

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:

ORIGINAL

APPLICATION OF BLACK MOUNTAIN OPERATING, CASE NO. 15628  
LLC FOR A NONSTANDARD OIL SPACING AND  
PRORATION UNIT AND COMPULSORY POOLING,  
LEA COUNTY, NEW MEXICO.

Consolidated with

APPLICATION OF BLACK MOUNTAIN OPERATING, CASE NO. 15629  
LLC FOR A NONSTANDARD OIL SPACING AND  
PRORATION UNIT AND COMPULSORY POOLING,  
LEA COUNTY, NEW MEXICO.

Consolidated with

APPLICATION OF BLACK MOUNTAIN OPERATING, CASE NO. 15630  
LLC FOR A NONSTANDARD OIL SPACING AND  
PRORATION UNIT AND COMPULSORY POOLING,  
LEA COUNTY, NEW MEXICO.

Consolidated with

APPLICATION OF MEWBOURNE OIL COMPANY CASE NO. 15600  
FOR A NONSTANDARD OIL SPACING AND  
PRORATION UNIT AND COMPULSORY POOLING,  
LEA COUNTY, NEW MEXICO.

Consolidated with

APPLICATION OF MEWBOURNE OIL COMPANY CASE NO. 15601  
FOR A NONSTANDARD OIL SPACING AND  
PRORATION UNIT AND COMPULSORY POOLING,  
LEA COUNTY, NEW MEXICO.

Consolidated with

APPLICATION OF MEWBOURNE OIL COMPANY CASE NO. 15602  
FOR A NONSTANDARD OIL SPACING AND  
PRORATION UNIT AND COMPULSORY POOLING,  
LEA COUNTY, NEW MEXICO.

REPORTER'S TRANSCRIPT OF PROCEEDINGS  
EXAMINER HEARING  
March 30, 2017  
Santa Fe, New Mexico

1     BEFORE:   PHILLIP GOETZE, CHIEF EXAMINER  
2               WILLIAM V. JONES, TECHNICAL EXAMINER  
3               GABRIEL WADE, LEGAL EXAMINER

4               These matters came on for hearing before  
5     the New Mexico Oil Conservation Division, Phillip  
6     Goetze, Chief Examiner, William V. Jones, Technical  
7     Examiner, and Gabriel Wade, Legal Examiner, on Thursday,  
8     March 30, 2017, at the New Mexico Energy, Minerals and  
9     Natural Resources Department, Wendell Chino Building,  
10    1220 South St. Francis Drive, Porter Hall, Room 102,  
11    Santa Fe, New Mexico.

12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

REPORTED BY:   Mary C. Hankins, CCR, RPR  
                 New Mexico CCR #20  
                 Paul Baca Professional Court Reporters  
                 500 4th Street, Northwest, Suite 105  
                 Albuquerque, New Mexico 87102

APPEARANCES

FOR APPLICANT BLACK MOUNTAIN OPERATING, LLC:

SETH McMILLAN, ESQ.

and

J. SCOTT HALL, ESQ.

MONTGOMERY & ANDREWS LAW FIRM

325 Paseo de Peralta

Santa Fe, New Mexico 87501

(505) 982-3873

shall@montand.com

smcmillan@montand.com

FOR MEWBOURNE OIL COMPANY AND ICA ENERGY, INC.:

JAMES G. BRUCE, ESQ.

Post Office Box 1056

Santa Fe, New Mexico 87504

(505) 982-2043

jamesbruc@aol.com

ALSO PRESENT: Mark Adams, Esq., Rodey Law Firm

1	INDEX	
2		PAGE
3	Case Numbers 15628, 15629, 15630, 15600, 15601, 15602 Called	6
4		
5	Opening Statement By Mr. McMillan	8
6	Opening Statement by Mr. Bruce	8
7	Mewbourne Oil Company and ISC Energy, Inc.'s Case-in-Chief:	
8	Witnesses:	
9	Corey Mitchell:	
10	Direct Examination by Mr. Bruce	11
11	Cross-Examination by Mr. McMillan	22
	Cross-Examination by Examiner Jones	29
12	Direct Examination (Witness recalled) By Mr. Bruce	147
13		
14	Nate Cless:	
	Direct Examination by Mr. Bruce	32
15	Cross-Examination by Mr. McMillan	41
	Cross-Examination by Examiner Jones	45
16	Cross-Examination by Examiner Goetze	48
	Redirect Examination by Mr. Bruce	49
17	Recross Examination by Mr. McMillan	50
18	Travis Cude:	
19	Direct Examination by Mr. Bruce	52
	Cross-Examination by Mr. McMillan	57
20	Redirect Examination by Mr. Bruce	66
	Cross-Examination by Examiner Jones	68
21	Cross-Examination by Examiner Goetze	75
22		
23		
24		
25		

1	INDEX (Cont'd)	
2		PAGE
3	Black Mountain Operating, LLC's Case-in-Chief:	
4	Witnesses:	
5	Robert "Robbie" Zimmerman:	
6	Direct Examination by Mr. McMillan	76
	Cross-Examination by Mr. Bruce	93
7	Redirect Examination by Mr. McMillan	101
	Cross-Examination by Examiner Jones	103
8		
	Michael E. McCracken, Ph.D.:	
9		
	Direct Examination by Mr. McMillan	104
10	Cross-Examination by Mr. Bruce	134
	Cross-Examination by Examiner Jones	142
11	Cross-Examination by Examiner Goetze	144
12	Statement by Mark Adams, Esq., Audience Member	149
13	Proceedings Conclude	151
14	Certificate of Court Reporter	152
15	EXHIBITS OFFERED AND ADMITTED	
16	Mewbourne Oil Company Exhibit Numbers	
	1 through 13	22
17		
	Mewbourne Oil Company Exhibit Numbers	
18	14 through 20	41
19		
	Mewbourne Oil Company Exhibit Numbers	
	21, 22 and 23	57
20		
	Mewbourne Oil Company Exhibit Number 24	66
21		
	Mewbourne Exhibit Number 25	101
22		
	Black Mountain Operating, LLC Exhibit	
23	Numbers 1, 2, 4, 5, 7 and 8	93
24		
	Black Mountain Operating, LLC Exhibit	
	Numbers 3 and 6	134
25		

1 (1:52 p.m.)

2 EXAMINER GOETZE: Call Case Number 15628,  
3 application of Black Mountain Operating, LLC for a  
4 nonstandard oil spacing and proration unit and  
5 compulsory pooling, Lea County, New Mexico.

6 Call for appearances.

7 MR. McMILLAN: Mr. Examiner, on behalf of  
8 Black Mountain, Seth McMillan and Scott Hall, Montgomery  
9 & Andrews.

10 MR. BRUCE: Mr. Examiner, Jim Bruce of  
11 Santa Fe representing Mewbourne Oil Company.

12 EXAMINER GOETZE: Now, Mr. Hall and  
13 Mr. McMillan, we have Case 15628, Case 15629 and Case  
14 15630 that you have asked for consolidation?

15 MR. McMILLAN: Indeed, Mr. Examiner.

16 EXAMINER GOETZE: Also as a procedural  
17 matter, you have requested that we hear Mewbourne's  
18 cases regarding similar acreage, which would be Case  
19 15600 and 15601; is that correct?

20 MR. McMILLAN: That's correct,  
21 Mr. Examiner.

22 EXAMINER GOETZE: Mr. Bruce?

23 MR. BRUCE: That's correct.

24 EXAMINER GOETZE: And you have no  
25 opposition to this?

1 MR. BRUCE: No.

2 EXAMINER GOETZE: You're not going to come  
3 up and have a seat?

4 MR. BRUCE: I think I will.

5 EXAMINER GOETZE: Okay. Thank you.

6 MR. HALL: He's taking that break from  
7 earlier.

8 (Laughter.)

9 EXAMINER GOETZE: So let's start off with  
10 Case 15628 will be consolidated with Case Number 15629,  
11 application of Black Mountain Operating, LLC for a  
12 nonstandard oil spacing and proration unit and  
13 compulsory pooling, Lea County, New Mexico, in  
14 consolidation also with Case 15630, application of Black  
15 Mountain Operating, LLC for a nonstandard oil spacing  
16 and proration unit and compulsory pooling.

17 With that, we will also consolidate the  
18 hearing of Case Number 15600, application of Mewbourne  
19 Oil for a nonstandard oil spacing and proration unit and  
20 compulsory pooling, Lea County, New Mexico, and Case  
21 Number 15601, application of Mewbourne Oil Company for a  
22 nonstandard oil spacing and proration unit and  
23 compulsory pooling, Lea County, New Mexico.

24 So we have five cases.

25 MR. BRUCE: No, six.

1 EXAMINER GOETZE: You're going to throw in  
2 the last one?

3 MR. BRUCE: Absolutely.

4 EXAMINER GOETZE: Okay. Well, then we'll  
5 roll in the last one, Case Number 15602, application of  
6 Mewbourne Oil Company for a nonstandard oil spacing and  
7 proration unit and compulsory pooling, Lea County, New  
8 Mexico.

9 Since we seem to have a full house, we will  
10 start with opening statements.

11 Would you like to make one, sir?

12 OPENING STATEMENT

13 MR. McMILLAN: Well, I hadn't prepared one,  
14 but just very briefly, Mr. Examiner, we essentially have  
15 competing applications here with well proposals that  
16 overlap. We believe -- Black Mountain believes that we  
17 have the better development plan. We are proposing  
18 longer laterals, and I believe that the productivity and  
19 economics of our plan are far superior to that being  
20 proposed by Mewbourne. And we'll be putting on evidence  
21 this afternoon in connection with that argument.

22 Thank you very much.

23 EXAMINER GOETZE: Mr. Bruce?

24 OPENING STATEMENT

25 MR. BRUCE: First of all, Mr. Examiner, I

1 forgot one thing. In all cases, I'm entering an  
2 appearance also for ICA Energy, Inc.

3 But I think the evidence will show that  
4 Mewbourne has the better development plan, as a matter  
5 of fact. Development of the west half-west half of  
6 Section 15 has already been developed. The development  
7 plan is better. Our engineer will show that -- talk  
8 about additional recovery is wrong because Mewbourne can  
9 drill the wells cheaper, and there is no benefit to the  
10 mile-and-a-half laterals. And they will also show the  
11 offsets to the interest of Black Mountain oppose their  
12 mile-and-a-half development plan and that virtually  
13 everyone in Section 15, other than Mewbourne, has agreed  
14 to the Section 15 one-mile laterals, and this is just  
15 the way to go. Mewbourne has been working on this  
16 prospect for two years -- over two years, and they have  
17 the far better development plan, the better track  
18 record, and Mewbourne's application should be granted.

19 EXAMINER GOETZE: On that note, we will ask  
20 how many witnesses do you have?

21 MR. McMILLAN: We have two, Mr. Examiner.

22 MR. BRUCE: We have three.

23 EXAMINER GOETZE: So will the witnesses  
24 please stand, identify yourself to the court reporter  
25 and be sworn in, please.

1 MR. MITCHELL: Corey Mitchell with  
2 Mewbourne Oil Company.

3 MR. CLESS: Nate Cless, Mewbourne Oil  
4 Company.

5 MR. CUDE: Travis Cude, Mewbourne Oil  
6 Company.

7 MR. ZIMMERMAN: Robbie Zimmerman, Black  
8 Mountain Operating.

9 DR. McCracken: Michael McCracken, Black  
10 Mountain Operating.

11 (Mr. Mitchell, Mr. Cless, Mr. Zimmerman and  
12 Dr. McCracken sworn.)

13 MR. HALL: Mr. Examiner, I'd point out that  
14 Mewbourne was the first to file. These cases have been  
15 continued a number of times. We'd be pleased to let  
16 them go first.

17 MR. BRUCE: That's fine.

18 EXAMINER GOETZE: Yes. I did notice on the  
19 case file that it is covered quite well in continuances.  
20 And we will honor your courtesy and let Mewbourne go  
21 first with their presentation.

22 MR. BRUCE: Mr. Examiner, for practical  
23 purposes, we will present testimony on -- the land  
24 testimony -- the common land testimony on 15600 first,  
25 and then we will present some common land -- and then we

1 will just refer to the exhibits for 15601 and 15602  
2 because the basic testimony is the same, just to reduce  
3 the time involved. And then there are certain exhibits  
4 that are common to all -- land exhibits common to all of  
5 them.

6 COREY MITCHELL,  
7 after having been previously sworn under oath, was  
8 questioned and testified as follows:

9 DIRECT EXAMINATION

10 BY MR. BRUCE:

11 Q. Would you please state your name, city of  
12 residence for the record?

13 A. Corey Mitchell, Mewbourne, Midland, Texas.

14 Q. And who do you work for and in what capacity?

15 A. I work for Mewbourne Oil Company as a landman.

16 Q. Have you previously testified before the  
17 Division?

18 A. Yes, sir.

19 Q. And were your credentials as an expert  
20 petroleum landman accepted as a matter of record?

21 A. Yes, sir, they were.

22 Q. And are you familiar with the land matters  
23 involved in all three of these applications, as well as,  
24 for the most part, the Black Mountain applications?

25 A. I am.

1 MR. BRUCE: Mr. Examiner, I tender  
2 Mr. Mitchell as an expert petroleum landman.

3 EXAMINER GOETZE: You're going to be lead,  
4 so I'll ask Mr. McMillan all of these questions?

5 MR. HALL: Please.

6 (Laughter.)

7 EXAMINER GOETZE: Mr. McMillan?

8 MR. McMILLAN: No objection.

9 EXAMINER GOETZE: Very well. You are so  
10 qualified. Thank you.

11 Q. (BY MR. BRUCE) Mr. Mitchell, could you identify  
12 Exhibit 1 for the Examiners and describe the well  
13 involved and what zone you're seeking to test?

14 A. Exhibit 1 is a Midland Map Company land plat of  
15 Section 15, Township 23 South, Range 34 East.  
16 Highlighted on the map is our proposed Pronghorn 15 B3AP  
17 Fed Com #1H well. It is a 3rd Bone Spring Sand test  
18 well encompassing the east half-east half of Section 15.

19 MR. BRUCE: And although I didn't staple  
20 them together, Mr. Examiner, the second page would be  
21 the C-102 for that well.

22 Q. (BY MR. BRUCE) Mr. Mitchell, is the name of the  
23 pool and pool code given on that plat?

24 A. It is.

25 Q. And the surface- and bottom-hole locations, et

1     **cetera, are given?**

2           A.    Yes, sir.

3           **Q.    And is the -- are the first take point and the**  
4     **last take point orthodox?**

5           A.    Yes, sir.

6           **Q.    Is there an API number as of this date?**

7           A.    No, sir, there is not.

8           **Q.    Okay.  What is Exhibit 2?**

9           A.    Exhibit 2 is our tract ownership set out for  
10    this well.  It also identifies the party that we are  
11    seeking to pool, which is Black Mountain Operating, LLC.

12          **Q.    That is the only party you are seeking to pool**  
13    **at this time?**

14          A.    Yes, sir.

15          **Q.    What is Exhibit 3?**

16          A.    Exhibit 3 is the summary of my communications  
17    with Black Mountain Operating, LLC, as well as their  
18    predecessor in title, Merit Energy Company.  Also  
19    attached to this summary of communication are copies of  
20    the respective correspondence.

21          **Q.    And when did Mewbourne first start working on**  
22    **this prospect?**

23          A.    Around January of 2015.

24          **Q.    And so there have been extensive contacts**  
25    **between Mewbourne and Black Mountain since then?**

1           A.    And/or Merit, yes, sir.

2           Q.    And/or Merit.

3                       And there are no unlocatable parties in  
4 this well, are there?

5           A.    No, sir.

6           Q.    In your opinion, has Mewbourne made a  
7 good-faith effort to obtain the voluntary joinder of  
8 Black Mountain in this well?

9           A.    Yes, sir.

10          Q.    Could you identify Exhibit 4 and discuss the  
11 cost of the proposed well?

12          A.    Exhibit 4 is our proposed AFE for this well.  
13 It sets out estimated dry-hole costs of \$2,279,400 and  
14 estimated completed costs of \$4,898,700.

15          Q.    And are these costs in line with the cost of  
16 other similar horizontal wells drilled to this depth in  
17 this area of Lea County?

18          A.    Yes, sir.

19          Q.    Do you request that Mewbourne be appointed  
20 operator of the well?

21          A.    Yes, sir.

22          Q.    And do you have a recommendation for the  
23 amounts which Mewbourne should be paid for supervision  
24 and administrative expenses?

25          A.    We are requesting 7,500 a month for drilling

1 and \$750 a month for producing.

2 Q. And are these amounts equivalent to those  
3 charged by Mewbourne and other operators in this area  
4 for wells of this depth?

5 A. Yes, sir.

6 Q. And do you request that the rates be adjusted  
7 periodically provided by the COPAS accounting procedure?

8 A. Yes, sir.

9 Q. Mr. Mitchell, I've handed you folders of land  
10 exhibits for Cases 15601 and 15602. Are they basically  
11 the identical exhibits, more or less, as in Case 15600?

12 A. Yes, sir.

13 Q. The land plats, the C-102s, the interest  
14 ownership, the contacts with either Merit or Black  
15 Mountain and the AFEs for the well?

16 A. Yes, sir.

17 Q. And in both of them, in your opinion, has  
18 Mewbourne made a good-faith effort to obtain the  
19 voluntary joinder of Black Mountain in those two wells  
20 as well?

21 A. Yes, sir.

22 Q. And do you request the same overhead rates for  
23 these wells?

24 A. Yes, sir.

25 Q. And in all of the wells, do you request that

1 the maximum cost plus 200 percent risk charge be  
2 assessed if Black Mountain goes nonconsent in the well?

3 A. Yes, sir.

4 Q. Mr. Mitchell, was Black Mountain notified of  
5 the hearings in these cases?

6 A. Yes, sir.

7 Q. And is that reflected in the Affidavit of  
8 Notice marked as Exhibit A?

9 A. It is.

10 Q. Now, it was also mailed to Tom Ragsdale in  
11 Houston. What is the status of Mr. Ragsdale?

12 A. We have since come to an agreement with  
13 Mr. Ragsdale. He has executed our JOA and respective  
14 AFEs.

15 Q. So you do not seek to force pool Mr. Ragsdale?

16 A. No, sir.

17 Q. And what is Exhibit 6?

18 A. Exhibit 6 is the list of the offset operators.

19 Q. And this is the offset operators to all three  
20 wells?

21 A. Yes, sir.

22 Q. And was notice of the application sent to all  
23 offsets?

24 A. Yes, sir, it was.

25 MR. BRUCE: And, Mr. Examiner, if you look

1 through all of this, all of the offsets did receive  
2 actual notice of the first letter that was sent.  
3 Lindy's Living Trust in Fort Worth was returned, but we  
4 got a new address, so that trust did receive actual  
5 notice.

6 Q. (BY MR. BRUCE) Mr. Mitchell, what is Exhibit 8?

7 A. Exhibit 8 is excerpts of our JOA dated February  
8 1, 2016, covering Section 15, Township 23 South, 34  
9 East.

10 Q. Okay. And does the JOA cover all of Section  
11 15?

12 A. No, sir.

13 Q. And what depths does it cover?

14 A. It covers from the surface to the base of the  
15 Wolfcamp Formation.

16 Q. Now, these three applications cover the east  
17 half and the east half-west half of Section 15.

18 What about the west half-west half of  
19 Section 15?

20 A. The west half-west half of Section 15, we have  
21 already drilled a well there.

22 Q. And did Black Mountain participate in that  
23 well?

24 A. Yes, sir, they did.

25 Q. There was a forced pooling hearing on that

1 well; was there not?

2 A. Yes, sir, there was.

3 Q. And subsequently Black Mountain signed the JOA  
4 for the well?

5 A. Yes, sir. They signed a separate JOA than this  
6 one.

7 Q. And what did that JOA cover?

8 A. That JOA covered the west half-west half of  
9 Section 15 only as to the Bone Spring Formation.

10 Q. Okay. Was title kind of difficult in Section  
11 15?

12 A. Yes, sir. Title's extremely complicated.

13 Q. And quite a few -- quite a few working interest  
14 owners in that section?

15 A. That is correct.

16 Q. Have you contacted the working interest owners  
17 regarding both Mewbourne's well proposals, the JOA  
18 parties?

19 A. Yes, sir, I have.

20 Q. And did you request letters of support from  
21 Mewbourne's application?

22 A. Yes, sir, I did.

23 Q. And did a number of parties sign letters of  
24 support for Mewbourne?

25 A. Yes, sir.

1 Q. And is that marked as Exhibit 9?

2 A. Yes, sir, it is.

3 Q. And what is Exhibit 10?

4 A. Exhibit 10 is a letter from ICA Energy  
5 addressed to Black Mountain Operating, LLC.

6 Q. Without going into details, you were copied  
7 with a copy of this letter; is that correct?

8 A. Yes, sir, I was.

9 Q. And does it essentially state that ICA supports  
10 Mewbourne's position in these cases?

11 A. Yes, sir, it does.

12 Q. Mr. Mitchell, what is Exhibit 11?

13 A. Exhibit 11 are copies of AFEs we received from  
14 Black Mountain.

15 Q. When did you receive these AFEs, approximately?

16 A. I believe the letter was dated December 9th,  
17 and we received them around December 12th of 2016.

18 Q. And roughly what are the -- and these are for  
19 all three of Black Mountain's proposed wells?

20 A. Yes, sir, they are.

21 Q. And what is the approximate amount of these  
22 AFEs?

23 A. Just shy of \$8,300,000 for each one.

24 Q. Now, after you received these, did you put  
25 together a brief memo or statement of facts regarding

1     **why Mewbourne's applications were preferable to Black**  
2     **Mountain's applications?**

3           A.    Yes, sir.

4           Q.    Was that done in late December?

5           A.    Yes, sir, it was.

6           Q.    What is Exhibit 12?

7           A.    Exhibit 12 highlights one of the facts we set  
8     out in the statement of facts letter we sent.

9           Q.    And, basically, what does that say with regard  
10    to well costs, Mewbourne versus Black Mountain?

11          A.    It basically sets out that under the AFEs  
12    provided to us, which were 8.25 million to right under  
13    8.3 million for their 1.5 mile lateral, basically, that  
14    was higher than 1.5 times Mewbourne's AFE for a one-mile  
15    lateral, implying no cost savings for drilling the  
16    extended lateral.

17          Q.    And will Mewbourne's engineer testify about  
18    this later?

19          A.    Yes, sir.

20          Q.    And did I provide a copy of that memo to  
21    Mr. Hall, one of Black Mountain's counsel, in late  
22    December?

23          A.    Yes, sir.

24          Q.    And what happened next?

25          A.    Approximately around January 11, 2017, we

1 received revised AFEs from Black Mountain Operating  
2 revising the cost down approximately \$1 million.

3 Q. And will Mewbourne's engineer testify about  
4 that also?

5 A. Yes, sir.

6 Q. But, essentially, what brought down the cost by  
7 \$1 million within 30 days?

8 A. It appears that Black Mountain reduced their  
9 completion cost and got rid of their contingency.

10 Q. And, again, will Mewbourne's engineer testify  
11 about that later?

12 A. Yes, sir.

13 Q. Mr. Mitchell, were Mewbourne Exhibits 1 through  
14 4 in each of the three cases, plus Exhibits 5 through  
15 13, which apply to all three cases, prepared by you,  
16 under your supervision or compiled from company business  
17 records?

18 A. Yes, sir, they were.

19 Q. And in your opinion, is the granting of  
20 Mewbourne's applications and the denial of Black  
21 Mountain's applications in the interest of conservation  
22 and the prevention of waste?

23 A. Yes, sir.

24 MR. BRUCE: Mr. Examiner, I move the  
25 admission of Exhibits 1 through 4 in each of the three

1 cases and Exhibits 5 through 13.

2 EXAMINER GOETZE: Mr. McMillan?

3 MR. McMILLAN: No objection.

4 EXAMINER GOETZE: Very good. Then we will  
5 enter in Exhibits 1 through 4 for individual cases  
6 15600, 15601, 15602, and appropriate to all cases will  
7 be Exhibits 5 through 12.

8 13?

9 MR. BRUCE: Yes.

10 EXAMINER GOETZE: Correction, 13.

11 (Mewbourne Oil Company Exhibit Numbers 1  
12 through 13 are offered and admitted into  
13 evidence.)

14 EXAMINER GOETZE: Your witness,  
15 Mr. McMillan.

16 MR. McMILLAN: Just a few questions.

17 CROSS-EXAMINATION

18 BY MR. McMILLAN:

19 Q. Mr. Mitchell, you testified that title was  
20 complicated in Section 15; is that right? It's a  
21 complicated thing?

22 A. Yes, sir.

23 Q. At this point are you fully confident in your  
24 title?

25 A. Yes, sir.

1           Q.    There are no lingering doubts about its  
2 accuracy?

3           A.    Not -- not -- no, sir.

4           Q.    To your knowledge, is it true that in 2016,  
5 Black Mountain offered to trade Mewbourne its acreage in  
6 the west half of Section -- Section 15 with their east  
7 half -- for your east half but that Mewbourne declined?

8           A.    Yes, sir. We had a short discussion about it.

9           Q.    Was it you personally who had the discussion?

10          A.    Yes, sir.

11          Q.    And with whom?

12          A.    I believe it was Luke Midren.

13          Q.    Following that discussion, was it your  
14 understanding that that offer was on the table?

15          A.    We countered with another offer. So at that  
16 point, I didn't think we were still discussing the  
17 west-half-versus-east-half trade.

18          Q.    Ultimately, Mewbourne declined the trade; is  
19 that correct?

20          A.    That's correct.

21          Q.    And for what reason?

22          A.    Because Mewbourne has a majority of the owners  
23 in Section 15 under a JOA, and we felt that it would not  
24 be right as operator of that section to -- to swap out  
25 for one-half over another, with the understanding that

1 we are operator under a JOA and are looking out for the  
2 best interest of all the parties in the section.

3 Q. Would it have been true, had that trade been  
4 accepted by Mewbourne, that both parties could have  
5 drilled longer laterals on their acreage?

6 A. No, sir, not necessarily.

7 Q. Not to your mind. Okay.

8 And, also, at what level of management was  
9 the trade declined?

10 A. Through the manager of Mewbourne Oil Company's  
11 Midland District Office.

12 Q. Are there levels of management above that --

13 A. There are.

14 Q. -- within Mewbourne?

15 About how many?

16 A. I don't know, about two, three.

17 Q. Was the trade discussed at any higher levels of  
18 management as far as you know?

19 A. No, sir, it was not.

20 Q. What are Mewbourne's plans for the Wolfcamp on  
21 this acreage?

22 A. I'm not sure.

23 Q. At this point do you know if Mewbourne has any  
24 plans to get into the Wolfcamp?

25 A. Possibly in the future. Right now our

1 immediate focus is the Bone Spring Formation.

2 Q. Okay. Do you know what the spacing unit is for  
3 the Wolfcamp in this vicinity?

4 A. I believe it is 320-acre spacing unit for  
5 Wolfcamp gas.

6 Q. Given a longer -- larger spacing units here,  
7 wouldn't it be fair to say that longer laterals would  
8 ultimately aid in recovery of the Wolfcamp?

9 A. I can't speak to that.

10 Q. I believe either your counsel mentioned it in  
11 his opening statement or you may have testified to it.  
12 You've already drilled the well in the west half-west  
13 half of Section 15, correct --

14 A. Correct.

15 Q. -- one of these Pronghorn wells?

16 Did you own --

17 I'll let you answer the question. Is that  
18 the Pronghorn 1 well?

19 A. It's the Pronghorn 15 B3B0 Fed Com #1H well.

20 Q. Okay. And when you -- did you file a C-108 on  
21 that well?

22 A. I'm not sure which one the C-108 is.

23 Q. Okay. Did you -- at the time that you applied  
24 to drill the Pronghorn well in the west half-west half  
25 of Section 15, did Mewbourne own in each of the tracts

1     where the wellbore traversed?

2           A.     Yes, sir.

3           Q.     Let me backtrack. I said C-108. I meant  
4     C-102. Do you recall filing a C-102 as to the Pronghorn  
5     well?

6           A.     I believe a C-102 is the survey plat, and it  
7     would have been filed with the APD, is my understanding.

8           Q.     Okay. And at that time, is it your  
9     understanding that Mewbourne owned in each of the tracts  
10    where the wellbore was to traverse?

11          A.     Yes, sir.

12          Q.     So it's my understanding that that well was  
13    approved -- this is the west half-west half of Section  
14    15 well -- was approved and drilled before Mewbourne  
15    embarked on any further development in the area; is that  
16    correct?

17          A.     No, that is not correct.

18          Q.     To what degree had you embarked on your  
19    development plan for the rest of Section 15 when you  
20    received approval of the well in the west half-west  
21    half?

22          A.     Well, I'm not exactly sure what date we  
23    received approval for the west half-west half, but we  
24    put together the entire section at one time.

25          Q.     Okay. You applied for the west half-west half

1 before applying to develop any of the rest of Section  
2 15, correct?

3 A. I do not know that that is correct. I'm not  
4 sure when we filed the subsequent wells.

5 Q. Right. But they were subsequent to filing the  
6 west half-west half well, correct?

7 A. I do not know that that's a true statement.  
8 They are subsequent to the drilling of the well in the  
9 west half-west half --

10 Q. Okay.

11 A. -- as in the west half-west half well is the  
12 first well we drilled.

13 Q. Right. Right.

14 And was there a hurry in getting that well  
15 drilled? Did you have a lease expiring or something?

16 A. We did have obligations. Yes, sir.

17 Q. What were those obligations?

18 A. The acreage is federal, so it would not be a  
19 lease. It was extended from term assignments that we  
20 received from other owners in the section.

21 Q. Okay. Do you recall -- in presenting your JOA  
22 on the well in the west half-west half of Section 15,  
23 did you communicate directly with Black Mountain with  
24 respect to that JOA?

25 A. We originally proposed a JOA covering a full

1 section, as we did with all the other owners in the  
2 section, to Black Mountain. Black Mountain -- we ended  
3 up in pooling. Black Mountain did want to sign that  
4 JOA. Upon request of Mr. Hall here, we -- in order to  
5 work with Black Mountain, we sent an additional JOA  
6 covering just the Bone Spring Formation as to the whole  
7 section. Then upon further negotiation with Black  
8 Mountain, we then reduced the JOA to cover the Bone  
9 Spring Formation as to the west half-west half only.

10 **Q. In those discussions with Black Mountain, did**  
11 **you at any point represent to them they were the only**  
12 **working interest owner not to have signed the JOA on the**  
13 **west half-west half well?**

14 **A. One of.**

15 **Q. One of.**

16 **It's not your recollection or your**  
17 **testimony that you represented that they were the only**  
18 **one?**

19 **A. I mean -- I'm not sure. I'm not sure. We had**  
20 **four full people -- or were forced pooling people a**  
21 **small interest, so I may have said that we had everybody**  
22 **else signed up in the aspect of all the parties who were**  
23 **going to sign up.**

24 **Q. But it wasn't true at that time that you had**  
25 **all the parties other than Black Mountain signed up,**

1 correct?

2 A. No, sir. Mr. Ragsdale was still hanging out at  
3 the time.

4 Q. And ultimately weren't some small parties  
5 pooled --

6 A. Yes, sir.

7 Q. -- in the west half-west half well?

8 MR. McMILLAN: I think that's everything I  
9 have for right now.

10 EXAMINER GOETZE: Thank you.

11 Would you like to redirect or --

12 MR. BRUCE: No, I don't.

13 EXAMINER GOETZE: Mr. Wade?

14 EXAMINER WADE: I don't have any questions.

15 CROSS-EXAMINATION

16 BY EXAMINER JONES:

17 Q. Mr. Mitchell, Section 15 is all federal; is  
18 that right?

19 A. Yes, sir.

20 Q. Why were you putting -- were you proposing to  
21 put your wells in the north -- near the north line of  
22 that section? In other words, why the surface location  
23 at that point?

24 A. I'm not sure. I don't know if we were limited  
25 to those locations or if it's to help out with our -- we

1 operate a number of other sections nearby, so I don't  
2 know if it's to coordinate with our surface facilities.  
3 I'm not sure why we're coming from the north as opposed  
4 to from the south.

5 Q. Do you have other surface facilities in this  
6 area? Do you operate much more wells?

7 A. Yes, sir. We operate approximately five other  
8 sections in the immediate area.

9 Q. Might have other wells in the --

10 A. Sections.

11 Q. Sections?

12 A. Yes, sir.

13 Q. So you're happy to operate more wells, to  
14 increase your well number? You're not -- you're not  
15 willing to switch over to another company and let them  
16 operate some wells? Your preference is to operate?

17 A. Yes, sir. Yes. We've invested quite a bit in  
18 infrastructure in this area.

19 Q. Okay. And are all of the other wells in this  
20 area one-mile wells, or how many -- the wells that you  
21 operate?

22 A. Yes, sir.

23 MR. BRUCE: Mr. Examiner, I think our next  
24 witness will have that info.

25 Q. (BY EXAMINER JONES) Okay. But it's a

1 complicated land situation.

2 And when you drill the west half-west half  
3 well, do you do most of that land work at that point for  
4 that section?

5 A. Yes, sir.

6 Q. So you just used the same data and --

7 A. Yes, sir. The section is made up of two  
8 federal leases that are checkerboard. So one covers the  
9 northwest quarter and the southeast quarter, and the  
10 other covers the northeast and southwest. So the  
11 ownership is common for the most part throughout the  
12 section based on those leases.

13 Q. Okay. Okay. Thank you.

14 EXAMINER GOETZE: His last question  
15 answered mine. I have no further questions for this  
16 witness.

17 You have an engineer coming up, Mr. Bruce?

18 MR. BRUCE: A geologist and an engineer.

19 EXAMINER GOETZE: Yes. We are going to  
20 take a break.

21 Let's go ahead and take a ten-minute break  
22 and mosey on back, pick it up with new testimony.

23 (Recess, 2:28 p.m. to 2:46 p.m.)

24 EXAMINER GOETZE: We're back on the record.

25 Mr. Bruce?

1                   MR. BRUCE: I put the geologic exhibits in  
2 front of you there.

3                   NATE CLESS,  
4 after having been previously sworn under oath, was  
5 questioned and testified as follows:

6                   DIRECT EXAMINATION

7 BY MR. BRUCE:

8           Q.    Would you please state your name and city of  
9 residence?

10          A.    Nate Cless. I live in Midland, Texas.

11          Q.    Who do you work for and in what capacity?

12          A.    I'm a geologist for Mewbourne Oil Company.

13          Q.    Have you previously testified before the  
14 Division?

15          A.    Yes, sir.

16          Q.    And were your credentials as an expert  
17 petroleum geologist accepted and made a matter of  
18 record?

19          A.    Yes, they were.

20          Q.    And does your area of responsibility at  
21 Mewbourne include this area of southeast New Mexico?

22          A.    Yes, it does.

23          Q.    And are you familiar with the geologic matters  
24 related to these applications?

25          A.    Yes, sir.

1 MR. BRUCE: Mr. Examiner, I tender  
2 Mr. Cless as an expert petroleum geologist.

3 EXAMINER GOETZE: Mr. McMillan?

4 MR. McMILLAN: No objection.

5 EXAMINER GOETZE: Very good.

6 And you are so qualified.

7 Q. (BY MR. BRUCE) Mr. Cless, could you identify  
8 Exhibit 14 for the Examiners and discuss its contents?

9 A. Yeah. Exhibit 14 is just a regional activity  
10 map with all the horizontal activity covering 23 South,  
11 34 East. On this map, I've also got a structure on the  
12 top of the Wolfcamp Formation. You can see all the  
13 horizontal wellbores on here, and they've got different  
14 color codes to them.

15 We're interested primarily in the 3rd Bone  
16 Spring Sand. That's where these wells that we're  
17 talking about are going to be drilled, and those are  
18 going to be the red laterals. The solid lines represent  
19 wells that have been drilled, and the dashed lines  
20 represent permits. The green lines on here are going to  
21 2nd Bone Spring Sand wells. There is one brown line on  
22 here, the Delaware horizontal, and some gray lines over  
23 on the east side. Those are Avalon Shale horizontals.

24 As far as the structure goes, like I said,  
25 this is the structure on the top of the Wolfcamp

1     Formation. We sit -- and just about two or three miles  
2     off this map to the west, there is a major fault, and so  
3     we sit kind of on an uplifted part of this fault. So  
4     we're going to be drilling these -- basically, Section  
5     15 sits right at the very -- structurally at the --  
6     structural high, I guess, for this area for the top of  
7     the Wolfcamp and for the 3rd Bone Spring interval.

8                     On this map, I've highlighted -- all the  
9     acreage is highlighted in yellow. It is acreage that  
10    Mewbourne currently operates horizontals in. So you can  
11    see there's six different -- I guess seven different  
12    sections that we currently -- we currently operate wells  
13    in Section 9. Section 14 -- we operate wells in the  
14    west half of Section 14. Section 15, we've currently  
15    drilled the west half-west half well. Section 21, we  
16    operate the south half, and then we operate the entire  
17    sections in Sections 25, 35 and 36. We've drilled  
18    approximately 13 horizontal wells in this area within  
19    the last probably three to four years. So we're the  
20    most active operator of horizontal wells in this area.

21                    I've outlined the proration units which  
22    we're discussing here. Mewbourne proposes to do  
23    one-mile laterals in the east half-west half of Section  
24    15, as well as the east half of Section 15. I've also  
25    outlined what Black Mountain proposes to do with the

1 one-and-a-half mile laterals going in Section 15 up into  
2 Section 10.

3           You can see that the north half of Section  
4 10 I've got highlighted in blue, and I've labeled that  
5 as potentially stranded acreage. The reason we believe  
6 that it is potentially stranded acreage is, again, we've  
7 drilled the west half-west half of Section 15 already  
8 with a one-mile lateral.

9           We've been in touch with BTA, who is the  
10 operator of Section 3 just to the north of Section 10.  
11 They have given us a letter, which we will present as an  
12 exhibit later on, stating they're the operator of  
13 Section 3 and they fully intend to develop Section 3  
14 with one-mile laterals. If Black Mountain were to drill  
15 mile-and-a-half laterals, basically the majority of the  
16 north half of Section 10, that would leave undeveloped  
17 stranded acreage.

18           You can see that all but one well -- one  
19 well in this area is drilled north-south. The one well  
20 drilled east-west that we drilled, it's in the south  
21 half of Section 21. That was the second well drilled  
22 out here. At the time there were approximately three  
23 horizontals drilled in this township, so we were -- all  
24 we had was the south half of Section 21, testing to see  
25 whether the east-west well would work in this area. The

1 production on it is significantly less than all the  
2 north-south wells, and you can see all the other  
3 operators in this area would agree with that. So you  
4 basically have to drill north-south in this area to  
5 maximize production.

6 Q. So if it came about that the interest owners in  
7 the north half of Section 10 had to drill east wells,  
8 would you recommend drilling that -- if you had an  
9 interest in that acreage, drill an east-west well?

10 A. I would not.

11 Q. And, again, that would strand the west  
12 half-southwest quarter of Section 10?

13 A. That's correct.

14 Q. And will you have a little more information on  
15 your east half east-west well in a few minutes?

16 A. Yes, sir.

17 Q. Now, you said Mewbourne has drilled over a  
18 dozen wells in this immediate area. As you're looking  
19 at this township, Mewbourne has drilled numerous wells  
20 both in -- horizontal wells in the Bone Spring and  
21 Wolfcamp both in Lea County and Eddy County; have they  
22 not?

23 A. Correct.

24 Q. They're one of the most active operators in the  
25 state?

1           A.    Correct.

2                   Our engineer can testify to the number of  
3   wells we have drilled, but I believe we've drilled over  
4   300 horizontals in Eddy and Lea Counties.  And I don't  
5   believe Black Mountain has drilled any horizontal wells  
6   in New Mexico.

7           **Q.    Could you identify Exhibit 15 for the Examiner?**

8           A.    Exhibit 15 is a gross isopach map on the 3rd  
9   Bone Spring interval.  This is an isopach from the top  
10   of the 3rd Bone Spring to the base -- it's to the top of  
11   the Wolfcamp, identifying the gross sand, and there's  
12   roughly 300 feet -- 300 feet, plus or minus, of gross  
13   sand across this interval.  We've got pretty good --  
14   three vertical wells which penetrate the 3rd Bone Spring  
15   interval.

16                   And I've also identified location of my  
17   next exhibit on this map, which is just a three-well  
18   cross section going through the three wells in Section  
19   15.

20           **Q.    So the thickness of the 3rd Bone Spring**  
21   **interval in this area is pretty --**

22           A.    Consistent.

23           **Q.    -- consistent?**

24                   **Thank you.**

25           A.    Yes, sir.

1 MR. BRUCE: Having trouble here.

2 EXAMINER GOETZE: That's okay. I've had  
3 trouble all day.

4 Q. (BY MR. BRUCE) What is Exhibit 16?

5 A. Exhibit 16 is a three-well cross section  
6 covering the 3rd Bone Spring interval in this area.  
7 Again, it's three wells which penetrate -- which go deep  
8 enough to see the entire 3rd Bone Spring section. This  
9 cross section is hung on the top of the 3rd Bone Spring  
10 interval, and you can see -- I've labeled the bottom  
11 line on here. The bottom blue line is the top of the  
12 Wolfcamp Formation. And so you see, for the most part,  
13 it's very consistent and uniform across this interval.  
14 There are also some other correlation lines across this  
15 that you can kind of correlate some of these -- some of  
16 these smaller sands within the 3rd Bone Spring interval.

17 We typically have landed our wells in the  
18 bottom part of the 3rd Bone Spring interval, and you can  
19 see that by the red arrow on the right-hand side of the  
20 cross section.

21 Q. In your opinion, in each of the three well  
22 units, will each quarter-quarter section in each well  
23 unit contribute more or less equally to production?

24 A. Yes, sir.

25 Q. And what is Exhibit 17?

1       A.   Exhibit 17 is just a production data table for  
2 all the Bone Spring horizontals in this township, so in  
3 Township 23 South, 34 East. I've listed the name of the  
4 wells, the operator, the API, the location, when they  
5 were completed, as well as the cumulative oil, gas and  
6 water and then what part of the Bone Spring interval  
7 they're producing out of. Like I said, there are some  
8 wells that have been drilled in the 2nd Bone Spring  
9 Sand, but the majority of the wells have been drilled in  
10 the 3rd Bone Spring Sand interval.

11               Just -- just to look at the very first well  
12 on here, it's the closest -- it's the closest 3rd Bone  
13 Spring well to our proposed Section 15. It's the  
14 Antelope 9 B3PA State Com #1H. We drilled it back in  
15 September of 2015, and since that time, it's made  
16 124,000 barrels of oil. That's a typo on the cumulative  
17 amount of gas. It should be 0.2 bcf, not 2 bcf of gas,  
18 and then 155,000 barrels of water. And that was the  
19 north-south well.

20               The one east-west well that was drilled in  
21 this area is about two-thirds of the way down, and it's  
22 called the Wildcat 21 LI Fed #1H. Again, it was drilled  
23 by Mewbourne back in 2013, and in a little over -- in  
24 approximately four years, it's made 65,000 barrels of  
25 oil, a tenth of bcf of gas, and 90,000 barrels of water.

1 So you can just see the significant difference between  
2 the north-south and east-west wells through there.

3 Q. And if we look at COG's Banter State Com 4H  
4 well, the fourth one down, that a north-south well; is  
5 it not?

6 A. Yes, sir.

7 Q. And its cumulative production is almost  
8 equivalent to your wildcat well?

9 A. Correct.

10 Q. Again, this justifies north-south orientation  
11 in this township?

12 A. Correct.

13 Q. And then very briefly, Mr. Cless, what are  
14 Exhibits 18, 19 and 20? I don't think we need to go  
15 into those too much.

16 A. These are just the directional drilling plans  
17 that we have for each of our three proposed wells. It  
18 just lists our TVDs and our measured depths for all  
19 three proposed laterals.

20 Q. And, again, the first and last take point for  
21 each well will be orthodox; is that correct?

22 A. Yes, sir.

23 Q. And how many completion stages does Mewbourne  
24 generally use in mile laterals?

25 A. I'll defer that to our engineer.

1           Q.    Okay.  And in your opinion, is the granting of  
2   Mewbourne's applications and the denial of Black  
3   Mountain's applications in the interest of conservation  
4   and the prevention of waste?

5           A.    Yes, sir.

6           Q.    And were Exhibits 14 through 20 either prepared  
7   by you or compiled from company business records?

8           A.    Yes, they were.

9                   MR. BRUCE:  Mr. Examiner, I'd move the  
10  admission of Mewbourne Exhibits 14 through 20.

11                   EXAMINER GOETZE:  Mr. McMillan?

12                   MR. McMILLAN:  No objections to 14 through  
13  20.

14                   EXAMINER GOETZE:  Very good.  Exhibits 14  
15  through 20 are entered into the record.

16                           (Mewbourne Oil Company Exhibit Numbers 14  
17  through 20 are offered and admitted into  
18  evidence.)

19                   EXAMINER GOETZE:  Mr. McMillan, your  
20  witness.

21                           CROSS-EXAMINATION

22   BY MR. McMILLAN:

23           Q.    Take a look at Exhibit 15, sir.  Looking in  
24   Section 16, in the north half of 21, do you know how  
25   long those laterals are, those green sticks there?

1           A.    They appear to be mile-and-a-half laterals.

2           Q.    Do you know who is operating those laterals?

3           A.    Concho.

4           Q.    And do you know the production data on those  
5 laterals?

6           A.    Yes.  That's displayed on Exhibit 17.

7           Q.    Okay.  That's very helpful.

8                        You spoke to concerns about potential  
9 stranded acreage, correct?

10          A.    Yes, sir.

11          Q.    Remind me who the operator in Section 3 is.

12          A.    BTA.

13          Q.    BTA.

14                       Has BTA actually drilled any wells up there  
15 in Section 3, to your knowledge?

16          A.    Not horizontal wells.  They operate vertical  
17 wells up through there, but I'm not sure whether they've  
18 drilled those wells or not.

19          Q.    Okay.  Do you know if they're operating any --

20                       I'm sorry.  Your testimony was you don't  
21 know if they're operating any horizontal wells up there?

22          A.    They do not operate horizontal wells in  
23 Section 3.

24          Q.    Okay.  In discussing this potential stranded  
25 acreage, I believe -- let's see.  What was your exhibit

1 for that? I'll answer the question. Exhibit 14. Let's  
2 look at Exhibit 14.

3 So I believe your testimony was that that  
4 acreage could be -- in the north half of Section 10  
5 could potentially be stranded because BTA is, I believe  
6 you said, committed to drilling one-mile laterals up  
7 there?

8 A. Yes. The majority of the north half could be  
9 stranded. I believe the west half-west half could be  
10 drilled with a mile lateral.

11 Q. Is there anything geologically or otherwise  
12 precluding an entity, whether BTA or someone else, from  
13 drilling a longer lateral crossing Section 3, Section 10  
14 line into the north half of Section 10?

15 A. Geologically, I do not believe so.

16 Q. So as we're all kind of speculating here as to  
17 what could happen to Section 3 and the north half of  
18 Section 10, we can't write off the possibility that  
19 mile-and-a-half laterals could be drilled from Section 3  
20 to into the north half of Section 10, thus filling in  
21 that acreage?

22 A. I would say you can't write off the  
23 possibility. However, we do have a letter stating that  
24 their intent is to drill Section 3 with mile laterals.

25 Q. However, just to repeat, they haven't actually

1 drilled those wells?

2 A. That's correct.

3 Q. Okay. And has BTA permitted any of those  
4 one-mile laterals yet?

5 A. I do not know.

6 Q. And do you know how many wells BTA has drilled  
7 in the past year?

8 A. I do not know.

9 Q. Do you have any idea how many rigs BTA is  
10 operating?

11 A. No, sir.

12 Q. Safe to say that testimony concerning the plans  
13 of BTA in Section 3 is essentially speculative since  
14 nothing's been permitted or drills up there?

15 A. BTA is currently drilling to the north in 22  
16 South, 34 East. Outside of that -- and they're drilling  
17 horizontals to the north. And so I would imagine at  
18 some point in time, they plan on drilling Section 3.

19 Q. Right. But that's -- at some point in time  
20 that may be the plan for Section 3, but at this point,  
21 we're just speculating?

22 A. Sure. Yes.

23 Q. Okay. Just looking back at Exhibit 17, I just  
24 want to look at those production curves for the four  
25 mile-and-a-half long laterals in Section 16 and in the

1 north half of Section 21. Would you agree with me that  
2 those look like very productive wells?

3 A. They are productive wells.

4 Q. Would it be -- have you run the numbers and are  
5 those wells producing at a more efficient rate than the  
6 one-mile laterals in the vicinity?

7 A. Those wells are drilled in the 2nd Bone Spring  
8 Sand, and we're talking about the 3rd Bone Spring Sand.  
9 But, again, they're economic -- they appear to be  
10 productive wells. I don't think I can speak for whether  
11 economically they would be a better target or not than  
12 the mile laterals.

13 Q. Okay. That's all the questions I have.

14 EXAMINER GOETZE: Thank you.

15 Do you wish to redirect?

16 MR. BRUCE: No, I don't.

17 EXAMINER GOETZE: Okay.

18 Mr. Wade?

19 EXAMINER WADE: No questions.

20 EXAMINER GOETZE: Mr. Jones?

21 CROSS-EXAMINATION

22 BY EXAMINER JONES:

23 Q. Okay. I like your -- on Exhibit 17, your  
24 location synopsis is very nice. It gives me ideas for  
25 what we should be doing.

1                   Going back to these mile-and-a-half  
2                   laterals in Sections 16 and 21, those are COG wells in  
3                   the 2nd Bone Spring?

4           A.    Yes, sir.

5           Q.    And so to compare, you would almost need to  
6                   take the -- prepare for production on -- at least, I  
7                   guess, on a footage basis almost, wouldn't you? I mean,  
8                   because you're looking at -- you're comparing 2nd Bone  
9                   Spring and 3rd Bone Spring. You're comparing mile wells  
10                  to mile-and-a-half wells. I mean, some way of  
11                  comparison more like an apple to an apple.

12          A.    Yeah, because they're different reservoirs.  
13                  They're not 100 percent the same. They are both Bone  
14                  Spring intervals, but it is the 2nd Bone Spring versus  
15                  the 3rd Bone Spring.

16          Q.    Have you talked to COG about why they're  
17                  targeting the 2nd versus --

18          A.    Those were just the initial wells that they  
19                  drilled out here. I believe they drilled those back in  
20                  2013 and 2014. They've since then ultimately drilled in  
21                  the 3rd Bone Spring Sand in this area. So if you look  
22                  on Exhibit 14, you can see there's -- there's more 2nd  
23                  Bone Spring Sand further to the west. I don't have an  
24                  isopach map of the 2nd Bone Spring Sand with me, but it  
25                  pinches out as you move towards the east. And so --

1           **Q.    It pinches out?**

2           A.    Yeah.  Where we sit regionally, if you were to  
3   go three or four more miles to the east, you could lose  
4   pretty much all of your Bone Spring Sand.  You're kind  
5   of right up -- I mean, it's not the best platform, but  
6   it's a dry [sic] run right through here, and so you're  
7   kind of right on the edge of where all the Bone Spring  
8   Sand is being deposited.

9           **Q.    Okay.  So it's not a question of porosity**  
10   **changing.  It's the sand itself is not there?**

11          A.    Correct.  Yeah.  Like for this map, it's pretty  
12   consistent across here?  But, again, if you -- if you  
13   were to look at the gross interval on the 3rd Bone  
14   Spring Sand, if you went three or four miles to the  
15   east, it would change pretty significantly.

16          **Q.    And you're targeting the lower part of the 3rd**  
17   **Bone Spring.  Is there a reason for that?**

18          A.    We've -- if you look at some of those  
19   porosities, it seems like there is better porosity  
20   development in the middle to lower part of the 3rd Bone  
21   Spring -- Bone Spring interval.  And then we've also --  
22   we've also done some microseismic, not in this area, but  
23   in Bone Spring wells in other areas.  We've seen a  
24   majority of our frac cost goes upwards.  We typically  
25   tend to land lower assuming that the majority of the

1 frac is going upwards.

2 Q. Okay. But still when you drill them, you're  
3 mud-logging them, and you've got a directional tool, and  
4 you've got a gamma ray; is that right?

5 A. Yes, sir.

6 Q. And that's it?

7 A. That's it.

8 Q. Thanks a lot.

9 CROSS-EXAMINATION

10 BY EXAMINER GOETZE:

11 Q. I just have one question. Has there been any  
12 interest of Mewbourne in Wolfcamp in this area?

13 A. We are certainly aware of it. You can see,  
14 based off of Exhibit 14, that there have been no  
15 Wolfcamp wells drilled in this immediate area. You  
16 know, we've identified that it does potentially look  
17 good, so I think somewhere down the road, we definitely  
18 are interested in the Wolfcamp, will make plans for the  
19 Wolfcamp. Currently, the majority of people are  
20 targeting the Bone Spring right now in this particular  
21 area. So it's --

22 Q. So the Bone Spring is the driver in this area?

23 A. Right. But the Wolfcamp has potential in the  
24 future, I would say.

25 Q. Okay.

1 EXAMINER GOETZE: I have no more questions  
2 for this witness.

3 MR. BRUCE: Could I ask one follow-up  
4 question?

5 EXAMINER GOETZE: Okay.

6 REDIRECT EXAMINATION

7 BY MR. BRUCE:

8 Q. Looking at your Exhibit 17, Mr. Cless, when  
9 you're looking at the COG Gettysburg wells, when you  
10 look down at the bottom at the Mewbourne Mad Dog wells,  
11 which were drilled a little later, considering they were  
12 drilled later and they're one-mile laterals, the  
13 production is fairly equivalent, isn't it?

14 A. Yes, I would say so. I mean, if you look at  
15 the second-to-the-last well on there, Mad Dog 26 B3NC,  
16 that well was drilled in the middle to late part of  
17 2014, similar timing to when a lot of the Concho wells  
18 were drilled. Again, you're comparing 2nd Sand to 3rd  
19 Sand, but all of our wells have been mile laterals, so  
20 you can see that we've had very good production simply  
21 out of our one-mile laterals.

22 Q. That's all I have.

23 EXAMINER GOETZE: Thank you.

24 MR. McMILLAN: May I have follow-up  
25 questions?

1 EXAMINER GOETZE: Someday we have to draw  
2 the end. I'll give you one comment and question.

3 MR. McMILLAN: Many thanks, Mr. Examiner.

4 RECROSS EXAMINATION

5 BY MR. McMILLAN:

6 Q. You testified to areas to the west of our  
7 subject lands here that don't have Bone Spring?

8 A. I don't -- I don't believe I understand what  
9 you're --

10 Q. Not too much?

11 I believe it was your testimony --

12 A. To the east.

13 Q. It was to the east? To the east. Okay.

14 Are you privy to the details of the  
15 proposed land swap between Black Mountain and Mewbourne  
16 here?

17 A. I knew that there was some negotiations, but  
18 that's about as far as I knew.

19 Q. Okay. Are you aware that the lands that you're  
20 describing to the east that don't have Bone Spring, that  
21 those are the lands that Mewbourne proposed trading to  
22 Black Mountain in exchange for their acreage in Section  
23 15?

24 A. I believe the lands we proposed to trade do  
25 have Bone Spring rights. I believe they were in Section

1 12 that we proposed trading. And you can see that there  
2 are Bone Spring wells that have been drilled directly to  
3 the north in Section 1, as well as Section 13.

4 Q. And with respect to comparing the new -- the  
5 newer Mewbourne wells in the south half of Section 21  
6 with the older COG wells, given the difference in timing  
7 as to when these wells were drilled, isn't it true that  
8 the completion style would have been very different?

9 A. I believe you have the wrong section there.  
10 Section 21 is where we drilled our east-west well.

11 Q. Right. Okay.

12 A. But if you're --

13 Q. I'm sorry. I was referencing the Mad Dog  
14 wells.

15 A. The Mad Dog wells in Section 26. Again, for  
16 example, if you look at the last two wells on there,  
17 they were both drilled in 2014, and a lot of Concho's  
18 wells were drilled in -- two of the -- two of the -- two  
19 of the three Concho wells were also drilled in 2014.  
20 One was also drilled in 2013, and one was drilled in the  
21 middle of 2015. Those are all very similar, not like  
22 2014 to the present day. I think that would -- the  
23 completion styles were similar.

24 Q. You think that technology hasn't changed that  
25 much since 2014?

1           A.    Again, two of their wells were drilled in 2014,  
2           and ours were also drilled in 2014.  I believe they  
3           would have been the same.

4           **Q.    That's all I have.**

5                       EXAMINER GOETZE:  We have to stop  
6           somewhere.  Thank you.  We're done with this witness.

7                       Next witness, please.

8                               TRAVIS CUDE,  
9           after having been previously sworn under oath, was  
10          questioned and testified as follows:

11                               DIRECT EXAMINATION

12          BY MR. BRUCE:

13               **Q.    Would you please state your name and city of**  
14          **residence for the record?**

15               A.    Travis Cude, Midland, Texas.

16               **Q.    And who do you work for and in what capacity?**

17               A.    Mewbourne Oil Company, reservoir engineer.

18               **Q.    Have you previously testified before the**  
19          **Division?**

20               A.    I have.

21               **Q.    And were your credentials as an expert**  
22          **reservoir engineer accepted as a matter of record?**

23               A.    They were.

24               **Q.    And are you familiar with the engineering**  
25          **matters related to these applications?**

1           A.    I am.

2                   MR. BRUCE:  Mr. Examiner, I tender Mr. Cude  
3   as an expert reservoir engineer.

4                   EXAMINER GOETZE:  Mr. McMillan?

5                   MR. McMILLAN:  No objection.

6                   EXAMINER GOETZE:  So qualified.

7                   Proceed.

8           **Q.    (BY MR. BRUCE) First of all, could you identify**  
9   **Exhibit 21 and discuss it for the Examiners?**

10           A.    Exhibit 21 is just a graph showing the number  
11   of horizontal wells drilled in Township 23 South, Range  
12   34 East, Lea County, New Mexico.  As of January 1st,  
13   2017, based on the data from the OCD's Web site, there  
14   were 45 total horizontal wells drilled.  Mewbourne is  
15   the leading operator in the township with 14 wells  
16   drilled, followed by Endurance.

17           **Q.    This brings up something I meant to ask before,**  
18   **Mr. Cude.  On an average basis at this point, how many**  
19   **drilling rigs does Mewbourne have going in southeast**  
20   **New Mexico?**

21           A.    Mewbourne's currently operating six rigs in the  
22   Delaware Basin.  There are a couple of rigs that bounce  
23   back and forth between Loving and Winkler County in  
24   New Mexico, but in this general area, we currently  
25   operate six.

1           Q.    So if Mewbourne's applications were granted,  
2   Mewbourne relatively quickly down the line would have  
3   the ability to drill these wells?

4           A.    Yes, sir. We'd be prepared to drill the wells.

5           Q.    Mr. Cude, did you examine the AFEs that were  
6   sent to Mewbourne by Black Mountain?

7           A.    Yes, sir.

8           Q.    And are you familiar with well costs of  
9   Mewbourne wells drilled in this area?

10          A.    I am.

11          Q.    What is Exhibit 22?

12          A.    Exhibit 22 is just a comparison of the AFEs  
13   provided by Black Mountain and ourselves in these  
14   competing proposals, Black Mountain's as a  
15   mile-and-a-half and our -- our proposal as a one-mile  
16   lateral. So I've just broken down the drilling costs  
17   and completion costs associated with each of these AFEs  
18   and the facilities cost. So I guess those are your  
19   first six columns there and then just the total AFE  
20   number.

21                   And so what we did was essentially said,  
22   Okay -- I think as Mr. Mitchell testified earlier,  
23   really the only benefit to an operator for drilling  
24   extended laterals would be that you have a reduction in  
25   well cost, essentially, per foot so that your well

1 that's a mile and a half is more economic on a per-foot  
2 basis than a well that's a one-mile lateral.

3 So what we've shown here is that even if  
4 you multiplied Mewbourne's AFE cost times 1.5, there is  
5 still essentially a \$900,000 difference between our 1.5  
6 mile lateral, it seems, and Black Mountain's 1.5-mile  
7 lateral.

8 Q. The benefit is toward Mewbourne; is it not?

9 A. That's correct.

10 Q. Now, you also looked at the newer AFEs that  
11 Black Mountain sent to Mewbourne, didn't you?

12 A. Yes, sir, I did.

13 Q. And what -- how did they go from 8.2 million to  
14 7.2 million in a month on these AFEs?

15 A. It appeared to us, essentially, that the  
16 completion costs had been decreased and that the  
17 contingencies on the AFE were removed.

18 Q. Would you, as a petroleum engineer, recommend  
19 removing contingencies from drilling wells in this area?

20 A. I would not, not in this area, especially  
21 without any experience drilling wells in this area.

22 Q. So in your opinion, would the cost of Black  
23 Mountain's wells be more like -- would they more likely  
24 be 8.2 million rather than 7.2 million?

25 A. That was their original AFE, so I would believe

1 so, yes.

2 Q. And, Mr. Cude, what is Exhibit 23?

3 A. Exhibit 23 is a letter from BTA stating that  
4 they own oil and gas interests in Section 3, Township 23  
5 South, 34 East and that they plan to develop that  
6 section by drilling one-mile horizontal wells and have  
7 no plans to drill into the north half of Section 10.

8 Q. BTA has been around quite a while?

9 A. Yes, sir.

10 Q. And they've drilled a substantial number of  
11 wells; have they not?

12 A. They have, and they are currently -- they're  
13 actively drilling.

14 Q. Were Exhibits 21 and 22 prepared by you?

15 A. Yes, sir.

16 Q. And was Exhibit 23 compiled from company  
17 business records?

18 A. Yes, sir.

19 Q. In your opinion, is the granting of Mewbourne's  
20 applications and the denial of Black Mountain's  
21 applications in the interest of conservation and the  
22 prevention of waste?

23 A. It is.

24 MR. BRUCE: Mr. Examiner, I'd move the  
25 admission of Mewbourne Exhibits 21 through 23.

1 EXAMINER GOETZE: Mr. McMillan.

2 MR. McMILLAN: Black Mountain would object  
3 to the admission of Exhibit 23. Exhibit 23 is  
4 essentially hearsay. It's also -- none of the  
5 information here is anything but speculative. Finally,  
6 Section 3 here is irrelevant to our matter here today.

7 MR. BRUCE: I would discount the fact that  
8 it's irrelevant, and it is addressed to Mr. Cude, and  
9 it's a company business record.

10 EXAMINER GOETZE: In light of its  
11 relevancy, we will take it into exhibit [sic] based upon  
12 it is merely a statement of intent and it is not a  
13 drilling plan and it is not an APD, and it is just a  
14 letter stating a policy at this time. So I'll overrule  
15 and include Exhibit 23.

16 Exhibits 21, 22 and 23 are so entered.

17 (Mewbourne Oil Company Exhibit Numbers 21,  
18 22 and 23 are offered and admitted into  
19 evidence.)

20 EXAMINER GOETZE: Your witness.

21 CROSS-EXAMINATION

22 BY MR. McMILLAN:

23 Q. Mr. Cude, looking at Exhibit 22, I believe you  
24 already testified that you used the numbers from the  
25 first AFE received from Black Mountain; is that correct?

1           A.     That is correct.

2           Q.     In your calculation -- and you also testified  
3     you reviewed the most recent AFE?

4           A.     Yes, sir, I have.

5           Q.     Ultimately, do the numbers shown on the most  
6     recent AFEs actually come in at or below the calculated  
7     costs times 1.5?

8           A.     If you remove the contingencies, they do.

9           Q.     Can we take a look at Exhibit -- let's look at  
10    Exhibit 4. This was Mewbourne's AFE. This is for the  
11    Fed Com 1H. Do you have that in front of you by any  
12    chance?

13          A.     Which one did you say?

14          Q.     Exhibit 4?

15          A.     Which well?

16          Q.     Oh, you know what? There is an Exhibit 4 for  
17    each. Correct.

18                   EXAMINER GOETZE: Correct. So it would be  
19    Case Number 15600. That would be for the 1H?

20                   MR. McMILLAN: Yes. Thank you.

21                   THE WITNESS: I think they're all the 1H.  
22    You said for the AP?

23          Q.     (BY MR. McMILLAN) Yeah, your AFE.

24          A.     For the AP?

25          Q.     For the Pronghorn 15 B3AP Fed Com #1H. Same

1 page?

2 A. Yes.

3 Q. Can you point out for the benefit -- where the  
4 contingencies are located on this document?

5 A. The contingencies are located at the bottom of  
6 the total for the intangible costs. That's Code Number  
7 0180-0199.

8 Q. Do you believe that these amounts --

9 Well, first of all, are these amounts, to  
10 your knowledge, in line with the contingencies proposed  
11 in AFEs for similar wells in the area?

12 A. They are.

13 Q. So it's your testimony that those are  
14 appropriate contingencies?

15 A. At the time this AFE was prepared, yes.

16 Q. Okay. As you sit here today, do they appear to  
17 be appropriate?

18 A. I believe we've adjusted some of the  
19 contingencies on the completion side, but still, yes.

20 Q. When you say adjusted them, have you adjusted  
21 them upwards?

22 A. As upward pressure on pricing has occurred,  
23 yes, they've adjusted upwards.

24 Q. Do you have a more current AFE that we can look  
25 at to compare to what your estimated contingencies are

1 now?

2 A. I do not.

3 Q. Do you have, off the top of your head, what  
4 your estimated contingencies are on the completion side?

5 A. I do not.

6 Q. Fair to say that an AFE is really an estimate  
7 of costs as opposed to a final invoice, so to speak? Is  
8 an AFE an estimate or a final number?

9 A. I believe it is an estimate. I do know if we  
10 removed the contingencies from our AFE, the AFE times  
11 1.5 would be less than Black Mountain's revised AFE.

12 Q. Have you run those numbers?

13 A. Yes. I have those.

14 Q. Do you have those numbers here today in an  
15 exhibit?

16 MR. BRUCE: If I may, Mr. Examiner?

17 Handing you what's been marked as Mewbourne  
18 Exhibit 24.

19 Mr. Cude, could you reply to Mr. McMillan's  
20 question?

21 THE WITNESS: So, again, here I -- this is  
22 essentially the same comparison. And I have taken Black  
23 Mountain's new AFEs and that's the -- essentially the  
24 total there. Highlighted are the contingencies in the  
25 AFE, so those are built into the total cost. So if I

1 back out the contingencies for our AFE and multiply that  
2 number times 1.5, I think it still shows that  
3 Mewbourne's 1.5 times AFE would be 275- to \$300,000 less  
4 than Black Mountain's.

5 Q. (BY MR. McMILLAN) I see. So you've removed the  
6 contingencies from --

7 Boy, it would have been helpful if this  
8 exhibit had come out on direct.

9 You removed the contingencies from the  
10 AFE -- from your AFE, you left our numbers intact, and  
11 you still come up with a 1.5 multiplier, and it's within  
12 \$300,000, correct?

13 A. Yes. I'm just trying to compare apples to  
14 apples in this exhibit.

15 Q. Okay. Except isn't it fair to say -- why  
16 aren't -- okay. That's enough of this, I think.

17 Remind me, sir, what the -- what the  
18 setbacks are in this area.

19 A. Statewide rules, 330s.

20 Q. So in your proposed wells, is your last take  
21 point about 330 feet from the unit boundary?

22 A. Yes, sir.

23 Q. Would it be safe to say that in a north-south  
24 configuration, one-mile laterals drilled in the section  
25 to the south would also have to adhere to the 330-foot

1 setback?

2 A. In the south end?

3 Q. In the section to the south.

4 A. In Section 22?

5 Q. Where are your take points on your wells --  
6 your last take point?

7 A. They would be 330 from the south line of  
8 Section 15.

9 Q. Right.

10 So if -- if there were north-south one-mile  
11 laterals in the section to the south -- that's Section  
12 22 -- wouldn't those also have to adhere to the 330  
13 setback?

14 A. They would.

15 Q. Okay. My math isn't great. I went to law  
16 school to avoid it. But it seems to me that if they're  
17 there for 330 feet from your last take point to the --  
18 to the unit boundary, that would be another 330 feet  
19 from either the take point or the surface-hole location  
20 to the south. Isn't that going to produce 660 feet of  
21 undrained reservoir in this area if you're doing just a  
22 one-mile lateral?

23 A. I don't know that you can say the reservoir  
24 area in between is undrained. It's probably not drained  
25 as efficiently.

1           Q.    Have you calculated any -- have you calculated  
2   those reserves attributable to the lost acreage, just to  
3   say these 660 feet?

4           A.    I have not.

5           Q.    As you sit here now, is it safe to say there  
6   would be some reserves attributable to lost acreage  
7   there?

8           A.    There would.

9           Q.    Looking again at your AFE, sir, I'm curious how  
10   you intend to complete the well at such low costs. What  
11   kind of things are you doing to drill wells in the  
12   neighborhood of \$5 million?

13          A.    Our standard practices that we use throughout  
14   New Mexico.

15          Q.    Okay. Specifically, how many pounds of  
16   proppant do you intend to use per lateral foot?

17          A.    I believe on this AFE, there is approximately  
18   1,650 pounds per lateral foot.

19          Q.    Do you think that's an appropriate amount for  
20   the project here?

21          A.    Based on the production table that our  
22   geologist presented, I believe it is.

23          Q.    What -- specifically what cluster spacing do  
24   you plan on using?

25          A.    I believe this is set up for approximately

1 20-foot cluster spacing.

2 Q. Specifically what stage spacing do you intend  
3 to use?

4 A. 185 feet -- 185 to 200 feet.

5 Q. And is this information on the AFE in front of  
6 you? Is that where you're getting this?

7 A. No.

8 Q. No?

9 Can you tell me where you're getting this  
10 information?

11 A. I designed the completion jobs on nearly all of  
12 Mewbourne's horizontal wells in the Permian Basin, so I  
13 know it off the top of my head.

14 Q. Okay. And finally, specifically, what fluid  
15 system will you be using in the completed well?

16 A. We use a slick-water system.

17 Q. And is there anything about the slick-water  
18 system that allows you to drill and complete the well at  
19 a lower cost?

20 A. As opposed to?

21 Q. I don't know.

22 A. I mean, I think slick water is somewhat the  
23 standard issue being used by operators right now, and it  
24 is lower cost than the equivalent gel system. You know,  
25 the equivalent volumes, it would be lower cost than

1 running costs on -- or something of that nature.

2 Q. But there are other available options with  
3 respect to the fluid system?

4 A. There are.

5 Q. Okay. Just one last question. Are you  
6 certain, looking at the numbers in your AFE, you really  
7 can complete the well for the costs -- for the price  
8 stated in your AFE even in the current pricing  
9 environment?

10 A. In the current price environment, I am. That's  
11 not to say that once the wells are drilled, that won't  
12 change, but this is an estimate.

13 Q. Did you take into account the current pricing  
14 in developing this AFE?

15 A. Pricing changes daily, so when these exhibits  
16 were prepared, this was the cost.

17 Q. And looking at the AFE in front of us, Exhibit  
18 4, it looks like this AFE was prepared in August of  
19 2016. Isn't it true that -- well, is that correct?

20 A. That is correct.

21 Q. Okay. Isn't it true that the pricing  
22 environment was pretty much at a low point in August of  
23 2016?

24 A. It depends on who you were using, what -- I  
25 mean, it was lower than it had been before, yes.

1           **Q.    Has it recovered since then?**

2           A.    As I mentioned before, yes, there are upward  
3 pressures on pricing.

4           **Q.    Mercifully, I'm through.  Thanks.**

5                   EXAMINER GOETZE:  All right.  Good.

6                   MR. BRUCE:  Couple of follow-up?

7                   EXAMINER GOETZE:  And you have an exhibit.

8                   MR. BRUCE:  Ah.

9                               REDIRECT EXAMINATION

10          BY MR. BRUCE:

11               **Q.    Was Exhibit 24 prepared by you, Mr. Cude?**

12               A.    It was.

13                   MR. BRUCE:  I'd move the admission of  
14 Exhibit 24.

15                   EXAMINER GOETZE:  You asked for it, so you  
16 got it.

17                   MR. McMILLAN:  I know.

18                   EXAMINER GOETZE:  Exhibit 24 is so entered.  
19 (Mewbourne Oil Company Exhibit Number 24 is  
20 offered and admitted into evidence.)

21               **Q.    (BY MR. BRUCE) Mr. Cude, let's talk about the**  
22 **current pricing environment that Mr. McMillan was asking**  
23 **you about.  If you took Black Mountain's December 2016**  
24 **AFE and their January 2017 AFE, did they reduce the**  
25 **completion costs?**

1           A.    Yes, sir.  It does appear the completion cost  
2   was reduced.  And as far as the fluid costs associated  
3   with the AFE and the completion stages on the AFE, those  
4   did not change.  So unless their completion design  
5   changed over that time period, I don't see where the  
6   cost decreased.

7           Q.    And you were also asked a question about, you  
8   know, the ending of one well or the beginning of  
9   another, and you testified that there would be some  
10  incremental recovery from one-and-a-half mile  
11  reserves -- one-and-a-half miles laterals; is that  
12  correct?

13          A.    That is correct.  There is incremental access  
14  to the reservoir.  Yes.

15          Q.    But you have to compare that with the cost of  
16  the well to drill?

17          A.    That's correct.

18          Q.    And before drilling, will the well -- would  
19  Mewbourne prepare a current AFE and provide that to the  
20  working interest partners in the well?

21          A.    If necessary, yes.

22          Q.    And then this one question on Exhibit 24, just  
23  to clarify, when you're looking at the third column from  
24  the right, just take the top two lines, the 7.2 million  
25  is the cost proposed by Black Mountain in January of

1     **this year?**

2           A.     That's correct.

3           Q.     The second line, the 4.9 million, is what is in  
4     Mewbourne's AFE, and you are subtracting the  
5     contingencies in Mewbourne's AFE so you are comparing  
6     apples and apples, correct?

7           A.     That's correct.

8           Q.     But you're not going to remove contingencies  
9     from your AFEs?

10          A.     We would not do that.

11          Q.     Thank you.

12                   MR. BRUCE: I have no questions,  
13     Mr. Examiner.

14                   EXAMINER GOETZE: Thank you.

15                   EXAMINER WADE: I have no questions.

16                   EXAMINER GOETZE: Mr. Jones?

17                               CROSS-EXAMINATION

18     BY EXAMINER JONES:

19           Q.     So the casing design for your well -- but are  
20     you setting the intermediate at the top of the Delaware  
21     and drilling out?

22          A.     Yes, sir. That's how the AFEs were --

23          Q.     Is that pretty consistent with other operators  
24     out here?

25          A.     It varies. Some people also tend to set their

1 intermediate string at the top of the Bone -- in the  
2 landing zone. So, say, in the proposal, it would be the  
3 3rd Bone Spring. We have drilled wells both -- both  
4 ways.

5 Q. Okay. So I noticed one of the operators in  
6 your chart is Concho, has drilled some Delaware wells.  
7 So is that -- do you know what target they're going for  
8 in the Delaware?

9 A. I believe it is the Lower Brushy Canyon.

10 Q. It's the Brushy -- Lower Brushy, like above the  
11 Avalon?

12 A. Yes.

13 Q. Okay. And their -- and you think you're  
14 protecting their reserves well enough with your well  
15 design in any of the Barstow [sic] above the Delaware?

16 A. Yes, sir. And there are multiple casing  
17 designs such as this in the areas with active Delaware  
18 production.

19 Q. What about your gas? What do you do with the  
20 gas out here? Are you able to sell it immediately when  
21 you get your wells completed?

22 A. We typically try to have our gas take-away  
23 lined up at our surface facilities before the well is  
24 completed. Sometimes it's more difficult than others,  
25 but, you know, nine times out of ten, yes, we do.

1           Q.    Okay.  Now, your well you drilled in the west  
2   half-west half, where is the surface location of that  
3   well?  Is that in Unit Letter D or Unit Letter M?

4           A.    It's in Unit Letter D.

5           Q.    D.

6                        So are you not trying to be consistent with  
7   your surface facilities out here by locating your  
8   surface locations for these proposed wells in the -- in  
9   the north half of this section?

10          A.    We are.  Like we mentioned before, we also  
11   operate Section 9, and we drilled multiple wells in that  
12   section.  I believe we have three producers right now.  
13   But in the southwest quarter of the southeast quarter is  
14   Unit Letter P.  We have a production facility there, and  
15   so have gas take-away there.  So this would just -- this  
16   well right here is a short extension from that.  We also  
17   have disposal gathering in place here.

18          Q.    So if you put your wells as prepared -- as  
19   proposed here in the north half of Section 15 and then  
20   you chose to drill up into Section 10, you could use the  
21   same consistent surface location; is that correct?

22          A.    We could.  We currently don't have any interest  
23   in Section 10.

24          Q.    But it does -- by locating your surface  
25   locations there, you are limiting yourself to one-mile

1 wells; is that correct?

2 A. Yes. That's the development we set out for  
3 this area.

4 Q. Okay. Just quickly, your slick-water fracs  
5 you're fracking down the casing with, how high rates do  
6 you get with that?

7 A. We typically get to 80 barrels a minute.

8 Q. Okay. And what's the peak concentration? What  
9 sand size and concentration are you proposing?

10 A. We usually start with 100 mesh. We switch over  
11 to 40-70, and we typically get to about 2 pounds per  
12 gallon --

13 Q. Up to 20-40?

14 A. 40-70.

15 Q. 40-70.

16 So 2 pounds per gallon is your maximum?

17 A. Yes.

18 Q. You can't reach your pressure limit and stop  
19 at --

20 A. We typically don't reach our pressure limit.  
21 We design our stages for an effective half length. And  
22 so once we pump the volume that we associate with that,  
23 we shut down the stage and we flush.

24 Q. You've chosen not to go with a gel system -- or  
25 a crosslink system at least?

1       A.    Yes, sir. That's been very consistent in our  
2    completions over the last couple of years. We've done  
3    both. Like Nate mentioned, we've completed over 350  
4    horizontal wells, and we haven't seen much -- really any  
5    downside to using a slick-water system as opposed to  
6    gels. And like we mentioned earlier, it is cheaper.  
7    And so to be a more prudent operator, that's the route  
8    we take.

9       Q.    So you're willing to handle all the water that  
10   you're putting in versus a gel system that might have  
11   less of water loading in your formation?

12      A.    Yes.

13      Q.    And your price of sand -- you know, most of us  
14   read the paper, and we've noticed that the price of  
15   sand -- they're projecting it to almost be hard to get  
16   here pretty soon. Is that what you're looking at, too?

17      A.    There's very high demand for frac sand right  
18   now. Yes.

19      Q.    We hear something like up in North Dakota where  
20   if they drill the longer wells, they end up with less  
21   efficiency per foot, efficiency meaning recovery per  
22   foot, like maybe a reduction of like 20 percent versus  
23   drilling the shorter, like a one-mile or -- I don't know  
24   exactly whether they -- what they're comparing, longer  
25   to shorter, but -- and then we hear people here in

1 New Mexico saying, Well, we're drilling longer and  
2 longer, you know. So are you seeing a less efficiency  
3 per foot by drilling longer wells, or is there a -- you  
4 like to drill the one-mile wells here, so I'm still  
5 struggling with why.

6 A. I think in this area, we like the one-mile  
7 laterals because we've drilled a lot of them. We have a  
8 good feel for how to do that. That's what we've done in  
9 the area and other operators have as well. I think, you  
10 know, what we see is that -- not that we don't support  
11 longer laterals. We think there are places to do them,  
12 but they do add risk both on the drilling side and on  
13 the completion side, operational risk. And in this  
14 area, like Nate mentioned, so close to the pinch-out,  
15 that we haven't gone to extended laterals here.

16 I guess based on your earlier statements as  
17 far as do we see any -- any less efficiency per foot,  
18 it's a little hard to compare, you know, because over  
19 the last few years, a lot of completions have changed  
20 and all of that. But I think, you know, this case right  
21 here, kind of referencing back to our geologist's  
22 testimony, it's very difficult to drill east-west in the  
23 north half of Section 10. And so even if somebody was  
24 to drill east-west in the north half of Section 10, the  
25 west half of the southwest quarter would be stranded,

1 and I think there is approximately 80 acres.

2 And if you look across these three  
3 proration units that we're discussing today, if you had  
4 330 setbacks off either sides of that, I think that's  
5 only approximately 60 acres. So technically, there  
6 would be more waste drilling the extended laterals and  
7 ruining -- or messing up the development plan of this  
8 area rather than just continuing with one-mile laterals.

9 **Q. What about two-mile wells?**

10 A. That hasn't been tested out here. I mean, this  
11 is a very deep area. I think the 3rd Bone Spring is  
12 around 11,300 feet. It's some of the deepest parts in  
13 the Basin. It's overpressured. So like I said earlier,  
14 there are just additional risks. You know, not as much  
15 in the 2nd Sand, but getting down into the Lower 3rd  
16 Bone Spring, the Wolfcamp and deeper, there's just  
17 additional risk with drilling extended laterals.

18 **Q. Okay. Your chosen surface location looked like**  
19 **they preclude drilling of the longer than one-mile wells**  
20 **here, and the Feds are not shutting you down on putting**  
21 **a location in the south half of this section?**  
22 **Obviously, Black Mountain might -- I haven't looked at**  
23 **their C-102 yet, but maybe they're proposing wells in**  
24 **the south half of Section 15.**

25 A. I believe their wells are in the south half --

1 north half of the south half of Section 10.

2 Q. Okay.

3 A. But more -- I mean, the majority of the  
4 development in this area has been under standard project  
5 areas, 160s, et cetera.

6 Q. Okay. Thank you.

7 CROSS-EXAMINATION

8 BY EXAMINER GOETZE:

9 Q. Just one question: These three wells -- or  
10 four wells as proposed, are they going to be drilled in  
11 quick sequence, or are you just going to do one and then  
12 stand down?

13 A. We typically try to work with our other  
14 interest owners, and they have -- we have other  
15 commitments, and so, you know, depending on what the  
16 majority of the interest in the section does. I mean,  
17 we try to be a flexible company as far as that's  
18 concerned. We have six rigs, so we have places on our  
19 drilling schedule for them if need be.

20 Q. All right.

21 EXAMINER GOETZE: No further questions for  
22 this witness.

23 Mr. Bruce, are you done?

24 MR. BRUCE: Yup.

25 EXAMINER GOETZE: Let's give Mr. McMillan a

1 chance.

2 MR. McMILLAN: I think I'm done.

3 EXAMINER GOETZE: You don't get questions.

4 It's your time to give your case.

5 MR. McMILLAN: Oh, good. May I approach?

6 I've got exhibits for everyone.

7 EXAMINER GOETZE: Please.

8 MR. McMILLAN: Our first witness today is

9 Robbie Zimmerman.

10 ROBERT "ROBBIE" ZIMMERMAN,

11 after having been previously sworn under oath, was

12 questioned and testified as follows:

13 DIRECT EXAMINATION

14 BY MR. McMILLAN:

15 Q. Mr. Zimmerman, please state your full name and  
16 place of residence.

17 A. Robert Zimmerman, residing in Fort Worth,  
18 Texas.

19 Q. By whom are you employed and in what capacity?

20 A. I'm a senior landman with Black Mountain  
21 Operating, LLC.

22 Q. Are you authorized to testify today on Black  
23 Mountain's behalf?

24 A. Yes.

25 Q. Have you previously testified before the

1 Division or one of its examiners and had your  
2 credentials accepted and made a matter of record?

3 A. No, sir, I have not.

4 Q. Can you please provide us with a brief summary  
5 of your educational background and work experience?

6 A. I received a bachelor's degree in energy  
7 commerce from Texas Tech University in 2011.

8 Thereafter, I took a position as a landman  
9 at XTO in Fort Worth, Texas. I worked the Appalachian  
10 and Delaware Basins for XTO in my five years of  
11 employment with the company.

12 While at XTO, I received my MBA from Texas  
13 Christian University, completing my degree in 2015. I  
14 obtained my certification of Certified Petroleum Landman  
15 in November of 2016 and left XTO in December of 2016 to  
16 go to work with Black Mountain.

17 Q. Just to clarify, when again did you obtain your  
18 certification as a Certified Petroleum Landman?

19 A. November 2016.

20 Q. 2016?

21 A. Yes.

22 Q. Are you familiar with the applications filed in  
23 these cases?

24 A. Yes.

25 Q. Are you familiar with the land matters in this

1     **case?**

2           A.     Yes.

3                   MR. McMILLAN:  Mr. Examiner, I would tender  
4     Mr. Zimmerman as an expert witness.

5                   MR. BRUCE:  No objection.

6                   EXAMINER GOETZE:  Expert landman or --

7                   MR. McMILLAN:  Expert landman indeed.

8                   EXAMINER GOETZE:  Thank you.

9                   Mr. Bruce?

10                  MR. BRUCE:  No objection.

11                  EXAMINER GOETZE:  Very good.  He's so  
12     qualified.

13                  **Q.     (BY MR. McMILLAN) Would you briefly state for**  
14     **all of us what Black Mountain seeks by the three**  
15     **applications that were filed?**

16                  A.     In Case Number 15628, Black Mountain seeks an  
17     order approving a nonstandard oil spacing and proration  
18     unit in the Bone Spring Formation comprised of the east  
19     half-west half of Section 15 and the east half-southwest  
20     quarter of Section 10, Township 23, Range 34 East in Lea  
21     County, New Mexico.

22                         In Case Number 15629, Black Mountain seeks  
23     an order approving a nonstandard oil spacing and  
24     proration unit for the Bone Spring Formation comprising  
25     of the west half-east half of Section 15 and the west

1 half of the southeast quarter of Section 10, Township 23  
2 South, Range 34 East in Lea County, New Mexico.

3 In Case Number 15630, Black Mountain seeks  
4 an order approving a nonstandard oil spacing and  
5 proration unit in the Bone Spring Formation comprised of  
6 the east half-east half of Section 16 and the east  
7 half-southeast quarter of Section 10, Township 23 South,  
8 Range 34 East in Lea County, New Mexico.

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

11 A. Yes, sir.

12 Q. Let's take a look at those exhibits. Is  
13 Exhibit 1 a land plat showing each of the three units  
14 under discussion today?

15 A. Yes, sir, it is.

16 Q. Are the surface- and bottom-hole locations  
17 shown in schematic form here?

18 A. Yes, sir.

19 Q. Are the actual surface- and bottom-hole  
20 locations -- the actual take points, are they set forth  
21 in the applications filed in this case --

22 A. Yes, sir.

23 Q. -- in these cases, rather.

24 What are the setbacks for oil pools -- oil  
25 wells in this pool?

1           A.    The setbacks are 330 feet from the lease line.

2           Q.    So are these orthodox well locations?

3           A.    Yes, sir.

4           Q.    What are the names of the wells being proposed?

5           A.    In Case Number 15628, Black Mountain proposes  
6   the Duke Federal 10 10H. In Case Number 15629, we're  
7   proposing the Duke Federal 10 18H. In Case Number  
8   15630, we're proposing the Duke Federal 10 26H.

9           Q.    Can you tell me what the primary objective is  
10   for these wells?

11          A.    In all three cases, the primary objective is to  
12   drill to a depth sufficient to test the Bone Spring  
13   Formation and complete the well with a 7,500-foot  
14   lateral.

15          Q.    Are 240-acre project areas established in the  
16   Bone Spring pool in this area?

17          A.    Yes.

18          Q.    And is the standard proration unit for the West  
19   Antelope Bone Spring pool here a 40-acre unit?

20          A.    Yes, it is. That's why we are requesting two  
21   40s.

22          Q.    Are you aware of other 240-acre project areas  
23   in the vicinity?

24          A.    Yes.

25          Q.    This wouldn't be the only one in the

1 neighborhood?

2 A. No.

3 Q. These wouldn't be the only three in the  
4 neighborhood, rather?

5 Does Black Mountain own the right to drill  
6 in each tract that will be traversed by the wellbores?

7 A. No, we do not. Black Mountain has leases under  
8 the southeast quarter and northwest quarter of Section  
9 15 and the southeast quarter in the north half of the  
10 southwest quarter of Section 10.

11 Q. Let's go ahead and look at ownership. Is  
12 Exhibit 2 an ownership breakdown or this acreage?

13 A. Yes. This is a copy of the Exhibit A we sent  
14 out with our well proposals, Exhibit A to the JOA.

15 Q. About how many net acres does Black Mountain  
16 own in Section 15?

17 A. Black Mountain owns 160 net acres in Section  
18 15.

19 Q. And how many acres does Black Mountain own in  
20 Section 10?

21 A. 55.18.

22 Q. When did Black Mountain first commence its  
23 geologic evaluation of this area?

24 A. Around November 2015.

25 Q. And what experience does Black Mountain have in

1     **drilling and operating these types of horizontal oil**  
 2     **wells?**

3           A.     Although we're a new entrant to southeast  
 4     New Mexico and in the process of drilling our first  
 5     horizontal well, the employees have been well versed in  
 6     horizontal development throughout their careers, and our  
 7     CO, Dr. McCracken, will also testify as a specific  
 8     example of this, our of employees.

9           Q.     I note a north-south orientation of each of  
 10    **these units and wellbores; is that correct?**

11          A.     Yes.

12          Q.     Is that consistent with the development pattern  
 13    **in this area?**

14          A.     Yes, all offsetting the same north-to-south  
 15    development pattern, which is the preferred orientation  
 16    of operators in the area.

17          Q.     Okay. Let's take a look at your Exhibit 3  
 18    **here. Are these two alternative area development plats**  
 19    **that we're looking at here?**

20          A.     Yes.

21          Q.     Can you tell us what these two images are  
 22    **telling us?**

23          A.     The plat on the left shows the three 7,500-foot  
 24    laterals that Black Mountain is proposing in today's  
 25    cases. They're shown by the purple sticks. And as you

1 can see, Sections 3 and 10 could possibly be developed  
2 with one- to two-mile laterals in the west half-west  
3 half and three 7,500-foot laterals filling in the  
4 section from the west.

5 And the exhibit to the right shows the  
6 proposed trade -- what the development plan would look  
7 like with the proposed trade between Black Mountain and  
8 Mewbourne, where there would be two 7,500-foot laterals  
9 in the east half of Section 15 and the southeast quarter  
10 of Section 10, and one one-mile lateral in the east  
11 half-west half of Section 15.

12 Q. And that, of course, is the trade that was  
13 rejected by Mewbourne?

14 A. Yes, sir.

15 Q. Your two images here show, again, longer  
16 laterals. Is it your sense that that's the trend in the  
17 industry in this part of New Mexico?

18 A. Yes, sir.

19 Q. Let's talk about ways in which the north half  
20 and west half of the southwest quarter of Section 10 --  
21 how would this acreage -- what ways could this acreage  
22 be developed?

23 A. I mean, there's -- the examples I just cited  
24 were just one of many different possibilities that  
25 acreage could be developed.

1 Q. And those possibilities, as we see, can include  
2 north-south orientation and long laterals, correct?

3 A. Yes, sir.

4 Q. Referring back to Exhibit 2 -- this is the  
5 ownership breakdown -- can you tell us what percentage  
6 of the acreage in these 240-acre units -- what  
7 percentage is voluntarily committed to this well?

8 A. Just a little over 25 percent.

9 Q. And so that's Black Mountain's ownership plus  
10 how many others?

11 A. We've had a couple sign JOAs and a few verbals  
12 from our working interest partners.

13 Q. On the verbals, do you expect to have  
14 agreements in hand soon enough?

15 A. Yes, sir, we do.

16 Q. And that's based on conversations, obviously,  
17 that you've had with these folks?

18 A. Yes, sir.

19 Q. All right. So are we here today -- is Black  
20 Mountain here today to ask the Division to pool the  
21 mineral interests?

22 A. Yes, sir.

23 Q. And is Black Mountain also seeking the  
24 imposition of a 200 percent risk penalty against  
25 unjoined working interests?

1           A.    Yes, sir.

2           Q.    Does Black Mountain seek to be the designated  
3 operator for the wells?

4           A.    Yes, we do.

5           Q.    Okay. Let's go ahead and discuss -- in the  
6 notes in front of you, we're going to jump to my  
7 Question 27. Can you discuss the efforts that you've  
8 undertaken as landman for Black Mountain to obtain the  
9 voluntary participation of the unjoined working interest  
10 and mineral interest owners on this acreage?

11          A.    Yes. On January 5th, 2017, a well proposal was  
12 sent to all working owners for the Duke 10 10H, 18H and  
13 26H wells. Included in the well proposal was a proposed  
14 APL 2015 JOA form with necessary exhibits and estimated  
15 AFEs for each well.

16                   On February 28th, 2017, after the receipt  
17 of a more in-depth title report, well proposals were  
18 sent to newly discovered working interest owners, and an  
19 amended Exhibit A was sent to the originally thought  
20 working interest owners as well.

21          Q.    In your opinion, has Black Mountain made a  
22 good-faith effort to locate all the mineral interest  
23 owners and working interest owners and communicate  
24 them -- communicate with them in order to obtain their  
25 voluntary participation?

1 A. Yes, sir.

2 Q. Was title complicated both in Section 15 and  
3 Section 10?

4 A. Yes, sir, just a little bit.

5 Q. Just a little bit? Are you saying that with  
6 tongue in cheek?

7 A. Yes, sir.

8 Q. So it was indeed complicated?

9 A. Yes.

10 Q. Do you nonetheless feel that you've ultimately  
11 identified and communicated with each interest owner of  
12 record?

13 A. Yes, sir.

14 Q. Exhibit 4, is this -- are these examples of the  
15 January 5th letters that you sent with respect to the  
16 three well proposals?

17 A. Yes, sir.

18 Q. And since we're only -- we have three pages  
19 here. Is this one example for each of the three wells?

20 A. Yes, sir.

21 Q. Would the many letters that you sent to other  
22 interest owners be available for the Examiners' review  
23 if they were so interested?

24 A. Yes, sir, they would be.

25 Q. And I see that these letters under tab four --

1 Exhibit 4 are dated January 5th, 2017, correct?

2 A. That's correct.

3 Q. The letters sent on February 28th was the --  
4 was the text of those letters the same as the January  
5 5th letters?

6 A. Identical.

7 Q. Identical.

8 But those were sent on February 28th  
9 because newly discovered working interest owners were  
10 found following receipt of a more in-depth title report?

11 A. That's correct.

12 Q. Did you have follow-up communications with some  
13 of the folks that you sent these letters to?

14 A. A few of the parties, yes, sir.

15 Q. Did those conversations lead to commitments to  
16 participate?

17 A. Yes.

18 Q. Some by signature and others by verbal  
19 commitment?

20 A. Yes, sir.

21 Q. In these conversations, did any other lease  
22 owner or any other interest owner indicate that Black  
23 Mountain's estimated well costs were out of line?

24 A. No.

25 Q. Let's look at Exhibit 5. Are these the most

1 recent AFEs for the three wells?

2 A. Yes, sir.

3 Q. And tell us again what the approximate total is  
4 for each completed well?

5 A. Approximately \$7.2 million.

6 Q. And were these AFE cost estimates updated from  
7 the time of Black Mountain's original well proposals?

8 A. The cost estimates have not changed since we  
9 sent out the well proposals dated January 5th.

10 Q. Is it your understanding that these costs shown  
11 in the three AFEs in Exhibit 5 are in line with what's  
12 being charged by other operators in the area for similar  
13 wells?

14 A. Yes, sir.

15 Q. And how do you know that?

16 A. Just from other JOAs we have received for our  
17 interest in the area.

18 Q. Other than perhaps what we've seen from  
19 Mewbourne today, do you generally see costs lower than  
20 what Black Mountain is proposing here for similar wells?

21 A. No, sir.

22 Q. Have you made an estimate of overhead and  
23 administrative costs while drilling and producing the  
24 wells?

25 A. Yes, we have.

1 Q. And what's the drilling overhead?

2 A. \$7,500 per month drilling overhead and \$750 per  
3 month producing.

4 Q. Do you recommend that these drilling and  
5 producing overhead rates be incorporated into the order  
6 that results from this hearing?

7 A. Yes, sir.

8 Q. And does Black Mountain request that the order  
9 be issued providing for an adjustment of the drilling  
10 and producing overhead rates in accordance with the  
11 current COPAS bulletin for the area?

12 A. Yes, sir.

13 Q. In your opinion, has Black Mountain acted  
14 diligently to develop these reserves so far?

15 A. Yes, we have.

16 Q. Has Mewbourne proposed a well unit that's in  
17 conflict with the units designated by Black Mountain?

18 A. Yes, they have.

19 Q. Have they, in fact, proposed multiple well  
20 units that are in conflict with the units designated by  
21 Black Mountain?

22 A. Yes.

23 Q. Okay. Is it true that Black Mountain executed  
24 a JOA covering the west half of the west half of Section  
25 15 with Mewbourne as the operator?

1 A. Yes.

2 Q. Okay. And I'm sure the Examiners are curious.  
3 Why did Black Mountain do that?

4 A. Well, at the time Mewbourne's order for forced  
5 pooling already been granted. Therefore, it didn't sign  
6 the JOA or our interest would be subject to the 200  
7 percent nonconsent penalty.

8 Q. Okay. Did Black Mountain execute Mewbourne's  
9 JOA covering the entirety of Section 15?

10 A. No, sir.

11 Q. Do you recall Black Mountain having been told  
12 by Mewbourne that Black Mountain was the only working  
13 interest owner not to sign the JOA on the west half-west  
14 half of Section 15?

15 A. Yes.

16 Q. And to your understanding, did that turn out to  
17 be true?

18 A. Apparently not.

19 Q. With respect to Black Mountain's proposed  
20 wells, has Black Mountain sent a JOA to Mewbourne?

21 A. Yes.

22 Q. And what response did Black Mountain receive?

23 A. We did not receive a response.

24 Q. In your opinion, would the granting of Black  
25 Mountain's applications be in the best interest of

1 conservation, the prevention of waste and the protection  
2 of correlative rights?

3 A. Yes.

4 Q. Okay. Let's turn quickly to Exhibit 7. Is it  
5 your understanding that Exhibit 7 is comprised of three  
6 separate affidavits executed by me certifying,  
7 essentially, that copies of the application in this  
8 matter were sent to all the working interest owners and  
9 the offset operators whose interests may be indicated by  
10 Black Mountain's applications?

11 A. Yes, sir.

12 Q. And attached thereto do you see green cards  
13 indicating those notice letters that were received and  
14 signed for?

15 A. I do.

16 Q. And looking at Exhibit 8, is it your  
17 understanding that these are two separate affidavits of  
18 publication listing specifically the names of persons  
19 and entities for whom green cards were not returned or  
20 no response was had. Are these essentially -- I'm going  
21 on here, but are these essentially the nonlocatables?

22 A. Yes, sir.

23 Q. Very good.

24 MR. McMILLAN: And then I will testify, I  
25 guess, as the one who sent these letters, that there

1 remain outstanding about 15 or so letters that we  
2 haven't received a green card back for, and so I guess  
3 what we would ask for is that these cases be continued  
4 so that I can publish with respect to these 15 or so  
5 persons and entities. Again, the list is mighty long,  
6 and we got a good response or a good number of green  
7 cards back, but given the time crunch, we're going to  
8 have to publish as to approximately 15 of these  
9 individuals.

10 Q. (BY MR. McMILLAN) Okay. So were Exhibits 1, 2,  
11 4 and 5 prepared by you, Mr. Zimmerman, or at your  
12 direction and control?

13 A. Yes.

14 Q. Is it your understanding that Exhibit 3 will  
15 actually be sponsored by our next witness?

16 A. Yes, sir.

17 Q. Okay.

18 MR. McMILLAN: And I would tender now at  
19 this time Exhibits 1, 2, 4 and 5, as well as my Exhibits  
20 7 and 8, which are the notice affidavits and the  
21 affidavits of publication.

22 EXAMINER GOETZE: Mr. Bruce.

23 MR. BRUCE: No objection.

24 EXAMINER GOETZE: Very good. Then Exhibits  
25 1, 2 -- and these are Black Mountain exhibits. 1, 2, 4,

1 5, 7 and 8 are so entered into record.

2 (Black Mountain Operating Exhibit Numbers  
3 1, 2, 4, 5, 7 and 8 are offered and  
4 admitted into evidence.)

5 EXAMINER GOETZE: Do you have any  
6 questions?

7 MR. BRUCE: A few.

8 CROSS-EXAMINATION

9 BY MR. BRUCE:

10 Q. Let's first go to Exhibit 7, Mr. Zimmerman. Go  
11 to your listing. I guess it's on page 8 of Exhibit 7,  
12 your listing of offset operators. You might want to  
13 pull out your Exhibit 3, the land plat. You list  
14 Mewbourne Oil Company because of the offset. Is that --  
15 15 acres?

16 A. Yes, sir.

17 Q. Where is GMT's acreage?

18 A. I cannot tell you off the top of my head.

19 Q. Where is Siana Oil and Gas Company's acreage?

20 A. I can't tell you off the top of my head.

21 Q. Where is CML Exploration's acreage?

22 A. Do not know.

23 Q. Did you notify people in Section 2 -- I mean --  
24 excuse me -- Section 11 of your nonstandard unit?

25 A. I believe we did.

1           Q.    How about section -- in Section 14?

2           A.    Yes, sir.

3           Q.    How about the northwest quarter -- northwest  
4   quarter of Section -- what would that be -- 23 in the  
5   southeast quarter?

6           A.    Yes, sir. To my knowledge, yes.

7           Q.    And in Section 22?

8           A.    Yes, sir.

9           Q.    Section 21?

10          A.    I do not know.

11          Q.    Section 16?

12          A.    Yes, sir.

13          Q.    Did you see Mewbourne's exhibit regarding  
14   offsets?

15          A.    Yes, sir.

16          Q.    How come you only have three offsets and they  
17   have about 12 or 14?

18          A.    Do not know.

19          Q.    Might you have omitted some offset operators?

20          A.    If we're taking into account sections to the  
21   southeast and southwest, possibly, yes, sir.

22          Q.    Looking at your Exhibit 3 again, you've  
23   proposed some certain drilling. Who owns in the north  
24   half of Section 10; do you know?

25          A.    I do not know.

1 Q. How about Section 3?

2 A. From Mewbourne's testimony, it sounded like BTA  
3 owns some working interest in that section.

4 Q. But you have not broached with them the subject  
5 of any development like you are putting forth in your  
6 Exhibit 3?

7 A. No, sir.

8 Q. So that's just speculative, to use  
9 Mr. McMillan's term?

10 A. I suppose you could say that, yes. There would  
11 be many scenarios, many different ways you could develop  
12 these two sections.

13 Q. Going to your Exhibit 2, which interest owners  
14 on Exhibit 2 have signed your JOA? And your JOA does  
15 cover all three of your proposed well units, correct?

16 A. Yes, sir.

17 Q. And along that line, why wouldn't you -- go  
18 ahead. Go ahead. Who has joints [sic]?

19 A. Chemily Management and Lisa Barr have signed  
20 JOAs.

21 Q. On what page is that? Chemily Management?

22 A. Yes, sir.

23 Q. Which --

24 A. They are --

25 Q. Which page?

1 A. Page 5 of the exhibit.

2 Q. Chemily Management. Okay. That's the only one  
3 that's signed so far?

4 A. And Lisa Barr --

5 Q. Lisa Barr.

6 A. -- on page 3.

7 Q. Thank you very much. I did find that one.

8 So about .22 percent has joined in your  
9 well proposal?

10 A. Yes, sir.

11 Q. Are those only -- do they own interests in  
12 Section 10 or in the south half of Section 15?

13 A. Section 10.

14 Q. Is COG Operating on this list?

15 A. Not to my knowledge.

16 Q. Then let's ask this question: Did Black  
17 Mountain have a title opinion done on Section 15?

18 A. No, sir. We do not have a title opinion on  
19 Section 15.

20 Q. Do you have a title -- did you have a title  
21 opinion done on the southeast quarter and -- southwest  
22 quarter of Section 10?

23 A. No, sir. We do not have a title opinion.

24 Q. So you have takeoffs or title reports on them?

25 A. Yes, sir.

1           Q.    In what time frame would you -- if -- if Black  
2   Mountain is successful in its application, what time  
3   frame would you propose drilling the well?

4           A.    I was told by our technical team as soon as we  
5   were granted a permit, we would develop plans to drill  
6   these wells as soon as possible.

7           Q.    Would Black Mountain be drilling it, or would  
8   Marathon be drilling it?

9           A.    Depending on the time frame. I don't know the  
10   answer to that question.

11          Q.    One more thing about your proposed JOA. The  
12   depth is from the surface to 13,381 feet. Does that  
13   encompass the Wolfcamp?

14          A.    No, sir, it does not.

15          Q.    Do you currently have a rig under contract to  
16   drill these wells?

17          A.    That is not my expertise.

18          Q.    You mentioned that Black Mountain is drilling  
19   its first horizontal well in New Mexico. Where is that  
20   well?

21          A.    That is in Eddy County.

22          Q.    What type of well is it? What formation are  
23   you testing?

24          A.    I believe it is a Wolfcamp well.

25          Q.    Has that well been spudded?

1           A.    No, sir.

2           Q.    Have you filed with the BLM APDs for your three  
3 proposed wells?

4           A.    No, sir.

5           Q.    Why was the AFE that was prepared in about the  
6 first week of December modified in the first week of  
7 January, within about 30 days?

8           A.    I cannot speak to that.

9           Q.    And what is the proposed closing date of Black  
10 Mountain's sale to Marathon?

11                   MR. McMILLAN:  Objection, foundation.

12                   EXAMINER GOETZE:  Well, let's not ponder  
13 with that.  I think that's not really relevant to our  
14 case.

15                   MR. BRUCE:  Okay.

16                   EXAMINER GOETZE:  It's not part of the  
17 application.  Let's move on to something more relevant,  
18 if you would, please.

19                   MR. BRUCE:  Okay.

20           Q.    (BY MR. BRUCE) Mr. Zimmerman, I've handed you  
21 what's been marked Mewbourne Exhibit 25.  Can you  
22 identify what is contained in these two pages?

23           A.    Looks like an AFE dated December 23rd, 2016.

24           Q.    And for what wells --

25           A.    The Gramma Ridge wells.

1           **Q.   Where are these located approximately from the**  
2           **wells at issue here today?**

3           A.   I would say approximately -- just guessing --  
4           four, five miles away.

5           **Q.   To the north?**

6           A.   Yes, sir.

7           **Q.   And are these wells -- are these for**  
8           **one-and-a-half-mile lateral wells?**

9           A.   Yes, sir, they are.

10          **Q.   3rd Bone Spring wells?**

11          A.   Yes, sir.

12          **Q.   Just like we're here for today?**

13          A.   That's correct.

14          **Q.   What is the approximate cost of these AFEs?**

15          A.   Looks to be approximately \$8.2 million.

16          **Q.   Were these submitted to GMT Exploration?**

17          A.   I believe they were.

18          **Q.   Have these AFEs ever been changed?**

19          A.   I do not know the answer to that.

20          **Q.   Have you ever seen a changed AFE?**

21          A.   Yes, sir.

22          **Q.   For these wells?**

23          A.   No, sir. I do not know.

24          **Q.   Are these the only AFEs that have been**  
25          **submitted to GMT regarding these wells?**

1           A.    I don't know the answer to that.

2           Q.    I would state for the record, Mr. Zimmerman,  
3   that there is a gentleman here from GMT who could say  
4   that they have not received any revised AFEs reflecting  
5   the lower well cost.

6                   MR. McMILLAN:  I need to object to this  
7   whole line of questioning.  It's beyond the scope of  
8   direct.

9                   MR. BRUCE:  What I'm asking --  
10   Mr. Examiner, in Mewbourne's cases, all of a sudden  
11   Black Mountain comes up with a magical \$1 million  
12   decrease in well costs, but in these GMT wells, which  
13   are one better, continued to two weeks, it's still 8.2  
14   million.  And I'm just showing, really, the reasonable  
15   well cost is 8.2 million, not 7.2 million.

16                   EXAMINER GOETZE:  We will take it as what  
17   you have submitted like all the other evidence.  I don't  
18   think we need to proceed any further.

19                   MR. BRUCE:  I think I'm done.

20                   EXAMINER GOETZE:  I hope so.  Thank you.  
21   But you can't be because this is an exhibit.

22                   MR. BRUCE:  I would move the admission of  
23   Exhibit 25.

24                   MR. McMILLAN:  And I would object to that  
25   that motion as -- this exhibit and the line of

1 questioning being beyond the scope of direct. And as I  
2 previously suggested -- well, I guess that was a  
3 different line of questioning, but also there is no  
4 foundation for any of this. It's irrelevant to today's  
5 proceeding.

6 MR. BRUCE: The witness identified them as  
7 Black Mountain's AFEs.

8 EXAMINER GOETZE: You know, we're going to  
9 go ahead and enter it. Again, the scope of this is to  
10 look at comparisons, and this is providing a comparison.  
11 And we will use it as such, but we won't exclude it just  
12 based upon the fact that this is a different area but it  
13 is by the same operator. So I'm just going ahead --  
14 Exhibit 25, we're going to enter it into the record, and  
15 we will consider it.

16 Would you like to --

17 MR. McMILLAN: Can I have a moment?

18 EXAMINER GOETZE: You may ask questions.

19 (Mewbourne Oil Company Exhibit Number 25 is  
20 offered and admitted into evidence.)

21 REDIRECT EXAMINATION

22 BY MR. McMILLAN:

23 Q. Do you recall Mr. Bruce asking you about those  
24 interest owners who have voluntarily committed to this  
25 well? Do you remember him asking you for percentages?

1 A. Yes.

2 Q. Okay. I believe you identified the two  
3 entities that have committed by signature, correct?

4 A. Yes.

5 Q. Can you review for us those entities who have  
6 provided a verbal commitment to you?

7 A. Yes. It would be Seeligson Oil Company.

8 Q. Where are they located on your exhibit? 2?

9 A. Seeligson would be on page 2.

10 Q. Near the top of the second page?

11 A. Current Resources.

12 Q. Current Resources? Where is Current Resources  
13 located on this list? Is it about the middle of page 4?

14 A. Yes, as well as Dasco Energy, about the middle  
15 of page 5.

16 Q. That was Dasco Energy?

17 A. Yes.

18 Q. And they are the middle of page 5?

19 A. Yes.

20 Q. And including those folks, what percentage of  
21 this acreage is voluntarily committed to these wells?

22 A. That would be 25.11 acres.

23 Q. If per chance offset operators were -- if, in  
24 fact, Mr. Bruce has identified true offset operators who  
25 need to be notified here, would Black Mountain -- and

1 if, in fact, there are folks -- offset operators who  
2 don't appear on Exhibit 7, would Black Mountain be  
3 willing to immediately provide notice and cure any  
4 defect here?

5 A. Absolutely. Yes.

6 Q. Okay. I think that's everything. Thank you.

7 EXAMINER GOETZE: Thank you very much.

8 EXAMINER WADE: I do not have any  
9 questions.

10 MR. BRUCE: I have one follow-up.

11 EXAMINER GOETZE: We've got to call the  
12 line. You can do it later.

13 MR. BRUCE: Okay. That's fine.

14 EXAMINER GOETZE: You've got opportunity  
15 for rebuttal.

16 So no questions?

17 EXAMINER WADE: No questions.

18 EXAMINER GOETZE: Mr. Jones?

19 CROSS-EXAMINATION

20 BY EXAMINER JONES:

21 Q. The actual title on the lands is held by Mull,  
22 Kramer, McCarty & Hayda [phonetic]; is that right? Is  
23 that correct? I mean, they actually have the leases,  
24 record title holders --

25 A. Oh, yes, sir.

1 Q. -- with the federal leases?

2 A. Yes, sir.

3 Q. I don't have -- I guess one question was --  
4 would be -- I'll wait for the next witness to talk about  
5 that one. So I don't have anything. Thank you. You've  
6 been grilled enough.

7 EXAMINER GOETZE: And I have no questions  
8 for this witness. Thank you very much.

9 Let's take a five-minute break here and  
10 stretch our legs.

11 And you have one more? You have your  
12 geologist?

13 MR. McMILLAN: Engineer.

14 EXAMINER GOETZE: Engineer. Okay. So  
15 let's give him a fresh start.

16 (Recess, 4:25 p.m. to 4:36 p.m.; Examiner  
17 Wade not present.)

18 EXAMINER GOETZE: You may proceed,  
19 Mr. McMillan.

20 MICHAEL E. McCracken, Ph.D.,  
21 after having been previously sworn under oath, was  
22 questioned and testified as follows:

23 DIRECT EXAMINATION

24 BY MR. McMILLAN:

25 Q. Please state your full name for the record.

1 A. Michael Edward McCracken.

2 Q. Is it Dr. McCracken?

3 A. It is.

4 Q. Dr. McCracken, where do you reside?

5 A. 1505 Daisy Lane, Flower Mound, Texas.

6 Q. By whom are you employed?

7 A. Black Mountain Operating, LLC.

8 Q. What is your current position?

9 A. I'm the chief operating officer.

10 Q. Have you previously testified before the  
11 New Mexico Oil Conservation Division and had your  
12 credentials as an expert in petroleum engineering  
13 accepted and made a matter of record?

14 A. I have not.

15 Q. Could you please review for us your educational  
16 background?

17 A. I have a bachelor's degree and a master's  
18 degree and a Ph.D. in mechanical engineering from Purdue  
19 University. I was, additionally, retrained as a  
20 petroleum engineer by ExxonMobil.

21 Q. Can you then summarize for us your work  
22 experience?

23 A. Yes. In 2014, I took the position of reservoir  
24 engineer at ExxonMobil in Houston at their Upstream  
25 Research Company, underwent several months of training

1 learning reservoir engineering and being cross-trained  
2 in geology and completions.

3 I went on to actually instruct in several  
4 of their engineering courses, worked offshore fields,  
5 including North Slope of Alaska, West Coast Africa, Gulf  
6 of Mexico, then transitioned to unconventional assets in  
7 the Piceance Basin.

8 (The court reporter requested the witness  
9 speak louder and slower.)

10 A. And then worked the Piceance Basin, and then  
11 also worked in Shell Gas Research. After seven years, I  
12 left ExxonMobil and took a position at Pioneer Natural  
13 Resources at Las Colinas [sic]. And I took a position  
14 as staff. I was a reservoir engineer, and I was their  
15 field development coordinator for the Eagle Ford asset.  
16 They were ramping up to 14 rigs, and I did a lot of work  
17 there just guiding the development plan and making  
18 strategic decisions.

19 I moved on from there to Enduro Resource  
20 Partners working conventional assets in the Bighorn and  
21 Fulsome [phonetic] Basin. I eventually became vice  
22 president of development, heading up reservoir and  
23 geology groups. We drilled 30 or so horizontal wells in  
24 those assets.

25 In 2015, I took a position with Black

1 Mountain Oil & Gas as we started up our company.

2 Q. Great.

3 And just to make sure the record is clear  
4 and also to check my own hearing, I just want to make  
5 sure the year in which you accepted a position as a  
6 reservoir engineer with ExxonMobil. What year was that?

7 A. 2004.

8 Q. 2004. Great.

9 Are you familiar with the applications  
10 filed in these cases?

11 A. I am.

12 Q. And are you familiar with the status of the  
13 lands in the subject area?

14 A. I am.

15 Q. Okay.

16 MR. McMILLAN: At this time I'd like to  
17 tender Dr. McCracken as an expert petroleum engineer.

18 EXAMINER GOETZE: Mr. Bruce?

19 MR. BRUCE: No objection.

20 EXAMINER GOETZE: He's so qualified. Thank  
21 you.

22 Q. (BY MR. McMILLAN) Let's begin. Can you please  
23 give the Hearing Examiners a brief overview of the  
24 drilling and completion plans for these wells?

25 A. Yes, I can.

1           As Mr. Zimmerman mentioned, we plan to  
2   drill north-south oriented wells in the south half of  
3   Section 10 and in through Section 15, trying to maximize  
4   the producing lateral length as much as we can using the  
5   standard 330-foot setbacks on the leaselines. We plan  
6   to complete the wells in the basal 3rd Bone Spring, and  
7   we plan to use high-intensity proppant fractures, around  
8   2,000 pounds per foot, in relatively tight cluster stage  
9   spacing to maximize recovery and economics.

10       **Q.   Have you developed certain exhibits for our**  
11 **reference during this hearing?**

12       A.   I have.

13       **Q.   Are they found in the packet behind tab six in**  
14 **the packet of exhibits?**

15       A.   Yes, they are.

16       **Q.   Great. Let's all turn there, to Exhibit 6.**  
17 **Turning to page 1 of Exhibit 6, is this a summary of**  
18 **what you intend to testify to today?**

19       A.   Yes, sir, it is.

20       **Q.   Can you please walk us through this page?**

21       A.   Yes, I can.

22           As I mentioned before, we have independent  
23   development plans for this acreage, the south half of  
24   Section 10 and Section 15, that we believe maximizes the  
25   economic recovery of hydrocarbons by employing long

1 laterals. There are several reasons behind this and why  
2 it works. You know, basically long laterals are known  
3 by the industry to reduce waste and to maximize economic  
4 returns. That's due to multiple reasons.

5           One, the EUR, as I'll show in these  
6 exhibits, scales virtually linearly with the completed  
7 lateral length. Basically, you're losing -- you're  
8 alluding [sic] all the losses due to the lease line  
9 setbacks, and that will enable you to increase your  
10 reserves. Also, you know, the drilling costs don't --  
11 do not scale linearly -- lateral, in general. Also,  
12 you're going to get a longer economic well life from the  
13 well because of the fixed costs that are associated with  
14 it that cut off the economic limit for the well. And  
15 I'll show that. And then it also reduces your surface  
16 footprint. There are less roads, less right-of-way,  
17 less pads being built, and so it's better for the  
18 environmental impact.

19           Mewbourne's development plan calls for  
20 5,000-foot laterals, which, in our opinion, reduces the  
21 economic efficiency and would result in loss of  
22 hydrocarbon recovery versus our plan, and there is a  
23 chance it could potentially leave Black Mountain Oil and  
24 Gas acreage stranded. And as we've talked about before,  
25 you know, we think we're pretty easy to work with, and

1 we offered a trade that was mutually beneficial for  
2 Mewbourne, a west half-east half trade, but they  
3 declined it.

4 **Q. Turn to page 2. Is this essentially an area**  
5 **locator map showing the areas of comparison?**

6 A. Yes, it is.

7 **Q. Can you briefly orient us using this exhibit?**

8 A. Yes.

9 So the zoomed-out picture shows where this  
10 acreage sits in relationship to the broader development  
11 area. You can see it's the potash area with the red  
12 outline, and then I've highlighted here three comparison  
13 areas where I plan to demonstrate that recovery of  
14 hydrocarbons scales with the completed lateral length.  
15 And so just for future reference, we've got a comparison  
16 area of, one, which we've loosely talked about in  
17 previous testimony, the 2nd Bone Spring; comparison area  
18 two, the 3rd Bone Spring wells; and comparison area  
19 three with Avalon wells with various lateral lengths.

20 **Q. Great. Thank you.**

21 **Let's see. We may have already gotten this**  
22 **into the record, but can you briefly describe Black**  
23 **Mountain's acreage position in Section 15 and Section**  
24 **10?**

25 A. Yes.

1                   Our acreage is highlighted there in yellow,  
2   so we're owning in the southeast quarter and the  
3   northwest quarter of Section 15, the southeast quarter  
4   of Section 10 and the north half of the southwest  
5   quarter of Section 10.

6           **Q.   Great.**

7                   **Let's take a look at page 3 of the exhibit.**  
8   **Can you just give us a sense of what we're looking at**  
9   **here, please?**

10          A.   Yes.

11                   This is our idealized development plan for  
12   the area if we had, I guess, full control of the south  
13   half of Section 10 and Section 15 as operator. We see  
14   multiple benches having perspective that we would like  
15   to develop. And so you have both the stick map on the  
16   left side of that exhibit and then a gun-barrel view on  
17   the right half. And so we see 2nd Bone Spring having a  
18   large target where we can stagger laterals and 3rd Bone  
19   Spring, which is the subject of this hearing, as well as  
20   Wolfcamp A and Wolfcamp D potential.

21          **Q.   And, again, this is an idealized schematic of**  
22   **Black Mountain's development plan?**

23          A.   That's correct.

24          **Q.   Okay. What about the potential targets for**  
25   **development in the three units that we're discussing**

1 today?

2 A. The potential targets are -- I guess as I was  
3 mentioning before, we've got the 2nd Bone Spring, 3rd  
4 Bone Spring. Wolfcamp A and Wolfcamp D, subject to this  
5 hearing, is around the 3rd Bone Spring development.

6 Q. Great.

7 And just to be clear, what length of  
8 laterals is Black Mountain proposing to utilize in these  
9 sections?

10 A. Mile-and-a-half laterals.

11 Q. And what unit configurations will be designated  
12 for the wells?

13 A. These will be 240-acre units.

14 Q. And the take points are situated at orthodox  
15 locations, correct?

16 A. That's correct.

17 Q. Have you conducted, Dr. McCracken, an  
18 engineering investigation to determine whether the  
19 drilling of these proposed 7,500-foot laterals is a more  
20 efficient way to develop the oil reserves in this area?

21 A. Yes, I have.

22 Q. Great.

23 Can you summarize for the Examiners the  
24 conclusions you have reached with respect to whether  
25 drilling 7,500-foot laterals on 240-acre units will

1    **result in incremental recoveries exceeding those you**  
2    **would anticipate for 4,600-foot laterals on 160s?**

3        A.    Yes, I can. We'll get into all the details in  
4    the subsequent exhibits, but it's well known within the  
5    industry that longer laterals increase recovery and  
6    improve economics for not only for the operator but all  
7    the other working interest parties and the NRI owners  
8    and, thereby, also the State. And we'll go through  
9    those exhibits here in a little bit.

10       Q.    Okay. So let's turn together to your page 4  
11    and if you could explain just for the record what the  
12    connection is between your pages 4, 5 and 6 and page 2.  
13    Just tie those together for us.

14       A.    Okay. So on page 4 of our exhibit, we have  
15    comparison area one where the 2nd Bone Spring wells are  
16    all drilled in the same neighborhood, a mixture of  
17    one-mile laterals and mile-and-a-half laterals, and I  
18    point out those wells, including the Mewbourne Antelope  
19    9 well, the COG Gettysburg State wells and the Endurance  
20    Stratocaster wells.

21                    And at the bottom of that, you'll see a  
22    summary table that has the well name, the API number,  
23    the date of first production, the completed lateral  
24    length for each one of those wells, and then the  
25    proppant intensity represented in pounds per foot, as

1 this is a well-known fluence on well performance. So  
2 it's important to note any differences that we see as we  
3 go through these comparisons.

4 Then I have the cumulative production to  
5 date both for oil and gas, as well as our remaining  
6 reserve calculations for oil and gas. That then added  
7 together yields a gross EUR, and. The upper half of  
8 that table shows the short lateral lengths, and the  
9 bottom half of that shows the long lateral lengths.

10 So the bottom line is if you look at the  
11 ratios of that on a BOE basis, we're looking at a ratio  
12 of about 1.4. The longer lateral lengths outperform the  
13 shorter lateral lengths for a ratio of completed lateral  
14 length of 1.72. So if it's scaled linearly, we would  
15 want to see like a -- those numbers both be identical.  
16 So we're just slightly less than linear scaling here by  
17 about 82 percent scaling. But also notice that we are  
18 dealing with lower proppant intensity for the longer  
19 laterals compared to the shorter laterals, and if you  
20 were to additionally scale for that proppant intensity,  
21 it would be near linear.

22 **Q. Okay. What kind of conclusions -- are there**  
23 **any other additional conclusions you can draw from the**  
24 **fourth page of your exhibit?**

25 **A. Yeah. So the main conclusion here is that**

1 we're looking at direct offsets with different horizon,  
2 2nd Bone Spring, but we're seeing near linear scaling,  
3 especially linear -- scale for proppant intensity, well  
4 performance and completed lateral length, showing that  
5 the completed -- an increasing completed lateral length  
6 is important.

7 **Q. Okay. Let's go ahead and look at page 5. And**  
8 **how does this relate back to page 2?**

9 A. So page 5 is yet another comparison area. Now  
10 we're looking at 3rd Bone Spring, the exact same target.  
11 This is probably the most pure example that we will be  
12 able to find as far as comparing lateral lengths. And  
13 the reason is it's the same, exact operator who has  
14 drilled all these wells. They've done them in the same  
15 horizon and nearly the same time period. So we're  
16 looking at COG and the Cortison [phonetic] State wells.  
17 They're drilling close to mile-and-a-half laterals to  
18 the north there in that Section 3, and then in Section  
19 10, they're drilling one-mile laterals.

20 Again, we have a summary table at the  
21 bottom with all the same information that was in slide  
22 four, the cum to date, proppant loading, the remaining  
23 reserves in the gross EUR.

24 So in this case, we're seeing a gross EUR  
25 ratio of 1.73, looking at a completed lateral length

1 ratio of 1.61, basically looking at super linear ratio  
2 between the recovery and the proppant and the completed  
3 lateral length of about 108 percent. And we would -- we  
4 would -- we would expect it to be linear, so, you know,  
5 maybe se geologic components even though those are so  
6 close as to why we're seeing being super linear, but the  
7 proppant intensity is nearly identical between the two.

8 **Q. Okay. Any additional conclusions you'd like to**  
9 **draw from this page, or shall we move on?**

10 A. No. Let's go to the next.

11 **Q. All right. Let's look at page 6.**

12 A. Page 6 is another comparison area. Here we're  
13 looking at Avalon wells all drilled by EOG, various  
14 lateral lengths all in the -- all in the Avalon.

15 Again, got a comparison table at the bottom  
16 with short lateral lengths and long laterals. Looking  
17 at a BOE ratio of 1.99 versus a lateral ratio of 1.55,  
18 and the ratio of the proppant intensities is about 1.  
19 So some of the proppant intensities is getting better  
20 performance with the longer laterals in this case.

21 So we believe that this just confirms what  
22 all the industry is going to and why they're doing it,  
23 that we're getting more economic recovery from going to  
24 longer lateral lengths.

25 **Q. Jumping ahead just a bit here, I'm looking at**

1 pages 13 through the end of your exhibit. These appear  
2 to be, in layman's terms, curves of some sort. Can you  
3 explain to us how these -- these curves relate to the  
4 analysis you just explained to us?

5 A. Sure.

6 For the sake of completeness and  
7 transparency, slides 13 through 35 are our type curves,  
8 are our forecasts for all the wells, basically to show  
9 that we didn't do anything tricky to come up and to  
10 change the EURs, and we've used consistent engineering  
11 practices.

12 Q. Moving right along to page 7 of your exhibit,  
13 can you kind of tell us what we're looking at here?

14 A. Yes, I can. This is a comparison diagram  
15 illustrating why the longer lateral length development  
16 leads to less waste and increasing the EUR.

17 So on the very left side on that, we're  
18 showing a 5,000-foot development in the north-south  
19 laterals and your 330-foot setbacks. Now, what you can  
20 see as you compare that to your 7,500-foot are nominally  
21 [sic] mile-and-a-half length laterals. We encounter  
22 less setbacks, which is what allows us to have a longer  
23 completed lateral length, and this is what makes the  
24 longer lateral development better from a recovery  
25 standpoint.

1           There are additional benefits to having a  
2 longer lateral such that you're not drilling the  
3 overburden multiple times, and so that makes your cost  
4 more efficient. You have less facilities. You have  
5 less wells that you have to send a pumper to. There are  
6 a whole host of other reasons on the economic side. But  
7 this side is mostly focused around why it's superior  
8 from a recovery standpoint.

9           So if you compare the two development plans  
10 in the table, we have the undeveloped acres associate  
11 [sic] 5,000-foot laterals. This is simply done by  
12 calculating your setback, multiplied by your section  
13 width. You have 240 acres over the three-section  
14 display that's not developed or underdeveloped. And  
15 then with the mile-and-a-half long laterals, you only  
16 have 160 acres. So if you take the difference of those,  
17 you're looking at 80 acres of wasted, that are not  
18 properly drained, and that's about 4.2 percent.

19           So if we take our average type curve from  
20 the previous work and multiply that out -- that type  
21 curve was 310 barrels -- 310,000 barrels of oil and 661  
22 million cubic feet of gas, we're looking at lost oil  
23 just under 13 million -- 13,000 barrels and lost gas  
24 just under 28 million cubic feet. If we calculate that  
25 out in lost revenue for the State on the oil revenue,

1 assuming at 8.13 percent severance tax, we're looking at  
2 about \$53,000 on the oil side and about \$7,000 on the  
3 gas side. So total lost revenue per zone, per well  
4 would be about \$60,000.

5 And that number may not be that large, but  
6 we're talking about stacked pay, and we're talking about  
7 a lot of laterals that could be drilled. So when you  
8 multiply that out by number of -- looks like the  
9 interval will be four, and on the low side, four wells  
10 per section, we're looking at about a million dollars of  
11 lost revenue for the State.

12 **Q. Great. Thank you for that explanation.**

13 **Let's look -- let's move to page 8. And**  
14 **I'm going to let you just explain this exhibit to us.**

15 **A. Sure.**

16 Another way that long laterals increase  
17 recovery and thereby also increase -- improve economics  
18 for the working interest owners, NRI owners and the  
19 State is related to the end of the economic limit for  
20 well life.

21 So as the well comes near its end, the  
22 predominant costs that make it become economic are the  
23 fixed costs, but you have to have a pumper come out  
24 there every month. You're paying them a salary. You  
25 have a meter charge. Even if you're not using your

1 electricity very much, the electric company likes to  
2 charge you a lot of money to have your meter sitting out  
3 there. And you're going to have a set number of  
4 workovers that are just going to happen. You're going  
5 to get holes in tubing, pump changes, things like that,  
6 and all those things are pretty much fixed costs. They  
7 don't vary with the production.

8               So this illustrates the cash flow profiles  
9 for a 5,000-foot lateral and a 7,500-foot lateral. The  
10 fixed LOE for those two -- those two wells are basically  
11 the same. You're not really changing your fixed cost.  
12 And you can see that where the straight-running black  
13 line crosses over, that that represents the fixed LOE,  
14 that you end up getting six years longer economic life  
15 with a longer lateral.

16              And so you can go calculate the reserves  
17 that are associated with that. So if we go back using  
18 our example type curve, 370,000 barrels of oil and 600  
19 million cubic of gas per 5,000 foot versus the 55-,  
20 60,000 barrel oil and 923 million cubic feet foot for  
21 the mile-and-a-half laterals, you can calculate that you  
22 would get an additional \$22,000 in severance taxes for  
23 that well associated with that.

24              To normalize this back to a 5,000-foot  
25 lateral, you need multiply by two-thirds. If you do

1 that, you get about \$14,500 in lost severance taxes per  
2 well or \$300,006 for BMOGs, 21-well development plan.

3 Q. Very good. Any further conclusions to be drawn  
4 here, or should we move on?

5 A. We can move on.

6 Q. Yeah. Let's move on to page 9. Did you work  
7 with Black Mountain's geologists or geologist in  
8 developing the development plan here?

9 A. Yes, sir.

10 Q. In looking at page 9, this appears to be a  
11 cross section. Can you tell me what we can glean from  
12 this exhibit?

13 A. This cross section simply shows that the 3rd  
14 Bone Spring is continuous across all of our acreage, so  
15 we're not adding in acreage that would not add value.  
16 So basically we're -- we're not just trying to throw in  
17 this south half of Section 10 just for the sake of  
18 getting it contributed to the well.

19 This cross section shows it's flattened on  
20 the 3rd Bone Spring. Probably the easiest curve to look  
21 at is the resistivity curve. You can see the  
22 resistivity pulled back from the 3rd Bone Spring, and  
23 it's a consistent package across the section.

24 Q. Okay. Great.

25 Turning to page 10, it appears to be a

1     **structure map of the Wolfcamp?**

2           A.    It is.

3           **Q.    Can you tell us what we need to know from this**  
4     **exhibit?**

5           A.    Yes.  This is our structure map on the  
6     Wolfcamp.  It varies slightly from the one we just saw  
7     from Mewbourne.  I did a quick comparison, but it's  
8     largely similar.

9                     We'll be drilling a long strike from the  
10    north to the south.  There is a chance for a small throw  
11    fault to the south.  We see a clustering of the contour  
12    lines associated with the southeast-southeast of Section  
13    15, and we prefer to drill north to south so that if we  
14    do encounter that fault, it's much easier to do it at  
15    the tail of the well and -- versus trying to land as you  
16    go through it.

17          **Q.    Very good.**

18                    So ultimately is the Bone Spring continuous  
19    **across Sections 10 and 15?**

20          A.    Yes, sir.

21          **Q.    And ultimately will all of the 40-acre tracts**  
22    **contribute reserves to these wells?**

23          A.    Yes, it will.

24          **Q.    To your knowledge or in discussion with your**  
25    **geologist, are there any geologic or structural**

1    **discontinuities across the project areas for the wells**  
 2    **that would adversely affect development by horizontal**  
 3    **wells?**

4        A.    The only potential that we see for  
 5    discontinuities would be associated as we head to that  
 6    southeast-southeast of Section 15. We feel that it  
 7    would be a fairly small throw fault that we could easily  
 8    handle.

9        Q.    It wouldn't be of such a large magnitude that  
 10   **it would adversely impact your development?**

11       A.    That's correct.

12       Q.    In your opinion, are there any additional -- is  
 13   **there any additional potential of interference to**  
 14   **offsetting production by developing these sections with**  
 15   **horizontal wells configured across these nonstandard**  
 16   **units?**

17       A.    No.

18       Q.    **Any further explanation there?**

19       A.    Essentially, what we're seeing in the industry  
 20   and I guess empirically being proven is that tighter and  
 21   tighter cluster spacing is resulting in more and more  
 22   increases of EUR. So by being able to have less  
 23   setbacks in your development and being able to get that  
 24   tight cluster spacing in, it enhances the recovery,  
 25   which also means that you're not going to dramatically

1 interfere with other wells that are drilled parallel to  
2 yours. Basically, limited recovery perpendicular to the  
3 fractures.

4 Q. And in your opinion and supported by your  
5 exhibits, will development with 7,500-foot laterals  
6 enable Black Mountain to be able to efficiently and  
7 economically recover additional incremental reserves  
8 that would otherwise go unproduced?

9 A. Absolutely.

10 Q. And will this result in improved project  
11 economics so that premature abandonment will be avoided?

12 A. Yes.

13 Q. Oh. Will the development of these sections  
14 with horizontal wells allow Black Mountain to minimize  
15 surface disturbance?

16 A. Yes.

17 You know, obviously the longer lateral you  
18 drill, the less pad locations that you're drilling, less  
19 rights-of-way, less lease roads. Yeah. There are a  
20 whole lot of reasons that you'd want to do it from a  
21 surface standpoint.

22 Q. And speaking of disturbance, in your opinion,  
23 is Black Mountain's development plan disruptive of the  
24 predominant development in the area? We can look at  
25 Exhibit 3 for reference, perhaps.

1           A.    We do not believe it is. Today's the first  
2   time that we've heard anything about BTA. The entire  
3   industry is -- I can name executives from multiple oil  
4   and gas companies that are actively trying to  
5   orchestrate trades so that they can drill longer  
6   laterals. Earlier today we heard two pooling hearings,  
7   one by XTO who wants to drill nothing but 10,000-foot  
8   laterals, going to two-mile laterals, another one where  
9   BC was not able to get a mile-and-a-half lateral due to  
10  timing, but they really wish they could drill a  
11  mile-and-a-half lateral. Everyone wants to go do that.  
12  I don't see any reason why, as this play extends to the  
13  north through Sections -- the north half of Section 3,  
14  that people would not want to drill longer laterals.

15           **Q.    And do you recall Mewbourne's geologist**  
16 **testifying that to his knowledge, there was nothing,**  
17 **geologically speaking, that would preclude that kind of**  
18 **development?**

19           A.    I'm sorry. Say that again.

20           **Q.    Sure.**

21                   **Do you recall Mewbourne's geologist earlier**  
22 **today testifying that to his knowledge, there is nothing**  
23 **geologically speaking that would preclude --**

24           A.    Yes, I recall that, and I would concur,  
25  especially 3rd Bone Spring. It's very consistent in

1 this area.

2 Q. We've heard a bit today about the threat of  
3 stranded acreage. Do you have an opinion as to the ways  
4 in which -- starting with Black Mountain's development  
5 plan, how it could conceivably eliminate the threat of  
6 stranded acreage?

7 A. The plan optimizes the development, and there  
8 are plenty of opportunities to drill long laterals, and,  
9 basically, there won't be stranded acreage if that's  
10 done.

11 Q. Have you examined Mewbourne's development plan  
12 for this acreage?

13 A. I have.

14 Q. What are your conclusions in comparing  
15 Mewbourne's development plan with Black Mountain's?

16 A. Mewbourne's development plan for mile-long  
17 laterals, which are -- is not the preferential  
18 development by the large host of operators in the  
19 area -- it's a sub -- it's a suboptimal design due to  
20 the lease line setbacks and just the fact that you're not  
21 going to complete much of the lateral length. The  
22 economics are not as strong as long laterals due to  
23 having to drill the overburden multiple times for every  
24 time that you're having to go fill -- fill a section, as  
25 well as an increased surface footprint.

1           Q.   Earlier Mr. Zimmerman essentially deferred or  
2   at least promised that you would provide a bit more  
3   testimony concerning the experience of Black Mountain's  
4   personnel in drilling horizontal wells.

5           A.   Yes, sir.

6           Q.   Can you expand upon that, give us a better  
7   sense of the experience that your people have in  
8   drilling these kind of wells?

9           A.   Yes, I can.

10          Q.   Great.

11          A.   As Mr. Zimmerman mentioned, we are a relatively  
12   new entity, and we'll spud our first well. That same  
13   rig that BC just finished, Fried Chicken, is coming to  
14   our well to drill the Cypress 1H well.

15                    So, you guys, one week, we can meet and  
16   schedule a rig.

17                    We have -- all of our staff are well versed  
18   in drilling horizontal wells. I gave my background with  
19   Pioneer Natural Resources, 140 horizontal wells in a  
20   year, and then as a small company really having to  
21   understand things soup to nuts, drilling 30 laterals.  
22   Our geologic staff: We have a geo-steerer that has  
23   geosteered hundreds of wells, another one that's been  
24   involved in the planning, also, of hundreds of wells.  
25   Our ops engineer has fracked and sat on site for 50-plus

1 wells and designed and worked on over 100 wells.

2 So even though you guys haven't seen us  
3 yet, we're confident that we know what we're doing, that  
4 we will be able to ultimately develop the acreage.

5 Q. And if these applications are approved, is  
6 Black Mountain prepared to drill these wells?

7 A. We are.

8 Q. All right. Let's see. Earlier, Mewbourne, by  
9 and through counsel, was asking a lot of questions of, I  
10 believe, Mr. Zimmerman concerning Black Mountain's  
11 change to your AFE between December of 2016 and January  
12 of this year. Do you recall that?

13 A. Yes, sir.

14 Q. Do you have an explanation for why Black  
15 Mountain changed the AFE?

16 A. I do. And it also pertains to the -- it also  
17 pertains to the GMT, the AFE that was referenced by  
18 Mr. Bruce. All those AFEs were put together in  
19 December. Our completions engineer, who was pricing out  
20 those AFE, was using an old price tag that was dated,  
21 and when we came back to re-issue AFEs, as this process  
22 evolved in January, we revisited it and used current  
23 costs, and that's why the completion costs are  
24 different.

25 Some other important differences, we've

1 done a pretty much kind of head-to-head comparison  
2 between the AFEs. As Mr. Jones pointed out about where  
3 do you land your intermediate casing, we prefer to land  
4 that all the way through the Delaware. We think it's  
5 safer. And so we have an additional \$200,000 of pipe  
6 associated with that. Our day cost is higher. In our  
7 new rig procurement, our day costs are coming much  
8 closer to what Mewbourne's are. That's about another  
9 \$100,000 difference between the two AFEs. And then the  
10 last category that's the biggest difference is the  
11 completion cost. Mewbourne's completion costs are just  
12 way low. We don't think they can actually do that in  
13 today's price environment with that cost. They're  
14 putting a less pounds-per-foot proppant frac intensity  
15 than we are going to do, and we think that also will  
16 leave reserves behind.

17 **Q. Okay. We also heard today about a trade that**  
18 **was offered to Mewbourne that was rejected. Have you**  
19 **executed trades with other parties in recent history?**

20 A. We have.

21 **Q. Can you provide some details?**

22 A. Yes. This also pertains to the desire to drill  
23 long laterals. We recently executed a trade with XTO so  
24 that they could drill two-mile laterals because that's  
25 what they want to do, and we swamped like acreage in two

1 areas so we both could get to two-mile lateral  
2 development.

3 **Q. And is it your sense that in this -- in this**  
4 **area -- in this vicinity, that these kind of land swaps**  
5 **are --**

6 MR. BRUCE: I'd object to further  
7 questioning. Land swaps aren't at issue here today.  
8 The drilling of these wells is.

9 EXAMINER GOETZE: Well, to what advantage  
10 do you have to continue on? How far are you going to go  
11 with this?

12 MR. McMILLAN: Can I finish this question?

13 EXAMINER GOETZE: Let's do the question.

14 **Q. (BY MR. McMILLAN) Do you have a sense of**  
15 **whether these kind of land swaps are a common practice**  
16 **in this part of the country?**

17 A. Yes. As I mentioned, a large majority of the  
18 operators -- maybe Mewbourne is the only exemption --  
19 want to drill long laterals.

20 **Q. Okay. And I think you testified earlier that**  
21 **the swap that you proposed with Mewbourne made sense for**  
22 **both parties. Can you give any specifics about that?**

23 MR. BRUCE: I object to this.

24 How do you know it made sense to Mewbourne?

25 MR. McMILLAN: I'll rephrase the question.

1 Q. (BY MR. McMILLAN) Okay. Let's just do this.

2 Why do you think Mewbourne refused your trade offer?

3 A. I do not know why they refused our trade offer.  
4 They would have been able to drill mile-and-a-half long  
5 laterals. It made sense to both parties, other than to  
6 think that they're trying to be difficult.

7 Q. And that's in your opinion?

8 A. That's in my opinion.

9 Q. And in what ways did it, to your mind, makes  
10 sense to both parties?

11 A. As I mentioned before, both parties could drill  
12 long laterals.

13 Q. If it became necessary here, would Black  
14 Mountain be willing and able to drill two-mile laterals?

15 A. Yes. If BTA wants to drill one-mile laterals  
16 north of us, we would be more than happy to amend this  
17 whole hearing, and we'll drill two-mile laterals.

18 Q. Okay. And finally, I think -- no. Just about  
19 finally. Mewbourne's -- Mewbourne, by and through  
20 counsel, asked some questions about Black Mountain not  
21 having filed the APDs with the BLM. Can you just  
22 provide a little bit of explanation there as to why that  
23 hasn't been done?

24 A. Yes, I can.

25 We've been careful to try to follow the

1 course of the rules and the law as far as when we can  
2 file APDs. And since we don't have a compulsory pooling  
3 and the fact we don't own underneath all the tracts, we  
4 can't file APDs with the State, and then also that  
5 affects all the development with the BLM determining  
6 what sort of laterals we are able to develop. So once  
7 we clear all that, we will go down the proper pathway  
8 with the appropriate timing.

9 Q. And you know I'm at the end because I'm asking  
10 this question. In your opinion, would the granting of  
11 Black Mountain's applications be in the best interest of  
12 conservation, the prevention of waste and the protection  
13 of correlative rights?

14 A. Absolutely.

15 Q. Was Exhibit 6 prepared by you or at your  
16 direction, and also was what we referred to earlier as  
17 Exhibit 2 part of Exhibit 6, and was that prepared by  
18 you or at your direction?

19 A. Yes, they were.

20 Q. Great.

21 MR. McMILLAN: And I move the admission of  
22 Exhibits 6 and 2 at this time.

23 MR. BRUCE: No objection.

24 EXAMINER GOETZE: Well, let's take a gander  
25 back. Wasn't it Exhibit 3 that you were --

1 MR. McMILLAN: It could have been.

2 EXAMINER GOETZE: That's right.

3 MR. McMILLAN: Thank you, Phil. I'm sorry.

4 Thank you, Mr. Examiner.

5 EXAMINER GOETZE: So would you like to  
6 rephrase your exhibits?

7 MR. McMILLAN: Yes. I expect I would like  
8 to rephrase. It's 3.

9 I'd like to move the admission of Exhibits  
10 6 and 3 at this time.

11 Let me backtrack and just make sure that we  
12 have it clear with the witness.

13 Q. (BY MR. McMILLAN) Was Exhibit 6 prepared by you  
14 or at your direction?

15 A. Yes.

16 Q. And was what we referred to earlier today as  
17 Exhibit 3 part of that package of Exhibit 6?

18 A. Yes.

19 Q. Great.

20 MR. McMILLAN: I would like to move the  
21 admission of Exhibits 6 and 3.

22 EXAMINER GOETZE: Mr. Bruce?

23 MR. BRUCE: No objection.

24 EXAMINER GOETZE: Very good. Exhibits 3  
25 and 6 are so entered into the record.

1 (Black Mountain Operating Exhibit Numbers 3  
2 and 6 are offered and admitted into  
3 evidence.)

4 EXAMINER GOETZE: Mr. Bruce?

5 MR. BRUCE: I have a few questions, yes.

6 CROSS-EXAMINATION

7 BY MR. BRUCE:

8 Q. First of all, Mr. McCracken, the land swap is  
9 totally voluntary?

10 A. That's a statement?

11 Q. What's that?

12 A. Are you making a statement or asking a  
13 question?

14 Q. Yeah. Is a land swap totally voluntary?

15 A. Of course.

16 Q. Different companies have different development  
17 objectives. Is that a fair statement?

18 A. That is a fair statement.

19 Q. And were you here when Mr. Cude was testifying?

20 A. I was.

21 Q. Didn't you hear him say that Mewbourne is not  
22 opposed to longer laterals in the right circumstances?

23 A. I did hear him say that.

24 Q. The reason I'm asking is in part of your  
25 testimony, you said Mewbourne doesn't like longer

1     **laterals. Didn't you say that?**

2           A.     It appears they do not like longer laterals  
3     maybe perhaps unless they're on this side of the --  
4     unless they're in a compulsory pooling hearing which  
5     favors them for saying they want longer laterals.

6           Q.     And you also sat here through the hearing and  
7     you heard Mr. Mitchell testify that Mewbourne has been  
8     working on this prospect since January of 2015, correct?

9           A.     I have.

10          Q.     So they have a lot of time and effort and money  
11     invested in this prospect already?

12          A.     As do we.

13          Q.     And if your applications are denied, you have  
14     the perfect right to propose to people in the north  
15     where you could do one or one-and-a-half or two-mile  
16     laterals; could you not?

17          A.     The NMOCD allows people to propose laterals, so  
18     yes.

19          Q.     You would not be precluded from drilling --

20          A.     We would not.

21          Q.     -- to the north, starting in Section 10 and  
22     drilling to the north line?

23          A.     We could drill in Section 10 to the north. The  
24     question becomes: What is your working interest, and  
25     does it make sense to operate it?

1           Q.    Okay. Well, in your proposed well, you only  
2   control about 22 or 25 percent working interest; is that  
3   correct?

4           A.    That is correct. And for the circumstances of  
5   the ownership in this area, that is a substantial  
6   ownership.

7           Q.    Have you talked with any other horizontal Bone  
8   Spring operators in this township regarding their  
9   development plans?

10          A.    I don't know if I can state all the other  
11   operators in this section, so I don't know the answer to  
12   that question.

13          Q.    Any operators in this township?

14          A.    In this township? I don't know if I can answer  
15   that question without referencing something else.

16          Q.    Just out of curiosity, what is the name of the  
17   location of the Wolfcamp well in Eddy County?

18          A.    The name and location of our Wolfcamp well --

19          Q.    Yes, sir.

20          A.    -- is the Cypress 1H, in Section 9 of -- I  
21   think it's going to be 23 South, 27 East.

22                   MR. ZIMMERMAN: Yes.

23          Q.    (BY MR. BRUCE) You signed up very few people  
24   for your proposed mile-and-a-half laterals. If you  
25   eventually succeed in your cases, then you'll have to

1     **apply for a federal APD; is that correct?**

2           A.     That's correct.

3           **Q.     Pretty time-consuming, isn't it?**

4           A.     Yes.   The BLM process takes months.

5           **Q.     In the meantime, reserves wouldn't be produced?**

6           A.     Reserves won't be produced until the well is  
7     drilled.

8           **Q.     Uh-huh.   Isn't there a value -- a time value of**  
9     **money?**

10          A.     There's always a time value of money.

11          **Q.     If you were producing one of these wells today,**  
12     **it would be better than drilling one a year and a half**  
13     **from now?**

14          A.     Yes.   My understanding was that the compulsory  
15     pooling authorization is only valid for a year.

16          **Q.     Excuse me?**

17          A.     My understanding is that the compulsory pooling  
18     authorization is only valid for a year.

19          **Q.     Unless you get a valid extension from the OCD;**  
20     **isn't that correct?**

21          A.     I'll defer to my attorneys.

22          **Q.     Why were the contingencies removed from Black**  
23     **Mountain's AFEs?**

24          A.     They were removed because we didn't feel like  
25     we needed them.

1           Q.    So you haven't drilled a well in New Mexico,  
2   and you don't think -- you know it all?  You don't  
3   envision any drilling or operational problems?

4           A.    No.  I'm not saying that we know it all by a  
5   long stretch.  But I will say that an AFE is simply an  
6   estimate of the cost.  It's not the actual cost.  And an  
7   AFE is an AFE.  So if you have contingencies or not,  
8   it's not material.

9           Q.    Looking at page 8 of your Exhibit 6, how many  
10   horizontal wells in New Mexico have produced for 50  
11   years?

12          A.    How many wells have produced for 50 years?

13          Q.    How many horizontal wells in New Mexico have  
14   produced for 50, 5-0, years?

15          A.    I would say the same number of wells that were  
16   drilled 50 years ago, which is zero.

17          Q.    So this recovery stuff is speculative at this  
18   point.  When were the -- I mean, you're an experienced  
19   engineer.  When were horizontal wells first starting to  
20   be developed in southeast New Mexico?  How many years  
21   ago?

22          A.    I couldn't tell you the exact year, but I would  
23   estimate somewhere around 2008.

24                    I mean, let me be clear about this  
25   illustrative diagram.  It doesn't matter if the wells

1 decline more severely and have a shorter life or not.  
2 This concept is true no matter what the well life is.  
3 So if you have a steeper decline and wells only last 20  
4 years, this concept still works.

5 Q. Okay. Well, then let's go to your Exhibit 4 --  
6 I mean page 4 of your Exhibit 6. Excuse me. And the  
7 first well you have listed is the Antelope well. Is  
8 that a Mewbourne well?

9 A. Yes, it is.

10 Q. And you show remaining oil reserves of 32,000  
11 barrels?

12 A. Yes. That's the results of our decline curve.

13 Q. And that well is about a year-and-  
14 three-quarters years old right now, correct?

15 A. It was spud in June of 2015. So --

16 Q. Maybe a year and a half.

17 A. Sounds about right.

18 Q. Are you -- so you're projecting that that well  
19 will only produce another year and a half, maybe two  
20 years?

21 A. I don't know. We can go to the exhibit.

22 Q. Well, are you aware that that well is still  
23 producing about 80 barrels a day?

24 MR. HALL: 24.

25 THE WITNESS: Slide 24? Is that 24 or --

1 MR. BRUCE: 27.

2 MR. HALL: Mine's not current.

3 Q. (BY MR. BRUCE) 27, Mr. McCracken. Sorry about  
4 that.

5 A. Slide 27 shows the decline forecast for the  
6 Antelope 9 well.

7 Q. Uh-huh. My eyesight isn't good, but it looks  
8 like -- is the blue oil?

9 A. There is no -- blue would be water.

10 Q. Green?

11 A. Green is going to be oil.

12 Q. It appears to be cycling -- so what you're  
13 saying is the Antelope well isn't going to produce for  
14 50 or even 31 years on this plat. It's going to produce  
15 three years?

16 A. We estimate an economic limit. Maybe six more  
17 years, once a re-frac is done or something to stabilize  
18 the decline.

19 Q. So for your page 4 of this exhibit, you picked  
20 a pretty poor representative well, I would say.

21 A. For page 4 of this exhibit, I picked all of the  
22 offset 2nd Bone Spring wells that were close to the  
23 mile-and-a-half long lateral wells.

24 Q. Okay. But in looking at page 4, you know, the  
25 Stratocaster wells -- I mean, you have cums to date for

1 the Mewbourne well of 119,000 and only 32,000 remaining.  
2 And take the second Stratocaster well, which is an older  
3 well. It's produced 84, but you're showing at 158,000.  
4 Kind of the same thing with the first Stratocaster well,  
5 right?

6 A. Yes. So you can look at the decline curves and  
7 see the basis for our estimate.

8 Q. But, again, you know, EURs are not an exact  
9 science, are they?

10 A. No. There is some room for adjustment based  
11 upon interpretation of the declines, but they do not  
12 vary wildly.

13 Q. And there are more than seven 2nd Bone Spring  
14 wells in this township?

15 A. In the Township? Yes.

16 My attempt here is to make a display of  
17 something that is most geologically representative,  
18 which means we have to select wells that are in a very  
19 tight compass of development. And I've not only shown  
20 the scales of lateral length for this year area but also  
21 two other areas, and it just validates the industry  
22 known phenomenon, that longer lateral length leads to  
23 more EUR.

24 Q. Thank you.

25 MR. BRUCE: No more questions, Mr.

1 Examiner.

2 EXAMINER GOETZE: Would you like an  
3 opportunity?

4 MR. McMILLAN: (Indicating.)

5 EXAMINER GOETZE: Okay. Mr. Jones?

6 CROSS-EXAMINATION

7 BY EXAMINER JONES:

8 Q. Is the drill direction north to south very  
9 important here, or could you drill south to north?

10 A. I think you can go either way. The main reason  
11 we want to go north to south right here is just that  
12 potential for that faulting in the southeast -- the  
13 southeast of Section 15, and we are geosteering -- if  
14 you cross a fault, there is a good chance you're going  
15 to land out of zone, and then that also then limits your  
16 effective lateral length.

17 Q. I noticed both you and Mewbourne were going  
18 north to south.

19 And your sand concentration, it looks like  
20 it's pretty consistent out here, but we're hearing  
21 stories that higher sand concentration, especially down  
22 in the Haynesville, you know, is a big -- may be a big  
23 advantage. Were you looking at that?

24 A. Absolutely. We pay a lot of attention to the  
25 proppant intensity. I could prepare a lot more

1 exhibits. We just went through a marketing process that  
2 shows that higher proppant intensity fractures increase  
3 your EUR. People are probably recognizing that first in  
4 the Wolfcamp, and they're now slowly starting to move  
5 that into the Bone Spring.

6 Q. Okay. It looks like there is a big trend here  
7 to drill north-south. So is your actual stresses that  
8 you would -- actually, if you went ahead and measured  
9 your horizontal stress directions, is there a big  
10 difference between the second and the third maximum  
11 stress? I mean the first being the vertical.

12 A. Right. Right.

13 Q. So --

14 A. Being a small operator, we don't have access to  
15 proprietary data to help us understand that. Instead,  
16 we take kind of a pragmatic approach and look at  
17 operators that have developed both more south and  
18 east-west. And we've seen in portions of the Basin  
19 where north-south is clearly better. We've seen  
20 portions of the Basin where east-west is better, some  
21 places where it doesn't matter. In this vicinity, there  
22 are not enough wells that have been drilled in both  
23 orientations with the same sort of completions as to  
24 draw a firm conclusion, in my opinion.

25 Q. Okay. What about facilities out here? Because

1 we became aware that people applying for compulsory  
2 pooling, it's not necessarily for the tank battery and  
3 all that stuff. You know, so are you guys going to have  
4 to -- are you going to be able to have some efficiencies  
5 by putting all your wells in the center of this Section  
6 10?

7 A. Yes. Absolutely. That's a big advantage for  
8 the long laterals and the pad development, to  
9 consolidate your facilities and not overbuild it, which  
10 helps you, you know, be more efficient in your  
11 economics.

12 Q. Okay. I'm going to stop.

13 CROSS-EXAMINATION

14 BY EXAMINER GOETZE:

15 Q. I just have one question. You present a  
16 development plan in your Exhibit 6, on slide three. How  
17 realistic and what kind of a time frame would you be  
18 looking at to, say, at the initial development of the  
19 second -- excuse me -- the third -- the other stages of  
20 this would even be considered or implemented?

21 A. We like Wolfcamp A a lot. I'll lump in there  
22 the X-Y. So I think that would be a near term target.  
23 2nd Bone Spring is also strong. Wolfcamp B is probably  
24 a little bit farther out in our development plan. So I  
25 would order them in that order. Partially how this

1 plays out is going to say how much staggering we're  
2 going to do in the 2nd Bone Spring, you know, as far as  
3 if we have real divided ownership here. Where everyone  
4 has 160-acre units, it's going to be really hard to get  
5 some additional pooling in to make those other laterals  
6 happen on the staggers. But that would be our priority  
7 order: The 3rd Bone and Wolfcamp A and the 2nd Bone.

8 EXAMINER GOETZE: I have no further  
9 questions for this witness.

10 Both of you have gone through all your  
11 witnesses. We're at the end of --

12 What? You've got your finger to your nose.  
13 Oh, come on.

14 MR. BRUCE: You wouldn't let me ask his  
15 landman something, so I'd like to put Mr. Mitchell up  
16 for three questions only.

17 EXAMINER GOETZE: Three questions? So are  
18 you saying you're going to have rebuttal?

19 MR. BRUCE: Rebuttal.

20 EXAMINER JONES: You need to start eating  
21 lunch, Phil.

22 EXAMINER GOETZE: I don't need to eat  
23 lunch.

24 Okay. At this point we're done with your  
25 witness here. You may step down.

1                   You wish to put up one more witness.

2                   EXAMINER JONES: Thank you, Dr. McCracken.

3                   EXAMINER GOETZE: Yeah. Thank you, Doctor.

4                   THE WITNESS: Thank you.

5                   EXAMINER GOETZE: Bring your witness up.

6                   I would also like to point out in this  
7 hiatus that an attendant of the audience wishes to make  
8 a pro se statement, and we will, at the end of your two  
9 efforts, let this man have the opportunity to make his  
10 statement part of the record.

11                  MR. BRUCE: Yes, sir.

12                  EXAMINER GOETZE: Continue, Mr. Bruce.

13                               COREY MITCHELL,  
14 after having been previously sworn under oath, was  
15 recalled and questioned and testified as follows:  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

1 DIRECT EXAMINATION

2 BY MR. BRUCE:

3 Q. Mr. Mitchell, the testimony from Black Mountain  
4 is that Seeligson Oil Company was signing their JOA.  
5 But did Seeligson submit a letter of support to  
6 Mewbourne?

7 A. Yes, sir. Excuse me. Yes, sir, they did.

8 Q. Is that contained within Exhibit 9?

9 A. Yes, sir, it is.

10 Q. And does Seeligson own in both sections?

11 A. Yes, sir, they do.

12 Q. Are they the only Section 15 interest owner who  
13 Black Mountain claims signed their JOA?

14 A. Yes, sir, it is.

15 EXAMINER GOETZE: Yeah. You get an  
16 opportunity.

17 MR. HALL: Well, no.

18 EXAMINER GOETZE: What do you have?

19 MR. HALL: Counsel in chief has a kid to be  
20 picked up.

21 EXAMINER GOETZE: You've got a life?

22 (Laughter.)

23 MR. HALL: Can he make a call?

24 EXAMINER GOETZE: Please.

25 At this point we'll take a break.

1 And you're done?

2 MR. BRUCE: I think I only have one more.

3 EXAMINER GOETZE: Well, you asked three --  
4 four questions. We can have the court reporter --

5 MR. BRUCE: Well --

6 EXAMINER GOETZE: Off the record for now.  
7 (Recess, 5:33 p.m. to 5:36 p.m.)

8 EXAMINER GOETZE: We're back on the record.  
9 So you have one more question, Mr. Bruce?

10 Q. (BY MR. BRUCE) Referencing joinder,  
11 Mr. McCracken stated that they had about 25 percent of  
12 the acreage, or maybe it was Mr. Zimmerman. What  
13 percentage of the working interest commitment in Section  
14 15 does Mewbourne have?

15 A. We have approximately 74 percent, with Black  
16 Mountain having 24 percent, so a little less than 2  
17 percent is uncommitted. And our 74 percent  
18 approximately -- it's approximately 90 percent of the  
19 owners in the section.

20 Q. Thank you. That's it.

21 EXAMINER GOETZE: Mr. McMillan?

22 MR. McMILLAN: Nothing. Let's end this.

23 EXAMINER GOETZE: On that note, we no  
24 longer need this witness.

25 So we have a pro se statement.

1 MR. ADAMS: Yes, sir.

2 EXAMINER GOETZE: Come forward, have a  
3 seat, identify yourself and be sworn in by the court  
4 reporter.

5 MR. ADAMS: I will do that.

6 EXAMINER GOETZE: Please proceed.

7 MARK ADAMS,  
8 after having been first duly sworn under oath,  
9 testified as follows:

10 MR. ADAMS: My name is Mark Adams. I'm an  
11 attorney with the Santa Fe office of the Rodey Law Firm.  
12 I'm here on behalf of Patterson Properties and CML  
13 Exploration, and they asked me to express their very  
14 strong support for the Mewbourne applications here.  
15 They think that -- they are interest owners in the  
16 property involved and have an interest in having the  
17 Mewbourne applications approved.

18 EXAMINER GOETZE: Very good. Thank you.

19 MR. ADAMS: You're welcome. Thank you.

20 EXAMINER GOETZE: On that note, we have --

21 EXAMINER JONES: Closing statements?

22 EXAMINER GOETZE: Yeah. But I think -- do  
23 you want to do a closing statement?

24 MR. McMILLAN: 20 minutes or so?

25 (Laughter.)

1 EXAMINER JONES: You both have the  
2 opportunity, and we leave it to your option.

3 MR. HALL: Can you resist?

4 MR. BRUCE: I can resist if Mr. McMillan  
5 can resist.

6 MR. McMILLAN: Mine was drafted for me, so  
7 let me review it.

8 MR. BRUCE: I think you've heard the  
9 positions of the parties.

10 MR. McMILLAN: Yes. Nothing new here.  
11 You've heard our stories.

12 EXAMINER GOETZE: On that point, you have  
13 requested a continuance?

14 MR. McMILLAN: Indeed. Indeed.

15 EXAMINER GOETZE: What do you think would  
16 be sufficient time to deal with this notification issue?

17 MR. McMILLAN: Well, I think we're just  
18 publishing, and as I understand it, it's a ten-day --  
19 ten-day period.

20 EXAMINER GOETZE: Ten business days.

21 MR. McMILLAN: Ten business days. Could we  
22 continue until April 27th?

23 EXAMINER GOETZE: Mr. Bruce?

24 MR. BRUCE: I've been fighting continuances  
25 all along, but I know we're not getting an order out by

1 then.

2 EXAMINER GOETZE: In light of the status of  
3 most everything, I don't see anything pressing as far as  
4 a rig arriving on site. Let's go ahead and let's give  
5 this a final date of April 27th and --

6 EXAMINER JONES: For all six cases?

7 EXAMINER GOETZE: All six cases will be  
8 brought back on the 27th. At that point, hopefully we  
9 can get it under advisement.

10 MR. McMILLAN: Sure.

11 EXAMINER GOETZE: Cases 15600, 15601 and  
12 15602 have been continued to April 27th.

13 Thank you very much, gentlemen. It's quite  
14 a lot to think about.

15 MR. McMILLAN: Thank you for your patience  
16 with all of us.

17 EXAMINER GOETZE: Only thing you get for  
18 free around here is procrastination and patience.

19 (Case Numbers 15628, 15629, 15630, 15660,  
20 15601 and 15602 conclude, 5:41 p.m.)

21  
22  
23  
24  
25

do hereby certify that the foregoing is  
a true and correct copy of the proceedings  
of the hearing held at Court No. 1  
on the 30th day of March, 2017.

March 30 2017

Shirley L. DeB...

Off Conservation Division

15628  
15629  
15630  
15600  
15601  
15602

1 STATE OF NEW MEXICO  
2 COUNTY OF BERNALILLO

3

4

CERTIFICATE OF COURT REPORTER

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

I, MARY C. HANKINS, Certified Court

Reporter, New Mexico Certified Court Reporter No. 20,

and Registered Professional Reporter, do hereby certify

that I reported the foregoing proceedings in

stenographic shorthand and that the foregoing pages are

a true and correct transcript of those proceedings that

were reduced to printed form by me to the best of my

ability.

I FURTHER CERTIFY that the Reporter's

Record of the proceedings truly and accurately reflects

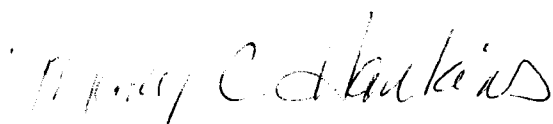
the exhibits, if any, offered by the respective parties.

I FURTHER CERTIFY that I am neither

employed by nor related to any of the parties or

attorneys in this case and that I have no interest in

the final disposition of this case.



MARY C. HANKINS, CCR, RPR

Certified Court Reporter

New Mexico CCR No. 20

Date of CCR Expiration: 12/31/2017

Paul Baca Professional Court Reporters