

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

IN THE MATTER OF THE HEARING CALLED  
BY THE OIL CONSERVATION COMMISSION FOR  
THE PURPOSE OF CONSIDERING:

ORIGINAL

APPLICATION OF COG OPERATING LLC FOR A  
NON-STANDARD SPACING and PRORATION UNIT  
AND COMPULSORY POOLING, LEA COUNTY,  
NEW MEXICO.

Case No.  
15327  
(De Novo)

REPORTER'S TRANSCRIPT OF PROCEEDINGS  
November 5, 2015  
Santa Fe, New Mexico

BEFORE: DAVID R. CATANACH, CHAIRPERSON  
ROBERT S. BALCH, COMMISSIONER  
PATRICK PADILLA, COMMISSIONER  
BILL BRANCARD, ESQ.

This matter came on for hearing before the  
New Mexico Oil Conservation Commission on Thursday,  
November 5, 2015, at the New Mexico Energy, Minerals,  
and Natural Resources Department, Wendell Chino  
Building, 1220 South St. Francis Drive, Porter Hall  
Room 102, Santa Fe, New Mexico.

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I N D E X

CASE NUMBER 15327 CALLED

COG OPERATING LLC

CASE-IN-CHIEF:

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1 (Time noted 9:43 a.m.)

2 COMMISSIONER CATANACH: So the next order of  
3 business today is Case No. 15327, Application of COG  
4 Operating LLC for a non-standard spacing and proration  
5 unit and compulsory pooling, Lea County, New Mexico.

6 At this time, I will call for appearances in  
7 this case.

8 MR. FELDEWERT: May it please the Examiner,  
9 Michael Feldewert and Jordan Kessler appearing on behalf  
10 of the applicant in this matter. We have two witnesses  
11 here today.

12 MR. WADE: Gabriel Wade on behalf of the  
13 OCD. I have one witness.

14 COMMISSIONER CATANACH: Any other  
15 appearances?

16 (No response.)

17 COMMISSIONER CATANACH: All right.  
18 Mr. Feldewert.

19 MR. FELDEWERT: Mr. Chairman, if I may  
20 approach. I've got a housekeeping matter I need to  
21 address first.

22 COMMISSIONER CATANACH: You may.

23 MR. FELDEWERT: In preparing for this case,  
24 we noticed that two of our exhibits in your exhibit  
25 notebook contained an error. And they involve Exhibits

1 3 and 18 in that they contain an incorrect description  
2 of the landing area of the proposed well.

3 And so if I may approach, I have some  
4 supplemental exhibits that we marked as Exhibit 3A and  
5 Exhibit 18A to correct that error.

6 COMMISSIONER CATANACH: Okay.

7 MR. FELDEWERT: Mr. Chairman and members of  
8 the Commission, we filed a prehearing brief to identify  
9 for you the factual and the legal basis for this pooling  
10 application that we have filed in this matter.

11 And you'll see that it's a limited pooling  
12 application. We seek to pool the upper portion of the  
13 Yeso Formation only, the Paddock and Blinebry zones of  
14 the Yeso Formation.

15 And the fundamental reason for that is it  
16 boils down to the circumstance where this limited  
17 pooling application is necessary here to protect  
18 correlative rights, because pooling the entire formation  
19 results in the owners in the portion of the formation  
20 that's actually contributing hydrocarbons to the well  
21 being forced to share their production with an owner, a  
22 single owner in a deeper zone of this formation that  
23 will not contribute hydrocarbons to this proposed well  
24 and thereby clearly impairing the correlative rights of  
25 our clients and the other working interest owners in

1 those zones.

2 And if you take a look at Exhibit 3A, it  
3 shows the type log of the area. And what it shows here  
4 is the correct description of our landing depth of the  
5 proposed well, which is at 6,400 feet.

6 And you will see that we are landing this  
7 particular well in what is known as the Blinebry  
8 interval of this much larger pool, the Maljamar-Yeso,  
9 West Pool. This is a pool that was established by the  
10 Division way back in 1950. And it has historically  
11 covered the entire Yeso Formation.

12 And if you keep this out and flip to our  
13 notebook and open up Exhibit No. 15, we provided you a  
14 stratigraphic chart column of the northwest shelf area.  
15 And we have highlighted in there the Yeso Formation.

16 And there's a couple of things you will  
17 observe. It's one of the thickest formations in the  
18 area. It is 1,500 feet thick. It has four discernible  
19 intervals, the Paddock, the Blinebry, the Tubb, and the  
20 Drinkard.

21 This application, as I mentioned, because of  
22 correlative rights, seeks to only pool -- we've marked  
23 there in blue -- the upper portion of this pool.

24 And there's two basic reasons for that.  
25 First, we have a unique circumstance here where we have

1 a single interest owner Este, Ltd., Este Limited.  
2 Because of the way they assign their acreage, they  
3 retain for themselves only an interest in the lower  
4 portion of the Yeso -- what we've marked there in red --  
5 the Tubb and the Drinkard. So the ownership depth  
6 severance line is at the base of the Blinebry, the same  
7 interval where our well is going to be located at 6,400  
8 feet.

9 That leads to a couple of problems. One is  
10 an accounting problem. I am not sure how you would deal  
11 with their interest if you did pool the entire  
12 formation. But, more importantly, the portion of the  
13 Yeso Formation that Este has retained its ownership in  
14 is not going to contribute hydrocarbons to this well --  
15 we are going to have the geologist talk about that here  
16 today -- because that Tubb Formation in which ownership  
17 starts is wet. It's not a contributing interval and  
18 will not contribute hydrocarbons to this well.

19 So that is why we brought this application,  
20 to only pool the portion of the formation first that has  
21 the common ownership. There's common ownership from the  
22 Paddock through the Blinebry. And that's the intervals,  
23 particularly the Blinebry, that's going to contribute to  
24 the proposed well. And so we just simply seek to  
25 exclude from the pooling portions that Este owns that



1 will not contribute hydrocarbons to this well.

2 And what's also unique about this case --  
3 and which I think is helpful for the Commission -- is  
4 everybody agrees that's the way to go, including Este,  
5 the interest owner that is going to be excluded by this  
6 pooling application.

7 So if you think about this, what we are  
8 trying to exclude here and what everybody thinks is  
9 appropriate to exclude is really the equivalent of  
10 vertical goat pasture. Remember the vertical equivalent  
11 of excluding surface acreage that's not productive.  
12 Because if you force Concho or any other working  
13 interest owner in this circumstance to pool this entire  
14 interval -- a pooling order can only allocate production  
15 on a surface acreage basis, so you are forcing these  
16 interest owners in a productive portion of the interval  
17 to share their production with an owner in the  
18 nonproductive portion of the interval that is not going  
19 to contribute hydrocarbons to the proposed well. That's  
20 a clear impairment of correlative rights. Your  
21 fundamental duty as the Commission is to protect  
22 correlative rights.

23 So that is why we brought this application  
24 here today in this unique circumstance. We are going to  
25 ask the Commission, after you hear from our landman and

1 after you hear from our geologist, to enter an order  
2 that pools only the acreage, the portion of this pool,  
3 this very deep pool, above the base of the Blinebry  
4 because that's necessary to protect correlative rights.

5 And before we start with our witnesses here,  
6 if you've got any questions about that, I will be happy  
7 to try to answer them. But we do have a land witness  
8 that's going to go through all the land circumstances  
9 here and the circumstances that we have with this depth  
10 ownership. And then we have a geologist that's going to  
11 talk about this particular formation.

12 COMMISSIONER CATANACH: Okay.

13 MR. WADE: Can the OCD make a brief  
14 statement?

15 COMMISSIONER CATANACH: Certainly.

16 MR. WADE: The OCD won't be providing any  
17 direct testimony from the witness, Mr. Goetze. He will  
18 be available for questions from the Commission and  
19 possibly following.

20 In general, after internal discussions and  
21 discussions with the applicant, the OCD feels that this  
22 application could be granted, based on the specific  
23 facts, if the Commission finds that the absence of a  
24 rule allowing it does not preclude the granting of the  
25 application.

1 COMMISSIONER CATANACH: Mr. Feldewert, are  
2 you ready to proceed?

3 MR. FELDEWERT: Yes, Mr. Commissioner. If I  
4 may, we will call our first witness. And our witnesses  
5 will be need to be sworn.

6 (WHEREUPON, the presenting witnesses  
7 were administered the oath.)

8 SEAN JOHNSON  
9 having been first duly sworn, was examined and testified  
10 as follows:

11 DIRECT EXAMINATION

12 BY MR. FELDEWERT:

13 Q. Would you please state your name, identify by  
14 whom you are employed and in what capacity?

15 A. My name is Sean Johnson. I'm employed by COG  
16 Operating LLC also known as Concho. I am the land lead  
17 for the New Mexico Shelf Asset Team.

18 Q. Have you previously testified before the Division  
19 as an expert in petroleum land matters?

20 A. Yes, I have.

21 Q. Have you had an opportunity to testify before the  
22 Commission?

23 A. No, I have not.

24 Q. Why don't you just briefly outline your education  
25 and background.

1       A. I graduated from Texas Tech University in 2009  
2       with my bachelor's of business administration in energy  
3       commerce, petroleum land management. Where I was then  
4       employed with ConocoPhillips, working the Balkan asset  
5       until August of 2011. Where I was then employed with  
6       Concho, working the same asset of which I am currently  
7       working now.

8       Q. And are you a member of any professional  
9       organizations and affiliations?

10      A. Yes, I am. I am a member of the American  
11      Association of Professional Landmen, the Permian Basin  
12      Landmen Association, the New Mexico Landmen Association.  
13      And I am also a certified professional landman.

14      Q. And how long, for example, have you been a member  
15      of the American Association of Petroleum Landmen?

16      A. Going on seven years.

17      Q. Are you familiar with the application that has  
18      been filed in this case?

19      A. Yes, I am.

20      A. And are you familiar with the status of the lands  
21      in this area?

22      A. Yes, I am.

23               MR. FELDEWERT: I would tender Mr. Johnson  
24      as an expert witness in petroleum land matters.

25               COMMISSIONER CATANACH: Mr. Johnson is so

1 qualified.

2 Q. Mr. Johnson, please turn to what's been marked as  
3 COG Exhibit 1. First identify it and then explain what  
4 the company seeks under this particular pooling  
5 application.

6 A. So Exhibit 1 is Concho C-102, the well location  
7 and acreage dedication plat for COG's Sneed 9 Fed Com  
8 23H Well, located in Township 17 South, Range 32 East in  
9 Lea County, New Mexico.

10 COG's proposed nonstandard spacing unit would  
11 encompass the south half of the northwest of section 9,  
12 the south half of the northeast of section 9, and then  
13 also the southwest of the northwest of section 10.

14 And underneath our application, COG is seeking  
15 two things, one being an approved nonstandard spacing  
16 unit order, and two being a pooling order pooling all  
17 uncommitted interest into the productive interval from  
18 the top of the Paddock to the base of the Blinbry.

19 Q. And would that pool a portion of the  
20 Maljamar-Yeso West Pool that is identified on this  
21 exhibit?

22 A. Yes, it would.

23 Q. This exhibit then provides the Commission with  
24 the API number for this well?

25 A. Yes, it does.

1 Q. As well as the pool code?

2 A. Yes, it does.

3 Q. Okay. Will the completed interval for this well  
4 comply with the Division's setback requirement for oil  
5 wells in this area?

6 A. Yes, it will.

7 Q. I want you now to put this in perspective. Let's  
8 turn to what has been marked as COG Exhibit 2. Is this  
9 an aerial area map that shows the location of this  
10 proposed well and nonstandard spacing and proration  
11 unit?

12 A. Yes, it is.

13 Q. Why don't you explain to the Examiners what all  
14 the colors mean.

15 A. So what you see here is just a referenced Concho  
16 Yeso development plat of COG's proposed Sneed 9 Fed Com  
17 23H Well. The yellow that you see is COG's acreage.  
18 The wells that are identified by circles being -- you  
19 will see some of them are just solid red. That means  
20 those are solely Paddock producers. And then you'll see  
21 some that are bicolored, being red and blue, which  
22 indicates Paddock and Blinebry producers.

23 And you can see in the south half of the north  
24 half of section 9 and in the southwest, northwest of  
25 section 10, fit in is COG's proposed Sneed 9 Fed Com

1 23H.

2 Q. With respect to the circles that we see, half  
3 blue and half red, those are vertical wells?

4 A. That is correct.

5 Q. Older vertical wells?

6 A. Correct, older vertical wells.

7 Q. And was the practice at the time these were  
8 drilled to have perforations in the Blinebry and then  
9 separate in the Paddock?

10 A. That's correct.

11 Q. And then does this also reflect that there's been  
12 some more recent vintage wells, horizontal wells, that  
13 have been drilled in this area?

14 A. Yes, that is correct.

15 Q. And those would be the lines and then they have  
16 red circles associated --

17 A. The red circles with the black line indicating  
18 the lateral.

19 Q. Okay. Now, I want you to then turn -- rather  
20 than turn to Exhibit 3, I want you to turn to the  
21 substitute exhibit, which is Exhibit 3A. And first off,  
22 does this particular exhibit correctly reflect the  
23 landing depth of the proposed well?

24 A. Yes, it does.

25 Q. And that's at 6,400 feet?

1 A. That is correct.

2 Q. I think the previous Exhibit 3 had the landing  
3 depth at sixty-four --

4 A. 6,450.

5 Q. And other than that, the exhibit is the same as  
6 the prior Exhibit 3?

7 A. Yes, that is correct.

8 Q. Okay. Is this a type log for one of the vertical  
9 wells that we saw from section 9?

10 A. Yes, completely just right offset to our proposed  
11 well.

12 Q. And for purposes of this hearing, does it  
13 identify where the particular pool at issue starts?

14 A. Yes, it does.

15 Q. And is that at the top of the Paddock?

16 A. Yes, that is at the top of the Paddock.

17 Q. And that is the Maljamar-Yeso West Pool?

18 A. Correct.

19 Q. And then it continues on through to the bottom of  
20 the Yeso Formation; is that right?

21 A. That's correct.

22 Q. And for purposes of this case, you seek to pool  
23 from the top of the Paddock to the base of the Blinebry,  
24 right?

25 A. That's correct.



1 Q. And, roughly, what is the distance between your  
2 proposed landing depth and the base of the Blinebry,  
3 which would be the bottom of where you seek to pool?

4 A. That is roughly 4- or 500 feet.

5 Q. Now, why are you pooling only from the top of  
6 this pool to the base of the Blinebry?

7 A. For a few reasons, the first being that's  
8 where -- that is the interval within the Yeso in which  
9 COG holds a common interest. And, secondly, that is the  
10 productive interval within the Yeso that would  
11 contribute hydrocarbons to our proposed well.

12 Q. Is there an interest owner that only owns below  
13 the base of the Tubb?

14 A. Yes, there is.

15 Q. And which interest owner is that?

16 A. That is Este, Ltd.

17 A. Other than Este, do the other interest owners own  
18 above the base of the Blinebry?

19 A. Yes, they do.

20 Q. And they also have some ownership then below the  
21 base of the Blinebry, correct?

22 A. That's correct.

23 Q. But that ownership changes because of the  
24 introduction of Este below the base of the Blinebry?

25 A. That's right. That severance.

1 Q. How did this vertical ownership depth severance  
2 arise?

3 A. So Este, Ltd., used to own, up until 2009, a  
4 common ownership within the Yeso Formation. And in  
5 2009, for some arbitrary reason, he assigned out or  
6 Este, Ltd., assigned out all of their working interest  
7 above the base of the Blinebry within Yeso Formation --  
8 at that point in time which created the depth severance,  
9 which created different ownership within the Yeso  
10 Formation. Being owners above, being from the top of  
11 the Paddock to the base of the Blinebry, you have  
12 100 percent cumulative ownership and then below --  
13 except now you are introducing a new party with a  
14 different ownership.

15 Q. Okay. And Este is the one that created this  
16 depth severance?

17 A. That's correct.

18 Q. Now, if I go back to our bigger book and I turn  
19 to what's been marked as COG Exhibit 4, does this use  
20 colors and percentages to describe exactly what you just  
21 talked about?

22 A. Yes, that is correct.

23 Q. And why don't you explain to us, starting at the  
24 top, what the different colors mean? I see a yellow and  
25 then I see red with the numbers 1, 2 and 3.

1       A. Okay. So this is COG's proposed 200-acre  
2       nonstandard spacing unit. That 200-acre nonstandard  
3       spacing unit is comprised of three tracts; tract 1 being  
4       in yellow, that indicates yellow common ownership  
5       throughout the entire Yeso Formation.

6               Tracts 2 and 3 that are indicated in red, those  
7       are the two tracts in which the depth severance occurs.

8       Q. So let me stop you there.

9               So with a vertical depth severance ownership, it  
10      only applies to two of the three tracts that would be  
11      involved in this nonstandard spacing unit?

12      A. Yes, that's correct.

13      Q. How have you depicted that depth severance in the  
14      lower portion of this exhibit?

15      A. So if you go below that land plat to the far  
16      right column, in red indicated, Base of Blinebry to the  
17      base of the Yeso. That depicts and shows where Este,  
18      Ltd., comes in in tract 2 and tract 3 below the base of  
19      the Blinebry, which is not the interval in which COG is  
20      seeking to pool underneath this application.

21      Q. And then if I go to the left-hand side, is  
22      that -- in blue, is that the interval that the company  
23      seeks to pool?

24      Q. Or I should say "intervals."

25      A. Yes, that's correct.

1 Q. And does that reflect the percentage interest of  
2 the interest owners in that common area of ownership?

3 A. Yes, it does.

4 Q. And that would be your proposed spacing and  
5 proration interval horizontally and vertically?

6 A. That we are seeking to pool under this  
7 application, yes, it is.

8 Q. Now, prior to the Division hearing in this  
9 matter, did the company provide notice to Este, Ltd.,  
10 that it was seeking to pool only to the base of the  
11 Blinebry?

12 A. We did.

13 Q. And did Este appear at the Division hearing or  
14 object to the application?

15 A. No, they did not.

16 Q. Has the company subsequently visited with Este  
17 again about pooling only the Paddock and the Blinebry  
18 intervals of this very deep Division-designated pool?

19 A. Yes, we have.

20 Q. And if I turn to what has been marked as COG  
21 Exhibit 5, is this an approval letter from Este  
22 supporting this application?

23 A. Yes, this is a letter of support in COG's  
24 development.

25 Q. And, again, Este is the only interest owner in

1 this formation that would be excluded from the pooling  
2 as proposed by Concho, correct?

3 A. That is correct.

4 Q. Now, the first three paragraphs of this letter  
5 roughly relate what you just talked about, right?

6 A. Yes.

7 Q. The difference in ownership. Would you be kind  
8 enough -- this is a little small -- would you be kind  
9 enough to read out loud the last two paragraphs of this  
10 letter.

11 A. "Este, Ltd, is also the owner of debt severed  
12 interest within particular formations or pools  
13 throughout New Mexico and will be affected by the  
14 NMOCD's current position with regards to denial of  
15 pooling subsets of a formation.

16 "Allowing pooling of subsets of formations or  
17 pools, among other things, will protect correlative  
18 correlative rights, prevent waste, and inhibit the  
19 stranding of reserves. Este, Ltd., is in support of  
20 COG's development of the Sneed 9 Fed Com 23H Well as  
21 discussed in case 15327. Este, Ltd, understands this  
22 letter of support will be used at an upcoming hearing in  
23 front of the NMOCC."

24 Q. Now, this is the party that's going to be left  
25 out of your proposed pooling application, right?

1       A. That is correct.

2       Q. With respect to the remaining interest owners  
3 here in the Yeso Formation -- and again here we are  
4 going to talk about pooling here today -- what is the  
5 status of your discussions and efforts to reach a  
6 voluntary agreement with the remaining interest owners?

7       A. The remaining interest owners will be Chevron,  
8 Devon and OXY. Devon has currently signed their AFE.  
9 And both Devon and Chevron were in the final stages of  
10 negotiating out our JOA, and both have indicated they  
11 will participate in the well.

12           Currently, right now, with budget constraints  
13 with OXY, they have indicated that they will not  
14 participate in the well and we are ongoing negotiations  
15 of acquiring on interest through a term assignment or  
16 farm-out.

17       Q. Are they aware of this pooling application?

18       A. Yes, they are.

19       Q. Do they have any objection to pooling only a  
20 portion of this Division-designated pool?

21       A. No, they do not.

22       Q. If I turn to what has been marked as COG  
23 Exhibit 6, is this the well proposal letter that was  
24 sent to the working interest owners for this particular  
25 well?

1 A. Yes, it is.

2 Q. And this letter, this sample letter was actually  
3 sent to OXY, correct?

4 A. That's correct.

5 Q. And when this was sent back in February, did it  
6 include an AFE for the proposed well?

7 A. Yes, it did.

8 Q. And at the time this was sent in February, does  
9 this AFE reflect the cost that the company was incurring  
10 for drilling horizontal wells in this area?

11 A. Yes, it does.

12 Q. And does this letter also reflect the overhead  
13 and the administrative costs that you proposed and which  
14 you are also then seeking under this pooling agreement?

15 A. Yes, it does.

16 Q. And where is that found in this letter?

17 A. So on the AFE cover letter, it is in the middle,  
18 about the middle of the page, COG seeking 7,000 a month  
19 drilling, 700 a month producing overhead rates.

20 Q. Is that on the first page of Exhibit 6?

21 A. That's correct.

22 Q. Are these overhead rates consistent with what  
23 operators are charging for similar wells?

24 A. Yes, they are.

25 Q. Now, we talked about the working interest owners.

1 A. Yes.

2 Q. And in this area, are there other types of  
3 interests that the company seeks to pool in its proposed  
4 proration unit for purposes of consolidating the  
5 interest?

6 A. Yes, there are.

7 Q. If I turn to what has been marked as COG  
8 Exhibit 7 -- now, this is similar to the type of exhibit  
9 we saw before -- right? -- in the sense that in the top  
10 in yellow it shows your proposed nonstandard proration  
11 unit?

12 A. Yes, that is correct.

13 Q. And it, also, then, towards the middle,  
14 identifies the working interest percentage in that  
15 proposed nonstandard spacing unit in the two intervals  
16 you seek to pool?

17 A. Correct.

18 Q. All right. And then at the bottom we have  
19 another group of interest owners that need to be pooled  
20 in this case; is that correct?

21 A. Yes, that's correct.

22 Q. I see a list of -- I see a number of names under  
23 ORRI; what does that stand for?

24 A. Those are overriding royalty interest owners.

25 Q. And what's the circumstance there, why do we need



1 to pool those overriding royalty interest owners?

2 A. In the actual document that created the override,  
3 the conveying document, that document lacked pooling  
4 language, so that's the reasoning for listing them as  
5 pool parties underneath this application.

6 Q. And then we have RI; is that royalty interest?

7 A. Royalty interest owners.

8 Q. What's the circumstance there? Why do we need  
9 need to pool them?

10 A. So those are the mineral owners, the lessors from  
11 which the leases were granted to working interest  
12 owners. Those leases actually lacked pooling provisions  
13 within their lease as well; hence the reason for pooling  
14 those royalty interest owners under the application.

15 Q. And then NPRI, what is that?

16 A. Nonparticipating royalty interest. That's a  
17 cost-free interest that is carved out of the mineral  
18 interest. And the same reasoning as for the overriding  
19 royalty interest owners.

20 Q. They don't have pooling language -- their  
21 interest arises out of an instrument that does not have  
22 pooling language?

23 A. That's correct.

24 Q. Now, these are all non-cost-bearing interest,  
25 correct?

1 A. All of these are non-cost-bearing parties.

2 Q. Then we have a group where you have listed as  
3 "Unmarketable Title." What do you mean by that? What  
4 is going on there?

5 A. So we seek to prove the unmarketable title, so  
6 the interest owners that we've recognized currently as  
7 the current record title owners initially had to stem  
8 from inception. So over time, say, party A conveyed to  
9 party B, party B conveyed to party C, and then, all of a  
10 sudden, the conveyance from party C ends up in party E,  
11 which creates a cloud on title, which creates an  
12 unmarketable title situation. So from that point  
13 forward, we would pool where the cloud of title was  
14 created forward, to protect ourselves.

15 Q. So you go through the chain and you have a gap?

16 A. There's a gap. Essentially, there's a gap in the  
17 chain of title.

18 Q. Is that why, for example, if you look through  
19 this list, you see, for example, the heirs and devisees  
20 of a number of names?

21 A. That's correct.

22 Q. These are estates?

23 A. Those are estates.

24 Q. And by pooling these, going back to the original  
25 interest in pooling that estate, you seek to cover

1    whatever interest owners may be connected with that  
2    estate?

3       A.   That is correct.

4       Q.   Okay.  And then the last group here is the record  
5    title owner.  That is Linn Energy?

6       A.   That's correct.

7       Q.   And, again, that is a non-cost-bearing interest?

8       A.   That's correct.

9       Q.   But you need to bring them in, consolidate their  
10   interest for purposes of pooling?

11      A.   Right.  So tract 1 is a federal lease.  And  
12   underneath the federal lease, you've got record title  
13   owners and then operating rights owners, operating  
14   rights being the cost-bearing parties to the well.

15           The record title owner are non-cost-bearing  
16   parties to the well, and that's Linn Energy in this  
17   situation.

18      Q.   For purposes of the record here today, did you  
19   attempt to reach an agreement and get the necessary  
20   amendments for all of these different types of interest  
21   owners?

22      A.   Yes, we did.

23      Q.   If I turn, for example, to what has been marked  
24   as COG Exhibit No. 8, is this a letter that you sent to  
25   the overriding royalty interest owners seeking the

1 authorization necessary to bring them into the  
2 nonstandard spacing unit?

3 A. Yes, it is.

4 Q. And the remaining overriding royalty interest  
5 owners that are listed on Exhibit 7 would be those that  
6 did not execute the ratification?

7 A. That's correct.

8 Q. By the same token, if I turn to what has been  
9 marked as COG Exhibit 9, is this -- I should say exhibit  
10 numbers 9 and 10, are these the letters that you would  
11 send to the royalty interests in the net profit royalty  
12 interests who were lacking the pooling language in an  
13 effort to get their ratification to the pool?

14 A. Yes, that's correct. So Exhibit 9 is an actual  
15 lease amendment to include pooling language within their  
16 lease. And then further on top of that, we also sent a  
17 consent to pool letter to those owners, also trying to  
18 get their voluntary permission to pool.

19 Q. And the remaining interest owners that you see  
20 listed on Exhibit 7 under royalty interest and net  
21 profit royalty interest, are those interest owners that  
22 didn't respond or didn't execute the assignments?

23 A. That's right.

24 Q. And did you also then try to reach out and get  
25 the agreement from the record title owner?

1 A. Yes, we did.

2 Q. And is that reflected in COG Exhibit 11?

3 A. That's correct, it is.

4 Q. Now, throughout this entire process, where you  
5 are trying to find these interests and understand these  
6 various interests, were there certain interest owners  
7 that you simply could not locate?

8 A. Yes, there were.

9 Q. What efforts did the company undertake to locate  
10 all these interest owners?

11 A. Internally and also externally, having our  
12 brokers check county records and then also internal  
13 systems on the computer for record searches and name  
14 searches to try to locate these owners.

15 Q. Did you also hire outside consultants to assist  
16 in this effort?

17 A. Yes, we did.

18 Q. Okay. And your end result was you had a group of  
19 interest owners that you simply could not find an  
20 address for or try to locate?

21 A. That's correct.

22 Q. Okay. If I turn to what's been marked as COG  
23 Exhibit 12, is this an affidavit of publication in the  
24 newspaper in Lea County providing notice of the Division  
25 hearing in this case by name to each of these interest

1 owners that you could not locate?

2 A. Yes, that is correct.

3 Q. In addition to identifying and providing notice  
4 to all of these interest owners, did the company then,  
5 because you are creating a nonstandard spacing and  
6 proration unit, did you identify all of the lease  
7 mineral interests in the 40-acre tracts surrounding your  
8 proposed nonstandard spacing and proration unit?

9 A. Yes, we did.

10 Q. And did you include those known lease mineral  
11 interest owners in the notice that went out of the  
12 Division hearing in this matter?

13 A. Yes, we did.

14 Q. If I turn to what has been marked as COG  
15 Exhibit 13, is this the affidavit prepared by my office  
16 that was introduced at the Division hearing that  
17 provided notice to all of these parties of the Division  
18 hearing in this matter?

19 A. Yes, it is.

20 Q. And it actually includes behind it three  
21 different letters, correct?

22 A. Right.

23 Q. The first was a letter to all the parties that  
24 you seek to pool?

25 A. Yes, that's number one.

1 Q. Which we just went through.

2 And then the next letter provided notice to all  
3 of the offsetting lessees and operators. That would be  
4 the 40-acre tracts surrounding your proposed nonstandard  
5 spacing and proration unit?

6 A. That is correct.

7 Q. And then the third letter, is that the letter  
8 that went out to the interest owner that was going to be  
9 excluded within the vertical interval by virtue of your  
10 pooling application?

11 A. Vertical offset notice, that's correct.

12 Q. And that would be Este?

13 A. That's correct.

14 Q. All right. And then I want to turn now to it,  
15 and then we have followed it up with all the green  
16 cards, correct?

17 A. Yes, all the rest of them are just returned green  
18 cards.

19 Q. Now I want to turn to a slightly different  
20 subject.

21 MR. FELDEWERT: And then we are almost  
22 finished with this witness, Mr. Chairman.

23 Q. I want you to turn to what's been marked as COG  
24 Exhibit 14. Is this a close-up of the larger area map  
25 showing sections 9 and 10 and your proposed nonstandard

1 spacing and proration unit?

2 A. Yes, it is.

3 Q. And it shows that you are seeking to extend your  
4 lateral, horizontal well, into the southwest quarter of  
5 the northwest quarter of section 10 that has not been  
6 been developed by a vertical well, correct?

7 A. Correct.

8 Q. Does this also then depict how the company  
9 intends to develop the remainder of section 9 and the  
10 west half of section 10 that has not previously been  
11 developed by vertical wells?

12 A. Yes, it does.

13 Q. And you have done this by utilizing both standup  
14 and lay-down horizontal wells, correct?

15 A. That's correct.

16 Q. And, actually, one of those wells has already  
17 been drilled; that's in the north half of the north half  
18 of nine?

19 A. Right.

20 Q. Did that particular well have the depth severance  
21 ownership issue that we have here?

22 A. Those are different leases, and they did not have  
23 the depth severance.

24 Q. Okay. Now, I want to briefly then go back to  
25 what has been marked as COG Exhibit No. 2. And again



1 this is the larger area map.

2 When I look at this much larger area, if I am  
3 understanding your colors correctly, has all of the  
4 development in the Yeso Formation in this area been in  
5 either the Paddock or the Blinebry intervals of that  
6 Yeso Formation?

7 A. Yes, they have.

8 Q. Has there been any development in the lower  
9 intervals of the Tubb or the Drinkard?

10 A. From my knowledge, no, there's not.

11 Q. Okay. And speaking with the company and its  
12 geologist, do you have understanding of why there has  
13 been no development in the Tubb and the Drinkard in this  
14 area?

15 A. Yes, I have.

16 Q. And what is that?

17 A. Because the Tubb, from conversations, is wet,  
18 and the Tubb and the Drinkard, combined together, are  
19 non-hydrocarbon contributing intervals within the Yeso  
20 within the Paddock and Blinebry.

21 Q. And do we have a geologist here today that is  
22 going to confirm that?

23 A. Yes, we do.

24 Q. Were COG Exhibits 1 through 14, which would  
25 include Exhibit 3A, were they prepared by you or

1 compiled under your direction and supervision?

2 A. Yes, they were.

3 MR. FELDEWERT: Mr. Examiner, I would move  
4 the admission into evidence of COG Exhibits 1 through  
5 14, which would include 3A.

6 COMMISSIONER CATANACH: Exhibits 1 through  
7 14 and 3A will be admitted.

8 MR. FELDEWERT: I'm sorry I said  
9 Mr. Examiner. I meant to say Mr. Chairman.

10 (COG OPERATING LLC EXHIBITS 1 through 14,  
11 including 3A, were offered and admitted.)

12 MR. FELDEWERT: That then, Mr. Chairman,  
13 concludes my examination of this witness.

14 COMMISSIONER CATANACH: Okay.

15 EXAMINATION BY COMMISSIONER PADILLA

16 COMMISSIONER PADILLA: Mr. Johnson, thank  
17 you for your time this morning.

18 COMMISSIONER CATANACH: I'm sorry.  
19 Mr. Wade, did you have any questions for this witness?

20 MR. WADE: We don't have any questions at  
21 this point. Thank you.

22 COMMISSIONER CATANACH: Okay. I'm sorry.  
23 Go ahead.

24 EXAMINATION BY COMMISSIONER PADILLA (resumed)

25 COMMISSIONER PADILLA: Could you tell us a

1 little bit more about your attempts to deal with OXY on  
2 this issue.

3 THE WITNESS: So, initially, when the well  
4 proposal was sent out back in February, as soon as the  
5 well proposals were sent out, we give them a reasonable  
6 amount of time, maybe about two weeks, and then we start  
7 phone calls and we start e-mailing and we start the  
8 following up, initially during our -- you know, on the  
9 front of our AFE cover letter, just recognizing that  
10 they own operating rights and giving them a chance to  
11 either participate and/or term assign or farm out their  
12 interest.

13 And up to this point, currently, right now,  
14 we've already had conversations with their landman and  
15 their legal, working out details in a farm-out that --  
16 to be able to acquire the interest to drill this well.

17 COMMISSIONER PADILLA: So it's moving  
18 forward.

19 THE WITNESS: It's moving forward.

20 COMMISSIONER PADILLA: When do you expect  
21 that to be, ballpark?

22 THE WITNESS: If there is no other hang-ups  
23 between our legal, I am hoping to say probably here  
24 within the next three weeks to a month.

25 COMMISSIONER PADILLA: Okay. When you say

1     that there's no production from the Tubb or the  
2     Drinkard, are you limiting that statement to what we see  
3     on the map in Exhibit 2?

4                   THE WITNESS:   The Yeso development is  
5     Exhibit 2?

6                   COMMISSIONER PADILLA:   Yes.

7                   THE WITNESS:   Yes, that is correct.

8                   COMMISSIONER PADILLA:   That is all I have.  
9     Thank you.

10                  THE WITNESS:   Thanks.

11                  COMMISSIONER BALCH:   And I don't have any  
12     questions.

13                  EXAMINATION BY COMMISSIONER CATANACH

14                  COMMISSIONER CATANACH:   I have a couple.

15     Mr. Johnson, what is the extent of the Maljamar-Yeso  
16     Pool; is it shown on this map?

17                  THE WITNESS:   I do not believe the extent of  
18     the pool is shown on the map.

19                  COMMISSIONER CATANACH:   So when you said  
20     that there isn't any Tubb, Drinkard production in this  
21     area, do you know if there's any Tubb, Drinkard  
22     production in the Maljamar-Yeso Pool or is it limited to  
23     in that area on the map?

24                  THE WITNESS:   When we reference that there's  
25     no production within the the Tubb and the Drinkard

1 within the Maljamar-Yeso Pool, I feel confident saying  
2 that there's not any production within the Tubb and  
3 Drinkard within the extent of the aerial view.

4 And I think our geologist will be able to  
5 testify to that as well.

6 COMMISSIONER CATANACH: Within the aerial  
7 extent of this map, which may not be the extent of the  
8 pool.

9 THE WITNESS: I am talking about the extent  
10 that you see in front of you and, then, also, the outer  
11 lying boundaries of the Maljamar, West Yeso Pool.

12 COMMISSIONER CATANACH: Do you know why  
13 those rights may have been severed at that depth by that  
14 company?

15 THE WITNESS: That is a question we all ask  
16 ourselves. These are things and events that have  
17 happened for reasons prior to us acquiring the interest.  
18 Their arbitrary numbers or depth references that come  
19 out of who knows what.

20 Somebody had an interest and decided they  
21 were going to depth sever it, either at a specific depth  
22 or at a specific reference within a formation. But who  
23 knows why. And we sit back and try to ask ourselves the  
24 same question. And there is no rhyme or reason behind  
25 that.

1 COMMISSIONER CATANACH: So at one point, as  
2 I understand it, Este had rights in the whole interval?

3 THE WITNESS: Right. Until 2009, when the  
4 depth severance was created, the entire Yeso Formation  
5 had common ownership. And at that point in time in 2009  
6 when Este assigned out all of their working interest  
7 above the base of the Blinbry to another party, that is  
8 when the depth severance was created.

9 COMMISSIONER CATANACH: Who did they assign  
10 it to?

11 THE WITNESS: Hawkins Petroleum. And then,  
12 subsequently, from Hawkins, we acquired the interest  
13 from Hawkins Petroleum.

14 COMMISSIONER CATANACH: With regards to the  
15 severed interest, is it just in tract 2 or is this in  
16 other areas of the Maljamar-Yeso Pool?

17 THE WITNESS: There will be other cases  
18 within the Maljamar-Yeso West Pool and among other pools  
19 across the New Mexico Shelf, and then also the Delaware  
20 Basin and all over the place.

21 COMMISSIONER CATANACH: So there are going  
22 to be some more cases in the West Maljamar-Yeso Pool?

23 THE WITNESS: I would have to look and see  
24 on a case-by-case scenario to give you a firm answer on  
25 that.

1                   COMMISSIONER CATANACH: So, basically, you  
2 are saying this problem is not limited to this area;  
3 it's extensive across the basin?

4                   THE WITNESS: That is correct.

5                   COMMISSIONER CATANACH: I think one of the  
6 things that we try and do is protect the integrity of a  
7 pool. And, you know, it's a complicated thing, pooling  
8 a portion of a pool.

9                   Let me ask you this, if Este is agreed to  
10 whatever you are proposing here, couldn't this be taken  
11 care of in a JOA that Este signs off on?

12                  THE WITNESS: In this particular case, Este,  
13 Ltd, agreed with the development of COG, so there was  
14 no -- there was no further discussion and need to try to  
15 enter into a JOA.

16                  COMMISSIONER CATANACH: I guess what I am  
17 asking is can this be done by some kind of land document  
18 in future cases where this interest is somehow taken  
19 care of contractually instead of bringing these to the  
20 Division?

21                  THE WITNESS: I know for a fact that there  
22 is two main issues with that. And the first is this  
23 interest was acquired based upon the interval within the  
24 Yeso, so economics were ran and that interest acquired  
25 based upon the rights that we acquired, and no more

1 outside of that interval.

2 And number two is, what you're going to run  
3 across is there are going to be owners that are going  
4 unlocatable. There are owners that are going to be  
5 limited to restricted budgets and development, that may  
6 or may not agree to how or what you are trying to  
7 propose underneath the JOA or underneath any other type  
8 of contractual agreement.

9 And agreeing on an allocation is -- would be  
10 slim to none in most cases.

11 COMMISSIONER CATANACH: So who owns the  
12 interest in the Tubb, Drinkard? Does COG own an  
13 interest in the Tubb, Drinkard?

14 THE WITNESS: We do have an interest in the  
15 Tubb and Drinkard, but it is different than what we own  
16 from the Paddock to the base of the Blinebry due to that  
17 depth severance.

18 COMMISSIONER CATANACH: With regards to the  
19 overrides and oil interest owners, the reason you want  
20 to pool those is because there is no pooling clause in  
21 the document conveying those interests?

22 THE WITNESS: Yes, that's correct.

23 COMMISSIONER CATANACH: Is that fairly  
24 common out here?

25 THE WITNESS: You know, it is about 50/50,



1 for the most part, when overrides are created through  
2 assignments. There is pooling language within that  
3 conveying document. And then some that were done back  
4 in the day, or even currently, it is just completely  
5 left out.

6 COMMISSIONER CATANACH: So you were  
7 successful in obtaining an agreement from some of the  
8 interest owners, some of the older interest owners?

9 THE WITNESS: That's correct. And then some  
10 of the other ones are either unlocatable or we just  
11 never heard back from them at all, even after multiple  
12 attempts of trying to contact them.

13 COMMISSIONER CATANACH: And all of these  
14 parties that are being pooled, all of them were given  
15 notice of this hearing?

16 THE WITNESS: Yes, they were.

17 COMMISSIONER CATANACH: Have you run across  
18 this in a vertical well that you have drilled in this  
19 area?

20 THE WITNESS: I personally have not.

21 COMMISSIONER CATANACH: I am just wondering  
22 if it would be treated differently for vertical wells as  
23 opposed to horizontal wells, would that make any  
24 difference as to --

25 THE WITNESS: I mean, the allocation of

1 interest in the depth severance, above and below where  
2 the depth severance is you're still going to have the  
3 same issue.

4 COMMISSIONER CATANACH: So within a vertical  
5 well, you are still saying that being at the bottom  
6 portion of the pool is non-protective, they would still  
7 be excluded from participating in a vertical well?

8 THE WITNESS: That is correct.

9 COMMISSIONER CATANACH: And the development  
10 of section 9 and 10, it appears that you are going to  
11 orderly develop what we would consider to be stranded  
12 acreage in those two sections, so that should be taken  
13 care of.

14 THE WITNESS: The whole point behind that  
15 slide -- let's see, Exhibit 14 -- was to show COG's  
16 overall development of section 9 and 10 and to show you  
17 guys that there was going to be no stranded acreage.

18 COMMISSIONER CATANACH: Now, with regards to  
19 notice to the parties that you noticed in the yellow  
20 portion of that which you indicated was COG's acreage,  
21 did you notify the other working interest owners in that  
22 acreage?

23 THE WITNESS: Are you referencing our  
24 proposed nonstandard spacing unit or for --

25 COMMISSIONER CATANACH: For the 40-acre

1 tracts that you noticed around --

2 THE WITNESS: Surrounding for our  
3 nonstandard spacing unit notification, yes, we did.

4 COMMISSIONER CATANACH: The working interest  
5 owners as well?

6 THE WITNESS: Yes.

7 COMMISSIONER CATANACH: That's all the  
8 questions I have.

9 Mr. Wade, do you have anything?

10 MR. WADE: No questions.

11 EXAMINATION BY MR. BRANCARD

12 MR. BRANCARD: Two questions on Exhibit 14.  
13 The same as Exhibit 2, you indicated that there is a  
14 horizontal development just to the north?

15 THE WITNESS: That's correct, in the north  
16 half, north half of --

17 MR. BRANCARD: Is that COG's development?

18 THE WITNESS: That is COG's horizontal well.

19 MR. BRANCARD: Does COG have a Division  
20 order creating a nonstandard spacing unit for that  
21 well?

22 THE WITNESS: Yes, we do.

23 MR. BRANCARD: And does that order encompass  
24 the entire Yeso?

25 THE WITNESS: That one does.

1           MR. BRANCARD: Okay. And then you indicated  
2 you do not know the extent of the Maljamar-Yeso West  
3 Pool. Is there a COG witness today who does know the  
4 extent of the Maljamar-Yeso West Pool?

5           MR. FELDEWERT: The aerial extent?

6           MR. BRANCARD: Yes.

7           MR. BROUGHTON: I don't know the aerial  
8 extent.

9           MR. FELDEWERT: He is going to talk  
10 generally about development in the area.

11           MR. BRANCARD: The Chair has asked for  
12 someone to define where this pool is that we are talking  
13 about, carving out part of this pool, so it might be  
14 useful to know where this pool is.

15           MR. FELDEWERT: Let me step back. I think  
16 you can go to the publication that's --

17           THE WITNESS: I have that. Apologies.  
18 Sorry.

19           MR. FELDEWERT: So you want to know the  
20 aerial extent of the existing Maljamar-Yeso West Pool?

21           MR. BRANCARD: Right. That was the question  
22 the Chair asked.

23           THE WITNESS: The West Maljamar-Yeso Pool,  
24 formerly the Maljamar-Paddock Pool, covers Township 17  
25 South, Range 32 East.

1 MR. FELDEWERT: Hold on. I'm going to make  
2 it easier for you. If you turn to and I'll introduce  
3 what's Division order Exhibit 20. So if we go to page 6  
4 of that order, under subparagraph M at the bottom, it  
5 talks about the West Maljamar-Yeso Pool, by the Division  
6 Order, date it was created was 1950, and says,  
7 "...currently covers the following lands."

8 I would be surprised if that has changed  
9 much since this order was entered in --

10 MR. BRANCARD: Right. I did see this order.  
11 And I guess my question is, you look at that order and  
12 it indicates Township 17 South, Range 32 East, Section  
13 17, 19, 20, 21 and 22. You are asking for an order in  
14 sections 9 and 10. That's not listed in that order.

15 MR. FELDEWERT: So my guess would be that  
16 the Division determined when this development occurred  
17 that this section was in that pool.

18 THE WITNESS: So what I have from 2012 --

19 MR. FELDEWERT: Wait a moment.

20 COMMISSIONER CATANACH: I think in looking  
21 at Exhibit 16, Mr. Balch has pointed out that those  
22 sections, 19, 20, 21, and 22 are the ones listed in the  
23 order, so that would be the extent of the pool at this  
24 point in time.

25 MR. FELDEWERT: And then you have the

1 one-mile buffer.

2 COMMISSIONER CATANACH: Yeah, however, with  
3 the Division's practice of updating pools and extending  
4 pools as wells are drilled has been lacking recently and  
5 we're trying to resolve that situation. So I would  
6 defer -- I would think that if -- were these wells  
7 permitted in that pool --

8 THE WITNESS: Yes, they were. I've got --  
9 under Order R-13623 of October 1, 2012, defining the  
10 West Maljamar-Yeso Pool in Township 17 South, Range 32  
11 East, encompassing the east half of section 9 and the  
12 west half of section 10, among sections 16, 17, 18, 19,  
13 20, 21, 22, and the northeast quarter of section 30.

14 COMMISSIONER CATANACH: So it was extended?

15 THE WITNESS: Yes, it was.

16 COMMISSIONER CATANACH: And what was that  
17 order again?

18 THE WITNESS: Order R-13623.

19 COMMISSIONER BALCH: So on Exhibit 16, you  
20 could outline the current extent of the pool?

21 THE WITNESS: Let's see. Yes. I believe by  
22 that reference that you could.

23 MR. FELDEWERT: And Mr. Chairman, just for  
24 clarification, the order that he just read from, it  
25 turns out to be an application by the Division for an

1 order recreating, redesignating, and extending  
2 horizontal limits of certain pools; it's September 10,  
3 2012. So at least there was some expansion done by the  
4 Division in 2012.

5 COMMISSIONER CATANACH: Do you have a copy  
6 of that order, Mr. Feldewert?

7 MR. FELDEWERT: I have a copy that's all  
8 marked up.

9 COMMISSIONER CATANACH: I am curious,  
10 because did that order also extend the vertical limits  
11 of the West Maljamar-Yeso?

12 MR. FELDEWERT: No. Just the -- you could  
13 take a look at this if you would like. If you look at  
14 Order R-27, which is referenced in the paragraph, it  
15 included the entire Yeso Formation, so it has included  
16 the entire Yeso Formation since 1950.

17 MR. FELDEWERT: So to, perhaps, address one  
18 of the questions. Exhibit No. 2 which is -- actually  
19 the designation of the West Maljamar-Yeso Pool would  
20 extend a little further south of the acreage that is  
21 shown on Exhibit 2, to include 19, 20, 21, 22, according  
22 to -- roughly. So it would take another area south,  
23 some more sections to the south.

24 COMMISSIONER CATANACH: Okay. That clears  
25 it up. Any other questions at this time?

1 (No response.)

2 COMMISSIONER CATANACH: Anything further?

3 MR. FELDEWERT: I do have one additional  
4 follow-up if I may.

5 REDIRECT EXAMINATION

6 BY MR. FELDEWERT:

7 Q. Would you turn, Mr. Johnson, to -- actually, I  
8 will tell you what, we can stay on COG Exhibit 2.

9 A. Okay.

10 Q. It was the question about the creation of the  
11 nonstandard spacing and proration unit for that well in  
12 the north half of the north half of 9; do you see that?

13 A. I do see that.

14 Q. You mentioned that in creating that nonstandard  
15 spacing and proration unit, you pooled the entire Yeso  
16 Formation, the entire pool?

17 A. Yes.

18 Q. First off, did you have the depths ownership  
19 severance issue that you have in this case?

20 A. No, we did not. They are separate leases within  
21 that nonstandard spacing unit.

22 Q. So was the ownership common from top of the Yeso  
23 Formation to the bottom?

24 A. The ownership was common, yes.

25 Q. So you didn't have the correlative rights issue



1     that you have in this case that requires a pooling of  
2     only a portion of the pool?

3         A.   That's correct.

4         Q.   And in the absence of having the divided  
5     ownership here, would you go ahead and pool the entire  
6     Yeso Formation because it would be common ownership and  
7     wouldn't have the correlative rights issue?

8         A.   In the absence of the depth severance, we would  
9     pool the entire Yeso Formation.

10        Q.   So really what is driving this is the correlative  
11    rights issue in the depth severance?

12        A.   That's correct.

13               MR. FELDEWERT: All right.

14               FURTHER EXAMINATION BY COMMISSIONER CATANACH

15               COMMISSIONER CATANACH: Let me ask just one  
16    question. You may not have an opinion on this.

17               Is there a possibility of contracting the  
18    West Maljamar-Yeso Pool to exclude the Tubb and the  
19    Drinkard and would that affect any existing interest  
20    owners in the pool?

21               THE WITNESS: I would have to actually look  
22    at it in more detail to be able to give you a correct  
23    answer on that.

24               COMMISSIONER CATANACH: But I think you  
25    testified that you are not sure whether this severance

1 exists in other areas of the pool at this point or do  
2 you know?

3 THE WITNESS: No. As stated previously, I  
4 would have to look and see to give you a concise answer  
5 if it does exist within the remaining portion of the  
6 pool.

7 COMMISSIONER CATANACH: Okay. Thank you.

8 MR. FELDEWERT: We will call our next  
9 witness.

10 HARVIN L. BROUGHTON  
11 having been first duly sworn, was examined and testified  
12 as follows:

13 DIRECT EXAMINATION

14 BY MR. FELDEWERT:

15 Q. Would you please state your name, identify by  
16 whom you're employed and in what capacity.

17 A. My name is Harvin Broughton. I am the lead  
18 geologist for the New Mexico Shelf Team for Concho  
19 Resources or COG Operating LLC.

20 Q. And have you, Mr. Broughton, previously testified  
21 before the Division as an expert in petroleum geology?

22 A. Yes, I have.

23 Q. And have you also had the opportunity to  
24 previously testify before the Commission as an expert in  
25 petroleum geology?

1 A. I have not in front of the Commission.

2 Q. You have not?

3 A. I have not.

4 Q. Would you please outline your educational  
5 background for us please.

6 A. I received in 1983 a bachelor of science degree  
7 in petroleum engineering from Oklahoma State University.  
8 At such time I went to work for Schlumberger Oil Field  
9 Services, where I worked for 25 years in numerous  
10 positions of increasing responsibility.

11 I went back to school during that time, and to  
12 the University of Texas of the Permian Basin. Worked at  
13 night for a few years and received my master of science  
14 in geology.

15 At such time I went to work for Concho Resources,  
16 which was basically seven years ago. So I have been  
17 with Concho for seven years all on this particular  
18 project or asset team, starting out as a senior  
19 geologist and in the last two and a half years as the  
20 lead geologist for that team.

21 Q. What year did you get your master's?

22 A. 2010.

23 Q. And you mentioned on the Northwest Shelf Team;  
24 that is in the Permian Basin in New Mexico?

25 A. Yes. That's the northwest shelf of the Delaware

1 Basin specifically.

2 Q. Are you a member of any professional associations  
3 or affiliations?

4 A. Yes, I am. I am a member of the AAPG. I am a  
5 member of the Southwest Section AAPG. I am a member of  
6 the West Texas Geological Society, of the Society of  
7 Petroleum Engineers, Roswell Geological Society, North  
8 Texas Geological Society --

9 Q. Blah-blah-blah.

10 A. Blah-blah-blah-blah-blah.

11 Q. How long have you been a member of the AAPG?

12 A. I have been an associate member and member for  
13 probably 15 years. I mean, I am not exactly sure, but  
14 quite a while.

15 Q. Are you familiar with the application filed in  
16 this case?

17 A. Yes, I am.

18 Q. And have you conducted a geologic study of the  
19 lands that are the subject of this application?

20 A. Yes, I have.

21 MR. FELDEWERT: I would tender Mr. Broughton  
22 as an expert witness in petroleum geology.

23 COMMISSIONER CATANACH: Mr. Broughton is so  
24 qualified.

25 Q. I want to go back, Mr. Broughton, to COG

1 Exhibit 14. There is one point in there that I want to  
2 address.

3 A. Okay.

4 Q. This depicts the company's overall development  
5 plan for sections 9 and 10?

6 A. Yes, it does.

7 Q. And you assisted in developing this plan?

8 A. I did assist, myself and my team.

9 Q. And you and your team put this together for  
10 purposes of not, quote, unquote, "stranding" any  
11 acreage?

12 A. That is correct.

13 Q. And you intend to use both horizontal lay-down  
14 and standup wells to develop this acreage that has not  
15 previously been developed by vertical wells; is that  
16 correct?

17 A. Yes, that is correct.

18 Q. And then if I go back to Exhibit No. 2, it  
19 appears -- if I am reading this correctly -- that the  
20 company has drilled not many but at least some standup  
21 and lay-down horizontal wells in this general area; is  
22 that correct?

23 A. That is correct, yes.

24 Q. Based on the available information, in your  
25 opinion, does the orientation of the horizontal wells in

1 the Yeso Formation in this particular area have any real  
2 impact on the ability of the wells to develop and drain  
3 the reserves?

4 A. No, we have not noticed any discernible  
5 difference. I mean it's still early, but we have not  
6 noticed any discernible difference between standup and  
7 lay-down horizontals.

8 Q. And if I look at -- if I look then at our  
9 substitute Exhibit 3A --

10 A. Yes.

11 Q. And does Exhibit 3A accurately reflect your  
12 landing depth for this well at 6,400 feet?

13 A. Yes, it does.

14 Q. And did you assist in choosing that landing  
15 depth, you and your team?

16 A. Yes, I was involved in the selection of that  
17 depth.

18 Q. It shows that your -- what? -- over 450 feet from  
19 the depth severance point which is at the base of the  
20 Blinebry interval?

21 A. That is correct, yes.

22 Q. What is the general lithology of the -- let's  
23 start first with the Blinebry?

24 A. The Blinebry is predominantly a carbonate  
25 reservoir, more specifically, dolomite, dolostone,

1 you'll hear the term used, with mier silt component,  
2 silica clastic, and a hydride component also -- that's  
3 predominantly dolomite.

4 Q. And does that translate to high or low porosity  
5 and permeability?

6 A. It is usually what we would call loosely a type  
7 formation, which generally means low porosity and even  
8 more specifically low permeability.

9 Q. If I then turn to what's been marked as COG  
10 Exhibit 15, this shows -- is this an accurate reflection  
11 of the New Mexico Shelf?

12 A. The stratigraphic column, yes, sir. This is a  
13 stratigraphic column of the Northwest Shelf of the  
14 Delaware Basin.

15 Q. And it shows the four distinctive intervals that  
16 comprise the Yeso Formation?

17 A. Yes, those are the four sub-members of the Yeso.

18 Q. And it shows the overall thickness of this  
19 formation as being 1,500 feet?

20 A. That is an approximation, but, yes.

21 Q. And it identifies the general lithology of the  
22 various descriptions. How does that basically break  
23 out? In other words, how does the Blinebry, for  
24 example, compare with the Tubb?

25 A. Okay. The Paddock and Blinebry are both

1 essentially dolomite, like I described before. The Tubb  
2 is a sandstone or siltstone.

3 Really the distinguishing feature between a sand  
4 and a silt is just grain size. And we believe that is  
5 more of a silt. So it is a low permeability -- lower  
6 permeability siltstone.

7 And then the Drinkard is -- you go back into more  
8 carbonate material. But it does have a sand and I  
9 believe even an anhydrite component.

10 Q. And then focusing on the Blinebry member where  
11 you seek to land your well, in your opinion does this  
12 entire interval generally extend across the surface  
13 acreage that's at issue in this application?

14 A. Yes, it does.

15 Q. If I turn to what has been marked as COG  
16 Exhibit 16, is this a structure map that you have  
17 developed for this area?

18 A. Yes. It is a structure map across the general  
19 area, an expanded view. The 200-foot contour lines show  
20 a gradual or gently dipping to the east, east, southeast  
21 across this entire interval.

22 The tighter contours that run from the left to  
23 the right are indicative of the shelf edge, so that is  
24 where you get the name Northwest Shelf. To the south,  
25 you have steeply dipping into the Delaware Basin.



1 Q. Okay. And you show in here outlined in blue the  
2 proposed nonstandard spacing and proration unit?

3 A. Yes. The Sneed 23H is shown in the blue box  
4 there.

5 Q. With respect to the structure in this area, do  
6 you see any faultings or pinch-outs or any other  
7 geologic impediments to developing this acreage using  
8 horizontal wells?

9 A. No, we do not.

10 Q. Did you prepare a cross section of the area?

11 A. I did. Yes.

12 Q. If you turn to what has been marked as COG  
13 Exhibit 17. First off, does that identify the wells  
14 that you utilized in developing your cross section of  
15 sections 9 and -- of this area?

16 A. Yes. If you will notice, there is a line of  
17 vertical wells with the blue and red dot symbols  
18 indicating that they're Yeso wells, combo Paddock,  
19 Blinebry. And there's three green dots, which are  
20 representative of the three wells that are the cross  
21 section that you'll see next.

22 Q. Why did you choose those three wells?

23 A. I chose those three wells because they are along  
24 the strike or along the azimuth of the wellbore. They  
25 go deep enough to show what we are trying to show. And

1 they had the open hole logs that I needed to demonstrate  
2 the wet nature of the Tubb.

3 Q. And then if I continue on to COG Exhibit No. 18,  
4 is this the cross section A to A Prime that follows  
5 those three wells?

6 A. Yes, it is.

7 Q. I'm sorry. Exhibit 18 --

8 A. Exhibit 18A.

9 Q. Let me step back.

10 If I go to COG Exhibit 18, that has an incorrect  
11 description of the landing depth; is that right?

12 A. It does. It has 6,450 and the actual landing  
13 depth will be 6,400.

14 Q. So as a result, have we substituted for the  
15 Commission here today Exhibit 18A?

16 A. Yes, we have.

17 Q. And that is in the separate packet?

18 A. Yes, it is.

19 MR. FELDEWERT: Mr. Chair and members of the  
20 Commission, for purpose of this exhibit, we have a  
21 smaller version in the front and in the sleeve in the  
22 back is a much larger version that you could pull out if  
23 you wanted to.

24 Q. And other than identifying the landing depth, is  
25 there any difference between Exhibit 18 and

1 Exhibit 18A?

2 A. No other differences.

3 Q. Okay. So would you please identify how you have  
4 described the various intervals here and then explain to  
5 us what this cross section shows.

6 A. Okay. Let's start, if you would, from left to  
7 right. So we've identified on the left the Glorieta --  
8 this is the red text over there -- the Glorieta.

9 And you will notice two depths there. One of  
10 them is the top of the Glorieta on the log on the left.  
11 The second depth, which is 5,473, is the top of the  
12 Glorieta on the log on the right.

13 So this is to demonstrate the structural trending  
14 downward to the east that you'll -- it was noted on our  
15 contour map.

16 And you will see the same thing for the Paddock.  
17 The Paddock is in the green band that stretches across  
18 all three of those logs. And then the Blinebry we've  
19 coded in a light blue, that goes all the way across.

20 And, then, down at the bottom is the Tubb, which  
21 is shown in a kind of a yellow color.

22 The horizontal red lines indicate what we are  
23 picking as the top of those formations.

24 And, then, of course, you will see the landing  
25 depth indicated by 6,400 feet.

1           These are open hole logs run by Schlumberger on  
2       these wells when they were initially drilled.

3           The left tract is the gamma ray. The middle  
4       tract in blue -- and I am just talking about the log on  
5       the left -- is the water saturation. And then there is  
6       a porosity fluids tract and then there's a lithology  
7       tract in a kind of a dark blue color that shows the  
8       dolomite coding.

9           Q. Mr. Broughton, having reviewed this, in your  
10      opinion does the targeted interval here, which is the  
11      very tight Blinebry dolomite, does that extend across,  
12      generally extend across the acreage that's at issue  
13      here?

14      A. Yes, it does.

15      Q. And is it continuous across that acreage?

16      A. Yes, it is.

17      Q. In your opinion, is a horizontal well across that  
18      acreage -- will the spacing units that are involved,  
19      40-acre tracts, will they contribute more or less  
20      equally to the production from that wellbore across the  
21      the Blinebry?

22      A. Yes, they will.

23      Q. I see your landing depth here in the Blinebry.  
24      And then this pool actually starts at the top of the  
25      Paddock, correct?

1 A. That's correct, yes.

2 Q. This Division-designated pool?

3 A. Yes.

4 Q. Will the Blinebry well develop?

5 A. It will not.

6 Q. If the company determines that it's prudent to  
7 develop the Paddock, will it be required to drill an  
8 additional well and then in the Paddock?

9 A. Yes. We would land a horizontal well in the  
10 Paddock interval unique to what we're planning to do in  
11 the Blinebry.

12 Q. And is that because of the thickness and the  
13 tight nature of these reservoirs?

14 A. It's because of two things, the thickness and  
15 then the difference in porosity and permeability in the  
16 Paddock. It is a slightly different animal than the  
17 Blinebry.

18 Q. And then focusing on the lower interval at the  
19 Tubb, which is where the depth severance point starts --

20 A. Yes.

21 Q. -- at the top of the Tubb, I take it that there  
22 is over 450 of this type dolomite between the landing  
23 area and the base of the Blinebry where this ownership  
24 changes?

25 A. Yes, a little over 400 feet.

1 Q. Is there any evidence of natural fractures in  
2 this area that would connect the Tubb to the Blinebry?

3 A. No, there is no evidence that would connect the  
4 two.

5 Q. What is the nature of the Tubb interval in this  
6 particular area?

7 A. The Tubb is a siltstone, as I mentioned before,  
8 believed to be low permeability. But as I am  
9 demonstrating on my logs here, it is calculating to be  
10 wet or only water bearing.

11 Q. Okay. I want to get to that. But before I get  
12 there, just so I know, how thick is this Tubb interval?

13 A. In this general area, it is roughly 100 feet  
14 thick. It varies slightly but it is roughly 100 feet  
15 thick.

16 Q. And does it have low permeability?

17 A. It has low permeability, yes.

18 Q. And in locating its wells here to develop the  
19 Blinebry, you were involved in that effort, correct?

20 A. Yes, I was.

21 Q. And did the company attempt to locate its  
22 Blinebry wells in a fashion to avoid production from  
23 what you describe as the wet Tubb interval?

24 A. Yes. We would definitely seek to avoid involving  
25 the Tubb in our well.

1 Q. Okay. And you mention that it's wet and  
2 nonproductive?

3 A. That is correct, yes, sir.

4 Q. If I turn to what has been marked as COG  
5 Exhibit 19, is this a portion of the cross section of  
6 the CO on Exhibit No. 18?

7 A. Yes. This is a blow-up interval from the log on  
8 your far left or the westernmost log. So I've gone in  
9 and blown up the interval of interest.

10 So I have shown the bottom part of the Blinebry,  
11 and then you have a horizontal red line which is the top  
12 of the Tubb and then there is another horizontal line at  
13 the very base of the graphic there that's the base of  
14 the Tubb.

15 Q. And you show that Tubb interval to be -- what? --  
16 roughly 100 feet thick?

17 A. It is very close to 100 feet thick in this  
18 particular well, yes.

19 Q. And why don't you discuss with us what it shows  
20 with respect to water saturation and how that's  
21 calculated.

22 A. Okay. If you look across the top of my graphic,  
23 the second track there, there's an SW, and it goes from  
24 100 percent to zero percent, and that's water  
25 saturation.

1           And you will notice as you are coming down  
2 through the Blinebry, that blue curve is down in the  
3 40 percent or even lower range. When you get to the top  
4 of the Tubb, there is a bulk shift in the water  
5 saturation up to A plus -- I mean, it's even getting to  
6 100 percent. And that's what we -- would trigger our  
7 belief that it's water.

8           And I have coded in our graphics over there, in  
9 the porosity tract, that you have of six to eight  
10 percent porosity, but that porosity is primarily filled  
11 with water.

12       Q. And is there a calculation that's utilized by  
13 people such as yourself to determine the water  
14 saturation?

15       A. Yes. This particular model, this particular  
16 petrophysical model, uses Archie's Water Saturation,  
17 which relates porosity to the resistivity, part of the  
18 open hole logging process and why I picked these  
19 particular logs to show you today.

20       Q. And having looked at this, in your opinion is the  
21 Tubb productive of hydrocarbons?

22       A. It is not productive of hydrocarbons in my  
23 opinion.

24       Q. Okay. I want to turn to our last exhibit, which  
25 is COG Exhibit No. 20. And this is order No. R-13382-E,



1 which was entered by the Division in September of 2011.

2 Do you recall this case, Mr. Broughton?

3 A. Yes, I do.

4 Q. And did you testify in this case?

5 A. I did testify in this case.

6 Q. And without going into all the nuances, one of  
7 the purposes of this case was to examine the various  
8 Yeso pools in an area of Lea and Eddy Counties; is that  
9 correct?

10 A. Yes, that is correct.

11 Q. And one of the pools that was involved was  
12 actually the pool here, the West Maljamar-Yeso Pool?

13 A. It was involved, yes.

14 Q. I want you to turn to page 10 of that order. And  
15 while we are going there, Mr. Broughton, there were a  
16 number of parties involved in this case; is that  
17 correct?

18 A. Yes.

19 Q. There was Concho and there was Hudson/Burnett?

20 A. Yes. Burnett/Hudson.

21 Q. And the various parties presented evidence?

22 A. They did, yes.

23 Q. And if I look at page 10 of this order, it begins  
24 to describe in the middle the evidence that was  
25 presented by Concho?

1 A. Yes.

2 Q. And if I look at paragraph 25, does that describe  
3 the evidence that the company presented on the Yeso  
4 Formation in general?

5 A. Yes, it does. I would agree with that.

6 Q. And that's information you would have  
7 represented?

8 A. I would have presented that, yes.

9 Q. And you discussed exactly what you did today, the  
10 low permeability, the low porosity of this formation?

11 A. That is correct, yes, sir.

12 Q. And if I go to page 13, and this begins to  
13 describe the evidence that was presented by  
14 Burnett/Hudson at that time, correct?

15 A. That is correct, yes.

16 Q. And I want you to read to yourself paragraph 50  
17 if you will, please.

18 A. Okay. (Witness complies.)

19 I would agree with that comment, yes.

20 Q. I want to break it out a little bit. It talks  
21 about the productive porosity exists in strings in the  
22 Blinbry and Paddock members of this Yeso Formation?

23 A. Yes, it does.

24 Q. And you agree with that?

25 A. I do agree with that, yes, sir.

1 Q. With respect to one of the tight strings in  
2 Blinebry, is that what you're trying to target with the  
3 company's horizontal well in Blinebry?

4 A. Yes. The horizontal wells connect up the thin  
5 compartments of porosity and permeability within the  
6 Blinebry, so yes.

7 Q. Now, this area that they were examining and  
8 presented evidence on included Lea and Eddy Counties?

9 A. It was right along the county line actually.

10 Q. And various pools?

11 A. Yes.

12 Q. Various Yeso pools?

13 A. Yes.

14 Q. And one of the observations that they make here  
15 is that the -- I am looking at the last part of that  
16 paragraph -- "The Tubb and the Drinkard members of the  
17 Yeso Formation below the Blinebry are continuous through  
18 the area but are rarely productive"; do you agree with  
19 that statement?

20 A. I would agree with that statement, yes, sir.

21 Q. And with respect to the area that's actually the  
22 subject of this application, which is a little smaller  
23 area --

24 A. Yes.

25 Q. In this particular area, do you have any evidence

1 to indicate that the -- to disagree with -- do you have  
2 evidence to indicate that the Tubb or the Drinkard are  
3 going to be productive in this area?

4 A. I've never seen anything indicating the Tubb or  
5 Drinkard would be productive in this area.

6 Q. Okay. Then if I turn to what has been marked as  
7 as -- sorry. Let's go to page 16 of this Division  
8 order -- I'm sorry. Let's go to page 16 of this  
9 Division order which has been marked as Exhibit 20.

10 Now these are the Division's conclusions having  
11 received all of that evidence in that case; is that  
12 right?

13 A. I believe so, yes.

14 Q. I want you to read to yourself paragraphs 71 and  
15 72.

16 A. (Witness complies.) Okay.

17 Q. And do you agree with these statements?

18 A. I do, yes, sir.

19 Q. It points out that the Blinebry and the Tubb  
20 intervals, these productive intervals are very tight --

21 A. That is correct, sir.

22 Q. And very low porosity?

23 A. Low porosity and low permeability, yes.

24 Q. And isn't it true, Mr. Broughton, that the  
25 Division found that these intervals were so tight that

1 it would require essentially ten-acre spacing for  
2 vertical well development?

3 A. I believe it does. Concho is developing our  
4 verticals on ten-acre spacing, yes.

5 Q. If you go to page 18 of this order, paragraph 83,  
6 does that confirm that the Division found that ten-acre  
7 spacing in this very tight interval was necessary to not  
8 cause waste and to protect correlative rights?

9 A. Yes, sir.

10 Q. Okay. Are you familiar, Mr. Broughton, with the  
11 general meaning of correlative rights?

12 A. Generally, yes.

13 Q. Let's go then back to page 16. And I want you to  
14 look at the bottom of page 16, paragraph 75.

15 A. Okay.

16 Q. And it fortunately quotes the definition of  
17 correlative rights. Would you look at that for me,  
18 please?

19 A. I will, yes. (Witness complies.) Okay.

20 Q. Now, it essentially means that you -- that the  
21 Division and the Commission is tasked with insuring that  
22 owners' mineral interests in New Mexico receive their  
23 just and fair share of the minerals underlying their  
24 acreage, correct?

25 A. That is the way I understood it.

1 Q. That's the way you understand it?

2 A. That's the way I understand it, yes.

3 Q. In your opinion, is it necessary, because of the  
4 unique circumstances we have out here, to pool only a  
5 portion of this pool, including the common area of  
6 ownership, involving the Paddock and Blinebry to protect  
7 the correlative rights of those interest owners?

8 A. Yes, I believe that is correct.

9 Q. And in your opinion, will the acreage of the  
10 interval that Este owns in it, meaning the Tubb or the  
11 Drinkard, will they contribute any hydrocarbons to this  
12 proposed well?

13 A. Not in my opinion. No, they won't.

14 Q. In your opinion, should Este have to pay their  
15 share of the costs in this well?

16 A. No.

17 Q. And in your opinion, should the interest owners  
18 in the Blinebry and the Paddock, where you have common  
19 ownership, should they have to share their production  
20 with Este?

21 A. I don't believe so.

22 Q. And in your opinion, if that's enforced here, is  
23 that going to violate the correlative rights of COG and  
24 the other interest owners in that common area of  
25 ownership?

1 A. That is the way I would understand it, yes.

2 Q. In your opinion, is the granting of this  
3 application in the best interests of conservation and  
4 the prevention of waste and the protection of  
5 correlative rights?

6 A. Yes, it is.

7 Q. Mr. Broughton, were COG Exhibits 15 through 19  
8 prepared by you or compiled under your direction and  
9 supervision?

10 A. Yes, they were.

11 MR. FELDEWERT: Mr. Chairman, I would move  
12 the admission into evidence of COG Exhibits 15  
13 through 20, which includes a copy of the Division's  
14 order.

15 COMMISSIONER CATANACH: Exhibits 15 through  
16 20 will be admitted.

17 (COG OPERATING LLC EXHIBITS 15 through 20  
18 were offered and admitted.)

19 MR. FELDEWERT: And that concludes my  
20 examination of this witness.

21 COMMISSIONER CATANACH: Mr. Wade, do you  
22 have any questions?

23 MR. WADE: No questions.

24 COMMISSIONER BALCH: I just have a couple of  
25 questions.

1 EXAMINATION BY COMMISSIONER BALCH

2 COMMISSIONER BALCH: Referring to  
3 Exhibit 18A, your cross section, it looks like you have  
4 a possible production about 1,000 feet thick that starts  
5 in the bottom 20 percent of the Blinebry -- I'm sorry  
6 the Paddock and goes through the Blinebry.

7 THE WITNESS: Could you start again.

8 COMMISSIONER BALCH: Sure. It looks like  
9 you have about 1,000 feet between the non-wet part of  
10 the Paddock and, say, around 5,800 feet or so in the  
11 Branex Federal 10 well --

12 THE WITNESS: Uh-huh.

13 COMMISSIONER BALCH: -- down to about 6,800  
14 feet, say around 1,000 feet of vertical extent that is  
15 not overly wet and could produce hydrocarbons if you hit  
16 the (inaudible).

17 THE WITNESS: Yes.

18 COMMISSIONER BALCH: And that seems to carry  
19 across the area even though you're --

20 THE WITNESS: It is pretty consistent, yes.

21 COMMISSIONER BALCH: Your landing depth of  
22 6,400 feet, do you know what the expected fracture  
23 stimulation or frac length is going to be on these wells  
24 or what they are targeting?

25 THE WITNESS: Well, I don't know what the



1 lengths are going to be. This is the first upper  
2 Blinebry well we would have drilled in this area. And  
3 so I really don't know that.

4 I think that would be evaluated after we  
5 drill the well. And the folks who do that would  
6 evaluate that.

7 COMMISSIONER BALCH: It looks like you are  
8 not exactly centered; you are a little down from center  
9 on the possible productive zone that includes the  
10 Paddock.

11 THE WITNESS: Just slightly, yes.

12 COMMISSIONER BALCH: If your fractures went  
13 up 300 feet in each direction -- just throwing that out  
14 there. Don't know what it's going to do -- that would  
15 keep you safe from the water in the Tubb and the water  
16 in the Paddock, but it might leave a little bit of the  
17 Paddock unproducible with a second lateral, because you  
18 would then interfere with the fractures on the first  
19 horizontal.

20 THE WITNESS: So you are saying if the  
21 fracture goes up 300 feet?

22 COMMISSIONER BALCH: Yes.

23 THE WITNESS: That's not going to get to the  
24 Paddock.

25 COMMISSIONER BALCH: Right.

1 THE WITNESS: So I guess I don't understand  
2 your question. I'm sorry.

3 COMMISSIONER BALCH: You alluded that there  
4 may be a second horizontal put in to make sure that none  
5 of the potential pay is stranded.

6 THE WITNESS: You're talking about a lateral  
7 in the Paddock Formation?

8 COMMISSIONER BALCH: Closer to the Paddock.  
9 I don't think you're going to put it in the Paddock  
10 because only the bottom 20 percent of it is probably  
11 going to be producible. The rest of it is going to be  
12 too wet, right?

13 THE WITNESS: In the Paddock? No. We would  
14 land the well in the 5,700 to 5,800 foot range. And it  
15 will make some water, for sure, but it will make a lot  
16 of oil.

17 COMMISSIONER BALCH: All right.

18 THE WITNESS: I mean, if I were picking a  
19 landing depth for a Paddock well, it would be in the  
20 fifty-seven-fifty range, 5,800 feet. And, yes, sir, it  
21 will make some water. But it will make oil.

22 COMMISSIONER BALCH: So there's more oil up  
23 there than there is in the Tubb?

24 THE WITNESS: Well, there's higher porosity,  
25 so yes. I mean, there's more storativity, I guess, if

1 you want to call it that. There is more room for the  
2 oil to live in that rock.

3 COMMISSIONER BALCH: Thank you.

4 THE WITNESS: Uh-huh.

5 COMMISSIONER CATANACH: Go ahead.

6 EXAMINATION BY COMMISSIONER PADILLA

7 COMMISSIONER PADILLA: Mr. Broughton, thank  
8 you for your time. I have a few questions for you.

9 THE WITNESS: Okay.

10 COMMISSIONER PADILLA: The lay-down,  
11 stand-up difference here, you said that this is early on  
12 that you hadn't seen any major difference between those?

13 THE WITNESS: No.

14 COMMISSIONER PADILLA: How many have you  
15 drilled? What are you basing that assumption on?

16 THE WITNESS: Let me get to the exhibit that  
17 will address that. I think that might be Exhibit 2.

18 Exhibit 2, you will notice we have -- we  
19 have 1, 2, 3, 4, 5 stand-ups and then we just have the  
20 one lay-down. So really there's one versus five.

21 But the Sneed Well there that's east to west  
22 is a good economic well. And from -- I mean, it's a  
23 very new well. Well, they are all very new wells. But  
24 there is no discernible, you know, one's way better than  
25 the other.

1 COMMISSIONER PADILLA: And the Flathead and  
2 the Panhead are the comparison stand-ups. Do those have  
3 the same target depth, more or less?

4 THE WITNESS: Yes, more or less, similar  
5 target depth. The red dots indicate that they're  
6 Paddock wells, so those wells were landed in the Paddock  
7 Formation as is that Sneed well.

8 COMMISSIONER PADILLA: Okay.

9 THE WITNESS: So those are all landed --

10 COMMISSIONER PADILLA: A little higher?

11 THE WITNESS: In the upper part, in  
12 the Paddock Formation, in the upper, higher porosity  
13 part. So those are all -- and the landing depths on  
14 those are going to be very similar. I don't know if  
15 they are exactly the same, but they are going to be very  
16 similar.

17 COMMISSIONER PADILLA: Do you attribute that  
18 to the fact that you don't have a lot of -- once you get  
19 over to section 12 and 13, I notice that that's where it  
20 is really starting to dip, if at all.

21 Do you attribute that to the relatively  
22 stable geology here, that you don't see a lot of natural  
23 fracturing, the basic fact that the stand-ups and the  
24 lay-downs are given in both?

25 THE WITNESS: I don't have a real good

1 explanation for why they are the same. The principal  
2 stress direction in this area, roughly, is  
3 northwest-southeast in general, which would let you  
4 drill a north-south or east-west well based on that  
5 particular factor.

6 COMMISSIONER PADILLA: So that remains to be  
7 seen?

8 THE WITNESS: It does remain to be seen.  
9 And we are keen to watch that type of information. But  
10 what we've seen right now is we don't believe there is  
11 any difference.

12 COMMISSIONER PADILLA: Okay. Based on  
13 Exhibit 19, I mean, it looks like you have porosities as  
14 low as just a couple of percentage points. Is that kind  
15 of what you are seeing out there -- and maybe up to  
16 8 or 9?

17 THE WITNESS: You have some streaks that are  
18 higher. But, in general, the porosity in the entire  
19 Blinbry interval is fairly low. It ranges from 2 to,  
20 you know, 4 percent in general and then there's streaks  
21 that obviously go a little bit higher than that.

22 COMMISSIONER PADILLA: And going up into the  
23 Paddock, you'd see what kind of porosity?

24 THE WITNESS: The Paddock is a little bit  
25 better. The Paddock -- and I'm just looking at one of

1 the logs here -- it has streaks in the 10, 12, 14  
2 percent range. So it's thinner but it has a higher  
3 porosity. The key to the Blinbry is that it's roughly  
4 1,000 feet thick. It is low porosity, low permeability,  
5 but it is very thick.

6 COMMISSIONER PADILLA: Okay. The Tubb,  
7 according to what I can see on some of these logs, you  
8 said it's about 100 feet. Does that mean, for  
9 example -- Exhibit 19, does that mean that you've cut  
10 off some of it there?

11 THE WITNESS: No. That is the actual base  
12 of the Tubb. That red line across the bottom -- I cut  
13 this graphic off just so I could expand it as much as I  
14 could. But that is the base of the Tubb right there.

15 COMMISSIONER PADILLA: So really in, say,  
16 the Branex Com Federal 10, you're looking at a 43 foot  
17 Tubb based on the numbers?

18 THE WITNESS: This goes from 6,850 to 6,950,  
19 so that's almost or exactly 100 feet thick.

20 COMMISSIONER PADILLA: I've got 6,862 to  
21 6,895 on mine.

22 THE WITNESS: Well, the number on the left,  
23 6,852, references the well on the left. And the 6,895  
24 is the well on the very far right. So that is not the  
25 thickness of the Tubb in that interval.

1 COMMISSIONER PADILLA: Relating to that, can  
2 you give us a ballpark description of the depths and  
3 thicknesses of these four members as shown in Exhibit  
4 15? I mean, these are obviously not to scale, the blue  
5 and red boxes?

6 THE WITNESS: I am just going to cheat and  
7 use my cross section here. But, you know, the top of  
8 the Paddock is roughly 5,500 feet across this area. The  
9 top of the Blinebry is right at 5,900 feet and the top  
10 of the Tubb is right at 6,850.

11 COMMISSIONER PADILLA: And what is the  
12 Drinkard?

13 THE WITNESS: The Drinkard would come in at  
14 6,950-ish.

15 COMMISSIONER PADILLA: And extend to?

16 THE WITNESS: We don't drill through the  
17 Drinkard over here very often. I really don't know  
18 exactly how thick it is. But I'm sure it's several  
19 hundred feet thick, but I hate to give you a specific  
20 number.

21 COMMISSIONER PADILLA: So the majority of  
22 the 1,500 feet, I guess my point is, is really the  
23 Blinebry and Paddock, the target zones?

24 THE WITNESS: Yes. And these vertical wells  
25 are all TD'd. We drill them to at least the top of the

1 Tubb and through the Tubb. They are just for -- so we  
2 can map the Tubb. So that's the reason that we drill  
3 these wells and that's the reason I picked these wells  
4 for the cross section.

5 COMMISSIONER PADILLA: Dr. Balch alluded to  
6 the issue of frac design and trajectories.

7 THE WITNESS: Okay.

8 COMMISSIONER PADILLA: In this case, I don't  
9 see much of an infringement on correlative rights. But,  
10 obviously, moving forward, if you have depth severances  
11 where there were a productive zone underneath, do you  
12 have any data that would basically show that your frac  
13 radius is staying within whatever the completion  
14 engineers have --

15 THE WITNESS: Nothing that would clearly  
16 establish that or prove that.

17 COMMISSIONER PADILLA: And you don't know  
18 what the frac radiuses are --

19 THE WITNESS: I don't know what it would be  
20 for this interval here.

21 COMMISSIONER PADILLA: For the first five  
22 wells?

23 THE WITNESS: I really don't know what it is  
24 for those wells. I don't specifically get involved  
25 directly with the frac design.



1 COMMISSIONER PADILLA: Okay. I imagine that  
2 would be something we would want to look at going  
3 forward, especially if you had two productive zones  
4 stacked on top of each other with different ownerships.

5 THE WITNESS: That's a different situation  
6 than we have here.

7 COMMISSIONER PADILLA: Okay. Using this as  
8 a template, I guess, it would be case by case.

9 THE WITNESS: Right.

10 COMMISSIONER PADILLA: Thank you.

11 THE WITNESS: Uh-huh.

12 EXAMINATION BY CHAIRMAN CATANACH

13 COMMISSIONER CATANACH: In your vertical  
14 wells in this area, where are they typically perforated?

15 THE WITNESS: They are typically  
16 perforated -- though usually -- not "usually" --  
17 predominantly, we will put three frac stages in the  
18 Blinebry spaced out fairly uniformly, and then there  
19 will be one perforated stage in the Paddock interval.  
20 So four unique, completed intervals.

21 COMMISSIONER CATANACH: So with your  
22 proposed horizontal well at landing depth of 6,400 feet,  
23 will that just drain, do you think, one of the producing  
24 intervals in the Blinebry?

25 THE WITNESS: What we would hope is that

1 would drain -- we call this an upper Blinebry well, so  
2 we are hoping that would drain the middle to upper part  
3 of the Blinebry, which seems to be the most economic.

4 The lower Blinebry has not, in general,  
5 performed quite as well. So that is why we are seeking  
6 to go optimize in that upper part.

7 COMMISSIONER CATANACH: So have you looked  
8 at the economics of drilling additional horizontal wells  
9 to develop the Paddock in this area? Would that be  
10 economic?

11 THE WITNESS: Yes. We've got the one that  
12 is just north of this that appears to be -- I mean, it's  
13 a very new well -- but it appears it's going to be an  
14 economic well.

15 COMMISSIONER CATANACH: So the one in the  
16 north half of section 9 is a Paddock?

17 THE WITNESS: Yes, sir. That's the red dot  
18 that you'll see. That indicates that it's a Paddock  
19 well, as are all those other horizontals that we've  
20 drilled, the ones to the east, the Highbar, the  
21 Boneless, and then the other -- the Panhead, the  
22 Flathead, those are all Paddock wells.

23 COMMISSIONER CATANACH: So this is your  
24 first Blinebry?

25 THE WITNESS: Yes, it is in this immediate

1 area. That is correct.

2 COMMISSIONER CATANACH: And you presented  
3 some geologic data and some water saturation data on the  
4 Tubb. We don't have any data on the Drinkard.

5 THE WITNESS: I didn't have any logs that  
6 went that deep.

7 COMMISSIONER CATANACH: So do you have any  
8 Drinkard data, some geologic data for the Drinkard that  
9 would indicate that it's similar to the Tubb?

10 THE WITNESS: Well, it is not similar to the  
11 Tubb insofar as the lithology. It is a different  
12 lithology.

13 The only thing I could go back to is the  
14 fact that there's no Tubb or Drinkard wells in this  
15 immediate area. I mean, if it was productive in this  
16 area, someone would have tested it and been exploiting  
17 it.

18 COMMISSIONER BALCH: You can make a  
19 horizontal well economic in a place where you can't make  
20 vertical wells economic. Horizontal wells are ten, 15  
21 years technology in this area. So has anyone tried with  
22 the horizontal?

23 THE WITNESS: The Drinkard?

24 COMMISSIONER BALCH: In this area, yes.

25 THE WITNESS: Not to my knowledge.

1 COMMISSIONER CATANACH: The Tubb and the  
2 Drinkard are generally very productive as you move east.

3 THE WITNESS: There are spots where it is,  
4 productive, yes. But it's well east of here, yes.

5 COMMISSIONER CATANACH: And, in fact, in  
6 portions of Lea County, there are actually separate  
7 pools for Tubb and Drinkard?

8 THE WITNESS: Right.

9 COMMISSIONER CATANACH: As you move west, is  
10 this a general trend in the Tubb and Drinkard, that it  
11 becomes nonproductive or is this localized?

12 THE WITNESS: We did a search for Lea and  
13 Eddy County for Tubb and Drinkard production. There was  
14 nothing to the west. There was only a couple of Tubb,  
15 Drinkard fields to the east. And they're well east of  
16 this.

17 We were able to find no Tubb, Drinkard  
18 production in Eddy County at all. I'm not going to say  
19 that there's definitely not. But we weren't able to  
20 find any.

21 COMMISSIONER CATANACH: But were you doing a  
22 pool search of Tubb and Drinkard; is that what you were  
23 doing?

24 THE WITNESS: No. I believe it was by  
25 perforated interval, those that have perms in the Tubb

1 or Drinkard.

2 COMMISSIONER CATANACH: So you guys haven't  
3 actually tested the Drinkard in this area?

4 THE WITNESS: Not in this specific area, no,  
5 sir.

6 COMMISSIONER CATANACH: In any of your  
7 vertical wells that you have drilled, have you tested  
8 the Tubb at all, have you perfed the Tubb?

9 THE WITNESS: Not since I've been at Concho.  
10 I don't know if they did that before I got there. I  
11 mean, they were drilling wells that were similar to  
12 this. It could have been done. But I'm not aware of  
13 it. We never target the Tubb and we try to avoid the  
14 Tubb, so...

15 COMMISSIONER CATANACH: And it is your  
16 opinion that it is all kind of irrelevant anyway. You  
17 don't believe that your fracture stimulation is going to  
18 even penetrate the Tubb in this well?

19 THE WITNESS: Again, that's not my field of  
20 expertise. But I would have a hard time believing it  
21 would go down 400 or 500 feet and penetrate into the  
22 Tubb in this scenario. If it did, in my opinion, it  
23 would only produce water. So we would do everything we  
24 could do to not have that circumstance happen.

25 COMMISSIONER CATANACH: Do you know if there

1 is any oil saturation in the Tubb?

2 THE WITNESS: The way the logs calculate, sic  
3 but you notice there's a bulk shift up in the 80 to  
4 100 percent range.

5 COMMISSIONER PADILLA: Do you have any idea  
6 what the treatment pressures were on any of the other --

7 THE WITNESS: No, sir, sorry. I have no  
8 idea.

9 COMMISSIONER CATANACH: Is there any  
10 geologic reason why the rights would have been severed  
11 at this particular depth?

12 THE WITNESS: I have no earthly idea. I  
13 don't know why they would do that.

14 COMMISSIONER CATANACH: I don't believe I  
15 have anything else. Do you have any other questions?

16 (No response.)

17 COMMISSIONER CATANACH: Mr. Wade, do you?

18 MR. WADE: No questions.

19 COMMISSIONER CATANACH: Okay. I guess this  
20 witness may be excused.

21 MR. FELDEWERT: Yes. Mr. Chairman, that  
22 concludes our presentation.

23 COMMISSIONER CATANACH: Okay. Do I have a  
24 motion to go into executive session?

25 COMMISSIONER PADILLA: So moved.

1 COMMISSIONER BALCH: And seconded.

2 COMMISSIONER CATANACH: All in favor. Aye.

3 COMMISSIONER BALCH: Aye.

4 COMMISSIONER PADILLA: Aye.

5 COMMISSIONER CATANACH: The motion is  
6 passed. We are going into closed session.

7 (Closed session held from 11:21 a.m. to  
8 12:06 p.m.)

9 COMMISSIONER BALCH: I make a motion that we  
10 go back into session.

11 COMMISSIONER PADILLA: I'll second that  
12 motion.

13 COMMISSIONER CATANACH: All in favor. Aye.

14 COMMISSIONER PADILLA: Aye.

15 COMMISSIONER BALCH: Aye.

16 COMMISSIONER CATANACH: The motion is  
17 passed. We are back in open session at this time.

18 The Commission has deliberated on this  
19 matter and that is all we have discussed in the closed  
20 session.

21 The Commission has decided to approve this  
22 application. We want to make a couple of things clear  
23 on this. Mr. Feldewert, we would like you to propose an  
24 order, draft an order that reflects the -- that this  
25 approval is based on the facts of this case,

1 specifically, the geology, the ownership of the zones,  
2 agreement of the parties, et cetera.

3 We would also like the Division to draft an  
4 order that also approves the application but includes  
5 some findings that might be helpful to guide the  
6 commission forward on this matter.

7 Just as a couple of comments, the  
8 Commission, we don't believe that this case gives us  
9 enough information to set a precedent for these types of  
10 cases. What that means is that probably in the future  
11 these cases will be handled on a case-by-case basis,  
12 because the facts of the case, the geology, ownership,  
13 things like that are going to be different in these  
14 types of cases.

15 And we would also like the applicant to  
16 further explore the JOA process and to determine if  
17 there is a way that the company can actually handle this  
18 through a JOA without having to pool a portion of a  
19 pool. So we'd like you to further address that, maybe  
20 at the next hearing, as to why that cannot be done.

21 Anything else?

22 (No response.)

23 COMMISSIONER CATANACH: I believe that's --

24 MR. WADE: Mr. Chairman, if I may, is there  
25 a timeline as to the draft, to the OCD drafting the



1 proposed findings? I would like to have the ability to  
2 have the transcript available to us.

3 COMMISSIONER BALCH: The next meeting is  
4 December 10th.

5 COMMISSIONER CATANACH: Do you know when the  
6 transcript will be ready?

7 THE COURT REPORTER: In approximately 14  
8 days.

9 COMMISSIONER CATANACH: Mr. Wade, that would  
10 give you enough time to prepare an order before the next  
11 Commission hearing?

12 MR. WADE: It would.

13 COMMISSIONER CATANACH: And as soon as you  
14 can so we can have maybe time to review it.

15 MR. FELDEWERT: Are you contemplating two  
16 submittals or do you want us to try to get together and  
17 do one submittal?

18 COMMISSIONER CATANACH: Just one submittal  
19 on your --

20 MR. FELDEWERT: I mean with the Division.

21 COMMISSIONER CATANACH: We will have two  
22 separate submittals.

23 MR. FELDEWERT: Okay.

24 COMMISSIONER BALCH: There will be one final  
25 probably patched together by Mr. Brancard.

1 MR. FELDEWERT: Okay.

2 COMMISSIONER CATANACH: Anything further?

3 MR. FELDEWERT: No. Thank you very much for  
4 your time.

5 COMMISSIONER CATANACH: This case will be  
6 taken under advisement and the draft orders and all  
7 that.

8 Do I have a motion to adjourn?

9 COMMISSIONER PADILLA: So moved.

10 COMMISSIONER BALCH: Seconded.

11 COMMISSIONER CATANACH: The motion passes.  
12 This hearing is adjourned.

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15 (Time noted 12:10 p.m.)

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1 STATE OF NEW MEXICO )  
 2 ) ss.  
 3 COUNTY OF BERNALILLO )  
 4  
 5  
 6

7 REPORTER'S CERTIFICATE

8  
 9 I, ELLEN H. ALLANIC, New Mexico Reporter CCR  
 10 No. 100, DO HEREBY CERTIFY that on Thursday, November 5,  
 11 2015, the proceedings in the above-captioned matter were  
 12 taken before me, that I did report in stenographic  
 13 shorthand the proceedings set forth herein, and the  
 14 foregoing pages are a true and correct transcription to  
 15 the best of my ability and control.

16  
 17 I FURTHER CERTIFY that I am neither employed by  
 18 nor related to nor contracted with (unless excepted by  
 19 the rules) any of the parties or attorneys in this case,  
 20 and that I have no interest whatsoever in the final  
 21 disposition of this case in any court.

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