

1 STATE OF NEW MEXICO  
2 ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
3 OIL CONSERVATION DIVISION  
4 STATE LAND OFFICE BUILDING  
5 SANTA FE, NEW MEXICO

6 29 March 1989

7 EXAMINER HEARING

8 IN THE MATTER OF:

9 Application of Benson-Montin-Greer Drill- CASE  
10 ing Corp. for downhole commingling, Rio 9553  
11 Arriba County, New Mexico.

12  
13 BEFORE: David R. Catanach, Examiner  
14

15  
16 TRANSCRIPT OF HEARING

17  
18 A P P E A R A N C E S

19 For the Division:

20 For Benson-Montin-Greer  
21 Corp.:

William F. Carr  
Attorney at Law  
CAMPBELL and BLACK, P. A.  
P. O. Box 2208  
Santa Fe, New Mexico 87501

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1 MR. CATANACH: I'll call the  
2 hearing back to order and call Case 9553, the application  
3 of Benson-Montin-Greer Drilling Corporation for downhole  
4 commingling, Rio Arriba, County, New Mexico.

5 This case was originally heard  
6 February 1st, 1989, and subsequently readvertised today due  
7 to correction in the well location.

8 Are there any additional ap-  
9 pearances and testimony at this time?

10 MR. CARR: May it please the  
11 Examiner, Benson-Montin-Greer does not intend to present  
12 additional testimony.

13 MR. CATANACH: Any other ap-  
14 pearances or testimony?

15 This case will be taken under  
16 advisement.

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(Hearing concluded.)

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3 OIL CONSERVATION DIVISION  
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5 SANTA FE, NEW MEXICO

6 1 February 1989

7 EXAMINER HEARING

8 IN THE MATTER OF:

9 Application of Benson-Montin-Greer CASE  
10 Drilling Corporation for downhole 9553  
11 commingling, Rio Arriba County, New  
12 Mexico.

13 BEFORE: David R. Catanach, Examiner

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17 A P P E A R A N C E S

18 For the Division:

19 For Benson-Montin-Greer  
20 Drilling Corporation:

William F. Carr  
Attorney at Law  
CAMPBELL and BLACK, P. A.  
P. O. Box 2208  
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22  
23 For NM & O and Larry  
Sweet:

Sarah W. Williams  
Attorney at Law  
3654 S. 108th E. Avenue  
Tulsa, Oklahoma 74146

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I N D E X

ALBERT R. GREER

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E X H I B I T S

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BMG Exhibit Two, Well History	6
BMG Exhibit Three, Notice	6

1 MR. CATANACH: At this time  
2 we'll call Case 9553, the application of Benson-Montin-  
3 Greer Drilling corporation for downhole commingling, Rio  
4 Arriba County, New Mexico.

5 Are there appearances in this  
6 case?

7 MR. CARR: May it please the  
8 Examiner, my name is William F. Carr, with the law firm  
9 Campbell & Black, P. A., of Santa Fe. We represent Benson-  
10 Montin-Greer Drilling Corporation and I have one witness.

11 MR. CATANACH: Any other ap-  
12 pearances?

13 MS. WILLIAMS: My name is  
14 Sarah Williams and I'm here on behalf of NM & O and Larry  
15 Sweet, Tulsa, Oklahoma, and I'm here to enter an appearance  
16 only. I have no witnesses.

17 MR. CATANACH: Sarah Williams  
18 on behalf of who?

19 MS. WILLIAMS: NM, New Mexico  
20 and Oklahoma, NM & O.

21 MR. CATANACH: And who else?

22 MS. WILLIAMS: Larry Sweet.  
23 He's the officer there.

24 MR. CATANACH: And, Ms.  
25 Williams, what is their interest in this case?

1 MS. WILLIAMS: They're an  
2 adjacent landowner.

3 MR. CATANACH: And you were  
4 saying, Mr. Carr?

5 MR. CARR: I'd like the record  
6 to reflect that Mr. Greer has previously been sworn and  
7 qualified as an expert petroleum engineer.

8 MR. CATANACH: Let the record  
9 reflect that.

10 You may proceed.

11  
12 ALBERT R. GREER,  
13 being called as a witness having been previously sworn and  
14 remaining under oath, testified as follows, to-wit:

15  
16 DIRECT EXAMINATION

17 BY MR. CARR:

18 Q Mr. Greer, would you please state for  
19 the Examiner what you seek with this application?

20 A We seek to commingle production from the  
21 Dakota formation and the Mancos formation in a well in the  
22 Canada Ojitos Unit in the West Puerto Chiquito Pool.

23 Q Have you prepared certain exhibits for  
24 presentation in this case?

25 A Yes, sir.

1           Q           Would you identify what has been marked  
2 as Benson-Montin-Greer Exhibit Number One and identify  
3 that, please?

4           A           Yes, sir, it's an orientation plat that  
5 shows the West Puerto Chiquito Pool with the Canada Ojitos  
6 Unit within it and in Township 26 North, 1 West, the F-20  
7 Well in Section 20, which is the one that we are making  
8 application to commingle.

9           Q           Now this well is within the exterior  
10 boundary of the Canada Ojitos Unit, is that correct?

11          A           Yes, sir.

12          Q           Are there any offsetting operators  
13 either direct or diagonal to this proposed -- to this well  
14 in which you propose commingling other than the unit  
15 itself?

16          A           No, sir.

17          Q           So there are no immediate offsets.

18          A           No, sir.

19          Q           What is the status of the land that --  
20 on which this well is actually located?

21          A           It's part of the Canada Ojitos Unit,  
22 committed to it.

23          Q           Is this a Federal tract?

24          A           It's all Federal land.

25          Q           And has notice of today's hearing been

1 provided to the BLM?

2 A Yes, sir.

3 Q And is a copy of that notice what has  
4 been marked as Benson-Montin-Greer Exhibit Number Three?

5 A Yes, sir.

6 Q Now would you state again what pools you  
7 propose to downhole commingle?

8 A We would commingle the existing West  
9 Puerto Chiquito Mancos Pool with an undesignated Dakota  
10 Pool. The spacing in the Dakota would be 40 acres, in my  
11 understanding from discussing this with Mr. Chavez of the  
12 Aztec office.

13 Q Now, Mr. Greer, would you refer to what  
14 has been marked as Benson-Montin-Greer Exhibit Number Two  
15 and working from this exhibit would you review for Mr.  
16 Catanach the relevant data on the well, including comple-  
17 tion history and treatment given to zones?

18 A Yes, sir. The well was drilled through  
19 the Mancos formation and into the Dakota in 1981. We  
20 tested the Dakota in 1984 with an acid job and in 1988  
21 fraced the Dakota and we are currently testing the Dakota.

22 Q All right, and all that is set forth on  
23 Exhibit Number Two.

24 A Yes, sir, all the completion data is  
25 shown.

1 Q At this time do you have a current  
2 gas/oil ratio test on the zones to be commingled?

3 A We didn't test the well for a couple of  
4 months. The production seems to be -- the oil production  
5 appears to be falling off. The gas production is around 50  
6 MCF a day. The oil is down to about 2 or 3 barrels a day.

7 Q And when you are able to get those tests  
8 they will be reported to the Commission on Form C-116?

9 A Yes, sir.

10 Q Would you refer to the second page of  
11 Exhibit Number Two and review that for Mr. Catanach?

12 A This shows schematically the casing  
13 string, 20-inch conductor casing, was set at 24 feet with  
14 125 sacks of cement. 10-3/4 inch casing was run to 1039  
15 feet and a satellite inch and a quarter string run with it.  
16 The satellite string was used to inject air to aerate the  
17 mud. We anticipate lost circulation in that area.

18 Then we set 7-5/8ths inch casing at 7219  
19 feet and then after drilling to total depth, ran a liner,  
20 5-1/2 inch liner, top at 7061, and the bottom at total  
21 depth of 8400, 8398.

22 We perforated the Dakota only from about  
23 8334 to 8384 and that's the zone that's being tested now.

24 Q Are both zones in the wells capable of  
25 only marginal production?

1           A           Well, we don't know what the Mancos  
2 formation will do but the Mancos in this section is part of  
3 the participating area and so the production that will be  
4 allocated to that acreage will be its proportionate share  
5 of the total Mancos formation participating area produc-  
6 tion, so really all we have to measure is the Dakota pro-  
7 duction and then once we're satisfied with what that volume  
8 is, then we just deduct that each month from the partici-  
9 pating area production.

10           Q           Do you anticipate the Dakota will be a  
11 marginal zone?

12           A           Yes, sir, the Dakota is marginal, we  
13 know that.

14           Q           Now, are the zones capable of flowing or  
15 are they going to be artificially lifted?

16           A           We will lift them with the gas lift.

17           Q           Do you have bottom hole pressure infor-  
18 mation on these zones?

19           A           Yes, sir. I didn't find it, I apolo-  
20 gize, I thought I had it. Well, it's approximately 1700  
21 pounds in the Dakota. The Mancos pressure maintenance pro-  
22 ject runs around 100 pounds below the bubble point, about  
23 1400 pounds.

24           Q           Would this pressure differential be such  
25 as could result in gas migration between zones?

1 A No, sir.

2 Q Are you prepared to make a recommenda-  
3 tion to the Examiner as to the allocation of production  
4 between each of the commingled zones?

5 A Yes, sir.

6 Q And how do you recommend that be  
7 handled?

8 A We just produce the commingled produc-  
9 tion and deduct from the total the amount that we have de-  
10 termined by test to be the Dakota share, which will be  
11 pretty small.

12 Q And any allocation that is worked out  
13 for the Dakota share, you'd be willing to do that in con-  
14 junction and working with the Aztec District Office of the  
15 Division?

16 A Oh, yes, sir.

17 Q Are these same zones commingled in other  
18 wells in the general area?

19 A Yes, sir.

20 Q And whereabouts generally are those  
21 other commingled wells?

22 A I think NM & O has some in Gavilan.

23 Q Are there any in the Canada Ojitos Unit?

24 A No.

25 Q Are you aware of any compatibility prob-

1 lems with the fluids that have been encountered in those  
2 commingled wells?

3 A No, sir.

4 Q Are the reservoir characteristics of  
5 these pools such that in your opinion underground waste  
6 will not be caused by the proposed commingling?

7 A There will be no underground waste  
8 caused.

9 Q In your opinion will granting this  
10 application result in increased recovery of hydrocarbons?

11 A Yes, sir, if we cannot commingle the  
12 production we'll just have to plug off the Dakota.

13 Q Will the value of the commingled pro-  
14 duction exceed the sum of the values of each of the indi-  
15 vidual zones?

16 A Yes, sir.

17 Q And economic savings will result?

18 A Yes, sir.

19 Q In your opinion will granting this ap-  
20 plication be in the best interest of conservation, the  
21 prevention of waste, and the protection of correlative  
22 rights?

23 A Yes, sir.

24 Q Were Exhibits One through Three pre-  
25 pared by you or compiled under your direction and super-

1 vision?

2 A Yes, sir.

3 MR. CARR: At this time, Mr.  
4 Catanach, I move the admission of Benson-Montin-Greer Ex-  
5 hibits One through Three.

6 MR. CATANACH: Exhibits One  
7 through Three will be admitted as evidence.

8 MR. CARR: That concludes my  
9 direct examination.

10

11

CROSS EXAMINATION

12 BY MR. CATANACH:

13 Q Mr. Greer, did you say the Dakota had  
14 already been tested?

15 A Yes, sir, we're testing it right now.  
16 The Mancos has not.

17 Q The Mancos has not been tested?

18 A No, sir.

19 Q Oh, so this is a fairly new well.

20 A Well, it's new in the sense of comple-  
21 tion.

22 Q In these two zones.

23 A We drilled it a number of years ago and  
24 for a number of reasons we didn't complete it. The frac  
25 treatment was given, I think, in August last -- last August

1 and we got the pipelines laid and commenced production, I  
2 believe, in October or November, and had recovered most the  
3 frac fluid, I think, in November, and had new production, I  
4 believe, November and December.

5 Q You've got the initial potential down  
6 here of the Dakota as one barrel a day?

7 A That was when we acidized it and its  
8 initial production in, I believe, 19 -- 1984, I believe.  
9 Yeah, October of 1984 and the well was shut-in at that  
10 time, has been shut-in until we started working on it in  
11 last August.

12 Q And what -- do you have any ideas about  
13 what it will make while producing?

14 A Well, the adjoining wells run all the  
15 way from about 10 barrels a day up to 200 barrels a day,  
16 and it's just another one of those things you just don't  
17 know till you drill them, but it could be anywhere in that  
18 range.

19 Q I see. The -- is the interest common in  
20 the two formations by virtue of the unit?

21 A The working interest is common. The  
22 overriding royalties are different, so that brings about a  
23 difference in ownership and, let's see, the basic royalty  
24 is different. The Dakota will be all Federal and the  
25 Mancos will be the pool, or the participating area

1 interest, which includes both state land and fee lands.

2 Q Do you see how there would -- any of  
3 these interest owners would be adversely affected by this?

4 A No, sir.

5 Q As I understand it, the working interest  
6 is common, the overriding royalty is different.

7 A Different and the royalty interest.

8 Q Basic royalty is different.

9 MR. CATANACH: I have no fur-  
10 there questions of the witness. He may be excused.

11 MR. CARR: I have nothing  
12 further, Mr. Examiner.

13 MR. CATANACH: Being nothing  
14 further in this case, it will be taken under advisement.

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16 (Hearing concluded.)

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C E R T I F I C A T E

I, SALLY W. BOYD, C. S. R. DO HEREBY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division (Commission) was reported by me; that the said transcript is a full, true and correct record of the hearing, prepared by me to the best of my ability.

Sally W. Boyd CSR

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiners hearing of Case No. 9553, heard by me on February 1, 1989.  
David R. Catanzaro, Examiner  
Oil Conservation Division

1 STATE OF NEW MEXICO  
2 ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
3 OIL CONSERVATION DIVISION  
4 STATE LAND OFFICE BUILDING  
5 SANTA FE, NEW MEXICO

6  
7 4 January 1989

8 EXAMINER HEARING

9 IN THE MATTER OF:

10 Application of Benson-Montin-Greer CASE  
11 Drilling Corp. for downhole comming- 9553  
12 ling, Rio Arriba County, New Mexico.

13  
14 BEFORE: David R. Catanach, Examiner

15 TRANSCRIPT OF HEARING

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17 A P P E A R A N C E S

18 For the Division: Robert G. Stovall  
19 Attorney at Law  
20 Legal Counsel to the Division  
21 State Land Office Bldg.  
22 Santa Fe, New Mexico

23 For the Applicant:  
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MR. CATANACH: Call next Case 9553.

MR. STOVALL: Application of Benson-Montin-Greer Drilling Corp. for downhole commingling, Rio Arriba County, New Mexico.

Applicant requests this case be continued to February 1st, 1989.

MR. CATANACH: Case 9553 is hereby continued to February 1st.

(Hearing concluded.)

## C E R T I F I C A T E

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Sally W. Boyd CSR

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David R. Cavanah, Examiner  
Oil Conservation Division

1 STATE OF NEW MEXICO  
2 ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
3 OIL CONSERVATION DIVISION  
4 STATE LAND OFFICE BUILDING  
5 SANTA FE, NEW MEXICO

6 7 December 1988

7 EXAMINER HEARING

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MR. CATANACH: Call Case 9553.

MR. STOVALL: Application of Benson-Montin-Greer Drilling Corp. for a downhole commingling, Rio Arriba County, New Mexico.

Applicant requests this case be continued to January 4th, 1989.

MR. CATANACH: Case 9553 will be continued to January 4th, 1989.

(Hearing concluded.)

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C E R T I F I C A T E

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that the said transcript is a full, true and correct record  
of the hearing, prepared by me to the best of my ability.

Sally W. Boyd CSR

I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Examiner hearing of Case No. 9553  
heard by me on December 7 1988.

David R. Cabanal, Examiner  
Oil Conservation Division