

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. 13,483

APPLICATION OF BP AMERICA, INC., FOR )  
 AN EXCEPTION TO THE WELL DENSITY )  
 REQUIREMENTS FOR THE BLANCO-MESAVERDE )  
 GAS POOL, SAN JUAN COUNTY, NEW MEXICO )

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

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

May 19th, 2005

Santa Fe, New Mexico

2005 JUN 2 PM 2 51

This matter came on for hearing before the New Mexico Oil Conservation Division, WILLIAM V. JONES, JR., Hearing Examiner, on Thursday, May 19th, 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

May 19th, 2005  
 Examiner Hearing  
 CASE NO. 13,483

	PAGE
APPEARANCES	3
APPLICANT'S WITNESS:	
<u>BILL HAWKINS</u> (Engineer)	
Direct Examination by Mr. Carr	4
Examination by Examiner Jones	16
REPORTER'S CERTIFICATE	21

\* \* \*

## E X H I B I T S

Applicant's	Identified	Admitted
Exhibit 1	6	15
Exhibit 2	7	15
Exhibit 3	8	15
Exhibit 4	11	15
Exhibit 5	12	15
Exhibit 6	12	15
Exhibit 7	13	15
Exhibit 8	14	15

\* \* \*

## 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: WILLIAM F. CARR

\* \* \*

1 WHEREUPON, the following proceedings were had at  
2 8:45 a.m.:

3 EXAMINER JONES: Okay, let's call Case 13,483,  
4 which is the Application of BP America, Inc., for an  
5 exception to the well density requirements for the Blanco-  
6 Mesaverde Gas Pool, San Juan County, New Mexico.

7 Call for appearances.

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

12 EXAMINER JONES: Any other appearances?  
13 Will the witness please stand to be sworn?  
14 (Thereupon, the witness was sworn.)

15 BILL HAWKINS,  
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 MR. CARR:

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

21 A. Bill Hawkins.

22 Q. Where do you reside?

23 A. In Denver, Colorado.

24 Q. By whom are you employed?

25 A. BP America Production Company.

1 Q. And what is your position with BP America  
2 Production Company?

3 A. I handle the regulatory affairs for Colorado New  
4 Mexico San Juan Basin.

5 Q. Have you previously testified before the New  
6 Mexico Oil Conservation Division?

7 A. Yes, I have.

8 Q. Have you appeared before Mr. Jones?

9 A. I have not.

10 Q. Could you summarize for the Examiner your  
11 educational background?

12 A. I graduated from Texas Tech in 1972 with a degree  
13 in petroleum engineering and then got my master's in  
14 engineering in 1974 from Texas Tech.

15 Q. Since graduation, for whom have you worked?

16 A. I've worked for Amoco and subsequently BP since  
17 graduation, so for about 30 years now.

18 Q. Are you familiar with the Application filed in  
19 this case on behalf of BP?

20 A. Yes.

21 Q. And are you familiar with the rules for the  
22 Blanco-Mesaverde Gas Pool that apply to the wells that are  
23 the subject of today's hearing?

24 A. I am.

25 MR. CARR: Mr. Jones, we tender Bill Hawkins as

1 an expert witness in petroleum engineering.

2 EXAMINER JONES: Mr. Hawkins is an expert witness  
3 in petroleum engineering.

4 Q. (By Mr. Carr) Would you briefly summarize for  
5 the Examiner what it is that BP seeks with this  
6 Application?

7 A. We're seeking an exception to the Blanco-  
8 Mesaverde density rules that require -- well, actually  
9 you're allowed four wells per spacing unit, and there are  
10 some requirements for -- two of them can be in each quarter  
11 section, and then there's another requirement that says  
12 they can't be -- those two wells can't be located in the  
13 same 40-acre quarter-quarter. And in this case, we ended  
14 up with two wells in the same quarter-quarter, so we're  
15 asking for an exception to that part of the density rule.

16 Q. Would you identify what has been marked as BP  
17 Exhibit Number 1?

18 A. Well, let's see. All right, yeah, this is a copy  
19 of the Blanco-Mesaverde Pool rules.

20 Q. And this is the section in the special pool rules  
21 that authorizes four wells on a spacing unit and requires  
22 where they must be located; is that correct?

23 A. That's correct.

24 Q. Let's go to Exhibit Number 2. Would you identify  
25 that, please?

1           A.   Exhibit Number 2 is a nine-section plat that  
2 identifies in orange the spacing unit that contains the  
3 Holmberg wells that are located in the same 40. It's a  
4 little fuzzy there from the print, but we're looking in the  
5 northeast quadrant of Section 28, right in the center of  
6 the exhibit.

7                   And then the yellow, the spacing units identified  
8 by yellow are those spacing units operated by BP America  
9 Production Company, and we operate all the spacing units  
10 surrounding this well with the exception of the west half  
11 of Section 21, just to the northwest of our wells. And  
12 that spacing unit is operated by Burlington.

13           Q.   When we look at this exhibit, the yellow blocks  
14 and the orange blocks, those actually indicate the areas  
15 within which wells could be drilled at standard locations;  
16 is that correct?

17           A.   That's correct, that's correct.

18           Q.   And all of the yellow blocks are BP-operated  
19 properties?

20           A.   That's correct.

21           Q.   The ones off to the northwest are operated by  
22 Burlington?

23           A.   Correct.

24           Q.   Has Burlington contacted us concerning this  
25 Application?

1 A. They have.

2 Q. And what have they indicated?

3 A. They've indicated that they have no objections.

4 Q. Let's go to what has been marked as BP Exhibit  
5 Number 3.

6 A. Exhibit Number 3 is just a little close-up of the  
7 section in question, Section 28, and I apologize for the  
8 blurriness on this -- on our -- the spacing unit in  
9 question. There's something happening with the colors when  
10 they put this color over to make it orange.

11 Q. Could you review just the history of the  
12 development of the spacing unit for Mr. Jones?

13 A. I can. In the north there's -- I guess the first  
14 well drilled here would have been the Holmberg Gas Com  
15 Number 1, located in the far northern, western corner of  
16 our spacing unit. That well is currently abandoned.

17 The first infill well that was drilled is down in  
18 the south. It's the Holmberg South Gas Com 1A, and you can  
19 see that down in the far southern part of the southeast of  
20 the section.

21 When the Holmberg Gas Com Number 1 was abandoned,  
22 we drilled a directional well -- and I think this was  
23 drilled by Amoco -- in 1995, in order to try to intercept a  
24 larger section of the Mesaverde and maybe try to encounter  
25 some fractures. And so it was directionally drilled, and



1 you can see the track there. And even though it started in  
2 -- what is that? -- Unit B, I guess, it didn't encounter  
3 the Mesaverde until we got to Unit H.

4 And you can see the top of the Cliffhouse. It's  
5 a little blurry, but it's marked with a dot and some  
6 letters next to it at about -- I'm guessing here, a little  
7 below 4000 feet; I don't have the exact number -- and  
8 continued on, hit the Menefee and then the Point Lookout,  
9 and the entire Mesaverde formation interval lies in Section  
10 H -- or Unit H, I'm sorry.

11 In 2000, when we were drilling our first 80-acre  
12 density infill well, we drilled the gas com -- the Holmberg  
13 Gas Com Unit Number 1 B. And unfortunately when we drilled  
14 that well, we looked at just the surface location of the  
15 1R, being up in Unit B, and when we drilled this one we  
16 drilled it in Unit H. And we did not recognize that we had  
17 both of these wells in the same quarter-quarter until just  
18 recently.

19 Q. When you discovered you had two wells in the  
20 southeast at the northeast of Section of 28, what did you  
21 do?

22 A. We shut in the Holmberg Gas Com Number 1B.

23 Q. And you've left it shut in --

24 A. It's still shut in.

25 Q. -- to this time?

1           And today you're seeking authorization to produce  
2 both wells in the same quarter-quarter section; is that  
3 right?

4           A.    That's correct.

5           Q.    Would the approval of this Application affect the  
6 correlative rights of any other interest owner in the  
7 Blanco-Mesaverde Pool?

8           A.    No, it would not.

9           Q.    And why is that?

10          A.    Well, we're not encroaching on any other spacing  
11 units that are out there, and we're also not putting more  
12 wells than are required by the Blanco-Mesaverde Pool Rules.  
13 Unfortunately, we've just got two wells in the same  
14 quarter-quarter.

15          Q.    In fact, you could have drilled another Mesaverde  
16 well in the southwest of the northeast, even closer to the  
17 horizontal wellbore than you are now. Then you would have  
18 been standard; is that right?

19          A.    That's correct, we could certainly have drilled  
20 this well a little bit to the north and west of this and  
21 actually been even closer maybe to the Cliffhouse part, but  
22 we would have been standard because we would have been in  
23 two separate quarter-quarters.

24          Q.    But what, in fact, you've got is, you're not  
25 increasing the total well density, and you're not

1 encroaching on an offset operator; is that right?

2 A. That's correct.

3 Q. Would you identify what has been marked BP  
4 Exhibit Number 4?

5 A. Yes, Exhibit Number 4 is the APD for the Holmberg  
6 Gas Com Number 1B, the latest well or most recent well that  
7 was drilled, and it shows the surface location of that  
8 well.

9 And I really would like to draw your attention to  
10 the well plat, the well-location plat on the second page of  
11 that exhibit. And you can see where the 1B is located 2200  
12 feet from the north and 1220 feet from the east. There's  
13 also a couple of pencil marks that were placed there by the  
14 actual -- actually, by the NMOCD Aztec District when they  
15 were comparing, you know, where are the locations of the  
16 other wells in this spacing unit and, you know, the Aztec  
17 District made the same mistake we made in expecting these  
18 other wells to be in different quarter quarters.

19 So it was just a mistake on our part, and I think  
20 the OCD made the same mistake we made.

21 Q. It shows three wells on the east half of Section  
22 28. Are there three Mesaverde wells --

23 A. Yes.

24 Q. -- in that section that are capable of producing?

25 A. There are.

1 Q. Let's go to BP Exhibit Number 5.

2 A. Okay, Number 5 shows the Holmberg Gas Com 1R  
3 production history, and I kind of would draw your attention  
4 to the red curve that represents the gas rate in MCFD. The  
5 well originally was up around 500, 600 MCFD and has  
6 declined now to about 125.

7 We drilled the -- I guess we could look at the  
8 second exhibit here, because I kind of want to make a  
9 comparison.

10 Q. Okay, Exhibit Number 6?

11 A. Exhibit Number 6 shows Holmberg Gas Com Number  
12 1B, which is the most recent well drilled in 2000, and it  
13 has a rate of about -- maximum rate of about 400 MCFD, and  
14 then it's down to 150 or a little below, MCFD.

15 But at the point in time that we drilled that, we  
16 looked at these wells and they both seemed to be doing very  
17 well. We don't seem to see any degradation of production  
18 trend on the 1R from the 1B, it looked pretty good, pretty  
19 consistent.

20 So my conclusion here would be that both of these  
21 wells are in fact recovering reserves that would not be  
22 recovered by the other well. There's no interference to  
23 date, and both wells are needed to efficiently recover the  
24 resource in this pool, in the spacing unit.

25 Q. Is it therefore your testimony that approval of

1 the Application will prevent waste

2 A. Yes, it will.

3 Q. If the Application is denied and you're not able  
4 to produce the 1B well, you'd have to drill another well in  
5 the northeast of Section 28, would you not?

6 A. Yes, we would.

7 Q. And what is the cost of a Mesaverde well in that  
8 area?

9 A. You know, I don't have the exact cost but I know  
10 it's on the order of \$600,000, \$700,000. So that would be  
11 a significant expense to replace a well that's currently  
12 producing and currently economic.

13 Q. Mr. Hawkins, does BP plan to drill additional  
14 Mesaverde wells on this spacing unit?

15 A. We don't have any plans right now, but I know we  
16 are -- we certainly have one location remaining in the  
17 south half of the spacing unit, and I'm not sure if or when  
18 that well will be drilled, but it could be.

19 Q. But it still would be within the well density  
20 authorized by the special pool rules for this pool?

21 A. That's correct.

22 Q. Is BP Exhibit Number 7 an affidavit confirming  
23 that notice of this Application has been provided in  
24 accordance with Division Rules?

25 A. Yes.

1 Q. And to whom was notice provided?

2 A. Well, it was provided to BP America Production  
3 Company working interest owners in all of the spacing units  
4 that surround us, and Burlington Resources as operator of  
5 the one spacing unit that we do not operate.

6 Q. Is Exhibit Number 8 a listing of the other  
7 working interest owners in the various wells operated by BP  
8 that offset the subject spacing unit?

9 A. Yes, it is.

10 Q. Would you summarize for Mr. Jones the reasons  
11 that you're requesting an exception to these special pool  
12 rules for the Holmberg 1R and the Holmberg 1B wells?

13 A. Well, primarily to prevent waste. We recognize  
14 these two wells are a little close together, but looking at  
15 the production we believe that both wells are needed in  
16 order to recover the resource. And they continue to be  
17 economic, and it doesn't seem to make sense to have to shut  
18 one in and replace it.

19 Q. Mr. Hawkins, what is BP doing to monitor its  
20 operations and to hopefully assure that these kinds of  
21 problems don't occur?

22 A. Well, we're making a search right now to see if  
23 there are any other wells of this type that may have  
24 slipped through the cracks somehow. We have -- you know,  
25 we're still continuing that, so I'm hopeful that we don't

1 have any, but I would not be surprised if we had one or  
2 two. But if we do, we will definitely come in to the  
3 Division and get them rectified.

4 Q. Are you attempting to tighten up your permitting  
5 procedures to also assure that these things don't happen  
6 again?

7 A. Yes, we are. We've made a number of changes, and  
8 we kind of brought this to the attention of our geologists  
9 and engineers that, you know, we need to look not only at  
10 the surface location but also the directional information  
11 that's available on any of those wells that may have been  
12 drilled directionally.

13 And you can see the type of map that we have now  
14 that indicates this as the kind of maps that we're looking  
15 at for -- all over the Basin.

16 Q. Were Exhibits 1 through 8 prepared by you or  
17 compiled at your direction?

18 A. Yes, they were.

19 MR. CARR: Mr. Jones, at this time we move the  
20 admission into evidence of BP America Production Company  
21 Exhibits 1 through 8.

22 EXAMINER JONES: Exhibits 1 through 8 will be  
23 admitted to evidence.

24 MR. CARR: And that concludes my direct  
25 examination of Mr. Hawkins.

## EXAMINATION

BY EXAMINER JONES:

Q. Mr. Hawkins, yesterday when I was looking at this I got -- I was thinking, well, you probably need to notify those people in Section 27, and then I noticed that BP is the operator in that spacing unit anyway, so -- But I am glad you did notify those working interest owners.

But then when I pulled up the production numbers I'm wondering why you didn't just come in today and ask for permission to actually drill another well and keep those two wells going, because those two wells are not making very much.

A. Yeah, 125, but they're still economic to operate, you know.

Q. Are they -- pumping units --

A. No. Well, they could have a pumping unit with some water, I'd have to look at that. I don't know right off the top of my head. But normally, you know, we don't get very much water with these wells, and so they just flow.

Q. Yeah. This directional survey, is it in your well files?

A. Yes.

Q. Okay, so it was there. But when did the merger happen between -- That was '99, wasn't it?



1 A. It was 1999, and that's exactly --

2 Q. A bunch of new people in there.

3 A. That's exactly what happened in 2000 when we  
4 drilled this new well. We had just had the merger, there  
5 was some changeover of personnel, and we looked at the  
6 surface location and failed to look at the directional  
7 information.

8 Q. What would be the payout on a well like -- a  
9 vertical well. Not that slant well, but -- Why was a slant  
10 well drilled in the first place?

11 A. You know, Amoco had a number of wells that were  
12 drilled to try to encounter what they deemed to be higher-  
13 permeability fractured areas because of some folding in the  
14 Mesaverde. And they identified that through seismic, and  
15 we drilled, I would guess, a dozen directional wells  
16 similar to this. And some were good and some were not, and  
17 we've discontinued that program now.

18 So in this case, I don't think this well  
19 encountered any additional fracturing, because the straight  
20 hole looks just like the other well. So they've got about  
21 the same amount of KH.

22 Q. Okay. Did you remember if it was deviated and  
23 then went vertical through the Mesaverde?

24 A. Usually they're S-shaped. And I think you can  
25 see, it does kind of -- when we get from the Menefee to the

1 Point Lookout, the dots are getting closer together and --

2 A. Yeah.

3 Q. -- probably dropping off there at the bottom.

4 A. Yeah. But what do you think a payout would be on  
5 drilling a vertical well out here?

6 A. You know, I don't know. I haven't run economics  
7 on these wells, so I couldn't tell you what the payout is.  
8 I just -- I know from the current rates that they're  
9 economic -- certainly economic to operate, and --

10 Q. But if you drilled another well in the north --  
11 you know, in the northwest of this spacing unit, maybe up  
12 in Unit B, you may get a similar well to these, from what  
13 these curves show here?

14 A. Sure. I mean, certainly there's another well  
15 that could be drilled in the south, that we wouldn't exceed  
16 the density rules on, and there's always an option to  
17 replace one of these.

18 But at 125 MCFD, it's hard to walk away from one  
19 of those that you've already got producing and you've spent  
20 the money on. At some point we may very well make a  
21 decision to shut one of these in and drill a replacement  
22 for it. But we prefer to continue with our current  
23 operations today.

24 Q. Okay. You could ask for permission to have five  
25 wells, though?

1 A. Well, we could.

2 Q. Where are you spending your money?

3 (Laughter)

4 A. We're still drilling Mesaverde wells in other,  
5 you know, spacing units in New Mexico, so...

6 Q. We're trying to encourage drilling in New Mexico  
7 here, so...

8 This is not Indian lands?

9 A. Not that I'm aware of.

10 Q. Okay. So the 10,987-A(1) applies to this one, I  
11 guess.

12 And the well was shut in -- it must have been in  
13 January, right? Or February, because I --

14 A. Probably February --

15 Q. Well, let's see, our records are behind times,  
16 and my records show that they're both still producing, but  
17 we're back five months.

18 A. Yeah, this would have been just in the last two  
19 to three months when we recognized it and then talked to  
20 Mr. Carr and decided to file an Application to -- for an  
21 exception to this.

22 EXAMINER JONES: Okay. That's all I have.  
23 Thanks very much, Mr. Hawkins.

24 MR. CARR: That concludes our presentation.  
25 Thank you, Mr. Examiner.

1 EXAMINER JONES: With that, we'll take Case  
2 13,483 under advisement.

3 (Thereupon, these proceedings were concluded at  
4 9:07 a.m.)

5 \* \* \*

6  
7  
8  
9  
10  
11 I do hereby certify that the foregoing is  
12 a complete record of the proceedings in  
13 the Examiner hearing of Case No. \_\_\_\_\_  
14 heard by me on \_\_\_\_\_

15 \_\_\_\_\_, Examiner  
16 Oil Conservation Division  
17  
18  
19  
20  
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 May 19th, 2005.



STEVEN T. BRENNER  
CCR No. 7

My commission expires: October 16th, 2006