

STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF: )  
 )  
APPLICATION OF BLACKWOOD & NICHOLS )  
CO., A LIMITED PARTNERSHIP, FOR ) CASE NO. 10201  
DIRECTIONAL DRILLING AND AN )  
UNORTHODOX COAL GAS WELL LOCATION, )  
RIO ARriba AND SAN JUAN COUNTIES, )  
NEW MEXICO. )  
\_\_\_\_\_ )

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

January 10, 1991  
1:33 p.m.  
Santa Fe, New Mexico

This matter came on for hearing before the Oil Conservation Division on January 10, 1991, at 1:33 p.m. at Oil Conservation Division Conference Room, State Land Office Building, 310 Old Santa Fe Trail, Santa Fe, New Mexico, before Deborah F. LaVine, RPR, Certified Court Reporter No. 252, in and for the County of Santa Fe, State of New Mexico.

FOR: OIL CONSERVATION  
DIVISION

BY: DEBORAH F. LAVINE, RPR  
Certified Court Reporter  
CCR No. 252

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## I N D E X

January 10, 1991  
Examiner Hearing  
Case No. 10201

PAGE

APPEARANCES

3

APPLICANT'S WITNESSES:

CLARENCE A. RECTOR

Direct Examination by Mr. Carr

7

Examination by Examiner Catanach

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APPLICANT'S EXHIBITS:

MRKD

ADMTD

1.	7	12
2.	8	12
3.	9	12
4.	11	12

## A P P E A R A N C E S

BEFORE: DAVID R. CATANACH, Hearing Examiner

FOR THE DIVISION: ROBERT G. STOVALL, ESQ.  
General Counsel  
Oil Conservation Commission  
State Land Office Building  
310 Old Santa Fe Trail  
Santa Fe, New Mexico 87501

FOR THE APPLICANT: CAMPBELL & BLACK, P.A.  
Attorneys at Law  
BY: WILLIAM F. CARR, ESQ.  
110 North Guadalupe  
Suite 1  
Santa Fe, New Mexico 87501

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1 EXAMINER CATANACH: Let's call case 10201.

2 MR. STOVALL: Application of Blackwood & Nichols Company,  
3 a limited partnership, for directional drilling and an  
4 unorthodox coal gas well location Rio Arriba and San Juan  
5 Counties, New Mexico.

6 EXAMINER CATANACH: Are there appearances in this case?

7 MR. CARR: May it please the examiner. My name is  
8 William F. Carr with the law firm Campbell & Black, P.A. of  
9 Santa Fe. We represent Blackwood & Nichols Company, and I  
10 have one witness.

11 EXAMINER CATANACH: Are there any other appearances?  
12 Will the witness please stand and be sworn in.

13 (Witness sworn.)

14 CLARENCE A. RECTOR

15 the Witness herein, having been first duly sworn, was examined  
16 and testified as follows:

17 DIRECT EXAMINATION

18 BY MR. CARR:

19 Q. Will you state your full name and place of  
20 residence.

21 A. Clarence A. Rector, and I live at 5920 Rinconada in  
22 Farmington, New Mexico.

23 Q. Mr. Rector, by whom are you employed and in what  
24 capacity?

25 A. I'm employed with Blackwood & Nichols as an

1 operations engineer.

2 Q. Have you previously testified before the New Mexico  
3 Oil Conservation Division?

4 A. Yes, I have.

5 Q. And did you review at that time your educational  
6 background and your work experience?

7 A. Yes, I did.

8 Q. How long have you been with Blackwood & Nichols  
9 Company?

10 A. Approximately 17 months.

11 Q. And you're working in an engineering capacity for  
12 that company?

13 A. Yes, I am.

14 Q. Prior to that time, by whom were you employed?

15 A. With El Paso Exploration which became Meridian Oil  
16 when I was with them.

17 Q. And for how long were you with Meridian and El  
18 Paso?

19 A. 14 years.

20 Q. And you were working in engineering capacities with  
21 them?

22 A. Yes, I was.

23 Q. Are you familiar with the application filed in this  
24 case on behalf of Blackwood & Nichols Company?

25 A. Yes, I am.

1 Q. Have you made a study of the subject area?

2 A. Yes, sir.

3 Q. And you're familiar with the proposed well?

4 A. Yes.

5 MR. CARR: Are the witness's qualifications acceptable?

6 EXAMINER CATANACH: They are.

7 Q. (By Mr. Carr:) Would you briefly state what  
8 Blackwood & Nichols seeks with this application.

9 A. Yes, what we seek is to drill a directional well  
10 with a surface location in Section 20, 30 North, 7 West, Rio  
11 Arriba County and a bottom hole location in Section 19 of that  
12 same township and range.

13 Q. Will the bottom hole be at an unorthodox location?

14 A. Yes, it will.

15 Q. And in what formation are you planning to complete?

16 A. This will be a Fruitland Coal well.

17 Q. Are you familiar with the rules which govern well  
18 locations and spacing in the Fruitland Coal pool?

19 A. Yes, I am.

20 Q. And what are those?

21 A. The northeast, southwest quarter sections are  
22 dedicated, and they're on 320-acre drill blocks. And orthodox  
23 location is within the proration which is 790 feet from the  
24 section lines and 130 feet from --

25 Q. Quarter lines?

1 A. Yeah, from the quarter lines.

2 Q. So there's a 790-foot setback from the outer  
3 boundary of the proration unit?

4 A. Yes.

5 Q. And the proposed bottom hole location will be  
6 substantially closer than that?

7 A. Yes, it will. It will be within 54 feet of the  
8 section line.

9 Q. Have you prepared certain exhibits for presentation  
10 in this case?

11 A. Yes, I have.

12 (Applicant's Exhibit No. 1 was  
13 marked for identification.)

14 Q. Would you identify what has been marked Blackwood &  
15 Nichols Exhibit Number 1 and then review this for Mr.  
16 Catanach.

17 A. Exhibit Number 1 is a map of the area in question  
18 showing the surface location of the 475 in Section 20 and the  
19 bottom hole location 2,000 feet horizontal displaced in  
20 Section 19. And the bottom hole will be under Navajo Lake.

21 Q. And what acreage do you propose to dedicate to this  
22 well?

23 A. The east half of Section 19.

24 Q. Is this tract an interior tract to the Northeast  
25 Blanco Unit, or are there other offsetting owners?

1 A. We are bounded on the south by Meridian Oil.

2 Q. And notice has been given to Meridian of the  
3 application?

4 A. Yes, it has.

5 Q. But the acreage to the east of this location is  
6 within the Northeast Blanco Unit?

7 A. Yes, it is.

8 (Applicant's Exhibit No. 2 was  
9 marked for identification.)

10 Q. Let's now go to Exhibit Number 2. And I'd ask you  
11 to identify that and then just explain to Mr. Catanach what it  
12 shows.

13 A. Exhibit Number 2 is our C-102 which was submitted  
14 with our APD. And it shows the surface location in Section 20  
15 and the bottom hole location in Section 19 and showing the  
16 east half of Section 19 dedicated to this well bore.

17 Q. Why are you seeking to directionally drill this  
18 well as you have proposed it?

19 A. To effectively drain the area under the lake and to  
20 move away from the bluff or to try to get our bottom hole  
21 location as close to the proration unit as possible and to get  
22 away from the south boundary of the lake which has not proven  
23 to be productive in the coal, as productive.

24 Q. This is not the first proposal for this well that  
25 Blackwood & Nichols has developed, is it?

1           A.     No, it isn't. We had originally set this well up  
2 in Section 19 for a surface location, then proposed to drill  
3 due north 1500 feet. And the Bureau of Reclamation which  
4 governs the dam did not want us to drill straight north. We  
5 swung the direction 26 degrees east to remain in the proration  
6 unit. And they do not -- well, they've held up approval on  
7 that location now for about three months. The dam safety  
8 committee or the group that is concerned with the safety of  
9 the dam has had it held up in their offices, which is in Salt  
10 Lake.

11           Q.     Now the location and the directional drilling  
12 program that you are proposing in this case does have Bureau  
13 of Reclamation approval?

14           A.     We have gotten verbal approval from the Bureau of  
15 Rec saying that they would have no problem with this.

16                     (Applicant's Exhibit No. 3 was  
17                     marked for identification.)

18           Q.     Let's go now to Blackwood & Nichols Exhibit Number  
19 3. And I'd ask you to identify that and then, working with  
20 this exhibit, Mr. Rector, could you review for the examiner  
21 exactly how you propose to go about the drilling of this well.

22           A.     Exhibit Number 3 was a vertical plan and horizontal  
23 plan prepared by Smith International, the people who have done  
24 our directional work for us. And we intend to set 300 feet of  
25 10 and three-quarter surface pipe and starting 75 foot below

1 the surface, start our directional build angle. And we will  
2 build at 7 degrees per 100 feet until we reach approximately  
3 52 and a quarter degrees which we will hold for some distance  
4 and then drop the wellbore back to vertical just above the  
5 Fruitland Coal. And when we reach a TD of -- a true vertical  
6 depth of 2950, we'll set 7 and five-eighths pipe at that point  
7 and cement back to surface. Then we will drill through the 7  
8 and five-eighths shoe and drill through the coal seams at that  
9 point.

10 Q. Would it be satisfactory to Blackwood & Nichols for  
11 the order resulting from this hearing to authorize completion  
12 of the well within a target area with a 50-foot radius around  
13 the proposed bottom hole location?

14 A. Yes, it would.

15 Q. That would keep it on Section 19; isn't that true?

16 A. Yes, it will keep it on Section 19.

17 Q. And even though it is close to the common boundary  
18 between Sections 19 and 20, the interest owners in 20 and 19  
19 are all unitized and will be sharing in the production?

20 A. That is correct.

21 Q. So you're not draining production from one interest  
22 owner that would benefit another?

23 A. No, we're not.

24 Q. Will Blackwood & Nichols run a directional survey  
25 on this well as required by OCD Rule 111?

1 A. Yes, we will, from kickoff point to TD.

2 Q. Has notice of this application been provided to  
3 Meridian, the BLM, and the state land office?

4 A. Yes, it has.

5 (Applicant's Exhibit No. 4 was  
6 marked for identification.)

7 Q. And that is what has been marked as Blackwood &  
8 Nichols Exhibit Number 4?

9 A. Yes. Yes, it is.

10 Q. How soon would you be ready to commence this well?

11 A. We would like to start -- well, we have a rig  
12 available now that's been working for us for quite some time.  
13 And if we can -- that rig will be ready to move on to a new  
14 location in about 12 days.

15 Q. You do request that the order be expedited to the  
16 extent possible?

17 A. Yes, we do.

18 Q. In your opinion, will granting this application be  
19 in the best interest of conservation, the prevention of waste,  
20 and the protection of correlative rights?

21 A. Yes, it will.

22 Q. Were Exhibits 1 through 4 either prepared by you or  
23 compiled under your direction?

24 A. Yes, they were.

25 MR. CARR: At this time, Mr. Catanach, we move the

1 admission of Blackwood & Nichols Exhibits 1 through 4.

2 EXAMINER CATANACH: Exhibits 1 through 4 will be admitted  
3 as evidence.

4 (Applicant's Exhibit Nos. 1 through 4  
5 were admitted into evidence.)

6 MR. CARR: And that concludes my direct examination of  
7 Mr. Rector.

8 EXAMINATION

9 BY EXAMINER CATANACH:

10 Q. Mr. Rector, is it my understanding that the Bureau  
11 of Reclamation will not let you drill in Section 19?

12 A. At this point, they have not given us clearance to  
13 drill, no, sir. The problem is the wellbore falls within  
14 1,000 foot of the toe of the dam, the upstream side of the  
15 dam. And their safety rules more or less say there will be no  
16 disturbance within 1,000 foot of the toe of the dam which is  
17 the leading point of the dam.

18 Q. Where would the lake be present on your plat here?  
19 Where would the lake be present?

20 A. On the C-102?

21 Q. Yes.

22 A. It would be shown -- this is the map of the area,  
23 but --

24 MR. CARR: You're looking at Exhibit 1?

25 A. Yeah, this is the lake around here, (indicating).

1 And it follows slightly closer than half way to the surface  
2 location, you know, between the bottom hole and the surface  
3 location. It's the edge of the water. Looks like it's about  
4 400 feet -- no, looks like about maybe 8 or 900 feet from the  
5 surface location.

6 And this location in Section 20 is on an existing  
7 well pad, and this entire area is a very sharp hillside or  
8 cliff, for that matter, at some places. And the existing well  
9 pad in Section 20 or the one around on where we had spotted  
10 the 475 the first time are the only two choices we have.

11 Q. (By Examiner Catanach:) So you've given up on your  
12 attempts to try and drill that well from a location in Section  
13 19?

14 A. Yes, we have.

15 MR. STOVALL: Are those standard sized sections right  
16 there?

17 THE WITNESS: Yes, they are.

18 Q. (By Examiner Catanach:) Is this proposed well  
19 likely to be the only well drilled in Section 19?

20 A. Yes, sir. We have the southwest quarter section is  
21 drilled already, and then this will be the one dedicated to  
22 the northeast.

23 Q. Is there a Fruitland Coal well in Section 20?

24 A. Yes.

25 Q. Is that the one that you're drilling from?

1           A.     Yes, sir, it is, the 479 location. We're expanding  
2 that location, and we will start approximately 70 to 80 feet  
3 away from the existing well bore. We'll be moving north away  
4 from it so we won't have any problem with our directional  
5 work.

6           Q.     Do you have an opinion as to whether a well located  
7 54 feet from the outer boundary of the proration unit will  
8 effectively drain that proration unit?

9           A.     It would probably not drain it as well as one in  
10 the proration unit itself or further into it, but I feel  
11 that's about as close as we can get with our present  
12 technologies. We've drilled three directional drills already.  
13 And the further towards which we've gotten so far is 1630  
14 feet. And we feel by going 2,000 feet, we're pushing our  
15 abilities because we have to get our direction, get kicked off  
16 at 2,000 feet and be back to vertical again within a 2950-foot  
17 vertical section.

18                   And we're increasing or almost doubling our build  
19 sections right now in the top of the hole. We're going from  
20 four and a half degrees in the previous wells to seven degrees  
21 per hundred foot in this one. And that's going to make  
22 running our seven and five-eighths a little more difficult to  
23 get it going around the bend it's so close to the surface  
24 because you have no casing weight. It would be better if we  
25 could get further out into the section, yes. But whether we

1 can do that or not is, you know, a question at this point.

2 Q. Is it also impossible to drill from a location in  
3 Section 20 that's closer to Section 19?

4 A. Let's see. No, this is really the only -- if I had  
5 a better map, you could see the severity of the hillside  
6 there. It's very steep. And like I say, it's a cliff in most  
7 places. The 479 location is the closest one to Section 19.

8 Q. (By Mr. Stovall:) Is the dam actually under where  
9 you've got your tag on this bottom hole location on that  
10 exhibit?

11 A. Yes, it is. It extends out. Well, I have a  
12 schematic here of the dam, but it does extend out quite a ways  
13 from from the crest of the dam. But it does come back.

14 Q. I'll tell you what I'm going to do is let me,  
15 because it appears that you've covered it up, let me just send  
16 you an exhibit and a red pen. And would you mark as best you  
17 can tell with the red pen where the dam --

18 A. Where the dam's at?

19 Q. -- itself is.

20 A. (Witness complies.) Yeah, that is what would be the  
21 eastward toe of the dam. It has a very gentle slope that  
22 comes back up under the lake. And of course the original 475,  
23 the wellbore came too close to that toe. It came within 1,000  
24 feet of it.

25 Q. That's the one to the south of the dam there?

1           A.     Yes, uh-huh.

2           Q.     How much higher is the 479 location than the dam  
3 elevation? Do you know?

4           A.     This 479 location is 300 foot above the crest of  
5 the dam.

6           Q.     Now you're saying BOR requires that the well be at  
7 least 1,000 feet away from the dam; is that --

8           A.     The wellbore itself, yes. Because we are going in  
9 a northerly direction with the 475 off the original surface  
10 location, you know, about, oh, we start our directional work  
11 and then that part of the hole was too close, you know, was  
12 within 1,000 foot of the toe of the dam.

13          Q.     The 475, you said?

14          A.     The original location of the 475, yes.

15          Q.     And that 1,000 feet, is that a horizontal distance,  
16 or is that a measured distance from the dam to the well bore?

17          A.     It's a measured distance from the dam to the  
18 wellbore.

19          Q.     So you actually get within 1,000 feet on a  
20 horizontal measurement but because you're below the depth of  
21 the lake, you're taking care of that 1,000-foot requirement;  
22 is that right?

23          A.     In this particular case, I think our surface was  
24 more than 1,000 feet. But when we started our directional  
25 work and went north -- this is a view of the wellbore and the

1 lake bottom and the dam drilling from the 475 from Section 19,  
2 which is right here. And our well direction was 26 degrees  
3 east. And this distance is less than 1,000 feet, and that's  
4 what they're concerned with.

5 MR. STOVALL: That answers the questions I've got.

6 Q. (By Examiner Catanach:) Mr. Rector, would all of  
7 Section 19 and all of Section 20 be included in a coal  
8 participating area in the Northeast Blanco Unit?

9 A. Yes, it will.

10 Q. So those interests will all be treated fairly?

11 A. Yes.

12 Q. (By Mr. Stovall:) Mr. Rector, have you had any  
13 discussion with -- let me back up. And my first question is,  
14 This is all federal minerals; is that correct?

15 A. This is state minerals on this particular one.

16 Q. It is state minerals?

17 A. Yes.

18 Q. Have you had discussion with the state land office  
19 or even with taxation and revenue regarding the allocation of  
20 production between the counties and the school districts that  
21 may be affected?

22 A. No, I haven't. I have had a survey done which  
23 shows where the bottom hole will fall if we hit our target  
24 exactly. And this is taken off of a 1917 survey of the county  
25 line. And if we hit our target with zero variance, we will

1 fall in San Juan County, the wellbore. The vertical section  
2 of the wellbore will be within San Juan County, and we're  
3 starting in Rio Arriba County.

4 MR. STOVALL: Well, the Section 19 proration unit -- I'm  
5 sorry. It's the east half, isn't it --

6 MR. CARR: Yes.

7 MR. STOVALL: -- of 19?

8 Q. (By Mr. Stovall:) Is that split? The county line  
9 goes through the east half of Section 19, doesn't it?

10 A. Yes, it does.

11 Q. So I'd say more that it doesn't really affect the  
12 issuance of the decision, but I would advise you that as you  
13 develop reporting for this well, you are going to need to have  
14 some discussion with the state land office royalty people and  
15 with taxation and revenue people regarding the allocation of  
16 production for severance tax and royalty and --

17 A. Yes.

18 Q. -- those purposes.

19 Q. (By Examiner Catanach:) And you're requesting a  
20 50-foot target area?

21 A. Yes, we are.

22 Q. That could conceivably put you four feet off that  
23 proration unit's boundary?

24 A. Yes, it could. In the previous three we've done,  
25 we haven't had a problem getting, oh, within 15 feet. I feel

1 we could have hit dead center, you know, if we had pushed it,  
2 if we absolutely had to.

3 Q. Is there a well on the northeast of 20?

4 A. Yes, there is, the 413 R.

5 Q. I can't see it on my copy.

6 A. It's rather -- it's up in the --

7 Q. I see where.

8 A. It's up in the very northeast.

9 Q. Kind of between the O in "before" and the O in  
10 "oil"? On the exhibit stamp.

11 A. Oh --

12 MR. CARR: I did that just to --

13 EXAMINER CATANACH: I believe that's all I have.  
14 Anything else, Bob?

15 MR. STOVALL: (Shakes head.)

16 EXAMINER CATANACH: Anything further in this case, Mr.  
17 Carr?

18 MR. CARR: Nothing further.

19 EXAMINER CATANACH: There being nothing further, case  
20 10201 will be taken under advisement.

21 (The foregoing hearing was adjourned at the approximate  
22 hour of 1:55 p.m.)

23 I do hereby certify that the foregoing is  
24 a complete record of the proceedings in  
the Examiner hearing of Case No. 10201  
heard by me on January 10 19 91.

25 David R. Catanach, Examiner  
Oil Conservation Division

1 STATE OF NEW MEXICO )  
2 ) ss.  
3 COUNTY OF SANTA FE )


4  
5  
6 REPORTER'S CERTIFICATE

7 I, DEBORAH F. LAVINE, RPR, a Certified Court  
8 Reporter and Notary Public, DO HEREBY CERTIFY that I  
9 stenographically reported these proceedings before the Oil  
10 Conservation Division; and that the foregoing is a true,  
11 complete and accurate transcript of the proceedings of said  
12 hearing as appears from my stenographic notes so taken and  
13 transcribed under my personal supervision.

14 I FURTHER CERTIFY that I am not related to nor  
15 employed by any of the parties hereto and have no interest in  
16 the outcome hereof.

17 DATED at Santa Fe, New Mexico, this 11th of  
18 February, 1991.

19  
20  
21  
22 My Commission Expires:  
23 August 6th, 1993

24  
25  
  
DEBORAH F. LAVINE, RPR  
Certified Court Reporter  
CCR No. 252, Notary Public

HUNNICUTT REPORTING  
DEBORAH F. LAVINE, CCR, RPR