

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. 13,767

APPLICATION OF WESTERN MINERALS AND OIL, )  
LTD., FOR APPROVAL OF A PILOT PROJECT )  
FOR PURPOSES OF DETERMINING PROPER WELL )  
DENSITY AND WELL LOCATION REQUIREMENTS )  
IN THE SOUTH BLANCO-PICTURED CLIFFS GAS )  
POOL, SAN JUAN COUNTY, NEW MEXICO )

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: WILLIAM V. JONES, JR., Hearing Examiner

September 14th, 2006

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, WILLIAM V. JONES, JR., Hearing Examiner, on Thursday, September 14th, 2006, 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.

\* \* \*

STEVEN T. BRENNER, CCR  
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Examiner Hearing  
CASE NO. 13,767

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<u>PAUL MICHAEL PIPPIN</u> (Engineer)	
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## A P P E A R A N C E S

## FOR THE DIVISION:

GAIL MacQUESTEN  
 Deputy General Counsel  
 Energy, Minerals and Natural Resources Department  
 1220 South St. Francis Drive  
 Santa Fe, New Mexico 87505

## 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: OCEAN MUNDS-DRY

\* \* \*

1 WHEREUPON, the following proceedings were had at  
2 9:29 a.m.:

3 EXAMINER JONES: At this time let's call Case  
4 13,767, Application of Western Minerals and Oil, Ltd., for  
5 approval of a pilot project for purposes of determining  
6 proper well density and well location requirements in the  
7 South Blanco-Pictured Cliffs Gas Pool, San Juan County, New  
8 Mexico.

9 Call for appearances.

10 MS. MUNDS-DRY: Good morning, Mr. Hearing  
11 Examiner. My name is Ocean Munds-Dry with the law firm  
12 Holland and Hart, here representing Western Minerals and  
13 Oil this morning, and I have one witness.

14 EXAMINER JONES: Any other appearances?  
15 Will the witness please stand to be sworn?

16 (Thereupon, the witness was sworn.)

17 MS. MUNDS-DRY: Just a moment, Mr. Examiner, I'm  
18 looking for my notes from this case. I think I've got them  
19 mixed.

20 EXAMINER JONES: All right.

21 MS. MUNDS-DRY: That's the problem when you do  
22 them back to back.

23 Mr. Examiner, I have a brief opening statement  
24 for you, if you would allow, just to try to give you some  
25 history of this Application, to hopefully try to clarify it

1 in your mind and Ms. MacQuesten's mind before I begin Mr.  
2 Pippin, if that's all right.

3 EXAMINER JONES: Sure.

4 MS. MUNDS-DRY: We originally brought an  
5 application, Western did, for simultaneous dedication, and  
6 I'd ask that you take administrative notice of Case Number  
7 13,654.

8 EXAMINER JONES: Okay, let's take administrative  
9 notice of Case 13,654.

10 MS. MUNDS-DRY: Thank you. We originally brought  
11 that application concerning the same two subject wells.  
12 And that application was ultimately denied, but during the  
13 hearing -- Mr. Catanach sat as the Hearing Examiner, and he  
14 actually asked us why we had not brought this as a pilot  
15 project, suggesting that that might be the better approach  
16 to this type project that Western had in mind.

17 And after the hearing and after we received the  
18 order, we discussed it and looked at the area, looked at  
19 the spacing unit, and actually decided that it might  
20 provide a unique opportunity to have a pilot project, which  
21 Mr. Pippin will of course get into. So we looked at it and  
22 thought the study would be actually helpful, of this area.

23 You also may have seen a letter from Mr. Alan  
24 Alexander of Burlington/ConocoPhillips. In his letter,  
25 which Mr. Pippin will also -- he's also -- Mr. Pippin has

1 also had a conversation with Mr. Alexander, but you may  
2 note in that letter that he doesn't -- Burlington does not  
3 oppose the Application. It was really concerned more with  
4 the form over the substance. And you'll note especially  
5 that he also agreed that there was no violation of  
6 correlative rights here. And we have had discussions with  
7 Mr. Alexander, explaining to him that we had tried the  
8 simultaneous dedication approach, but that was not  
9 successful.

10 So we believe there's no objection to this  
11 Application, as far as we understand, but I just wanted to  
12 give you that framework so you understood why we're here  
13 today. And of course we'll give you with Mr. Pippin why we  
14 think this is appropriate for a pilot project.

15 PAUL MICHAEL PIPPIN,

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

18 DIRECT EXAMINATION

19 BY MS. MUNDS-DRY:

20 Q. So with that, Mr. Pippin, will you please state  
21 your name for the record?

22 A. It's Paul M. -- Paul Michael Pippin, P-i-p-p-i-n.

23 Q. And where do you reside?

24 A. I live in Farmington, New Mexico.

25 Q. By whom are you employed?

1           A.    I'm a consulting petroleum engineer, employed by  
2 Western Minerals and Oil.

3           Q.    Have you previously testified before the Oil  
4 Conservation Division?

5           A.    Yes, I have.

6           Q.    Were your credentials previously made a matter of  
7 record and were you qualified as an expert in petroleum  
8 engineering?

9           A.    Yes, I was.

10          Q.    Are you familiar with the Application filed by  
11 Western in this case?

12          A.    Yes.

13          Q.    And are you familiar with the proposal to seek a  
14 pilot project in the southwest quarter of Section 24?

15          A.    Yes.

16                MS. MUNDS-DRY: Are the witness's qualifications  
17 acceptable?

18                EXAMINER JONES: They are, Mr. Pippin is  
19 qualified as an expert petroleum engineer.

20          Q.    (By Ms. Munds-Dry) Mr. Pippin, would you briefly  
21 summarize what Western seeks in this case?

22          A.    We'd like approval of this proposed pilot  
23 project, to allow two Pictured Cliff wells to produce in  
24 the southwest section -- or southwest quarter of Section  
25 24. This will help us determine if the well density should

1 be increased from one well in the quarter section to two  
2 wells.

3 In other words, do we need two Pictured Cliff  
4 wells in some 160-acre drilling blocks to adequately drain  
5 the gas reserves? This project should answer that  
6 question.

7 Q. Do you know, Mr. Pippin what rules govern the  
8 development of these lands?

9 A. It would be statewide Rule 104.C.

10 Q. What is the acreage dedication and spacing for  
11 wells in the Pictured Cliffs?

12 A. In the South Blanco-Pictured Cliffs it's a 160-  
13 acre spacing unit.

14 Q. And have you prepared exhibits for presentation  
15 in this hearing?

16 A. Yes.

17 Q. Mr. Pippin, would you please turn to Exhibit  
18 Number 1 and identify and review that for the Examiner?

19 A. Exhibit 1 is a map of the nine sections  
20 surrounding Section 24. It gives the well's name and  
21 number, current production in MCF per day, cumulative  
22 production in million cubic feet per day, the year the well  
23 was drilled. All these production rates are as of  
24 November, '05.

25 Q. Does it also show the offsetting acreage for the



1 subject spacing unit here?

2 A. Yes, the offsetting acreage to north, south, east  
3 and west is Conoco.

4 Q. Mr. Pippin, would you please turn to Western  
5 Exhibit Number 2 and review that for the Examiner?

6 A. Exhibit Number 2 shows the relative gas  
7 cumulatives of PC wells in the area around Section 24.  
8 These red bubbles show obvious areas of better gas  
9 production and areas of poorer gas production, or drainage.

10 Q. And looking at this map, what does Western seek  
11 to learn from its proposed pilot project?

12 A. The Marron Number 1 is the well we'd like to turn  
13 on. It's located in unit letter M, as in Mary, of Section  
14 24. It's a relatively poor well. In August of '05 Western  
15 concluded that the Marron 1 was not adequately draining the  
16 quarter section, so they opened the Pictured Cliffs in the  
17 Marron Number 6, located in Unit Letter K of Section 24.

18 Obviously since we could only have one well in  
19 the quarter section, we had to shut in Marron Number 1.  
20 Well, the Marron -- we shut in the Marron 1 making between  
21 20 and 30 MCF a day.

22 The Marron 6 came on very well, 300 MCF a day.  
23 Since then, over the last year, it has stabilized at about  
24 100 MCF a day. And Western immediately, and obviously,  
25 concluded that the Marron 1 was not adequately draining the

1 quarter section.

2 That begs the question, with the Marron 1 off due  
3 to rules, and only the Number 6 producing, is the Number 6  
4 going to drain the quarter section? We don't know. So we  
5 would like this pilot project to help us determine that.

6 Q. And with this pilot project, what will we be  
7 looking at if the Division allows us to put the Marron 1  
8 back on production?

9 A. We'll be watching the decline curves of both the  
10 Marron 1 and the Marron 6 to see if there's interference,  
11 to see if there's direct communication. The fact that the  
12 Marron 6 came on so strong and is producing so much more  
13 gas leads us to believe that these two wells are not in  
14 communication. The Marron 1 was not draining the quarter  
15 section, therefore how could the Marron 6 be draining the  
16 quarter section? That's where we're coming from.

17 Q. What's your understanding of the geology in this  
18 area that makes these wells in the spacing unit appropriate  
19 and unique for this sort of pilot project? Where is the  
20 location of these wells in terms of the geology?

21 A. The Marron 6 is closer to an area of better  
22 production, and you can see that on the exhibit. The  
23 Marron 1 is an area of poorer production. What could be --  
24 what the barrier could be between these two, we don't know.  
25 We suspect there is a barrier.

1 Q. And so we hope to then learn from this pilot  
2 project to see if there are certain drilling blocks in this  
3 pool that may be, in fact, appropriate to have two wells on  
4 a spacing unit?

5 A. This pilot project, if approved, should easily  
6 determine if we need two wells in some areas, particularly  
7 this area.

8 Q. Thank you, Mr. Pippin. If you would please turn  
9 to what's been marked Western Exhibit Number 3 and review  
10 this for Mr. Jones.

11 A. Exhibit Number 3 is just a cross-section across  
12 Section 24. It shows that the Pictured Cliff formation is  
13 continuous throughout the section.

14 Q. Will approval of this Application, Mr. Pippin,  
15 prevent waste?

16 A. Yes, we believe if we are correct and it takes  
17 two wells to drain the reserves adequately in the southwest  
18 quarter of Section 24, that two wells in this particular  
19 drilling block will prevent the loss of our reserves and  
20 waste of the natural resource.

21 Q. And also, Mr. Pippin, will approval of this  
22 Application impair correlative rights?

23 A. No. ConocoPhillips is the only offset operator.  
24 They've actually written a letter that was previously  
25 referred to. In this letter they stated that there is no

1 correlative rights issue.

2 Q. And have you had a conversation with Mr.  
3 Alexander?

4 A. I talked with Alan Alexander yesterday and said  
5 we'd be glad to share anything we had concerning this pilot  
6 project with Conoco. I also talked with Mike McGovern  
7 about a month ago, told him the same thing. Mike McGovern  
8 is an engineer with Conoco.

9 Q. And is Exhibit Number 4 a copy of the letter we  
10 received a copy of from Mr. Alexander?

11 A. Correct.

12 Q. Is Exhibit Number 5 a packet of notice  
13 information, Mr. Pippin?

14 A. Yes, it is.

15 Q. To whom was notice provided of this Application?

16 A. To Conoco.

17 Q. And Conoco is the only offset operator?

18 A. They're the only ones beside Western Minerals and  
19 Oil.

20 Q. And in this packet, is the first page of Exhibit  
21 Number 5 a notice affidavit indicating that notice was  
22 given in accordance with Division Rules?

23 A. Yes.

24 Q. And is the second page a letter to ConocoPhillips  
25 notifying them of this hearing?

1 A. Yes.

2 Q. And the third page, is that an affidavit of  
3 publication?

4 A. Yes.

5 Q. And then finally is the last page a copy of the  
6 green cards that were sent to -- well, Burlington and  
7 ConocoPhillips?

8 A. That is correct.

9 Q. Were Exhibits Number 1 through 5 either prepared  
10 by you or compiled under your direction and supervision?

11 A. Yes.

12 MS. MUNDS-DRY: Mr. Examiner, we would offer  
13 Exhibits 1 through 5 into evidence.

14 EXAMINER JONES: Exhibits 1 through 5 will be  
15 admitted into evidence in this case.

16 MS. MUNDS-DRY: And that concludes my direct  
17 examination of Mr. Pippin, Mr. Jones.

18 EXAMINATION

19 BY EXAMINER JONES:

20 Q. Okay, Mr. Pippin, tell me about that good well to  
21 the east there, in the next spacing unit.

22 A. That's operated -- it's also named the Marron 1.

23 Q. Okay.

24 A. So it's going to be tough getting these things  
25 confused. I'll call it the Marron 1 in unit letter J.

1 Q. Okay.

2 A. Conoco operates the east half of Section 24. The  
3 Number 1 well in unit letter J was completed the same,  
4 perforated the same, made a whole lot more gas. This is  
5 what prompted Western Minerals in the first place to come  
6 to the conclusion that our Marron 1 in unit letter M was  
7 not draining its share of the reserves, the reserves were  
8 being wasted. And they subsequently opened the Marron 6 in  
9 unit letter K.

10 Q. Was Marron 6 already drilled to a different  
11 horizon?

12 A. Yes, it was, to the Mesaverde

13 Q. Is it being downhole commingled?

14 A. Yes, it is.

15 Q. With the Mesaverde only --

16 A. Correct.

17 Q. -- and the PC?

18 So have you examined the producing rates and  
19 plotted the -- All you would have available, I guess, is  
20 monthly rates on the Marron -- the Conoco Marron Number 1  
21 in J, and the Marron Number 6. Does there appear to be any  
22 -- to you, any interference between those wells?

23 A. Not yet, no, sir.

24 Q. It's only been on line for a short period?

25 A. One year. I don't think there will be

1 interference, but time will tell.

2 Q. How do you produce a well at 30 or less MCF a  
3 day, a gas well?

4 A. The Pictured Cliffs in this area, 2200 feet deep,  
5 are essentially dry-gas reservoirs. They don't make hardly  
6 any water whatsoever, no oil. So there's flow --

7 Q. Okay.

8 A. -- they'll flow down to 5, 10 MCF a day.

9 Q. So what do you think the abandonment pressure  
10 could be out there for the Pictured Cliffs?

11 A. When we shut in the Marron 1, it was riding line  
12 pressure at about 120 pounds, obviously, and it has built  
13 since then to 180 pounds, which leads us again to believe  
14 the quarter section is not being drained. Abandonment  
15 pressure -- The reservoir is so tight, it takes such a long  
16 time. The Marron 1 has been producing for over 50 years.

17 There's also a well in the quarter section that  
18 has already been plugged. It's Conoco's Number 6 well in  
19 unit letter G. I suspect mechanical reasons for that.  
20 Obviously at these rates, once a well is plugged the  
21 natural resource is wasted, because it's uneconomical to  
22 drill for a well making 20 to 30 MCF a day. But if a well  
23 is sitting out there ready to produce and it's mechanically  
24 viable, we would like to open it. Thus the pilot program.

25 Q. How would Western Minerals scale up this pilot if

1 this is determined to be successful? Do they have other  
2 acreage that they could --

3 A. We have other -- We have other acreage in the  
4 area and we would consider opening a PC, if it was a  
5 situation like this where it looked like there was a  
6 possibility of poor production being offset by better  
7 production in the same drilling block. If the entire  
8 drilling block is in an area of just good production,  
9 probably wouldn't -- it isn't the same as this pilot  
10 program.

11 Conversely, if the acreage is only poor  
12 production that might not be a viable alternative. We  
13 would look for a similar instance as this where it looks  
14 like reserves are not being drained.

15 Q. What do the geologists say about this, as far as  
16 the trends in the area, as far as the discontinuity of the  
17 reservoir?

18 A. As far as I know, Western Minerals and Oil does  
19 not have a geologist on staff. It's a very small,  
20 privately owned company.

21 Q. Okay. Have you looked at the other pilots that  
22 were done in the PC and from them judged what kind of data  
23 you want to gather in these?

24 A. From what I've seen of the other pilot projects,  
25 possibly they may not have taken the opportunity to find



1 drilling blocks that were on the edge of both good  
2 production and considerably poorer production.

3 Q. Okay, so you see a fundamental difference in this  
4 pilot and the other pilots that Mr. Alexander referred to  
5 in his letter?

6 A. I do, yes.

7 Q. Okay, you see a need for this pilot?

8 A. Yes, sir.

9 Q. Okay. Would you object to coming back in a  
10 couple years and -- Do you think Western would object to  
11 coming back and presenting some data so it could be a  
12 public record, so it would help other operators in the  
13 Pictured Cliffs?

14 A. I think --

15 Q. Can you speak for them?

16 A. I think two or three years would be appropriate.  
17 It's going to take some time. At 20 to 30 MCF a day, I  
18 wouldn't expect much in 36 months.

19 Q. Do you have any kind of empirical models that  
20 would -- have you looked at the permeability in one of the  
21 good wells here, versus this Marron Number 1, I guess it  
22 is, to see what range of permeabilities you think is in the  
23 Pictured Cliffs?

24 A. I'm afraid these are 50-year-old wells, and there  
25 has been no data taken from them.

1 Q. No data, but --

2 A. No cores, no sidewall cores.

3 Q. So you're not going to guess on permeability for  
4 me?

5 A. I'm not going to guess on permeability, no, sir.

6 (Off the record)

7 EXAMINER JONES: Okay, I think we're out of  
8 questions here. We appreciate you guys coming in and --

9 THE WITNESS: Thank you.

10 EXAMINER JONES: -- thank you, Mr. Pippin --

11 MS. MUNDS-DRY: Thank you, Mr. Jones.

12 EXAMINER JONES: -- Ms. Munds-Dry.

13 Okay, with that we'll take Case 13,767 under  
14 advisement.

15 (Thereupon, these proceedings were concluded at  
16 9:50 a.m.)

17 \* \* \*

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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. \_\_\_\_\_  
heard by me on \_\_\_\_\_

\_\_\_\_\_, Examiner  
Oil Conservation Division

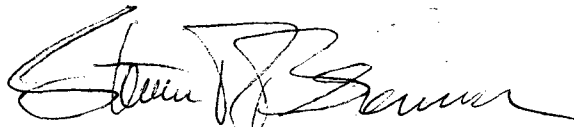
## CERTIFICATE OF REPORTER

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 September 16th, 2006.



STEVEN T. BRENNER  
CCR No. 7

My commission expires: October 16th, 2006