  
16 commingle together.

17 Q. So they're separate pools to the north?

18 A. Yes, sir.

19 Q. Okay. Whereas the White City-Penn includes all  
20 -- well, you've identified five producing intervals?

21 A. Yes, sir.

22 Q. Okay. Is there -- have you -- In terms of your  
23 experience, have you noticed any difference in the  
24 producing intervals between Section 15 and your new well in  
25 Section 14?

1 A. No, sir.

2 Q. Do you have another exhibit for us to review  
3 today?

4 A. Yes, sir, I sure do.

5 Q. Okay, why don't you turn to what's been marked as  
6 Gruy Exhibit Number 7, give everybody a minute to pull that  
7 out, identify that and review that for the Examiner.

8 A. Sorry, it's a big one. This cross-section, what  
9 I'm trying to do is using the cross-section from Section  
10 22, which is Federal 22 Com Number 2 well on the right-hand  
11 side of the cross-section. This well is located in the  
12 northeast quarter of Section 22. Also this well is drilled  
13 and complete by Gruy Petroleum Management Company.

14 The center of the cross-section is Pennzoil  
15 Federal Com Number 3. It's located southeast quarter of  
16 Section 15. This well also drilled and complete by Gruy  
17 Petroleum Management Company.

18 Then the last one, the left-hand side of the  
19 cross-section, is the subject well, Bradley Federal 14 Com  
20 Number 1 well. It's located west quarter of Section 14.  
21 Addition to that one, each one with perforations will be  
22 outlined in the center of the depth chart where they  
23 producing from today.

24 And if we're doing this comparison, you can see  
25 the Morrow horizon consistent in all three of wells.

1 Addition to that one, Bradley Com Number 1 well also have  
2 additional perforation at lower Strawn section, same as the  
3 Federal 22 Com Number 2 well.

4 Q. Now, you show a number of intervals; is that  
5 correct?

6 A. Yes, sir.

7 Q. And they're all consistent?

8 A. Yes, sir, they're all consistent, Strawn, the  
9 lower Strawn, the Atoka, Morrow, the middle Morrow and the  
10 lower Morrow, all consistent in the same pool, in the White  
11 City-Penn gas field.

12 Q. In your opinion, is Gruy's existing well in the  
13 northwest quarter of Section 14 producing from the same  
14 common source of supply --

15 A. Yes, sir.

16 Q. -- as is produced both in the existing boundaries  
17 of the White City-Penn Gas Pool?

18 A. That's correct, sir.

19 Q. In your opinion, will approval of this  
20 Application and the expansion of this pool be in the best  
21 interests of conservation, the prevention of waste and the  
22 protection of correlative rights?

23 A. Yes, sir.

24 Q. What is it about the White City-Penn Pool that is  
25 important to your ability as a company to drill wells in

1 this particular area?

2 A. The particular areas, you can see before the --  
3 granting the additional wells for each one quarter in the  
4 White City-Penn four areas, there's no well drill and  
5 complete in east half of the Section 15 and east half of  
6 Section 22. So what we are doing right now is expanding  
7 the White City Pool to the east. And definitely the  
8 quality of the sands and the reservoirs, close with edge of  
9 the reservoir, not as good as when we're moving to the west  
10 part of center of the White City-Pennsylvania Gas Pools.  
11 Each one well costs to us about \$1.4 million to drill and  
12 complete.

13 The producing rate for those horizons, which will  
14 be much less, the daily production rates, than those older  
15 wells to the west. If we do not complete them all together  
16 -- For example, the Atoka reservoirs in here is -- can be  
17 tighter carbonate rocks, depending on the fracture systems.  
18 If we don't have good fracture systems, the capability to  
19 -- the daily rate is very low. For example, maybe 1500 MCF  
20 per day.

21 And also the Strawn, you can see, is very tight,  
22 low-porosity horizon. Occasionally, if you're finding the  
23 better fracture porosity horizons, then you have a higher  
24 rate. As of today we are not have any evidence the Strawn  
25 and Atoka horizon, if just by itself, can capable to

1 produce enough gas to pay for the well. And this reason we  
2 request extension this one to the Section 14, as the same  
3 rule as the Section 15 and 22 White City Gas Field.

4 Q. So does expansion of this gas pool into Section  
5 14 give you the economic flexibility and the economic  
6 justification to drill wells in each quarter section?

7 A. Yes, sir, and it will prevent waste gas in the  
8 Strawn-Atoka in the event cannot stand by itself, to drill  
9 a well to complete that.

10 Q. Okay. Were Gruy Exhibits 6 and 7 prepared by you  
11 or under your direction and supervision?

12 A. Yes, sir.

13 MR. FELDEWERT: Mr. Examiner, at this time I  
14 would move the admission into evidence of Gruy Exhibits 6  
15 and 7.

16 EXAMINER CATANACH: Exhibits 6 and 7 will be  
17 admitted.

18 MR. FELDEWERT: And that concludes my examination  
19 of this witness.

20 EXAMINATION

21 BY EXAMINER CATANACH:

22 Q. Mr. Lee, the Federal 22 Com is producing from the  
23 Strawn interval, and I notice that the new well, the  
24 Bradley Federal --

25 A. Yes, sir.

1 Q. Is that perforated in the Strawn?

2 A. Yes, perforated. Actually is -- only have one  
3 small perforations right now around 10,650 to 10,655, the  
4 horizons. We plan to have more perforations later, after,  
5 if we can get permission granted by this court.

6 Q. Okay. The middle well, the Pennzoil Federal Com,  
7 what about that one? That's not producing --

8 A. That's not producing right now. The reason is,  
9 that well -- so far, that well cum about 287 million cubic  
10 feet of gas since about March year 2003 and currents about  
11 a half a million cubic feet of gas per day, and we do not  
12 want to kill the well at this moment. After the well get  
13 lower rate, we'll go back in to add additional Atoka and  
14 Strawn intervals in that well.

15 Q. Okay, the Morrow sands that you're producing in  
16 this area --

17 A. Yes, sir.

18 Q. Are they continuous and can they be correlated  
19 across this area?

20 A. Yes, in a way, because in here the reason I did  
21 this work is because the Morrow, upper, middle and the  
22 lower, actually my -- personally I divide them, become 15  
23 different sandbodies in here. They come and goes in the  
24 areas. So depending on which one you're hitting, they are  
25 not uniform, they cover the whole areas. Different

1 sandbody will cover different area.

2 Q. Are there some sands that are continuous from,  
3 say, Section 15 over to Section 14?

4 A. Yes, the -- If you will take a look, the so-  
5 called -- the middle Morrow, just below the middle Morrow  
6 on the 11,410 to 11,430, that's one in the Bradley 14 Com  
7 Number 1 well you can see is consistently moving to the  
8 Pennzoil Federal Com Number 3. That one occur in the  
9 11,380 to about -388. Also same horizon will be up here in  
10 the Federal 22 Com Number 2 well, and that was 11,334 to  
11 about -46. That's one of the sand continuous over there.

12 The second one pretty well in the adjacent areas  
13 will be close to a lower portion of the middle Morrow sand,  
14 in the Bradley 14 Com Number 1 will be 11,600 feet. That  
15 appear in the Pennzoil Federal Com Number 3, 11,520 to  
16 11,550 horizons.

17 Again, also the lower member of the lower Morrow  
18 sand, the Bradley Federal Com Number 2 -- I'm sorry,  
19 Bradley 14 Com Number 1 well at 11,824 to 11,832, that's  
20 also appear in the Pennzoil Federal Com Number 3 well at  
21 11,791 to 11,802, and this sand pinch out in the Federal  
22 Com 22 Number 2 well.

23 So they do have some continuity in the general  
24 area.

25 Q. Okay.



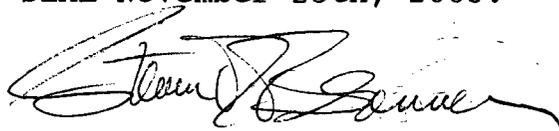
## CERTIFICATE OF REPORTER

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 November 25th, 2003.



STEVEN T. BRENNER  
 CCR No. 7

My commission expires: October 16th, 2006