

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. 13,654

APPLICATION OF WESTERN MINERALS AND )  
OIL, LTD., FOR SIMULTANEOUS DEDICATION )  
AND AN UNORTHODOX WELL LOCATION, )  
SAN JUAN COUNTY, NEW MEXICO )

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

March 30th, 2006

Santa Fe, New Mexico

2006 APR 13 PM 3 56

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH, Hearing Examiner, on Thursday, March 30th, 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.

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## I N D E X

Marc 30th, 2006  
 Examiner Hearing  
 CASE NO. 13,654

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

## FOR THE DIVISION:

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1220 South St. Francis Drive  
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## FOR THE APPLICANT:

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Santa Fe, New Mexico 87504-2208  
By: OCEAN MUNDS-DRY

\* \* \*

1           WHEREUPON, the following proceedings were had at  
2 8:29 a.m.:

3           EXAMINER CATANACH: Next case is Case Number  
4 13,654, the Application of Western Minerals and Oil, Ltd.,  
5 for simultaneous dedication and an unorthodox well  
6 location, San Juan County, New Mexico.

7           Call for appearances in this case.

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

12           EXAMINER CATANACH: Are there any additional  
13 appearances?

14           Okay, will the witness please stand to be sworn  
15 in at this time?

16           (Thereupon, the witness was sworn.)

17                   PAUL MICHAEL PIPPIN,  
18 the witness herein, after having been first duly sworn upon  
19 his oath, was examined and testified as follows:

20                   DIRECT EXAMINATION

21 BY MS. MUNDS-DRY:

22           Q. Good morning, would you please state your name  
23 for the record?

24           A. My name is Paul Michael Pippin. I go by Mike,  
25 and it's spelled P-i-p-p-i-n.

1 Q. Where do you reside, Mr. Pippin?

2 A. I live in Farmington, New Mexico.

3 Q. By whom are you employed?

4 A. I'm employed as a consulting petroleum engineer  
5 by Western Minerals and Oil.

6 Q. So you're a petroleum engineer for Western?

7 A. Yes, ma'am.

8 Q. Have you previously testified before the Oil  
9 Conservation Division?

10 A. Yes, I have. It was back in the middle and late  
11 1980s.

12 Q. Were your credentials previously made a matter of  
13 record, and were you qualified as an expert in petroleum  
14 engineering at that time?

15 A. Yes.

16 Q. Are you familiar with the Application of Western  
17 in this case?

18 A. Yes, I am.

19 Q. Are you familiar with the proposal of Western to  
20 simultaneously dedicate two Pictured Cliff wells to a 160-  
21 acre spacing unit in Section 24, Township 27 North, Range 8  
22 West?

23 A. Yes.

24 MS. MUNDS-DRY: Are the witness's qualifications  
25 acceptable, Mr. Catanach?

1 EXAMINER CATANACH: Mr. Pippin, your prior  
2 testimony back in the early 1980s -- or, I'm sorry, mid-  
3 1980s -- who was that on behalf of?

4 THE WITNESS: That would have been for Union  
5 Texas Petroleum.

6 EXAMINER CATANACH: Okay. Yes, the witness is so  
7 qualified.

8 Q. (by Ms. Munds-Dry) Mr. Pippin, briefly summarize  
9 what Western seeks in this case.

10 A. First, Western seeks authorization to open the  
11 Marron Number 1 Pictured Cliff well, which is now a  
12 pressure observation well. It's located 380 feet from the  
13 south line, 345 feet from the west line, in Section 24,  
14 Tract 27 North, 8 West, and it's in the Blanco-Pictured  
15 Cliffs Gas Pool. All we have to do to produce gas from  
16 this well is open the master valve.

17 Q. What else does Western seek with this  
18 Application?

19 A. Secondly, we seek authorization to simultaneously  
20 dedicate the existing 160-acre gas spacing unit, comprised  
21 of the southwest quarter of Section 24, to the Marron  
22 Number 1 and the Marron Number 6. Both of these wells  
23 produce from the Pictured Cliffs formation.

24 And third, approval of the unorthodox location of  
25 the Marron Number 1 well --

1 Q. Mr. --

2 A. -- nonstandard location.

3 Q. Sorry. Mr. Pippin, what rules are you aware of  
4 that govern the development of these lands?

5 A. Should be the statewide Rule 104.C, 160-acre  
6 spacing for the Pictured Cliffs and 660-foot setback for  
7 the Pictured Cliffs.

8 Q. Mr. Pippin, have you prepared exhibits for  
9 presentation in this hearing?

10 A. Yes, I have.

11 Q. Would you please identify and review for Mr.  
12 Catanach Western Exhibit Number 1? If you'll start with --  
13 just to give you a starting point -- with Section 24.

14 A. This is a map showing all the Pictured Cliffs  
15 wells around Section 24 and their current production,  
16 cumulative production, and the operator.

17 Q. In particular, Mr. Pippin, does it show both the  
18 Marron Number 1 and the Marron Number 6 in Section 24?

19 A. It shows the Marron Number 1 in unit letter M,  
20 "Mary", of Section 24, and the Marron Number 6 in unit K of  
21 Section 24.

22 Q. And does this map also show what offset operators  
23 are around this section?

24 A. Yes, there's two offset operators. One is  
25 Conoco, who operates PC wells in the west half of Section

1 25 and the east half of Section 23, and Burlington  
2 Resources, which operates PC well in the southeast quarter  
3 of Section 24.

4 Q. And does Western operate any properties around  
5 Section 24?

6 A. Besides the west half of Section 24, Western  
7 operates the east half of Section 25 and the east half of  
8 Section 26. I think that's all.

9 Q. I think that's all too.

10 Mr. Pippin, if you could please identify and  
11 review Western Exhibit Number 2.

12 A. Exhibit Number 2 is a cumulative gas bubble map.  
13 It shows relative cumulative productions. It shows that  
14 the Marron 1, located in unit letter M of Section 24, has  
15 made 1.309 BCF, and it shows the location of the Marron 6  
16 in unit letter K of Section 24, which was just put on line  
17 in August of 2005.

18 Q. Do you know what the average cumulative  
19 production on the Marron Number 6 has been since that time?

20 A. The average current production is about 190 MCF a  
21 day, from the Pictured Cliffs.

22 Q. Mr. Pippin, if you'll turn to Exhibit Number 3  
23 and identify and review that for Mr. Catanach.

24 A. Exhibit 3 is comprised of a map and six log  
25 sections. The log sections show the Pictured Cliff

1 formation. What we're trying to show here is just the  
2 continuity of the Pictured Cliff interval through the  
3 subject section.

4 Q. And for each of those logs, did you average how  
5 much thickness was in the formation for each of those six  
6 points?

7 A. Yes, starting with -- I think I called it A-1 --  
8 we averaged 44 feet, A-2 at 72 feet, A-3 at 46 feet and 50  
9 feet -- there's two wells there -- A-5 was 50 feet, and A-6  
10 was 60 feet. All these feet of estimated Pictured Cliff  
11 pay zone.

12 Q. Thank you, Mr. Pippin. If you would please turn  
13 to Western Exhibit Number 4 and review that for the Hearing  
14 Examiner.

15 A. Exhibit 4 is comprised of three curves showing  
16 the estimated remaining reserves for the Marron Number 1.  
17 The first curve, we estimate reserves at 175 million cubic  
18 feet by the production decline method.

19 Q. What does the second chart show you?

20 A. The second one shows 203 million cubic feet of  
21 natural gas, using a graphical material balance, the two-  
22 point method.

23 Q. And the third chart?

24 A. This also uses the graphical material balance,  
25 the pseudo-steady state method, and it shows 290 million

1 cubic feet of natural gas, remaining reserves.

2 Q. Did you come up with an average, Mr. Pippin,  
3 based on all of these charts?

4 A. These three numbers have an average of 223  
5 million cubic feet of natural gas left in the Marron Number  
6 1 PC.

7 Q. Mr. Pippin, based on your engineering study, did  
8 you have any conclusion that you reached?

9 A. Yes.

10 Q. What was that?

11 A. It's easy to conclude that the Marron 1 should be  
12 opened to production, just open the master valve, in order  
13 to produce this 223 million cubic feet of gas.

14 Q. Do you believe this will prevent the waste of  
15 natural resources?

16 A. Opening the Marron Number 1 will prevent the loss  
17 or waste of the natural resource, natural gas.

18 Q. More importantly, Mr. Pippin, do you believe that  
19 this doesn't, in fact, accelerate production but prevents  
20 the loss of reserves?

21 A. It probably does both. There will be loss of  
22 reserves if we don't open the Number 1. The Number 1 has  
23 been producing since early in 1954. It's --

24 Q. -- had a long life.

25 A. -- 52 years, and it still hasn't produced all its

1 gas.

2 Q. Thank you, Mr. Pippin. Now I'd like to turn, if  
3 you would, please, to Western Exhibit Number 5. Why are we  
4 seeking approval of the unorthodox well location when this  
5 is a -- simply a reopening of the well?

6 A. The Marron Number 1 was drilled in 1953, actually  
7 November of 1953, at 380 feet from the south line and 345  
8 feet from the west line of Section 24, obviously a  
9 nonstandard location since it is closer than the 660-foot  
10 setback. It was placed here due to topo reasons. It's in  
11 Largo Canyon with major cliffs right beside it.

12 I conducted a search with all of the Western  
13 Minerals and Oil well files, I also searched at the  
14 District office in Aztec. I was searching for the NSL  
15 approval. I also searched the website, and Ocean, I  
16 believe, searched the Santa Fe office, and we failed to  
17 find the NSL statement showing that we could drill there.

18 However, the completion report was approved and  
19 all subsequent sundry notices have been approved by the  
20 State. So along with us, it appears as though the State  
21 believes that an NSL at one time did exist.

22 Q. So this is just to confirm -- even though this  
23 has had, obviously, a long history of the well records  
24 being filed, this is just to confirm that the nonstandard  
25 location is proper through the Division?

1 A. That is correct.

2 Q. Since we have not been able to in fact confirm an  
3 NSL order?

4 A. Yes.

5 Q. Mr. Pippin, will approval of this Application and  
6 the reopening of the subject well result in the recovery of  
7 hydrocarbons that would otherwise be left in the ground?

8 A. Yes, I believe it will.

9 Q. Will approval of this Application be in the best  
10 interests of conservation, the prevention of waste and the  
11 protection of correlative rights?

12 A. Yes.

13 Q. Mr. Pippin, if you would please identify Western  
14 Exhibit Number 6, is that an affidavit signed by me?

15 A. Affidavit...

16 Q. Do you have it there?

17 A. How about this one?

18 Q. That works.

19 A. Okay. This is an affidavit stating what Western  
20 Minerals and Oil seeks to acquire here today. It was sent  
21 to Burlington Resources and Conoco.

22 Q. Which are both the offset operators in this case?

23 A. That is correct.

24 Q. If you would please identify Western Exhibit  
25 Number 7.



1 Q. -- and east half of 26?

2 A. Yes, in the Pictured Cliffs.

3 Q. In the Pictured Cliffs.

4 Conoco operates in Section 23?

5 A. Correct.

6 Q. Is that all -- Is that the whole section, or is  
7 that the east half?

8 A. Just the east half of Section 23 is Conoco.

9 Q. Okay. And Conoco also operates the west half of  
10 25?

11 A. That is correct.

12 Q. Okay, and let's see, the east half of 24 also?

13 A. I think we should call that Burlington, before  
14 the merger.

15 Q. And --

16 A. I believe Burlington bought the east half of 24,  
17 Pictured Cliffs, from Conoco. The well that's plugged  
18 shows Conoco. That's the last record for that plugged well  
19 in the northeast of Section 24. But the existing producing  
20 Pictured Cliff well in the southeast quarter shows  
21 Burlington as the operator. I suspect Burlington right now  
22 has the operating rights.

23 Q. Which will, I guess, shortly be one entity,  
24 Burlington --

25 A. Yes.

1 Q. -- ConocoPhillips.

2 Okay, the Number 1 well was drilled back in 1953,  
3 and it was completed in 1954 in the -- is it South Blanco-  
4 Pictured Cliffs?

5 A. Yes, in the South Blanco-Pictured Cliffs.

6 Q. And it produced up until when?

7 A. Produced up until July of 2005.

8 Q. Okay, and the Number 6 well was recently drilled  
9 in 2005?

10 A. No, the Number 6 well in unit K has been a  
11 Mesaverde well since 1974. Western Minerals and Oil opened  
12 the Pictured Cliffs in July of 2005 and started producing  
13 in August of 2005 from the Pictured Cliffs, and the  
14 commingled -- subsequently commingled in January of 2006.

15 Q. PC and Mesaverde?

16 A. PC-Mesaverde, yes.

17 Q. Now, why did -- why was that done in July? Why  
18 was the Number 1 abandoned, and why was the Number 6 opened  
19 in the PC?

20 A. The Number 6, due to several studies, appeared to  
21 have potential in the Pictured Cliffs. And when Western  
22 decided to open the Pictured Cliffs in Number 6, the State  
23 required us to shut in the Number 1.

24 Q. And do you know why that is?

25 A. The current state rule of one Pictured Cliff well

1 per 160-acre spacing.

2 Q. Do you know, at the time the Number 1 well was  
3 shut in, what its producing rate was?

4 A. Between 25 and 35 MCF a day.

5 Q. And the Number 6 well, you said, was producing --

6 A. -- about 190 MCF a day. It produced from the  
7 Pictured Cliff only, so we could get a good test, November  
8 and December of 2005, and then commingled January 10th of  
9 2006. So we had two months of Pictured Cliff-only  
10 production.

11 Q. Now I believe you said that reserves may be lost  
12 if you're not authorized to produce these two wells at the  
13 same time. Can you explain that to me, how that might  
14 happen?

15 A. We've calculated the remaining reserves in the  
16 Marron Number 1 three different ways, and I averaged the  
17 remaining reserves there. The cross-section shows  
18 continuity along with a very -- a rather thick Pictured  
19 Cliff interval. We do know that the Pictured Cliff ranges  
20 in permeability from, oh, probably a millidarcy to a tenth  
21 of a millidarcy. Any gas in the very, very low  
22 permeability is going to take a long time to get to a  
23 wellbore, due to the low permeability.

24 In addition, the Marron 1, like we've stated, has  
25 been producing for 52, 53 years. The casing probably won't

1 last much longer. In other words, the well's mechanical  
2 life will probably end soon. I doubt that anyone would  
3 drill a new Pictured Cliff well for 30 MCF a day, due to  
4 economic reasons. Where all we have to do is open the  
5 master valve, it seems like a very rational way to save  
6 these reserves.

7 Q. What does your production of remaining reserves  
8 graph -- How long does it tell you it's going to take to  
9 produce those 223 million cubic feet?

10 A. I do not have that at this time. I doubt that we  
11 will get to exactly the average remaining reserves number,  
12 but our attempt is to approach it, as long as this well's  
13 life holds up.

14 Looking at the decline curve, I would guess 10  
15 years.

16 Q. Your Exhibit Number 2 is just cumulative  
17 production. This -- Have you calculated drainage areas for  
18 any of these wells?

19 A. No.

20 Q. Mr. Pippin, are all these wells shown on Exhibit  
21 Number 2 -- are they pretty much the same vintage, do you  
22 know? Were they all drilled about the same time, or do you  
23 know?

24 A. Let's look. I believe on Exhibit 1, right by  
25 each of these wells there's a date that the well was first

1 delivered. Glancing at this, most of them are early 1950s,  
2 with a 1970 first delivery in the northwest quarter of  
3 Section 19, 1966 first delivery in the northwest quarter of  
4 25.

5 Q. Okay. In approving this Application, tell me how  
6 it's -- is it fair for Western to be able to produce two  
7 wells while everybody else cannot? I mean, can you address  
8 that issue?

9 A. I personally believe that in many cases in the  
10 Pictured Cliffs there should be two wells in a drilling  
11 block, two wells in a 160-acre spacing unit.

12 Q. But you don't really have drainage data to  
13 support that in this case?

14 A. We have remaining reserves, and we have the high  
15 producing rate of the Marron 6, which strongly indicates  
16 there's reserves left in the spacing unit at 190 MCF a day.

17 Q. Well, let me ask you this: Will the Marron  
18 Number 6 -- if left to produce by itself, will it recover  
19 the reserves that are remaining in the Marron Number 1?

20 A. I strongly doubt it, since the Marron Number 1  
21 has been producing for 52, 53 years, and has not  
22 successfully produced its reserves. That clearly indicates  
23 to me that in this particular isolated instance, two wells  
24 are needed to fully produce all of the reserves.

25 Q. Has any operator expressed any concern to you

1 about this Application?

2 A. No.

3 Q. Do you believe this Application affects more than  
4 just the offset operators in this case? Do you think it  
5 affects all of the operators in this pool?

6 A. At 30 MCF a day, I would lean towards it probably  
7 doesn't. However, insomuch as the belief that it takes two  
8 wells in some cases to produce all of the reserves, yes.  
9 To many operators, 30 MCF a day is insignificant. But  
10 since the well is there, and all Western Minerals has to do  
11 is open the master valve, it seems a terrible waste not to  
12 open the master valve.

13 Q. Does Western have any plans to do this type of  
14 thing in any of the offset acreage in this area?

15 A. Western is looking at that possibility, yes,  
16 depending on how these two wells perform. So far, it looks  
17 very good.

18 Q. Mr. Pippin, we've had these similar types of  
19 cases before in the -- certainly in the Basin-Dakota and  
20 Blanco-Mesaverde, where companies have kind of done a trial  
21 kind of a pilot project to see -- to gather some data to  
22 determine whether or not infill drilling is appropriate,  
23 and they've approached it a little bit different. They've  
24 notified all the operators in the pool, for one thing, and  
25 gave them the opportunity to participate or object.

1           That's really not what you're doing here. You're  
2 just asking in this specific case to open this one well up.  
3 My concern is that we approve this one, and you guys will  
4 be in here two months from now asking to do it in the next  
5 offset acreage or the next section, and then it just  
6 continues. I don't know if that's the right approach in a  
7 case like this, but we'll consider your evidence.

8           MS. MacQUESTEN: Ms. Munds-Dry, I noticed on the  
9 affidavit that you did not get a green return card back  
10 from ConocoPhillips.

11           MS. MUNDS-DRY: No, we did not.

12           MS. MacQUESTEN: Have you gotten anything back on  
13 that? It was mailed -- it appears the letter was mailed in  
14 late January.

15           MS. MUNDS-DRY: I don't believe so, Ms.  
16 MacQuesten.

17           MS. MacQUESTEN: How confident are you that the  
18 address you have for ConocoPhillips is correct?

19           MS. MUNDS-DRY: We've used it in the past and  
20 it's worked pretty well, so pretty confident.

21           MS. MacQUESTEN: Okay. Was any effort made to  
22 contact ConocoPhillips about this case, other than the  
23 certified letter and the newspaper advertisement?

24           MS. MUNDS-DRY: Not on our part. I don't know if  
25 Mr. Pippin had any other contacts. No.

1 MS. MacQUESTEN: Thank you.

2 EXAMINER CATANACH: Do you have anything else?

3 MS. MUNDS-DRY: Nothing further.

4 EXAMINER CATANACH: Okay, there being nothing  
5 further in this case, Case 13,654 will be taken under  
6 advisement.

7 MS. MUNDS-DRY: Thank you, Mr. Hearing Examiner.

8 THE WITNESS: Thank you.

9 EXAMINER CATANACH: Thank you.

10 (Thereupon, these proceedings were concluded at  
11 9:00 a.m.)

12 \* \* \*

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14  
15  
16  
17 I do hereby certify that the foregoing is  
18 a complete record of the proceedings in  
the Examiner hearing of Case No. 13654,  
19 heard by me on March 30, 2006.

20 David R. Catanach, Examiner  
Oil Conservation Division

21  
22  
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 March 31st, 2006.



STEVEN T. BRENNER  
 CCR No. 7

My commission expires: October 16th, 2006