

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

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

**ORIGINAL**

CASE NO. 14759

APPLICATION OF COG OPERATING LLC  
TO INCREASE WELL DENSITY IN THE BURCH KEELY  
FEDERAL UNIT, EDDY COUNTY, NEW MEXICO

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID K. BROOKS, Hearing Examiner  
WILLIAM V. JONES, Legal Examiner

November 10, 2011

Santa Fe, New Mexico

This matter came on for hearing before the  
New Mexico Oil Conservation Division, DAVID K. BROOKS,  
Hearing Examiner on Thursday, November 11, 2011, at the  
New Mexico Energy, Minerals and Natural Resources  
Department, 1220 South St. Francis Drive, Room 102,  
Santa Fe, New Mexico.

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7 I N D E X

|   | PAGE              |
|---|-------------------|
| 9 DIRECT EXAMINATION OF BRANDON GAYNOR            | 4                 |
| 10 DIRECT EXAMINATION OF HARVIN BROUGHTON         | 17                |
| 11 DIRECT EXAMINATION OF T.J. MIDKIFF             | 28                |
| 12 CERTIFICATE OF COMPLETION OF DEPOSITION        | 54                |
| 13 EXHIBITS                                       | MARKED/IDENTIFIED |
| 14 1. BLM/Concho 2011 Activity Meeting            | 11                |
| 15 2. Special Vertical Limits within BKU Area     | 11                |
| 16 3. Affidavit                                   | 11                |
| 17 4. Burch Keely Unit - Cross Section Map A - A' | 23                |
| 18 5. Yeso Shelf Area Stratigraphic X-Section     | 23                |
| 19 6. SENM Shelf Area Blinbry Producer Map        | 23                |
| 20 7. 10-Acre Spacing vs. 10-Acre Spacing         | 40                |
| 21 8. Need Increased Density in the Paddock       | 40                |
| 22 9. Burch Keely Unit 410 - Waste Prevention     | 40                |
| 23 10. Burch Keely Unit 410                       | 40                |
| 24 11. Current Density Rule Causes Waste          | 40                |
| 25 12. Proposed Density Rule Eliminates Waste     | 40                |

|    |  |    |
|----|--|----|
| 1  | 13. McIntyre DK Federal 17H                | 40 |
| 2  | 14. McIntyre DK Federal 17H                | 40 |
| 3  | 15. Current Density Rule Causes Waste      | 40 |
| 4  | 16. Proposed Density Rule Eliminates Waste | 40 |
| 5  | 17. Brinebry Deepening Not Economic        | 40 |
| 6  |  |    |
| 7  |  |    |
| 8  |  |    |
| 9  |  |    |
| 10 |  |    |
| 11 |  |    |
| 12 |  |    |
| 13 |  |    |
| 14 |  |    |
| 15 |  |    |
| 16 |  |    |
| 17 |  |    |
| 18 |  |    |
| 19 |  |    |
| 20 |  |    |
| 21 |  |    |
| 22 |  |    |
| 23 |  |    |
| 24 |  |    |
| 25 |  |    |

1 EXAMINER BROOKS: Call case number 14759,  
2 Application of COG Operating LLC to Increase Well  
3 Density in the Burch Keely Unit, Eddy County,  
4 New Mexico. Call for appearances.

5 MS. MUNDS-DRY: Good morning, Mr. Examiner.  
6 Ocean Munds-Dry with the law firm Holland & Hart, LLC,  
7 here in the Santa Fe office. I'll do my best for you to  
8 understand me. I'm here representing COG Operating, LLC  
9 this morning, and I have three witnesses.

10 EXAMINER BROOKS: Will the witnesses please  
11 stand and identify yourselves so you may be sworn.

12 MR. MIDKIFF: T.J. Midkiff.

13 MR. BROUGHTON: Harvin Broughton.

14 MR. GAYNOR: Brandon Gaynor.

15 [Whereupon the witnesses were duly sworn.]

16 MS. MUNDS-DRY: Mr. Brooks, I apologize. We  
17 just got these cables and we just need a minute.

18 EXAMINER BROOKS: Okay. We will stand at  
19 ease while you do that.

20 MS. MUNDS-DRY: We're ready to roll,  
21 Mr. Brooks.

22 EXAMINER BROOKS: Okay.

23 MS. MUNDS-DRY: We'd like to call our first  
24 witness.

25

1 BRANDON GAYNOR

2 after having been first duly sworn under oath,  
3 was questioned and testified as follows:

4 DIRECT EXAMINATION

5 BY MS. MUNDS-DRY:

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

7 A. Brandon Kimberly Gaynor.

8 Q. And, Mr. Gaynor, where do you reside?

9 A. Midland, Texas.

10 Q. And by whom are you employed?

11 A. Concho Resources.

12 Q. And what do you for Concho?

13 A. I'm a landman.

14 Q. And have you previously testified before the  
15 Division?

16 A. Yes, I have.

17 Q. And were your credentials accepted and made a  
18 matter of record at that time?

19 A. They were.

20 Q. Are you familiar with the application that's been  
21 filed in this case?

22 A. Yes.

23 Q. And are you familiar with the lands subject to  
24 the application?

25 A. Yes.

1 MS. MUNDS-DRY: Mr. Examiner, we tender  
2 Mr. Gaynor as an expert in the petroleum land matters.

3 EXAMINER BROOKS: He is so accepted.

4 MS. MUNDS-DRY: Thank you.

5 Q. (By Ms. Munds-Dry) Mr. Gaynor, if you could,  
6 before we turn to the slide, if you could please  
7 summarize for the Examiners what Concho seeks in its  
8 application.

9 A. Yes. We are seeking the right to develop both  
10 the Paddock and the Blinebry portions of the Yeso  
11 formation on 10-acre spacing.

12 Q. In our application, Mr. Gaynor, I think, if I'm  
13 correct, Concho asked for four wells in the Paddock  
14 member of the Yeso and four wells in the Blinebry member  
15 of the Yeso?

16 A. That's correct.

17 Q. And you said something, I think, a little  
18 different, in that we're seeking 10-acre spacing?

19 A. Yes. We've realized since submitting our  
20 application that perhaps it doesn't exactly capture what  
21 we're really trying to do. Because what we're really  
22 trying to do is make sure that we can develop them on a  
23 10-acre spacing pattern.

24 Q. And we're going to call technical witnesses that  
25 will explain that a little bit more.

1       A. Our engineer, Mr. Midkiff, will be able to  
2 explain why there's a difference between those two  
3 things, because it's the same spacing pattern. It's  
4 just shifted over a little bit. But he has some slides  
5 that will address that more clearly.

6               MS. MUNDS-DRY: Mr. Examiner, Mr. Brooks,  
7 and Mr. Jones, that may result in -- and we would ask  
8 for your guidance as to whether we need to amend our  
9 application. We'd like to put on our testimony and  
10 evidence for you today, and if you think that our intent  
11 doesn't match what we said in our application and you  
12 determine that we need to amend our application, we're  
13 of course happy to do that.

14              EXAMINER BROOKS: Well, maybe after I've  
15 heard the presentation we'll know a little more. It  
16 would seem to me that if you have -- if the division  
17 enters an order authorizing you to drill up to four  
18 wells in each zone within each 40-acre spacing unit then  
19 you will have permission to do at least what you want to  
20 do plus some other things that maybe you don't want to  
21 do, but you will still be able to do them if you want to  
22 do them.

23              So my general impression is it probably doesn't  
24 matter, but I don't like to make decisions before I've  
25 heard what's actually -- because every now and then I

1 hear something that surprises me.

2 MS. MUNDS-DRY: Yeah. And we understand  
3 that, and we just wanted to mostly give you kind of a  
4 heads up as to discussions that we had when we were  
5 preparing for this hearing that our intent may be a  
6 little different. So after you hear, particularly  
7 Mr. Midkiff's testimony, maybe we can discuss that again  
8 at the end of the hearing.

9 EXAMINER BROOKS: I do have a preliminary  
10 question though that would seem to be relevant. I don't  
11 know if this witness is the one to address it to, but is  
12 the Burch Keely unit a, quote, active water flood unit?

13 MR. GAYNOR: That is a question better  
14 directed to T.J.

15 EXAMINER BROOKS: Okay. Very good.

16 Q. (By Ms. Munds-Dry) With that then let's,  
17 Mr. Gaynor, turn to your first exhibit here that's been  
18 marked as Concho Exhibit 1. If you could identify and  
19 review that for the Examiners.

20 A. This is just sort of a broad overview of what we  
21 kind of consider to be the fairway of the shelf. The  
22 yellow shows places where Concho owns some interest in  
23 the lease order. And in the red outlined area, over  
24 sort of towards the left, that is the horizontal outline  
25 of the Burch Keely Unit.



1 Q. Okay. And you said the yellow acreage is Concho  
2 acreage?

3 A. Yes.

4 Q. And focusing on the Burch Keely Unit, if we  
5 could, what type of unit is the Burch Keely Unit?

6 A. It's a federal secondary recovery unit.

7 Q. And what is the unitized interval in the Burch  
8 Keely Unit?

9 A. The Burch Keely is unitized from the top of the  
10 Seven Rivers Formation down to 5,000 feet.

11 Q. And what pool is designated for the Burch Keely  
12 Unit?

13 A. Well, it's sort of influx currently. But it's  
14 presently in the Graper Jackson, Seven Rivers Queen  
15 Graper, Saint Andres Pool.

16 Q. And recently did Concho obtain a commission order  
17 vertically extending that pool in the Burch Keely Unit?

18 A. Yes, down to 5,000 feet.

19 MS. MUNDS-DRY: And, Mr. Examiners, for the  
20 record that was order R-10067D.

21 Q. (By Ms. Munds-Dry) And more recently than that,  
22 Mr. Gaynor, what has Concho asked the division do with  
23 respect to the Graper Jackson Pool? You indicated that  
24 was in flux.

25 A. Yes. As a part of our allowable hearings that

1 we've been having, we asked that the Glorieta and Yeso  
2 portion of that pool be severed within the Burch Keely  
3 Unit and that the Glorieta and Yeso down to 5,000 feet  
4 be called the Burch Keely Glorieta Yeso Pool.

5 Q. And that matter is under advisement with the  
6 division?

7 A. And that matter is under advisement with the  
8 division right now. So if it is approved then we will  
9 only be asking for a rule that affects that new pool.

10 Q. And, in fact, here in Concho Exhibit 2, if you  
11 could identify for the Examiners, I think this is what  
12 you were just discussing in part.

13 A. Yes. Well, this is really a map of the offset  
14 operators to what would be the new pool. These are the  
15 offset operators to the Glorieta and Yeso portions  
16 within the horizontal boundaries of the Burch Keely  
17 Unit.

18 MS. MUNDS-DRY: And, Mr. Examiners, again  
19 for the record, that was case number 14670 that was  
20 heard on September 29th of this year.

21 Q. (By Ms. Munds-Dry) Mr. Gaynor, what rules govern  
22 the development of the Yeso and the Burch Keely Units?

23 A. Currently it's just the statewide rule.

24 Q. And for the record, what does the statewide  
25 spacing rules currently allow Concho to do within the

1 Burch Keely Unit in terms of well density?

2 A. You can drill up to four wells per 40 acres.

3 Q. Okay. All right. And, Mr. Gaynor, Concho  
4 Exhibit Number 3 contained a notice packet with the  
5 affidavit of notice, a notice list, the affidavit of  
6 publication, notice letter, and green cards showing  
7 evidence that notice was given to certain parties?

8 A. Yes.

9 Q. And who did we give notice to of this  
10 application?

11 A. We gave notice to Three Rivers, Burnett, and  
12 Mack.

13 Q. And that's also illustrated on Exhibit Number 2?

14 A. Yes.

15 Q. In your opinion, Mr. Gaynor, will the granting of  
16 this application be in the best interest of  
17 conservation, the prevention of waste, and the  
18 protection of correlative rights?

19 A. Yes, it will.

20 Q. And were Exhibits 1 through 3 either prepared by  
21 you or compiled under your direct supervision?

22 A. Yes, they were.

23 MS. MUNDS-DRY: Mr. Examiner, we move the  
24 admission of Exhibits 1 through 3 into evidence.

25 EXAMINER BROOKS: 1 through 3 are admitted.

1 [Exhibits 1 through 3 admitted.]

2 MS. MUNDS-DRY: And that concludes my direct  
3 examination of Mr. Gaynor.

4 EXAMINER BROOKS: Okay. Mr. Gaynor, I'm not  
5 sure on these maps just where do we have a map that  
6 shows the outer limits of the Burch Keely Unit?

7 MR. GAYNOR: Both of these two maps show the  
8 outer limits of the Burch Keely Unit.

9 EXAMINER BROOKS: Okay. I think I'm seeing  
10 it. It's the red area on Exhibit 1?

11 MR. GAYNOR: The red outline on Exhibit 1  
12 and then the dark blue area with the black outline on  
13 Exhibit 2.

14 EXAMINER BROOKS: Yeah. And the color  
15 coding is the operators on Exhibit 2?

16 MR. GAYNOR: Yes.

17 EXAMINER BROOKS: Now, does the Burch Keely  
18 Unit have the same horizontal formations and all of the  
19 horizontal limits and all of the pools that -- all of  
20 the formations that it encompasses or is it different --  
21 the horizontal limits, are they the same? It's not a  
22 wedding cake, in other words?

23 MR. GAYNOR: Oh, yeah. Okay. I see what  
24 you're saying.

25 EXAMINER BROOKS: It's got one set of

1 horizontal limits --

2 MR. GAYNOR: It's a pillar all the way to  
3 the top.

4 EXAMINER BROOKS: Okay. That's what I was  
5 trying to be sure of. I think that's all the questions  
6 I have.

7 Mr. Jones?

8 EXAMINER JONES: You're not seeking to down  
9 space here, are you? You're just seeking four wells in  
10 the Blinebry and four wells in the Paddock?

11 MR. GAYNOR: We want to develop it on -- in  
12 accordance with the statewide spacing rules.

13 EXAMINER JONES: Okay. Okay. You're not  
14 affecting -- okay, but this is going to be most likely  
15 another pool, and it's going to be -- the pool would  
16 automatically be allowed four wells per 40 acres.  
17 You're still seeking the 40 -- I mean the 40 acres is  
18 still in affect, right? So the 40-acre spacing and  
19 proration unit, it's just going to be well density?

20 MR. GAYNOR: Well, specifically what we're  
21 asking for is the well density with 10-acre spacing.  
22 And the idea is that you have the Paddock and it's on  
23 10-acre spacing, and you want to get down to the  
24 Blinebry also and also have the opportunity to develop  
25 it on 10-acre spacing.

1 EXAMINER JONES: Different wells drill from  
2 the surface.

3 MR. GAYNOR: That's my understanding. But  
4 those are better questions to ask Mr. Midkiff.

5 EXAMINER JONES: Okay. So as far as  
6 affecting the pool, when you talk about the proposal to  
7 affect a pool, doesn't the notice need to go all also to  
8 the mineral interest owners?

9 MS. MUNDS-DRY: We read the rule a little  
10 differently, Mr. Jones, that it wasn't really affecting  
11 the pool. It's a general rule. We're not seeking  
12 exception, in other words, to pool rules or affecting  
13 the pool.

14 EXAMINER JONES: Okay.

15 MS. MUNDS-DRY: But we're seeking exception  
16 to the general rule, the general well density rule. And  
17 that's why we gave notice to the offsets.

18 EXAMINER JONES: But it says exception to  
19 the well density rule within this pool.

20 MS. MUNDS-DRY: Within the unit.

21 EXAMINER JONES: Within the unit, which is  
22 going to be the boundaries of the pool.

23 MS. MUNDS-DRY: Right. But we didn't see it  
24 as affecting -- the pool is within the -- it will be the  
25 same horizontal limits as the unit, so it only affects

1 the unit.

2 EXAMINER JONES: Okay. Who would be the  
3 mineral interest owners?

4 MR. GAYNOR: The mineral interest owners?  
5 Within the pool, it's all federal.

6 EXAMINER JONES: Okay. And did you notice  
7 the feds?

8 MR. GAYNOR: We did not provide notice to  
9 the feds. I believe Mr. Midkiff has had a conversation  
10 with Wesley at the BLM about this, but we did not  
11 provide them a formal notice.

12 EXAMINER JONES: But Wesley knows what your  
13 intention is?

14 MR. GAYNOR: You should ask Mr. Midkiff  
15 those questions.

16 EXAMINER JONES: I can ask him.

17 EXAMINER BROOKS: Well, the requirement for  
18 noticing mineral owners is if it involves changing the  
19 amount of acreage to be dedicated to a well. Now, I  
20 haven't heard your presentation and I'm not sure how  
21 they draw a distinction between 10-acre spacing and  
22 40-acre spacing with four wells allowed. But the  
23 reasons why we would -- unless they're doing something  
24 different from what I assume at this point they're  
25 doing, I would think the reasons why we would require

1 mineral interest owners to be notified would not apply  
2 to what I think they're doing. Okay. Well, that's  
3 that. Let's go ahead.

4 Do you have any further questions?

5 EXAMINER JONES: Only on the 5,000 foot  
6 limit on this unit. On the commission order, I haven't  
7 read that order, but that extended the unit itself to  
8 5,000 feet?

9 MR. GAYNOR: Yeah.

10 EXAMINER JONES: So there's not controversy  
11 anymore over that. That's been settled. Okay. Now,  
12 are you going to also define the top with a type well of  
13 the -- now that you're going to have the number of wells  
14 different -- I mean the same, but you're going to split  
15 the Paddock and the Blinebry now. So now you probably  
16 need to define the top of the Blinebry exactly with the  
17 type well so that people will know when they complete.  
18 So your geologist can do that, I'm sure.

19 MR. GAYNOR: Okay.

20 MS. MUNDS-DRY: We'll ask Mr. Broughton to  
21 address that.

22 EXAMINER JONES: Then I don't have any more  
23 questions.

24 EXAMINER BROOKS: Well, yeah, Mr. Jones has  
25 kindly reminded me that I need to look at the notice



1 provisions here, which I had kind of glossed over. When  
2 I look at your Exhibit 2, you notified all the operators  
3 named on Exhibit 2; is that correct?

4 MR. GAYNOR: Yes.

5 EXAMINER BROOKS: That seemed to be what  
6 Exhibit 3 provided. Okay. Now, does Exhibit 2 include  
7 all the operators within one mile of the outer limits of  
8 the Burch Keely Unit?

9 MR. GAYNOR: This map shows all of the  
10 offset operators within one mile of the outer limits of  
11 the Burch Keely who are not operating in another pool.

12 EXAMINER BROOKS: Okay.

13 MR. GAYNOR: To the east here you have the  
14 new Mar Loco Pool. The other pools are shown in gray.

15 EXAMINER BROOKS: Right. But the ones who  
16 are within another pool are not included.

17 MR. GAYNOR: No, they are not.

18 EXAMINER BROOKS: Okay. Okay. And that is  
19 correct. Now I have to go back and read the rule.  
20 Okay. Thank you.

21 MS. MUNDS-DRY: Thank you, Mr. Gaynor. We'd  
22 like to call Mr. Broughton.

23

24

25

1 HARVIN BROUGHTON

2 after having been first duly sworn under oath,  
3 was questioned and testified as follows:

4 DIRECT EXAMINATION

5 BY MS. MUNDS-DRY:

6 Q. Would you please state your full name for the  
7 record?

8 A. Harvin Broughton.

9 Q. And where do you reside, Mr. Broughton?

10 A. Midland, Texas.

11 Q. And with whom are you employed?

12 A. Concho Resources, LLC.

13 Q. And what do you for Concho?

14 A. I am a senior geoscientist, essentially a  
15 geologist for Concho.

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

18 A. I have.

19 Q. And were your credentials accepted and made a  
20 matter of record?

21 A. Yes, they were.

22 Q. Are you familiar with the application that's been  
23 filed by Concho?

24 A. Yes, I am.

25 Q. And are you familiar with the geology and the

1 subject lands?

2 A. I am.

3 MS. MUNDS-DRY: Mr. Examiner, we tender  
4 Mr. Broughton as an expert in the petroleum geology.

5 EXAMINER BROOKS: He is so qualified.

6 MS. MUNDS-DRY: Thank you.

7 Q. (By Ms. Munds-Dry) Mr. Broughton, if we could  
8 first go back to what's been marked as Concho Exhibit 1.  
9 And if you could review a few additional things for the  
10 Examiners.

11 A. Okay. This is a map of what we refer to at  
12 Concho as our northwest shelf property. All of the  
13 yellow is Concho owned acreage. Most of what you see  
14 here is operated by Concho, though not all. The dots on  
15 there represent Yeso wells operated by Concho and  
16 others. The red outline here, as we've already  
17 mentioned, is the Burch Keely Unit that we're talking  
18 about today.

19 Q. Okay. Let's go to what has been marked as Concho  
20 Exhibit 4. If you could please review the slide for the  
21 Examiners.

22 A. This is a blow up or a zoomed in of the Burch  
23 Keely Unit area to give us a little better picture. The  
24 red dots in here represent Paddock wells. The blue dots  
25 represent Blinebry wells. And then the half and half

1 colored dots represent combination wells, what we  
2 loosely call Yeso wells because that's the completion in  
3 the -- in both the Paddock and the Blinebry, both of the  
4 productive portions of the Yeso in this area.

5 Let's see. Again, we have the light blue is the  
6 outline of the unit. And then we have a fuchsia colored  
7 line, A to A prime, that depicts several wells that will  
8 be in the stratigraphic cross section that you'll see in  
9 the next slide.

10 Q. Okay. Let's turn to that slide, which has been  
11 marked as Concho Exhibit 5.

12 MS. MUNDS-DRY: And, Mr. Examiners, you have  
13 a larger cross section in your packet.

14 A. Right. It's much easier to see if you open up  
15 the larger cross section. So I selected several wells  
16 across the area from just west of the Burch Keely Unit  
17 to just east and then some wells in the Burch Keely  
18 Unit. And you'll see that index map also in the lower  
19 left corner of your unfolded map there.

20 So starting at the top, this interval right here,  
21 the two lines here between those two lines, that's the  
22 Glorieta formation. So the top line is the top of the  
23 Glorieta. The next line down, the next correlation line  
24 down, is the base of the Glorieta, which is the top of  
25 the Paddock. Then you have the base of the Paddock.

1 And then all the way down to the bottom you have the  
2 Tubb formation. Okay. So that's the base of the  
3 Blinebry or the Tubb sand, which is a pretty standard  
4 marker for the area.

5 This green color, that's the productive part of  
6 the Paddock. Then you've got this red interval in here.  
7 This is the productive part of the Blinebry above 5,000  
8 feet. So this red line here is our 5,000 feet, which is  
9 Concho ownership, the base of the pool and the base of  
10 the unit. And then you've got this green down here,  
11 which is outside of our ownership but in the Blinebry  
12 formation.

13 The red interval in here -- well, let me back up  
14 just a second to show you the structural picture here.  
15 You'll notice that the wells get deeper as you move from  
16 left to right, that's from west to east. So there's a  
17 slight structural component of a half to 1 degree  
18 dipping down to the east. And what that causes is a  
19 thinning of this interval here above 5,000 feet. So  
20 from the top of the Blinebry to our 5,000 foot ownership  
21 limit gets thinner as you move to the east.

22 But this particular colored-in red area, this is  
23 the area of what we would call stranded pay or waste  
24 interval. And this is part of the issue that we're  
25 trying to resolve today.

1 Q. (By Ms. Munds-Dry) And, Mr. Broughton, if I can  
2 ask you, based on Mr. Jones' interest in a type log, how  
3 does Concho pick the base of the Paddock or the top of  
4 the Blinebry?

5 A. Okay. There is -- well, we obviously respect  
6 thicknesses from well to well. So when I do this,  
7 I'll -- when we log a new well I'll put that well in a  
8 cross section like this so I can see where everything  
9 lies in the other wells. You know, typically we have a  
10 relatively thick Paddock interval of 4 to 500 feet. The  
11 bottom of that is usually, the bottom 75 to 100 feet of  
12 the Paddock is usually tight.

13 So this is a good example, this well right in the  
14 middle where you've got -- this is what we call our  
15 Paddock porosity and this is the base of the Paddock  
16 porosity. From the base of that porosity to the top of  
17 the Blinebry is typically in the range of about 75 feet.  
18 It varies as you move around on the shelf. And then  
19 there's typically just a little thin sand interval here  
20 at the base of that, and that's what we usually pick as  
21 the base of the Paddock or top of the Blinebry.

22 Q. Okay. Let's go to Concho Exhibit Number 6. What  
23 is this slide showing us?

24 A. This is showing the Blinebry Product -- you also  
25 have a foldout map.

1 Q. And there's also a foldout?

2 A. Yeah. This is showing the Blinebry production  
3 all across the shelf, so these are wells that are  
4 actually competed and producing in the Blinebry. And I  
5 showed this -- I've provided this slide to show that  
6 there's Blinebry production to the west and the east,  
7 and then really all the way across the shelf, which is  
8 one of the main reasons that we're very interested in  
9 being able to develop that portion of the Blinebry that  
10 we talked about above 5,000 feet below the base of the  
11 Paddock. And I provide this slide to demonstrate that  
12 the Blinebry is productive across this area.

13 Q. And in your expert opinion, what should the  
14 density or the spacing be in the Burch Keely Unit?

15 A. Concho would like to drill wells in this area on  
16 10-acre spacing.

17 Q. In both the Paddock and the Blinebry?

18 A. In both the Paddock and the Blinebry.

19 Q. Will the granting of this application be in the  
20 best interest of conservation, the prevention of waste,  
21 and the protection of correlative rights?

22 A. Yes, I believe it will.

23 Q. Were Exhibits 4 through 6 either prepared by you  
24 or compiled under your direct supervision?

25 A. They were.

1 MS. MUNDS-DRY: Mr. Examiner, we move the  
2 admission of Exhibits 4 through 6 into evidence.

3 EXAMINER BROOKS: Exhibits 4 through 6 are  
4 admitted.

5 [Exhibits 4 through 6 admitted.]

6 MS. MUNDS-DRY: Thank you. I have nothing  
7 further for Mr. Broughton.

8 EXAMINER BROOKS: Okay. As best I can  
9 figure out, if you allowed one well -- or four wells per  
10 40-acre unit, that if you want to develop one well -- to  
11 drill one well per 10 acres you can do it unless somehow  
12 your pattern is off.

13 MR. BROUGHTON: Right. And Mr. Midkiff is  
14 going to have some slides that address the issue of the  
15 pattern. And that really is the complicating factor, I  
16 think, is just the way that the previous operator sought  
17 to develop this.

18 EXAMINER BROOKS: Okay. Well, I guess the  
19 questions I would have on that is better addressed to  
20 Mr. Midkiff?

21 MR. BROUGHTON: Probably so, yes, sir.

22 EXAMINER BROOKS: In your log here --

23 MR. BROUGHTON: Yes, sir?

24 EXAMINER BROOKS: In the first place, maybe  
25 it's the way I interpret colors, but I don't see any red



1 zone. I see a red line at 5,000 feet, which I  
2 acknowledge is red, but I would not call that color red.

3 MR. BROUGHTON: Well, I guess it's pink.  
4 This pink -- is this the area you're talking about here?

5 EXAMINER BROOKS: Yeah.

6 MR. BROUGHTON: This pinkish colored area.  
7 Well, I called it red. It's stippled red but it shows  
8 up as pink, yes, sir.

9 EXAMINER BROOKS: What is the white? What  
10 is the significance of the white area that's between the  
11 Paddock and the Blinebry?

12 MR. BROUGHTON: That is the interval below  
13 the base of the Paddock porosity and the top of the  
14 Blinebry, so that is -- it's part of the Paddock  
15 interval, but it's tight. We typically don't complete  
16 in that interval.

17 EXAMINER BROOKS: And that tight interval is  
18 continuous across the Burch Keely Unit?

19 MR. BROUGHTON: It is. And, I mean, you see  
20 it all across the entire shelf actually.

21 EXAMINER BROOKS: So with that kind of --  
22 you know, Mr. Jones mentioned a type log, and we  
23 probably need something for definitional purposes.

24 MR. BROUGHTON: Okay.

25 EXAMINER BROOKS: But it would seem that if

1 that tight interval is continuous all the way across  
2 there would not seem to be any problem of distinguishing  
3 which zone you're completing in.

4 MR. BROUGHTON: No. But you can see -- this  
5 is a good example right here. You can see the green  
6 depicts the high porosity, and then you can see right  
7 here it just gets really, really tight right there. The  
8 porosity drops from in the 10 to 12 percent down to,  
9 well, 0 to 2 or 3 percent.

10 EXAMINER BROOKS: Well, the purpose is  
11 you're writing an order in this case, you might -- if  
12 you have not prepared to do that at this point, if you  
13 would think about what well you want to select as a  
14 type log for purposes of defining what constitutes a  
15 well in the Blinebry and what constitutes a well in the  
16 Paddock. Let us know.

17 MR. BROUGHTON: Okay. We can certainly do  
18 that.

19 MS. MUNDS-DRY: We'll submit that to you.

20 EXAMINER BROOKS: Mr. Jones?

21 EXAMINER JONES: And are you asking for this  
22 just inside the Burch Keely Unit or within a mile of the  
23 boundaries of the unit?

24 MS. MUNDS-DRY: Within the Burch Keely Unit.

25 EXAMINER JONES: Within the Burch Keely

1 Unit. And so that was worded that way in the  
2 application. You sent it to everybody within a mile,  
3 and I just would -- so they know that you -- if this  
4 gets approved you can drill more wells. And these are  
5 wells from the surface, correct?

6 MR. BROUGHTON: Yes, sir. These would be  
7 unique wells from the surface.

8 EXAMINER JONES: Otherwise, you all will  
9 comingle them in the same pool and just consider it one  
10 well. That was my main thing, is the type log, you  
11 know, the language. Pick the well, the language, on how  
12 to do that.

13 MR. BROUGHTON: Okay. I'll work with  
14 Ms. Munds-Dry on that.

15 EXAMINER JONES: And noticing those three  
16 operators. But you're within the unit, so they're not  
17 involved anyway. COG is the operator of the unit.

18 MS. MUNDS-DRY: That's correct.

19 EXAMINER JONES: And the target you've got  
20 going forward in the Blinebry, is that close to the top  
21 of the Blinebry?

22 MR. BROUGHTON: Yes, it is. So here's the  
23 top of the Blinebry, this correlation line here, and  
24 then here's our 5,000 feet. And you'll notice that  
25 because of the structural component, you know, we have 4

1 to 500 feet of the Blinebry over here, where over here  
 2 we've only got about 200 feet of Blinebry as a target.  
 3 So our plan, and Mr. Midkiff will discuss this in great  
 4 detail, would be to drill some horizontal Blinebry wells  
 5 in this region here.

6 EXAMINER JONES: That's next to the  
 7 5,000 foot boundary?

8 MR. BROUGHTON: Well, above it for sure.  
 9 Yeah.

10 EXAMINER JONES: And close to the top?

11 MR. BROUGHTON: Well, it's much closer to  
 12 the top over here. And over here you have a lot more  
 13 room to work with.

14 EXAMINER JONES: And if you had hung this on  
 15 the -- you just hung it on the 5,000 foot depth from  
 16 surface; is that correct?

17 MR. BROUGHTON: Yes, that is correct.

18 EXAMINER JONES: Would it look much  
 19 different?

20 MR. BROUGHTON: No, because the --

21 EXAMINER JONES: Flat land?

22 MR. BROUGHTON: Yeah, I mean, it's all  
 23 fairly uniform in thickness. I mean, there would be not  
 24 much variation. I mean, the Glorieta varies slightly in  
 25 thickness from place to place. But the Paddock, across

1 this area, would be fairly uniform, as with the  
2 Blinebry.

3 EXAMINER JONES: Okay. And you continued  
4 this other case on the other unit for some reason.

5 MS. MUNDS-DRY: We did continue it until  
6 December 15, yes.

7 EXAMINER JONES: But it's not like waiting  
8 on the other orders to come out?

9 MS. MUNDS-DRY: No.

10 EXAMINER JONES: Okay. I don't have any  
11 more questions.

12 EXAMINER BROOKS: Me neither. Thank you.

13 MS. MUNDS-DRY: And we will call the man of  
14 the hour, Mr. Midkiff.

15 T.J. MIDKIFF  
16 after having been first duly sworn under oath,  
17 was questioned and testified as follows:

18 DIRECT EXAMINATION

19 BY MS. MUNDS-DRY:

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

21 A. T.J. Midkiff.

22 Q. And where do you reside, Mr. Midkiff?

23 A. Midland, Texas.

24 Q. And by whom are you employed?

25 A. Concho Resources.

1 Q. What do you do for Concho?

2 A. I'm a reservoir engineer.

3 Q. Have you previously testified before the  
4 division?

5 A. Yes, I have.

6 Q. And were your credentials accepted and made a  
7 matter of record?

8 A. Yes, they are.

9 Q. Are you familiar with the application that's been  
10 filed by Concho?

11 A. Yes.

12 Q. And have you made an engineering study of the  
13 Burch Keely Unit?

14 A. Yes, I have.

15 MS. MUNDS-DRY: We'd tender Mr. Midkiff as  
16 an expert in petroleum engineering.

17 EXAMINER BROOKS: So qualified.

18 MS. MUNDS-DRY: Thank you.

19 Q. (By Ms. Munds-Dry) Mr. Midkiff, to your first  
20 slide, which has been marked as Concho Exhibit 7, if you  
21 could walk us through this and tell me when I need to --

22 A. Okay. Mr. Examiner, I put this slide in here  
23 originally to get us on the same page with understanding  
24 how whenever you start assigning wells to a proration  
25 unit and you begin assigning wells following the

1 proration unit lines, the type of patterns that you  
2 would need to be able to apply that type of pattern  
3 across the acreage and still end up with four wells per  
4 40. So I put that in there, I think you obviously  
5 understand from where we're coming from, from that end.

6 But if you could see what I've done is you've got  
7 four blue wells that go in the blue square, four red  
8 wells that go in the red square. So essentially across  
9 the pattern you see that's four wells per 40 and that's  
10 10-acre spacing. Now, I guess you can go ahead and move  
11 that and see that another type of alignment within the  
12 pattern is four wells located 330 off of each of the  
13 proration unit lines, and that's still four wells per  
14 40.

15 EXAMINER BROOKS: What exhibit is that that  
16 you're looking at up there?

17 MS. MUNDS-DRY: This is Exhibit 7.

18 EXAMINER BROOKS: Okay. It doesn't look  
19 like my exhibit.

20 MR. MIDKIFF: We'll go back.

21 MS. MUNDS-DRY: There's an animation there  
22 that's in the slide that's not in your exhibit.

23 MR. MIDKIFF: I can provide you with an  
24 electronic copy if that would help.

25 EXAMINER BROOKS: Okay.

1 MR. MIDKIFF: You can see all it is, is  
2 shifted. So it's still across and it's still going to  
3 end up as four wells per 40. It's just that the pattern  
4 would be shifted. And so ideally, though, whenever you  
5 start aligning wells on the proration unit lines you end  
6 up with -- if you do it correctly you'll end up with  
7 four wells per 40 acres.

8 And I'll just discuss kind of what you're  
9 alluding to earlier why this causes problems out here.  
10 So I guess we can go to the next slide then.

11 Q. (By Ms. Munds-Dry) And let's go then to our next  
12 slide to Exhibit 8.

13 A. This is just another diagram, a step closer to  
14 exactly what you were talking about. What I've  
15 illustrated to the left is a proration unit with four  
16 wells, and those four wells would be assigned to that  
17 proration unit. Well, as I've shown on the previous  
18 slide, that center location is still a 10-acre location.  
19 But that proration unit already has four wells assigned  
20 to it.

21 So it is necessary to drill that fifth well to  
22 avoid waste. And that is still 10-acre spacing. But  
23 that is the fifth well within the proration unit. And  
24 I've got a real world example following where this exact  
25 case happened, where you had four wells that were



1 assigned to a proration unit. The center well was  
2 drilled within the proration unit and that led to being  
3 the fifth well within the proration unit.

4 Q. Let's go ahead and turn to that exhibit then, if  
5 we could, which has been marked as Exhibit Number 9.

6 A. Okay. The Burch Keely 410 is the center well  
7 shown within that proration unit. And you can tell by  
8 looking at the other wells how they are slightly off of  
9 the lines, and those wells were drilled prior to the 410  
10 being drilled. And typically they want you to be at  
11 least 10 feet off the line, and you can see that those  
12 previous four wells all ended up being put in that 25D  
13 proration unit. We drilled the 410. It was a highly  
14 successful well, but it was the fifth well within the  
15 proration unit.

16 Q. Then let's go to your next exhibit, which shows  
17 is Exhibit Number 10.

18 A. This is the plot of the Burch Keely 410. You can  
19 see this well came on well over 100 barrels a day. It  
20 just dropped below 100 barrels after over 6 months.  
21 Again, this is a great well. It's a 10-acre well. But  
22 it's the fifth well within the proration unit.

23 Q. Let's go to your next slide, which has been  
24 marked as Exhibit Number 11.

25 A. Now, there was kind of two aspects that

1 Mr. Broughton alluded to our application here; one of  
2 them being able to fully develop the Paddock on 10-acre  
3 spacing with verticals. And the well assignments have  
4 caused us issues in the past going forward. The other  
5 part being that with four existing wells in the Paddock,  
6 we are unable to access the Blinebry reserves at this  
7 time.

8 And so what we'd like to be able to do is be able  
9 to develop the Blinebry on 10-acre spacing with  
10 horizontals. As you can see from the diagram that's up  
11 there the Paddock is currently producing and the  
12 Blinebry is currently being wasted. So the previous  
13 Paddock development is restricting development of the  
14 Blinebry here.

15 Q. Let's go to your next slide, which is Exhibit  
16 Number 12. What is this exhibit showing us?

17 A. Exactly what I was just talking about. These  
18 are -- I've illustrated four Paddock vertical  
19 completions, and then you see the two horizontal  
20 completions through the proration unit. Those would be  
21 horizontal wells on what are considered to be 10-acre  
22 spacing.

23 Q. And so this is Concho's existing thinking as to  
24 how it would propose to develop the Blinebry?

25 A. At this time we think this is the best way to

1 develop the Blinebry.

2 Q. Let's go to Exhibit Number 13. What does this  
3 slide show?

4 A. This is just a map indicating the location of s  
5 horizontal well that was drilled in the Blinebry. It's  
6 the McIntyre DK Federal 17H. And it's exactly offset  
7 analogous to exactly what we are wanting to do within  
8 the Burch Keely Unit.

9 Q. And is this offset well an example of why Concho  
10 was thinking that a horizontal development of the  
11 Blinebry is a better way to go?

12 A. Yes.

13 Q. Let's go to your next slide, Exhibit Number 14.

14 A. Okay. This is just a plot of the production from  
15 the McIntyre Federal 17H. This is an outstanding well.  
16 It came on well above 200 barrels a day. After almost a  
17 year it's just getting below 100 barrels a day. And  
18 it's a great completion showing the productivity of the  
19 Blinebry immediately offset to the Burch Keely Unit.

20 Q. Let's go to our next slide, which is Concho  
21 Exhibit 16. What does this show us?

22 A. Just to expand a little bit on the issues. What  
23 I tried to indicate here is three proration units that  
24 we would attempt to drill a horizontal well across.  
25 Starting on the left, the proration unit where the

1 surface locations would be located, you only have two  
2 Paddock vertical wells and then four Paddock verticals  
3 and two Paddock verticals. Well, on the surface  
4 locations you're allowed those two extra surface  
5 locations right there and the two extra wellbores. But  
6 you would not be able to drill across that middle  
7 proration unit because it has four existing locations  
8 within it.

9 So it's necessary, in our opinion, to be able to  
10 drill the full-length laterals. You begin losing  
11 benefits of your laterals whenever you begin to shorten  
12 them. And based on the productivity of the McIntyre DK,  
13 as I illustrated earlier, we consider it necessary to be  
14 able to drill these full length. And also, even still,  
15 that middle proration unit, any development would be  
16 restricted there under the current density rule.

17 Q. Anything else on 15?

18 A. I think that's it.

19 Q. Let's go to your next slide.

20 A. This is just a map of -- what I have shaded in  
21 here is the shaded areas indicate proration units that  
22 currently have four active producers within it, so any  
23 further development would be restricted within that  
24 proration unit. I've put red dots on here to indicate  
25 Paddock completions, that would be restricted Paddock

1 10-acre locations. That would be restricted based on  
2 the current density rule. When you begin looking at  
3 reserves for just restrictions within those areas that  
4 I've highlighted here, you're looking at approximately  
5 6 million barrels of oil equivalent out of the Blinebry  
6 and approximately 420,000 barrels of oil equivalent out  
7 of the Paddock. Total development case, you're looking  
8 at upwards of 11 million barrels of oil equivalent out  
9 of the Blinebry that would be restricted under the  
10 current density rule.

11 Now, one thing that's important to note here, and  
12 I'll see if I can do this with this laser, is if you  
13 look -- and I'll be pointing at 24 M, N, and then 24 C  
14 and D. They're on the map. And it would be the  
15 northwest location within 25 C, the location in that  
16 corner right there. So what you could see is that there  
17 is not currently a producing well in that location.  
18 Well, if you look on three sides there, you've already  
19 got four wells per 40 on those three offsetting  
20 proration units.

21 So it would be necessary to put the well in that  
22 location and 24 M to be able to develop that location.  
23 Well, if you put that location there, well, now the  
24 center location, the 10-acre location and 24 M in the  
25 center of the proration unit, you would be restricted

1 from being able to develop that location. Now, my point  
2 is that I've only indicated in gray on there the places  
3 that it's currently a problem. But what I'm saying is  
4 that it's going to continue to perpetuate itself as we  
5 go forward, that there's areas now that going forward  
6 there's no way around being able to develop on 10 acres  
7 unless we get an increased density.

8 Q. So as you continue to drill and develop the unit,  
9 the problem continues?

10 A. Yes.

11 Q. Okay. Let's go to the next slide, which is  
12 Concho Exhibit 17.

13 A. Okay. One of the issues or one of the things it  
14 talked about is, you know, in some areas we've deepened  
15 Paddock wells to the Blinebry. One of the reasons that  
16 we -- there's two reasons that we like the horizontals;  
17 one being that within this unit we have limited exposure  
18 due to that 5,000 foot ownership area, so we're not able  
19 to get the full Blinebry section in our completions.  
20 That limits the effectiveness of the deepenings.

21 Now, also we think we're seeing a little bit of  
22 increased recovery with the horizontals and so there's  
23 another benefit there. We think that we'll actually  
24 recover more oil with the horizontals due to the  
25 heterogeneity of the reservoir and the ability to be

1     able to put more frac planes in there with those  
2     horizontals and better drain the reservoir.

3           Q.   So this illustrates why in Concho's opinion  
4     simply reentering those existing Paddock wells doesn't  
5     make economic sense?

6           A.   Yes, it does not make economic sense. And I've  
7     included some costs on there to show that even just from  
8     a capital perspective you're spending about half just to  
9     drill a horizontal versus deepening eight vertical wells  
10    to the Blinbry.

11          Q.   Based on your engineering study of the area, what  
12    in your expert opinion should be spacing or well density  
13    for this unit?

14          A.   At this time Concho would like to develop this  
15    acreage on 10-acre spacing.

16          Q.   And does that mean in the Paddock, for example,  
17    that that may mean because of the way the unit has been  
18    developed it may mean more than four wells in the  
19    Paddock and the spacing unit?

20          A.   Yes, it could.

21          Q.   And in your opinion will the granting of this  
22    application be in the best interest of conservation,  
23    prevention of waste, and the protection of correlative  
24    rights?

25          A.   Yes, it will.

1 Q. Were exhibits 7 through 17 prepared by you or  
2 compiled under your direct supervision?

3 A. Yes, they were.

4 MS. MUNDS-DRY: Mr. Brooks, we move to admit  
5 7 through 17 into evidence.

6 EXAMINER BROOKS: Exhibits 7 through 17 are  
7 admitted.

8 [Exhibits 7 through 17 admitted.]

9 MS. MUNDS-DRY: I have nothing further for  
10 Mr. Midkiff.

11 EXAMINER BROOKS: Okay. I have a number of  
12 questions. Are you saying that you anticipate that the  
13 Blinebry will be developed primarily through  
14 horizontals?

15 MR. MIDKIFF: Yes, sir. We believe that's  
16 the most effective way. One of the things that's unique  
17 about the Burch Keely Unit is that the previous operator  
18 did not see, I guess at the time, potential within the  
19 Blinebry, so you have a majority of the penetration is  
20 only go into the Paddock. So essentially the Blinebry  
21 doesn't have any obstructions, and as far as wellbores  
22 mostly across the unit to be able to develop it with the  
23 horizontals.

24 And from a development cost perspective and from  
25 a recovery perspective, we think that horizontals would



1 be the most efficient way to develop this acreage.

2 EXAMINER BROOKS: And you think, then, that  
3 the -- how many wells do you think you would have to  
4 drill across a 40-acre to develop it horizontally?

5 MR. MIDKIFF: Well, we would like to drill  
6 full section laterals, and so that would -- we would  
7 consider two wells across, so two wells per 160 to be  
8 10-acre spacing.

9 EXAMINER BROOKS: So you would think that  
10 two horizontal wells across a 40-acre unit would be the  
11 appropriate number to develop a 40-acre unit?

12 MR. MIDKIFF: At this time that's what we're  
13 prepared to go forward with, yes, sir.

14 EXAMINER BROOKS: And you're talking about  
15 one-mile laterals?

16 MR. MIDKIFF: Yes, sir.

17 EXAMINER BROOKS: But the question being,  
18 what would be necessary to reasonably develop a 40-acre  
19 unit with one-mile laterals? That sounds anomalous, so  
20 I have to be sure I'm articulating correctly. You're  
21 suggesting that the one-mile laterals is the appropriate  
22 length of lateral for development of this formation; is  
23 that correct?

24 MR. MIDKIFF: Yes, sir.

25 EXAMINER BROOKS: And you would need two of

1     them -- a one-mile lateral would involve a 160-acre acre  
2     unit --

3                   MR. MIDKIFF:   Yes, sir.

4                   EXAMINER BROOKS:  -- if you drilled them  
5     through 40-acre units.  You would have to have a  
6     160-acre project area for that, correct?

7                   MR. MIDKIFF:   Yes, sir.

8                   EXAMINER BROOKS:  And you think in that  
9     160-acre project area you would need two laterals to  
10    fully develop that?

11                  MR. MIDKIFF:  At this time that is what we  
12    think is appropriate within the Blinebry.

13                  EXAMINER BROOKS:  Okay.  Now, if the  
14    proposed horizontal well rules were adopted and you were  
15    still limited to four vertical wells but you could have  
16    an unlimited number of horizontal wells then at least so  
17    far as the portion you want to develop with horizontal  
18    wells that would mute this problem, right?

19                  MR. MIDKIFF:   Yes, sir, it would.

20                  EXAMINER BROOKS:  But you also anticipate  
21    doing additional -- do you also anticipate doing  
22    additional development in the Paddock?  You said that's  
23    part of it.

24                  MR. MIDKIFF:   We do, yes, sir.

25                  EXAMINER BROOKS:  And you're going to

1 develop the Paddock on verticals, correct?

2 MR. MIDKIFF: Yes, sir. We have some areas  
3 within the Burch Keely that we're considering  
4 horizontals.

5 EXAMINER BROOKS: In the Paddock?

6 MR. MIDKIFF: Yes, sir, within the Paddock.  
7 But majority of the acreage, yes, sir. And the majority  
8 of the issue is the vertical locations.

9 EXAMINER BROOKS: Now, I think I said it,  
10 but I want to clarify. In the Blinebry you think that  
11 the two horizontals across a unit would actually have  
12 greater -- produce more. Ultimate recovery from the  
13 unit would be greater than if you developed the four  
14 verticals; is that correct?

15 MR. MIDKIFF: We only have one Blinebry  
16 horizontal at this time that I know of. And we think  
17 that we're seeing increased recovery off of that  
18 horizontal versus what eight vertical locations would be  
19 across the same area.

20 EXAMINER BROOKS: And that's eight vertical  
21 locations in the same zone or is that four in the  
22 Paddock and four --

23 MR. MIDKIFF: No, no, no. That is just  
24 Blinebry reserves.

25 EXAMINER BROOKS: Okay. So you're saying

1     that eight within what area?

2                 MR. MIDKIFF:   Within a 160, like I was  
3     saying.   Along the path of what the horizontal wellbore  
4     would be.

5                 EXAMINER BROOKS:   But eight within a 160 is  
6     two vertical wells per section average per quarter  
7     quarter section.

8                 MR. MIDKIFF:   Yes.   Two per quarter quarter.  
9     So ultimate development of a 160 would be two  
10    horizontals and 16 vertical locations.

11                EXAMINER BROOKS:   Right.   So you're saying  
12    that the horizontals and the data you have, which you  
13    only have one horizontal so you don't have much data.

14                MR. MIDKIFF:   Yes, in the Blinebry.

15                EXAMINER BROOKS:   But you're saying that the  
16    data you have tends to indicate that one horizontal --  
17    are you saying one horizontal in a 160 unit will develop  
18    more ultimate reserves than eight verticals in the same  
19    160?   Is that what you're saying?

20                MR. MIDKIFF:   It will develop the same area  
21    but I think it will drain more reserves.

22                EXAMINER BROOKS:   Yeah.   So the ultimate  
23    recovery will be greater?

24                MR. MIDKIFF:   Yes, sir.

25                EXAMINER BROOKS:   And that's really all

1 you're prepared to say at this point because that's as  
2 far as your experience goes; is that correct?

3 MR. MIDKIFF: Yes, sir.

4 EXAMINER BROOKS: Now, you talked about  
5 drilling new Blinebry wells as opposed to deepening  
6 Paddock wells, and I don't know anything about what's  
7 feasible and what's not in terms of multiple production.  
8 In the northwest they always want to produce as many  
9 zones as possible, it seems like, in each well. But I  
10 take it there's probably some technical difficulties in  
11 producing from the up hole portion of a well that's been  
12 diverted to make it a horizontal; is that correct?

13 MR. MIDKIFF: Well, you also have to have  
14 the appropriate casing sizes within the existing  
15 vertical wells to be able to kick off and do laterals.

16 EXAMINER BROOKS: Right.

17 MR. MIDKIFF: And that's not necessarily  
18 present in many of these wells. And, in fact, I would  
19 go as far as to say it's not present in any of these  
20 wells. Now, I probably shouldn't say that, but that's  
21 my thinking at the time.

22 EXAMINER BROOKS: Any is always a step out?

23 MR. MIDKIFF: Yes, sir.

24 EXAMINER BROOKS: Okay. Now, when we get to  
25 trying to say how we're going to articulate this in

1 terms of an order, I was just thinking about it and it  
2 seems to me maybe we're going to need to have a set --  
3 to achieve what you're trying to do we're going to need  
4 to put a setback distance between wells, which is  
5 something we don't usually do in New Mexico. It's very  
6 often done in other states, I think, but not in  
7 New Mexico. Is that a viable concept?

8 MR. MIDKIFF: From a surface location,  
9 having to be --

10 EXAMINER BROOKS: No. We're talking  
11 about -- yeah, well --

12 MS. MUNDS-DRY: Are you really thinking the  
13 Paddock, the vertical wells?

14 EXAMINER BROOKS: Well, you're developing  
15 Blinebry all horizontally, so we don't really have --  
16 and we may not have any issue because presumably, at  
17 least that portion of the horizontal well rule is  
18 probably going to be adopted. And we can just sit on  
19 this order until the commission acts and then we won't  
20 have to worry about how to write it.

21 MS. MUNDS-DRY: Well, let's hope that's not  
22 too long then, Mr. Hearing Officer.

23 EXAMINER BROOKS: Well, I was going to ask  
24 you what the constraints might be on that because I hate  
25 to have to really work out something that's fairly

1 complicated to work out that's probably not going to  
2 matter. But on the other hand, we attempt to serve our  
3 client -- or our customers. That's what they are,  
4 customers.

5 MS. MUNDS-DRY: Well, could we ask  
6 Mr. Midkiff and if he has -- I think this is driven by  
7 some drilling plans, which is why we didn't wait for the  
8 horizontal well rules.

9 EXAMINER BROOKS: Okay.

10 MS. MUNDS-DRY: We can have Mr. Midkiff to  
11 elaborate on that.

12 EXAMINER BROOKS: Well, of course, the easy  
13 way to do this for me would be to request Ms. Munds-Dry  
14 to prepare a proposed order.

15 MS. MUNDS-DRY: I would have happy to do  
16 that.

17 EXAMINER BROOKS: I know she has a few other  
18 things on her mind at the moment.

19 MS. MUNDS-DRY: I still have a few days  
20 left, so I would be happy to do that.

21 EXAMINER BROOKS: I'm thinking of how we are  
22 going to define this 10-acre spacing pattern when we're  
23 dealing with 40-acre units. And this has not been  
24 noticed as a case in which we're to reconfigure the  
25 spacing unit. So change the rules on the size of

1 spacing units. So, you know, it seems to me that where  
2 we're dealing with the vertical wells we could probably  
3 deal with it by a setback between what's a minimum. We  
4 could say you can have up to five wells per spacing unit  
5 provided that they must be at least -- would five be an  
6 enough or they're going to need more than five?

7 MR. MIDKIFF: Well, there are proration  
8 units with open 10-acre locations that do have, I  
9 believe, up to 6 wells already assigned. If you look at  
10 Exhibit Number 7 you could see you can have up to nine  
11 wells on 10-acre spacing, you know, within or on the  
12 boundaries of the proration unit. And in some areas  
13 there are, that I've seen, 6 wells within a single  
14 proration unit already.

15 EXAMINER BROOKS: Well, I don't how you  
16 could ever get more than 6. Maybe you could. As I say,  
17 the easiest way to do this is to let Ms. Munds-Dry and  
18 Mr. Midkiff prepare a proposed order.

19 MS. MUNDS-DRY: We'll be happy to do that.

20 EXAMINER BROOKS: Okay. Mr. Jones, you had  
21 some questions?

22 EXAMINER JONES: Yeah. When you say well  
23 density, well spacing, I wish you would say well  
24 density.

25 MR. MIDKIFF: Okay. Yes, sir.



1 EXAMINER JONES: Because that's more of a  
2 reservoir engineering term and spacing is more of a  
3 proration and regulatory kind of term.

4 Because it looks to me like it would need to be  
5 readvertised because it's advertised as four wells  
6 for -- in the Paddock four wells, in the Blinebry.  
7 Yeah, and that kind of implies four wells per 40-acre  
8 spacing. And so I don't know why -- it looks like  
9 you're gearing up, as a reservoir engineer ought to, to  
10 drill the wells the right way for drainage but also  
11 possible water flood or something in the future.

12 MR. MIDKIFF: That is, yes, sir.

13 EXAMINER JONES: So within water plugs, you  
14 know, unlimited wells are allowed. You put them  
15 wherever. So you have the spacing depending on which  
16 way the water is telling you it's going to go.

17 MR. MIDKIFF: Okay.

18 EXAMINER JONES: So instead of limiting the  
19 distance between wells I don't really -- if we give  
20 these guys the option of drilling it where they want,  
21 but I don't like the way it's advertised right now.

22 MR. MIDKIFF: Yes, sir.

23 MS. MUNDS-DRY: And that's why flagged that  
24 at the beginning. We recognize that may be a limitation  
25 that we may need to renotify with some upward density

1 amount that --

2 EXAMINER JONES: Unlimited density.

3 MS. MUNDS-DRY: I don't know what, but we  
4 can think about that and renotify.

5 EXAMINER JONES: Because Mr. Brooks can  
6 decide. But I'm just saying you're looking at it from a  
7 reservoir engineering standpoint, and I think that's  
8 great. But then the terminology is different, the way  
9 we look at it from as a landman.

10 MR. MIDKIFF: I've been hanging out with a  
11 landman.

12 MS. MUNDS-DRY: Not that there's anything  
13 wrong with that.

14 EXAMINER JONES: Well, you're in it anyway.

15 MR. MIDKIFF: Yes, sir.

16 EXAMINER JONES: You're within the unit.  
17 And what did Wesley think about this?

18 MR. MIDKIFF: Well, I visited with him, and  
19 I don't want to put words into his mouth. But he  
20 understood our application and didn't seem opposed  
21 whenever he understood what we were talking about. I  
22 mean, he understood that the Blinebry would go  
23 undeveloped if we were not able to get increased  
24 density.

25 EXAMINER JONES: And you didn't want to

1 split the pools because that would set off a split pool  
2 all over the area. There's probably no need to do that.

3 EXAMINER BROOKS: Let me look at this  
4 advertisement a minute.

5 EXAMINER JONES: And as far as NSLs go, you  
6 didn't ask for that in here either, did you?

7 MS. MUNDS-DRY: No, we did not.

8 EXAMINER JONES: But you could have?

9 MS. MUNDS-DRY: And we could if we renotify.  
10 We could amend and renotify.

11 EXAMINER JONES: That way Mr. Brooks would  
12 be so busy at his desk he could write hearing orders for  
13 the rest of us. He does the NSLs.

14 MS. MUNDS-DRY: Yes, he does.

15 EXAMINER JONES: I don't have any more  
16 questions.

17 EXAMINER BROOKS: Well, I think Mr. Jones is  
18 correct. I think clearly that this needs to be  
19 readvertised.

20 MS. MUNDS-DRY: Okay.

21 EXAMINER BROOKS: My instinct is I don't  
22 think that notice to the mineral owner is required;  
23 however, if you're going to readvertise it and since  
24 there's only one mineral owner that would be very easy.  
25 I would advise that we do that.

1 MS. MUNDS-DRY: We can certainly do that.

2 EXAMINER BROOKS: Now, I am going to need a  
3 proposed order. But if we're not -- it's not going to  
4 be an issue for four weeks because we're going to have  
5 to set it four weeks off to give you time to renotece.

6 MS. MUNDS-DRY: Well, Mr. Brooks, I'm sure  
7 Mr. Feldewert or Mr. Rankin would be glad to take care  
8 of all of this in a month.

9 EXAMINER BROOKS: Okay. Well, I'm not sure  
10 they would do so with equal -- whatever it takes, but I  
11 think they would probably do so.

12 MS. MUNDS-DRY: I appreciate that,  
13 Mr. Brooks.

14 EXAMINER BROOKS: Not at your level of  
15 experience.

16 MS. MUNDS-DRY: So would you like us to  
17 continue it for a month?

18 EXAMINER BROOKS: Yeah. I'm through with  
19 Mr. -- unless you have some follow up?

20 MS. MUNDS-DRY: I have nothing further.

21 EXAMINER BROOKS: Very good.

22 MS. MUNDS-DRY: Well, I do actually have one  
23 question.

24 Go ahead, Mr. Jones.

25 EXAMINER JONES: No. I would just say do it

1 the way you think it should be done as a reservoir  
2 engineer and get with your geologist.

3 MR. MIDKIFF: Okay. Yes, sir.

4 EXAMINER JONES: And obviously you're within  
5 the unit, so the landman is pretty happy.

6 MS. MUNDS-DRY: And I did want to ask  
7 Mr. Midkiff one follow-up question just in terms of the  
8 horizontal well rules and why we didn't wait.

9 Q. (By Ms. Munds-Dry) Mr. Midkiff, could you  
10 explain to the Examiners what Concho's drilling plans  
11 are and why we're needing this now rather than later?

12 A. Right. Well, we were hoping to get Blinebry  
13 horizontal permits back any day now, really, to begin  
14 our development program in this. So it is something  
15 that is urgent within our company. It's something that  
16 we're actively trying to permit.

17 MS. MUNDS-DRY: That's all I have.

18 EXAMINER BROOKS: Yeah. I think we should  
19 readvertise it and it should be reset for December -- or  
20 continued to December 15th. You might also want to  
21 think about, as Mr. Jones suggested, amending your  
22 application to request that -- and I don't have the  
23 terms of what you actually applied for. I don't know.

24 MS. MUNDS-DRY: To include the non-standard  
25 locations.

1 EXAMINER BROOKS: Yeah, to include the  
2 exemptions from the internal setbacks. You're still  
3 going to want to maintain the 330 setback around the  
4 exterior boundary of the Burch Keely Unit.

5 MS. MUNDS-DRY: Sure. We've had some  
6 experience in some other cases with that request.

7 EXAMINER BROOKS: Yes. I have heard a lot  
8 about the Rosa Unit.

9 MS. MUNDS-DRY: Yes.

10 EXAMINER BROOKS: Okay. Case Number 14759  
11 will be continued until December 15th.

12 MS. MUNDS-DRY: Thank you, Mr. Brooks, and  
13 thank you, Mr. Jones.

14 [Case number 14759 continued.]

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I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Examiner hearing of Case No. 14759  
heard by me on Nov 10, 2011  
*David K. Brooks* Examiner  
Oil Conservation Division

## REPORTER'S CERTIFICATE

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3 I, Lisa Reinicke, New Mexico Provisional  
4 Reporter, License #P-405, working under the direction  
5 and direct supervision of Paul Baca, New Mexico CCR  
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7 District Court, District of New Mexico, do hereby  
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11 was reduced to printed form under my direct supervision.

12 I FURTHER CERTIFY that I am neither employed by  
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15 disposition of this case in any court.

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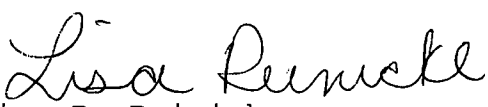
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