

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.: 14669

APPLICATION OF COG OPERATING LLC FOR THE CREATION OF A  
NEW POOL, SPECIAL POOL RULES AND THE CONTRACTION OF  
CERTAIN GRAYBURG JACKSON POOLS WITHIN THE DODD FEDERAL  
UNIT, EDDY COUNTY NEW MEXICO,

AND

Case No.: 14670

APPLICATION OF COG OPERATING LLC FOR THE CREATION OF A  
NEW POOL, SPECIAL POOL RULES AND THE CONTRACTION OF THE  
GRAYBURG JACKSON POOL WITHIN THE BURCH KEELY UNIT, EDDY  
COUNTY, NEW MEXICO.

REPORTER'S TRANSCRIPT OF PROCEEDINGS  
EXAMINER HEARING

BEFORE: DAVID K. BROOKS, Legal Examiner  
WILLIAM JONES, Technical Examiner

DATE: June 23, 2011  
Santa Fe, New Mexico

This matter came on for hearing before the New  
Mexico Oil Conservation Division, DAVID K. BROOKS,  
Legal Examiner, and WILLIAM JONES, technical Examiner,  
on Thursday, June 23, 2011, at the New Mexico Energy,  
Minerals and Natural Resources Department, 1220 South  
St. Francis Drive, Room 102, Santa Fe, New Mexico.

REPORTED BY: Irene Delgado  
Paul Baca Professional Court Reporters  
500 Fourth Street, NW, Suite 105  
Albuquerque, NM 87103

RECEIVED OGD  
2011 JUL 12 A 9:10

A P P E A R A N C E S

FOR THE APPLICANT:

OCEAN MUNDS-DRY

HOLLAND & HART

110 N Guadalupe Street, Suite 1

Santa Fe, NM 87501

FOR CONOCO CASE 14670:

CAMPBELL TRIAL LAW LLC

MICHAEL CAMPBELL

110 N Guadalupe Street, Suite 6

Santa Fe, NM 87501

I N D E X

STUART DIRKS

Direct by Ms. Munds-Dry 06

Cross by Mr. Campbell 15

Redirect by Ms. Munds-Dry 24

HARVIN BROUGHTON

Direct by Ms. Munds-Dry 26

Cross by Mr. Campbell 39

T J MIDKIFF

Direct by Ms. Munds-Dry 47

Cross by Mr. Campbell 53

EXHIBITS 1-5, 14 ADMITTED 15

EXHIBITS 6-11 ADMITTED 38

EXHIBITS 12, 13 ADMITTED 52

1 EXAMINER JONES: Let's go back on the record.  
2 We will call Cases 14669 and 14670. 14669 is the  
3 application of COG Operating LLC for the creation of a  
4 of a new pool, special pool rules and the contraction  
5 of certain Grayburg Jackson Pools within the Dodd  
6 Federal Unit, Eddy County, New Mexico.

7 Case 14670 is application of COG Operating  
8 LLC for the creation of a new pool, special pool rules  
9 and contraction of the Grayburg Jackson Pool within the  
10 Burch Keely Unit, Eddy County, New Mexico.

11 Call for appearances.

12 MS. MUNDS-DRY: Good afternoon, Mr. Examiner.  
13 Ocean Munds-Dry with the law firm of Holland and Hart  
14 LLP, here representing COG Operating LLC, and I have  
15 three witnesses today.

16 EXAMINER JONES: Other appearances?

17 MR. CAMPBELL: Mr. Examiner, my name is  
18 Michael Campbell. I'm a lawyer here in Santa Fe  
19 appearing for Conoco Philips Company in Case 14670.

20 EXAMINER JONES: Any witnesses?

21 MR. CAMPBELL: Not from me, Your Honor.

22 EXAMINER JONES: You just have an entry. Is  
23 that correct?

24 MR. CAMPBELL: Pardon me?

25 EXAMINER JONES: Entry of appearance?

1 MR. CAMPBELL: I entered an appearance.

2 EXAMINER JONES: Do you want to sit over  
3 here?

4 MR. CAMPBELL: Be happy to sit wherever.

5 EXAMINER JONES: As long as --

6 MR. CAMPBELL: As long as -- as I don't block  
7 the projector.

8 MS. MUNDS-DRY: We can maybe move the table  
9 over a little bit. Would that help?

10 EXAMINER JONES: Just drag it over. Thank  
11 you. Will the COG witnesses please stand and state  
12 your names.

13 MR. DIRKS: Stuart Dirks.

14 MR. BROUGHTON: Harvin Broughton.

15 MR. MIDKIFF: TJ Midkiff.

16 EXAMINER JONES: Will the court reporter  
17 please swear the witnesses.

18 (Witnesses duly sworn.)

19 MS. MUNDS-DRY: Mr. Examiner, if it's all  
20 right, I have a brief opening. It's really just  
21 background to put this case into context, if I may.

22 EXAMINER JONES: Okay.

23 MS. MUNDS-DRY: Thank you, Mr. Examiner. As  
24 you are, I'm sure, well aware, the Grayburg Jackson  
25 Pool and the Grayburg Jackson Yeso Pool which is split

1 out of the Grayburg Jackson Pool and comprises the  
2 vertical and horizontal limits of the Dodd Unit include  
3 multiple formations from the top of the Seven Rivers,  
4 and it varies with whether it's in the Burch Keely or  
5 in the Dodd, but right now it's in the Burch Keely to  
6 5,000 feet, and in the Dodd approximately the Paddock,  
7 the order for the pool is a little confusing. It's the  
8 Yeso, but it's the Paddock as well.

9           So in any event, both of the units, the Dodd  
10 Federal Unit and the Burch Keely Unit are both  
11 secondary recovery operations, and Concho is the  
12 operator of both of those units, currently is  
13 waterflooding in the Grayburg San andres Pool, and in  
14 those formations, I should say.

15           COG also has active drilling programs ongoing  
16 and planned for the Yeso in both of those. So it's  
17 kind of created a situation where they have secondary  
18 and primary recovery in the same pool, so you can see  
19 it's a setup for a bit of a complication.

20           In addition, recently, Mr. <sup>EZ</sup>"Zano" -- the  
21 Division heard the application of Concho to increase  
22 allowable in certain Yeso Pools along the Shelf. The  
23 Grayburg Jackson was actually in that application and  
24 was dismissed from that application with prejudice, as  
25 Mr. Brooks is undoubtedly familiar with, because

1 Concho's really only intention was to increase the  
2 allowable for the Yeso. It's not at this time looking  
3 to really increase the allowable in the Grayburg San  
4 Andres or any shallower formation.

5 So that's why we have come to you now with  
6 this setup, with this application, to separate the  
7 shallower formation from the deeper formation and  
8 attempt to separate the primary and secondary recovery  
9 operations that we have in those.

10 So I just wanted to give you that background  
11 to try to give you some context as to why we are here  
12 today in the fashion that we are here today.

13 EXAMINER JONES: Okay.

14 MS. MUNDS-DRY: With that, Mr. Jones, we will  
15 call our first witness.

16 EXAMINER JONES: Okay. So you intend to  
17 present the whole case -- all of the cases?

18 MS. MUNDS-DRY: We will present the same  
19 evidence, and so we will present both of them.

20 STUART DIRKS

21 (Having been sworn, testified as follows:)

22 DIRECT EXAMINATION

23 BY MS. MUNDS-DRY:

24 Q. Would you please state your full name for  
25 the record?

1 A. My name is Stuart Dirks.

2 Q. And, Mr. Dirks, where do you reside?

3 A. I live in Midland, Texas.

4 Q. And by whom are you employed?

5 A. Concho Resources.

6 Q. And what is your position with Concho?

7 A. I'm a senior landman.

8 Q. And what do your duties as senior landman  
9 include?

10 A. All types of land work, leasing, term  
11 assignments, making deals, operating agreements, title.

12 Q. And do you have an area of responsibility?

13 A. Yes, I do.

14 Q. And where is that?

15 A. It's on the Shelf in Eddy County, New  
16 Mexico.

17 Q. Okay. And have you previously testified  
18 before the Division?

19 A. No, I have not.

20 Q. Would you, please, for the Examiner,  
21 briefly review your educational work history pertinent  
22 to being landman.

23 A. I received a bachelor of science degree in  
24 geophysical engineering from Colorado School of Mines  
25 in 1981. Spent the next 30 years in the oil and gas

1 industry, primarily with Getty, Texaco, Merilot and now  
2 Concho for the past six years, and I am a certified  
3 professional landman.

4 Q. And in your position with Getty and Texaco  
5 and what was the last one you mentioned?

6 A. Merilot.

7 Q. What was your position with those  
8 companies? Did you do land work there as well?

9 A. Not for Getty. For Getty I was a  
10 geophysicist. For Texaco I was a geophysicist and  
11 landman, and, for Merilot, mostly landman with  
12 geophysicist.

13 Q. Are you familiar with the applications  
14 that have been filed by Concho in cases 14669 and  
15 14670?

16 A. Yes, I am.

17 Q. Are you familiar with the status of the  
18 land in the Burch Keely Unit and Dodd unit?

19 A. Yes, I am.

20 MS. MUNDS-DRY: Mr. Examiner, we tender  
21 Mr. Dirks as an expert in petroleum land matters.

22 EXAMINER JONES: Any objection?

23 MR. CAMPBELL: No.

24 EXAMINER JONES: Mr. Dirks, when you worked  
25 for Texaco, where were you at?



1 WITNESS: I was in Denver.

2 EXAMINER JONES: What years?

3 WITNESS: Fifteen years, and then here in  
4 Midland for a year and a half. From 84, when they  
5 bought Getty, until 97.

6 EXAMINER JONES: You were in Denver in 90  
7 through 97?

8 WITNESS: Yes.

9 EXAMINER JONES: What group did you work  
10 with? Different groups, probably?

11 WITNESS: Mostly just the Rockies. When I  
12 was in Denver, mostly the Rockies.

13 EXAMINER JONES: Ed Burrow. Did you know Ed  
14 Burrow?

15 WITNESS: Yes, I do. Bill Angster.

16 EXAMINER JONES: Yeah, Bill. Well, he is so  
17 qualified as an expert landman.

18 MS. MUNDS-DRY: Thank you.

19 Q. Mr. Dirks, would you briefly summarize for  
20 the Examiners what Concho seeks in this application?

21 A. Yes.

22 Q. Let's start with Case 14669, which I  
23 believe is for the Burch Keely.

24 A. Burch Keely. For the Burch Keely Unit  
25 we're applying to contract the vertical limit of the

1 Grayburg Jackson Pool to the top of the Glorieta  
2 Formation, and then create a new pool from the top of  
3 the Glorieta to 5,000 feet.

4 Q. I'm sorry, that's for Case 14670. I got  
5 them backwards. So if you could, explain for the  
6 Examiners Case 14669 for the Dodd.

7 A. For the Dodd Unit, we are applying to  
8 contract the Grayburg Jackson Yeso Pool to the top of  
9 the Glorieta and create a new pool from the top of the  
10 Glorieta to the top of the Tubb.

11 Q. And, Mr. Dirks, I believe also part of our  
12 application is to increase the allowable.

13 A. That's correct. That's part of our  
14 application, but we are not discussing that today, I  
15 believe.

16 Q. We discussed that procedural divide with  
17 the Examiner and with Mr. Campbell, and you understand  
18 we are going to talk about those issues another day?

19 A. Another day, yes.

20 Q. Okay. If you could turn to what's been  
21 marked as Concho's Exhibit Number 1, please, and review  
22 for the Examiner.

23 A. Exhibit Number 1 is a portion of the Shelf  
24 centered on the Dodd and Burch Keely Unit, and this map  
25 covers the Township 17 South from 27 to 33 East in Eddy

1 County, and it shows all the existing Yeso Pools in  
2 this area.

3 Q. Just for the record, this indicates some  
4 notes regarding allowable and GOR limits which we are  
5 not going to discuss today, right?

6 A. That is correct.

7 Q. Let's turn to what's been marked as Concho  
8 Exhibit 2.

9 A. The Exhibit Number 2 is a map of the  
10 Grayburg Jackson Pool. That's what's outlined in the  
11 dark blue there. The light blue shows the Dodd and  
12 Burch Keely, and I should mention that the Dodd, that  
13 is the one that has the separate pool. This map  
14 together with the last map shows that, generally  
15 throughout this area, generally the Glorieta Yeso is a  
16 separate pool.

17 This map is also the first step in our  
18 notification process. It shows this heavy dark line  
19 with the one mile offset for notice purposes, and then  
20 all the offset pools within the one mile are all the  
21 gray area.

22 Q. So the heavy dark line borders, the gray  
23 area which indicates our one mile --

24 A. This is the one mile offset, yes, and then  
25 all the offsets pool within one mile offset.

1 Q. And then dark blue is all the other Yeso  
2 Pools.

3 A. That's Grayburg Jackson.

4 Q. That's the Grayburg Jackson. Okay. Let's  
5 turn to Concho Exhibit Number 3.

6 A. Exhibit Number 3 is -- basically it's the  
7 previous map taken to the next step in the notification  
8 process. It's color coded to show the operators whom  
9 we notified, those being all the operators within the  
10 Grayburg Jackson Pool and all the offset operators in  
11 same formation not assigned to the pool which would be  
12 the gray area.

13 Q. And I believe at the bottom there it  
14 indicates the key, the color code?

15 A. Color code for which -- yes.

16 Q. And let's go then next to Concho Exhibit  
17 Number 5. What is this?

18 A. Concho Exhibit Number 5 shows the offset  
19 operators to the Dodd in the Glorieta Paddock whom we  
20 notified. This is the separate exhibit for the  
21 previous exhibit, due to the extended vertical limits,  
22 it just -- it was kind of messy trying to graphically  
23 display 3-D on a 2-D map, so we broke it out to make it  
24 a little simpler.

25 Q. And you have something similar here in

1 Concho Exhibit Number 5?

2 A. That's correct. This is the same as the  
3 previous slide except for the Burch Keely unit. It  
4 shows the offset operators we notified to the Burch  
5 Keely in the Glorieta down at 5,000 feet, and again a  
6 separate display due to the expansion of the vertical  
7 limits.

8 Q. And then, Mr. Dirks, I'm going to ask you  
9 to go to the very last exhibit, which is Concho Exhibit  
10 Number 14.

11 A. Oh, yes.

12 Q. Is that a copy of our notice packet?

13 A. Yes, it is.

14 Q. That includes the affidavit signed by me,  
15 the list of parties that were notified, as you  
16 indicated with your map?

17 A. Yes.

18 Q. The affidavit of publication, a copy of  
19 our letter, and then the green cards that we received  
20 back from the parties we notified?

21 A. Yes.

22 Q. Is that all included in there?

23 A. Yes.

24 Q. And, Mr. Dirks, before we conclude your  
25 testimony, if you could explain to the Examiner, how

1 does this application benefit Concho?

2 A. Both of these units are, as Ocean  
3 mentioned, are federal secondary recovery units.  
4 Granting these applications would prevent waste because  
5 it would allow us to pursue our secondary development  
6 in the Grayburg San Andres and pursue primary  
7 development in the Glorieta Yeso.

8 Q. And does it help with the more orderly  
9 development if we split these pools from your primary  
10 and secondary recovery operation?

11 A. Yes, it would also help -- we could use  
12 the existing infrastructure which would improve the  
13 economics. It would reduce regulatory burdens, and,  
14 like you said, allow more orderly development.

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

19 A. Yes.

20 Q. And were Exhibits 1 through 5 prepared by  
21 you or members of your team and approved and reviewed  
22 by you under your supervision?

23 A. Yes.

24 Q. And was Exhibit 14 prepared by you or  
25 under your direction and supervision?

1           A.     It was also prepared by the team and  
2 reviewed by me.

3           MS. MUNDS-DRY: At this time, Mr. Examiner,  
4 we move the admission into evidence of Concho Exhibits  
5 1 through 5 and 14.

6           EXAMINER JONES: Any objection?

7           MR. CAMPBELL: No objection.

8           EXAMINER JONES: 1 through 5 and 14 will be  
9 admitted.

10           (Exhibits 1 -5, 14 admitted.)

11           MS. MUNDS-DRY: That concludes my direct  
12 examination of Mr. Dirks. I pass the witness.

13           CROSS-EXAMINATION

14           BY MR. CAMPBELL:

15           Q.     Mr. Dirks, part of your application in  
16 14670 is to create a new pool from the top of the  
17 Glorieta to 5,000 feet in the Burch Keely unit,  
18 correct?

19           A.     Yes, sir, that's correct.

20           Q.     When you give notification, do you  
21 consider notifying owners who in effect are vertically  
22 offsetting your application below the 5,000 foot level?

23           A.     No.

24           Q.     Is there a reason for that?

25           A.     The OCD rule provides for within the same

1 formation.

2 Q. We can confirm from your Exhibit 14 that  
3 Concho provided no notice to Conoco Philips of this  
4 proceeding, correct?

5 A. I believe that's correct. I can double  
6 check.

7 MS. MUNDS-DRY: It should be your last  
8 exhibit there.

9 A. No, we did not.

10 Q. I didn't see in the -- in your exhibit  
11 package a copy of the application itself in Case 14670.  
12 Can we confirm that the application itself is not  
13 there?

14 A. It's not there. I mean, I'm not --

15 MS. MUNDS-DRY: It's not there.

16 MR. CAMPBELL: Okay. May I approach?

17 EXAMINER JONES: Yes.

18 Q. Mr. Dirks, I have handed you a copy of  
19 Concho's exhibit in case 14670, that matter at hand  
20 here. You say you are familiar with this application?

21 A. Yes.

22 Q. Could you turn to Paragraph 3? In  
23 Paragraph 3 your application references an order  
24 entered February 1, 2011, in which the Division  
25 extended the vertical limits of the Grayburg Jackson to



1 a depth of 5,000 feet. Do you see that?

2 A. Yes, I see that.

3 Q. And in Paragraph 4, your application  
4 states that those vertical limits have, quote, "Become  
5 unworkable," closed quote. Do you see that?

6 A. I see that.

7 Q. Are you aware of the facts supporting the  
8 allegation that the prior order has become unworkable  
9 for your company?

10 A. Would you repeat that, please?

11 Q. Are you aware of the facts supporting the  
12 allegation that the prior order entered by the Division  
13 had become unworkable for your company?

14 A. I believe I'm aware of them, yes.

15 Q. And what are the facts that make the prior  
16 order unworkable?

17 A. Developing the -- the primary development  
18 and secondary development interfere with each other.

19 Q. And the prior order that has become  
20 unworkable was entered January or February 1, 2011?

21 A. That's correct.

22 Q. What facts can you identify between  
23 February 1 of this year and the date of your  
24 application here in May that led you to conclude that  
25 the prior order had become unworkable?

1           A.     Personally I can say that in meetings with  
2     the Bureau of Land Management, they expressed concern  
3     that we were pursuing primary development in a  
4     secondary recovery unit.

5           Q.     Can you point, other than to BLM  
6     allegations in a meeting, as to any operational  
7     unworkability that you discovered resulting from the  
8     prior order?

9           A.     I'm sorry, would you repeat that?

10          Q.     Other than statements by the BLM, can you  
11     identify any operational facts that you discovered  
12     between grant of the prior order in January and the  
13     date of your application in 14670 that led you to  
14     conclude that the prior order was unworkable?

15          A.     By operational facts, what do you mean?

16          Q.     Events in the field.

17          A.     Events in the field, I would defer that to  
18     an engineer.

19          Q.     Who would you defer it to particularly  
20     among your witnesses?

21          A.     That would be TJ.

22          Q.     TJ being?

23          A.     TJ Midkiff.

24          Q.     All right. Now, are you aware that the  
25     order that you refer to here in Paragraph 3 was issued

1 in a case, 14577, which is the second handout I gave  
2 you just a moment ago? This is the order, is it not,  
3 in Case 14577 that you characterize as being unworkable  
4 in Paragraph 4 of your application in this case?

5 A. It appears to be.

6 Q. Are you aware, Mr. Dirks, that that order  
7 in Case Number 14577 is the subject of a pending de  
8 novo review before the Commission scheduled to be heard  
9 on Tuesday?

10 A. I was aware of that, yes.

11 Q. Have you informed the Commission,  
12 Mr. Dirks, that your company has concluded that order,  
13 which is subject to de novo review on Tuesday, is  
14 unworkable?

15 MS. MUNDS-DRY: At this point I'm going to  
16 object, Mr. Examiner. I think this line of questioning  
17 is completely mischaracterizing our application. If  
18 you read the paragraph, it is not referring to the  
19 order, but the vertical limits. It is not referring to  
20 that prior order as being unworkable.

21 EXAMINER BROOKS: Well, I wouldn't sustain  
22 that objection, however, I believe the witness has  
23 indicated that he has no knowledge of the Commission  
24 proceeding, and therefore, presumably has no knowledge  
25 of the basis of which he can answer the question.

1 MR. CAMPBELL: I thought --

2 Q. Are you aware of which the order you  
3 characterize as unworkable in this case is pending de  
4 novo review before the Commission?

5 A. I'm aware of it.

6 Q. Then my question was simply whether you  
7 have informed the Commission in the pending de novo  
8 proceeding that your company now characterizes that  
9 order as unworkable?

10 A. I personally have not. I am not aware if  
11 Concho has. I'm not involved in the de novo hearing.

12 Q. Would you concede, sir, that Concho's  
13 application in this case, 14670, is different from  
14 Concho's application in the Case 14577 currently  
15 pending before the Commission?

16 A. Repeat that again, please?

17 Q. Can you confirm that the relief your  
18 company seeks in this proceeding, 14670 --

19 A. Uh-huh.

20 Q. -- is different than the relief your  
21 company seeks in the application pending before the  
22 Commission in Case Number 14577?

23 A. I am not involved in the de novo hearing.

24 Q. All right. Has the company in this case,  
25 14670, is it seeking different relief than it was

1 seeking in the prior order?

2 A. In the order 10067?

3 Q. Yes, sir.

4 A. Different relief? I cannot speak to the  
5 intent of this order.

6 Q. Well, I'm asking you to speak to the  
7 intent of your application that led to the order. In  
8 that application, 14577, you asked for extension of the  
9 Grayburg Jackson Unit to a depth of 5,000 feet, did you  
10 not?

11 A. The company did, yes.

12 Q. And now you are seeking a contraction of  
13 that depth limitation, correct?

14 A. I could not -- I was not involved in the  
15 extension. I cannot speak --

16 Q. Excuse me. Is anybody on your witness  
17 list able to answer this question?

18 A. I don't believe so.

19 Q. All right, sir. Thank you, Mr. Dirks,  
20 that's all I have.

21 EXAMINER JONES: I will ask a couple and  
22 then turn it over to David here. You were pretty  
23 versatile going from geophysics to a landman. Of  
24 course everybody somehow wanted to abandon geophysics,  
25 go for something else. In this instance you are going

1 from Seven Rivers down to the top of the Glorieta and  
2 are you -- are you proposing to -- is there any  
3 separation of ownership? There would be to the top of  
4 the Burch Keely and Dodd Federal Unit, I guess. Is  
5 that correct?

6 WITNESS: Are you talking about the Dodd?

7 EXAMINER JONES: As far as notice goes in  
8 this, you had to notify everybody within the boundaries  
9 of this. Tell me again who -- what criteria you used  
10 to determine who to notify for the separation of the  
11 three units.

12 WITNESS: We notified all operators within  
13 the pool and all operators within a mile offset.

14 EXAMINER JONES: Of the entire Grayburg  
15 Jackson Pool?

16 WITNESS: Yes, sir, that's correct. All  
17 operators within the one mile offset in the same  
18 formation not dedicated to another pool.

19 EXAMINER JONES: That's how I remember the  
20 rule reads, if you do something that's going to affect  
21 the whole pool -- so that's how you did it then?

22 WITNESS: That's correct.

23 EXAMINER JONES: Okay. And so that would  
24 include, as far as -- Concho is the operator of this  
25 Dodd Federal Burch Keely, so their working interest

1 owners would know about it, obviously, but between  
2 Seven Rivers and the Grayburg San Andres, you've got  
3 some shallow wells out here. Is that correct?

4 WITNESS: Correct.

5 EXAMINER JONES: So those people got  
6 notified, too. Is that correct?

7 WITNESS: Yes. Yes. It's -- in the Burch  
8 Keely, it's common ownership to 5,000 feet, and in the  
9 Dodd the leases are common ownership at least to the  
10 base of the Yeso.

11 EXAMINER JONES: Okay. All right. I better  
12 turn it over to David, here.

13 EXAMINER BROOKS: Well, to follow up a little  
14 bit of what Mr. Campbell was asking, you are aware of  
15 what your company is asking for in the application in  
16 this proceeding, correct?

17 WITNESS: Yes, sir.

18 EXAMINER BROOKS: And are you asking -- well,  
19 are you aware that -- that the order that Mr. Campbell  
20 referred to, Order Number 10067, extended the depth  
21 limitation of the Grayburg Jackson Pool to 5,000 feet  
22 below the surface?

23 WITNESS: For the Burch Keely, yes, sir.

24 EXAMINER BROOKS: Okay. But you're not  
25 asking us now to change that depth limitation, are you?

1 You are asking -- as I understand it, you are asking to  
2 create a new pool that will go from the top of the  
3 Glorieta to 5,000 feet.

4 WITNESS: That is correct, yes.

5 EXAMINER BROOKS: Okay. So there will still  
6 be a pool that extends through the Glorieta and Yeso  
7 down to 5,000 feet, under your proposal?

8 WITNESS: Two separate pools.

9 EXAMINER BROOKS: Right.

10 WITNESS: Yes, sir.

11 EXAMINER BROOKS: Okay. That's all I wanted  
12 to clarify. And all you're -- the relief you are  
13 asking or what you are asking for in the Glorieta and  
14 in the Dodd Federal is to split the Grayburg San Andres  
15 on the one hand into one pool and the Glorieta Yeso  
16 into another?

17 WITNESS: Yes, sir, that's correct.

18 EXAMINER BROOKS: I think that's all I have,  
19 all the questions I have.

20 MS. MUNDS-DRY: I have one or two redirect to  
21 make sure this was clear.

22 REDIRECT EXAMINATION

23 BY MS. MUNDS-DRY:

24 Q. Mr. Dirks, do you still have the  
25 application in front of you, the handout from Mr.



1 Campbell, or application?

2 A. Yes.

3 Q. If you could turn to the third page,  
4 Paragraph 4, if you could read that paragraph, just the  
5 first sentence?

6 A. Okay. "The vertical limits of this pool  
7 has become unworkable due to Concho's primary and  
8 secondary recovery efforts inside the Burch Keely Unit  
9 boundaries."

10 Q. And besides the poor grammar of the author  
11 of that application, what is the reference to  
12 unworkable? What is that referring to? What is  
13 referring to being unworkable? Is it the vertical  
14 limits of that pool?

15 MR. CAMPBELL: Objection. Calls for  
16 speculation and leading.

17 MS. MUNDS-DRY: It's reading --

18 MR. CAMPBELL: Put Ms. Munds-Dry on the stand  
19 and ask her what she is reading.

20 EXAMINER BROOKS: Well, I will overrule the  
21 objection. The witness can answer if he has knowledge.  
22 If he doesn't have knowledge, he can say he doesn't  
23 have it.

24 Q. Can you tell me what you think that means?

25 A. What I think the unworkable means? Is

1     that what you are asking?

2             Q.     Yes.

3             A.     My understanding of the unworkable is  
4     trying to do this -- I don't know how to state this --  
5     secondary recovery and primary, it interferes. It  
6     would be much easier to have two separate pools for the  
7     two distinct operations.

8             MS. MUNDS-DRY: I think that's it. No  
9     further questions from Mr. Dirks.

10            EXAMINER JONES: Thanks a lot, Mr. Dirks.

11            THE WITNESS: Thank you.

12            MS. MUNDS-DRY: Call our next witness, Mr.  
13     Broughton.

14                         HARVIN BROUGHTON

15            (Having been sworn, testified as follows)

16                         DIRECT EXAMINATION

17     BY MS. MUNDS-DRY:

18            Q.     Would you please state your full name for  
19     the record?

20            A.     Harvin Broughton.

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

22            A.     Midland, Texas.

23            Q.     By whom are you employed?

24            A.     Concho Resources.

25            Q.     And what do you do for Concho?

1           A.     I'm a senior geoscientist.

2           Q.     As a senior geoscientist, what do your  
3     duties include?

4           A.     Examining the geology in the area, setting  
5     up logging jobs, evaluating wells, selecting new  
6     locations to -- to be permitted, gathering the data  
7     once it's acquired and interpreting that.

8           Q.     And have you previously testified before  
9     the Division?

10          A.     No, ma'am, I have not.

11          Q.     Could you please review your education and  
12     work history for the Examiner?

13          A.     Okay. I received in 1983 a bachelor of  
14     science in petroleum engineering from Oklahoma State  
15     University. At that point I immediately went to work  
16     for Schlumberger Oil Field Services. I worked for  
17     Schlumberger for 25 years in varying capacities of  
18     increasing responsibility.

19                 The last eight years I was in an advanced  
20     interpretation group called -- a processing and  
21     interpretation group that did advanced petrophysical  
22     and geological log interpretation. My specialty was  
23     interpretation of formation image logs, the type of  
24     tool is called an FMI Log, which is a borehole  
25     electrical, micro electrical image. So I did that for

1 the last eight years of my tenure at Schlumberger.

2 During that particular time I went back to  
3 school and worked on and completed a master's degree in  
4 geology at this University of Texas at Permian Basin  
5 under Dr. Emily Stout who is fairly well known  
6 carbonate expert in the Permian Basin.

7 I have been with Concho for three years  
8 employed as a geologist or geoscientist.

9 Q. And your duties as a geoscientist of  
10 Concho, do you have an area that you are assigned to?

11 A. I'm assigned to the Northwest Shelf Team.

12 Q. And that's means the Yeso?

13 A. The Yeso, and, well, the Shelf Team.

14 Q. The Shelf Team?

15 A. Somewhat broader than that.

16 Q. Are you familiar with the applications  
17 that have been filed by Concho in this case?

18 A. I am.

19 Q. Have you made a study and are you familiar  
20 with the geology in the subject area?

21 A. I am.

22 MS. MUNDS-DRY: Mr. Examiner, we tender  
23 Mr. Boughton as an expert in petroleum geology.

24 EXAMINER JONES: Any objection?

25 MR. CAMPBELL: No objection.

1 EXAMINER JONES: Can you spell your name for  
2 me, please?

3 WITNESS: First name is Harvin, H-a-r-v-i-n.  
4 And last name is Broughton, B-r-o-u-g-h-t-o-n. And the  
5 court reporter has my card.

6 EXAMINER JONES: He is so qualified.

7 Q. Thank you. Mr. Broughton, if we can turn  
8 to what's been marked as Concho Exhibit Number 6, which  
9 I believe is the one with green, if you could identify  
10 and review for the Examiners.

11 A. This is a stratigraphic column of the  
12 geological formations that exists on the Northwest  
13 Shelf of the Delaware Basin. So this -- this is in  
14 Southeastern New Mexico, traversing Lea and Eddy  
15 County, Southern Lea and Eddy County. In particular,  
16 the Strata we are discussing here are from the Permian  
17 Age, and this is -- this slide is just to review and  
18 get everybody on the same page with respect to some of  
19 the formation names we are going to hear.

20 We've got the Seven Rivers will be the upper  
21 most formation that we discuss. Queen, Grayburg San  
22 Andres, Glorieta, and then the Yeso, primarily  
23 consisting of the reservoir portion of the Yeso in this  
24 area, which is the Paddock and the Blinbry that we  
25 loosely call the Yeso.

1 Q. Okay. This just gives us the orientation  
2 as to the stratigraphy?

3 A. That is correct, the order in which these  
4 formations lie.

5 Q. Let's turn to Concho Exhibit Number 7.  
6 What does this display show?

7 A. This is a cross section between two wells,  
8 and this is mainly focused on the Yeso portion. You  
9 will notice the Glorieta, which is the sandstone,  
10 overlying the dolomite Yeso interval, and the reason we  
11 presented this slide is just to show the thickness and  
12 uniformity of these particular units.

13 Q. And you will get into this in a little bit  
14 more detail in the Dodd and the BKU.

15 A. We can.

16 Q. Let's go to Concho Exhibit 8. What does  
17 this show us?

18 A. This a map plat that depicts the wells  
19 that I'm going to use in the next slide which will be a  
20 stratigraphic cross section. This happens to be for  
21 the Dodd Unit, so there is one, two, three, four, A to  
22 A prime, those are the four wells, and I specifically  
23 selected these wells to completely traverse the Dodd  
24 Unit so that everyone understood how all of that laid  
25 in there. And I also selected well logs that went deep

1 enough and went shallow enough to show all the  
2 formations that we are trying to talk about today.

3 Q. Okay. Let's go then to your cross  
4 section, and I believe it's marked as Concho Exhibit  
5 Number 9.

6 A. This is the cross section that was just  
7 depicted in the plat on the previous slide, and we are  
8 going to go start up here at the Seven Rivers  
9 Formation. So Seven Rivers, then the Queen, Grayburg  
10 San Andres, and we get down here is the Glorieta. You  
11 will notice it's a fairly uniform thickness of between  
12 50 and 75 to 100 feet, which it typically is across the  
13 entire Shelf, or at least the Shelf area that I work.  
14 And then below that is the, immediately below that is  
15 the Paddock Formation, which is the upper part of what  
16 we all call the Yeso.

17 Q. And while we are here, if you could  
18 discuss in a little bit more detail what you see from  
19 this geologic standpoint. What is the Glorieta --  
20 what's the permeability and porosity, if you could  
21 explain?

22 A. The Glorieta is -- is sort of a boundary  
23 formation. It's fine grain sand to siltstone that has  
24 relatively low permeability. The Glorieta is fairly  
25 expansive in aerial extent. It basically rims the

1 entire northern end of the Delaware Basin, so it's  
2 pretty much everywhere, and it's a really good marker  
3 bed. And we -- it's one of our stratigraphic picks  
4 just to really orient us to the top of the Paddock.  
5 It's not considered reservoir in this particular area  
6 because of the low permeability.

7 Q. And how do you characterize its porosity?

8 A. The porosity sometimes can be reasonably  
9 high, but the permeability is still quite low. There  
10 is not a good porosity permeability relationship there.  
11 The reason for that, it is title flat environment which  
12 makes several implications. It's got a lot of algal  
13 matting, so it's highly laminated. The sands and silts  
14 that were brought in there get trapped in those algal  
15 mats. The algal mats decay and it leaves fine  
16 sediments that exhibit poor vertical and horizontal  
17 permeability characteristics.

18 Q. And based on what you have said about the  
19 permeability and porosity, do you see fluids migrating  
20 by themselves?

21 A. It would be surprising to me if any or  
22 much fluid was able to move on its own through this  
23 particular formation.

24 Q. Okay. I would like to spend some time now  
25 also on, if you could, explain the differences that you



1 see between the Grayburg San Andres and the Yeso  
2 formation?

3 A. Do you want me to start with the Seven  
4 Rivers, or you want to talk about above the Glorieta  
5 and below the Glorieta?

6 Q. Let's do that.

7 A. Okay. Okay. We -- we consider the  
8 Glorieta a boundary because of several significant  
9 differences we see in the rocks above and below, and I  
10 will just start at the San Andres because it's  
11 immediately above the Glorieta, but it is -- it is a  
12 restricted carbonate platform environment which is the  
13 same as the Yeso, but really that's kind of where the  
14 similarities stop. It is a highly laminated interval,  
15 but its much shallower marine depositional environment.

16 You see it actually exists in shallower  
17 water. It's been given to -- literature refers to a  
18 lot of subaerial exposure, so it's very, very near the  
19 shoreline. Karsting is exhibited in this particular  
20 interval which leads to a high degree of  
21 compartmentalization, which we rarely if -- I have  
22 never seen in the -- in the Yeso, either the Paddock or  
23 the Blinberry.

24 It is -- another key difference is, there is  
25 still typically a significant amount of limestone in

1 the San Andres which the Yeso is completely  
2 dolomitized. I won't say 100 percent, but it's  
3 dolomite. And in the San Andres, the lower interval is  
4 particularly densely dolomitized, and then towards the  
5 middle you get more limestone, and then you transition  
6 back into a finer grain dolomite. So it's  
7 significantly different on a number of fronts.

8 Another key point is that the API gravity of  
9 the oils from the Yeso and the San Andres are somewhat  
10 different, which leads -- leads one to believe there is  
11 a different level of thermal maturity of the oils, not  
12 to say that they necessarily are not sourced from the  
13 same place because they probably are out off the  
14 platform in the basin, but they are somewhat different.  
15 Moving on up to the Grayburg.

16 Q. Please.

17 A. The Grayburg is primarily sandstone to  
18 siltstone, particularly at the base. That's the  
19 primary reservoir facies in the Grayburg, though there  
20 is some dolomite in that interval, but, you know, sand  
21 siltstone is obviously considerably different than the  
22 Yeso.

23 The Queen, again, is a sandstone. It's  
24 another title flat type deposit similar to the Glorieta  
25 in many ways.

1                   And then moving up to the upper interval that  
2 we want to discuss is the Seven Rivers, which is  
3 largely evaporites which are a super title environment,  
4 but it does have some dolomite in it, and that's the  
5 reservoir in areas where the Seven Rivers is  
6 productive, but obviously quite different than the  
7 Yeso. So my point here is that the rocks above the  
8 Glorieta are significantly different than the rocks  
9 below the Glorieta for a number of reasons.

10               Q.     And are you familiar with the development  
11 in the Grayburg San Andres and Yeso formations in this  
12 area?

13               A.     Yes, I am.

14               Q.     And what can you say that explains or  
15 gives further explanation to your difference in the  
16 rocks about how the development has occurred in these  
17 areas?

18               A.     Well, this is some anecdotal evidence, but  
19 there has been a number of generations of shallow  
20 production, and what I call shallow production or  
21 development is Grayburg San Andres wells. A lot of  
22 operators, either because of rights issues, or they  
23 just didn't -- or they just drilled San Andres wells  
24 because they didn't see the need to try to exploit the  
25 Yeso or maybe they felt that the technology wasn't in

1 place at that time to develop the Yeso, the completion  
2 technology, there has been a number of generations of  
3 San Andres wells drilled, water floods in the San  
4 Andres by people who were not interested in the Yeso,  
5 and conversely, there is Yeso operators that are less  
6 interested in the San Andres.

7 So really, it's anecdotal, I realize, but  
8 there are -- you know, there are operators that  
9 exploited one and not the other and vice versa. You  
10 know, another good example is down in what we call the  
11 Maljamar area in 17 South 32 East where Conoco operates  
12 a shallow San Andres Flood right on top of our Yeso  
13 production, and they happily co-exist on the same  
14 lands.

15 Q. Okay. Anything else you want to point out  
16 on this exhibit?

17 A. I don't believe so. I don't believe so.

18 Q. Let's move on to what's been marked Concho  
19 Exhibit Number 10.

20 A. This is basically a repeat of what we just  
21 saw except across the Burch Keely Unit, so I have an A  
22 to A prime cross section. This is the plat showing the  
23 wells that are included in that cross section, and this  
24 is basically just to orient the Examiners as to how  
25 that looks. And you will notice it looks very similar

1 to the -- to the Dodd Unit in terms of thickness of  
2 package, type of geology, it's basically the same rock.

3 Q. And let's go ahead and look at that cross  
4 section, Concho Exhibit Number 11. If you could  
5 identify --

6 A. So starting at the top we have the Seven  
7 Rivers Formation. Again we have the Queen Formation,  
8 which is the sandstone. Then we have the Grayburg, the  
9 San Andres, and then down here you will notice we've  
10 got it flagged in yellow, it doesn't show up on the  
11 screen that well, but that is the Glorieta. And what  
12 I'm demonstrating here is the relatively uniform  
13 thickness of the Glorieta Formation, and then of course  
14 below that is the Paddock.

15 Q. And based on your discussion and review of  
16 these two cross sections, what does Concho or what is  
17 your geologic conclusion about the Glorieta as I  
18 believe you called it a barrier or a --

19 A. Well, because of the significantly lower  
20 permeability of the Glorieta and the vast difference in  
21 lithology, it's a sand slash siltstone versus dolomite,  
22 I would conclude that the Glorieta is a -- a fluid  
23 permeability barrier, if not a boundary, at least a  
24 baffle, and that it would not transmit fluids readily  
25 through that particular morphology.

1 Q. And based on that discussion, what is your  
2 geologic expert opinion on Concho's application to  
3 split the Grayburg Jackson Pool into two pools?

4 A. Well, as I understand it, not being a  
5 landman, the objective of pooling is to group similar  
6 rocks, similar depositional environments, similar  
7 lithologies together, and that's what they call a pool.  
8 And, in my opinion, the depositional environments and  
9 rocks in this particular interval are different enough  
10 from the Yeso to consider them different pools or to  
11 assign them to different pools.

12 Q. Mr. Broughton, will the granting of these  
13 applications be in the best interest of conservation,  
14 the prevention of waste and will it protect correlative  
15 rights?

16 A. Yes, they will.

17 MS. MUNDS-DRY: With that, Mr. Examiner, we  
18 would move to admit Concho Exhibits 6 through 11 into  
19 evidence.

20 EXAMINER JONES: Any objection?

21 MR. CAMPBELL: No objection.

22 (Exhibits 6 - 11 admitted.)

23 MS. MUNDS-DRY: That concludes my direct  
24 examination. I pass the witness.

25

## CROSS-EXAMINATION

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

BY MR. CAMPBELL:

Q. Mr. Broughton, can you retrieve Exhibit  
Number 11?

A. Well, I just had it on the screen, but let  
me go to it. It's -- you are referring to the Burch  
Keely Unit cross section?

Q. Yes, sir.

A. I have it.

Q. In your application you are asking for the  
Division to establish a new pool from the top of the  
Glorieta to 5,000 feet. Is that right?

A. That I believe is correct, sir, yes.

Q. Can we identify on this cross section  
where the 5,000 foot line would be?

A. No, sir, we can't. None of these wells  
that I was able to find that went shallow enough to  
show the Seven Rivers went deep enough to show that  
5,000 feet.

Q. You do have some wells that would show  
that -- deeper wells that would show the 5,000 foot  
line as to where it would fall on the Burch Keely  
extension?

A. I'm not certain of that. We have not been  
drilling deep enough to penetrate the 5,000 foot line,

1 so we would not have that on a log, no, sir, at least  
2 that I'm aware of.

3 Q. All right. Have you studied to any extent  
4 the reservoir differences, if any, at the 5,000 foot  
5 line that you seek to establish here?

6 A. Studied the reservoir differences, could  
7 you clarify what you mean by that, please?

8 Q. Is the 5,000 foot level below surface that  
9 you are seeking for the new pool, the bottom for the  
10 new pool, is that 5,000 foot level a geological  
11 feature?

12 A. No, sir, it's not.

13 Q. What is it?

14 A. It's a 5,000 foot line.

15 Q. Is there any distinction between the  
16 reservoir characteristics at 5,001 feet from the  
17 reservoir characteristics at 4,999, to your knowledge?

18 A. No discernable difference, in my opinion.

19 Q. In lithology?

20 A. No, sir.

21 Q. So we have simply an imaginary line in an  
22 otherwise homogeneous reservoir?

23 A. It truly is -- I wouldn't call it -- I  
24 wouldn't characterize the reservoir as homogeneous, but  
25 it certainly appears to be an arbitrary line, yes, sir.



1 Q. That's all I have, sir. Thank you,

2 EXAMINER JONES: Mr. Broughton, the proposal  
3 is to split the Jackson Pool only within the boundaries  
4 of these two waterfloods. Is that correct? Not the  
5 whole pool, not proposing to split the whole pool, even  
6 though you noticed everyone with the pool.

7 WITNESS: That --

8 MUNDSD-DRY: That's the way we read the rule,  
9 Mr. Jones, that we have to notify everybody in the  
10 pool. Since it affected a pool, we read the rule to  
11 mean that we have to notify everyone in that pool. So,  
12 yes, while we only asked for within the vertical and  
13 horizontal limits of the unit, we did notify everybody  
14 in the pool.

15 EXAMINER JONES: Yeah, and I agree with the  
16 -- with the notice. I mean, that was a very thorough  
17 notice, and it was what you read in the rules, but it  
18 does leave the rest of the Grayburg Jackson Pool  
19 outside the boundaries of these two units. The people  
20 you notified, did they express any interest in possibly  
21 extending that split beyond the boundaries?

22 WITNESS: That would be a question for our  
23 land group, sir. I wouldn't know that.

24 EXAMINER JONES: Unfortunately, I didn't  
25 think of this question until you came up.

1                   WITNESS: I wish I could help you with that.  
2     That would be well outside of my realm.

3                   EXAMINER JONES: You're a geologist?

4                   WITNESS: Yes, sir.

5                   EXAMINER JONES: Actually, an expert log guy.  
6     And geologists a lot of times get to name these things.  
7     So are you proposing names, or did you talk to Paul  
8     Couch in Hobbs about it?

9                   WITNESS: I don't know who that is. I would  
10    call it the Harvin Unit, I guess.

11                  EXAMINER JONES: There you go. And would you  
12    call it that for the upper part or lower part?

13                  WITNESS: Probably the lower. That's  
14    probably the most profitable. Yes, that's the one I  
15    want my name associated with.

16                  EXAMINER JONES: Okay. Paul Couch is our  
17    geologist in Hobbs.

18                  WITNESS: I'm not familiar with him.

19                  EXAMINER JONES: He's been around since 1979  
20    or 80 working that area, but he told me the other day  
21    that the -- he is trying to use the term Upper Yeso for  
22    the Paddock or Blinebry, and below that the term Lower  
23    Yeso, he is trying to do that on his pool names.

24                  WITNESS: You mean to separate the Paddock  
25    from the Blinebry?

1 EXAMINER JONES: No. To separate the Paddock  
2 Blinebry from the Tubb Drinker. He is trying to split  
3 -- so he is trying --

4 WITNESS: Okay.

5 EXAMINER JONES: That's just the way he is  
6 naming the pools and stuff now.

7 WITNESS: Okay.

8 EXAMINER JONES: But I realize we are not  
9 here to talk about the 5,000 foot business, but you as  
10 a log analyst, do you see differences between the 5,000  
11 foot down to the bottom of the Blinebry versus from  
12 5,000 foot up to the top of the Blinebry?

13 WITNESS: Not particularly, no, sir. I mean,  
14 there's -- I mean, this is heterogeneous rock across  
15 the whole Shelf, so sometimes you will see variances in  
16 porosity, variances in the porosity distribution up and  
17 down from well to well. But, you know, overall -- and  
18 again, I don't know where the 5,000 number came from,  
19 it does seem fairly arbitrary because there is no  
20 particular geologic log signature that I can find that  
21 would -- that would dictate, you know, putting any kind  
22 of severance at that depth.

23 EXAMINER JONES: Just an ownership?

24 WITNESS: Don't know. Probably by a land  
25 guy.

1 EXAMINER JONES: Yeah, land guy, okay. So  
2 you are not proposing any pool names, is that correct?

3 WITNESS: I'm not proposing any pool names,  
4 no, sir.

5 EXAMINER JONES: So we can come up with  
6 whatever pool names we want here?

7 WITNESS: Well, I'll go work on that.

8 EXAMINER JONES: What about -- application?

9 WITNESS: Again, that's well out of my realm.  
10 That would be a land question.

11 EXAMINER JONES: Okay. So the Glorieta is a  
12 big barrier, sandstone barrier?

13 WITNESS: Yes, sir.

14 EXAMINER JONES: Do you -- what about any  
15 barriers between the Seven Rivers Queen, and the  
16 Grayburg San Andres. I mean, there has to be some big  
17 differences there, or you would be -- but you are not  
18 proposing to split that?

19 WITNESS: We are not proposing to split that,  
20 no.

21 EXAMINER JONES: And as far as your limestone  
22 dolomite termination, you seem pretty knowledgeable  
23 about that. Are you basing that on the three porosity  
24 logs or the sonic --

25 WITNESS: None. Basic and on my viewing of a

1 number of logs, on literature that I have -- that I  
2 have read concerning the San Andres. I mean, that's  
3 where that comes from.

4 EXAMINER JONES: So there is a lot of  
5 dolomitization below the Glorieta than there is above  
6 it?

7 WITNESS: That is correct, in general, yes.  
8 The Yeso is -- I mean, you basically call it a pure  
9 dolomite, though you could find spots where it's 98  
10 percent dolomite, or 95. But there are limestone, what  
11 you would call limestone intervals in the San Andres,  
12 in numerous places that have not been dolomitized.

13 EXAMINER JONES: I remember seeing limestone  
14 come up on cuttings, and then I go -- and the log  
15 people wouldn't believe me sometimes.

16 WITNESS: That it was lime?

17 EXAMINER JONES: This was actually in the  
18 Glorieta.

19 WITNESS: Yeah. All you need is a little  
20 hydrochloric acid and that will solve that problem.

21 EXAMINER JONES: That's the way I figured it  
22 out. They didn't believe me.

23 WITNESS: There is degrees of dolomitization.  
24 There is lime and dolomite and dolomitic lime, but the  
25 Yeso is largely dolomite. Parts of the San Andres are

1 largely dolomite and parts are not.

2 EXAMINER JONES: The dolomitization parts are  
3 the best reservoirs?

4 WITNESS: Not always. Sometimes the  
5 dolomitization occludes porosity like in the upper part  
6 of the San Andres, sometimes you will get dolomite  
7 crystal growth that occludes the primary porosity, so  
8 sometimes it works against you. But, in general, yes,  
9 you look for dolomitized rock, and that's where the  
10 better porosity is preserved. So there is no  
11 absolutes.

12 EXAMINER JONES: Okay. I don't have any more  
13 questions -- wait. One more question.

14 WITNESS: Okay.

15 EXAMINER JONES: There is splits in the  
16 Permian between the series names -- is that correct --  
17 the Guadalupian and Leonardian?

18 WITNESS: Let me get that.

19 EXAMINER JONES: Does that coincide with what  
20 you are proposing here, or would that not fit?

21 WITNESS: Well, you will see different  
22 stratigraphic columns that actually have that  
23 Guadalupian Leonardian barrier at the base of the  
24 Glorieta. I mean, that's really an academic argument  
25 where those actual series boundaries exist. You will

1 see it several different ways in the literature. This  
2 was the most concise slide I could find that showed all  
3 the formations I wanted to talk about, so that's -- you  
4 know, this is what I have. But you will notice that  
5 Guadalupian Leonardian line is actually within the  
6 lower part of the San Andres. I mean, that is an  
7 academic argument that I wouldn't get into.

8 EXAMINER JONES: What was the academic reason  
9 for splitting the Permian and the Guadalupian?

10 WITNESS: I don't know that, sir. I don't  
11 know that answer.

12 EXAMINER JONES: I have no more questions.

13 EXAMINER BROOKS: I'm guessing from what I  
14 have heard from the testimony so far that you probably  
15 do not know exactly how the boundary is of the Grayburg  
16 Jackson Pool are defined throughout its horizontal  
17 extent.

18 WITNESS: I do not know that, sir.

19 EXAMINER BROOKS: Okay, thank you.

20 WITNESS: Is that it for me?

21 EXAMINER JONES: Depends on your attorney.

22 MS. MUNDS-DRY: I have no further questions,  
23 Mr. Broughton.

24 EXAMINER JONES: Thank you very much.

25 MS. MUNDS-DRY: Call our next witness,

1 please.

2 EXAMINER BROOKS: Mr. Chairman, can we take a  
3 brief recess?

4 EXAMINER JONES: Yes. Let's take a break  
5 until 4:00.

6 EXAMINER BROOKS: Sounds good to me.

7 (Recess taken.)

8 EXAMINER JONES: Okay. Let's go back on the  
9 record then.

10 MS. MUNDS-DRY: We are going to call our next  
11 witness.

12 T J MIDKIFF

13 (Having been sworn, testified as follows:)

14 DIRECT EXAMINATION

15 BY MS. MUNDS-DRY:

16 Q. State your full name for the record.

17 A. T J Midkiff.

18 Q. Where do you reside, Mr. Midkiff?

19 A. Midland, Texas.

20 Q. By whom are you employed?

21 A. Concho.

22 Q. And what do you do for Concho?

23 A. I am a reservoir engineer. I work on the  
24 Shelf, SEC reserve reporting, analysis, field  
25 development, within the Shelf area.



1 Q. Have you previously testified before the  
2 Division?

3 A. Yes, I have.

4 Q. And were your credentials accepted and  
5 made a matter of record?

6 A. Yes, ma'am.

7 Q. Are you familiar with the applications  
8 that have been filed by Concho in this case?

9 A. Yes, ma'am.

10 Q. You made an engineering study of the Dodd  
11 and Burch Keely unit?

12 A. Yes, ma'am.

13 MS. MUNDS-DRY: We tender Mr. Midkiff as an  
14 experiment witness in petroleum engineer.

15 MR. CAMPBELL: No objection.

16 EXAMINER JONES: He is so qualified.

17 MS. MUNDS-DRY: Thank you, Mr. Examiner.

18 Q. Mr. Midkiff, if we could turn to -- and  
19 this is not up on the power point, but if we could turn  
20 to the hard copy, we will go back to the old fashioned  
21 way of doing it -- to Concho Exhibit 12, if you could  
22 identify and review for the Examiner, please?

23 A. This is a plot of the Western Federal 8.  
24 This was a well that was initially completed as a Yeso  
25 producer, and it depleted and was later recompleted

1 back to the Grayburg San Andres. And one of the  
2 questionnaires, how is the Yeso different from the  
3 Grayburg San Andres and why should they be broken off  
4 as they have already been done before? And, you know,  
5 one of the interesting points here is this is actually  
6 a poor Yeso producer, but actually a strong Grayburg  
7 San Andres producer, so there really is no correlation  
8 even between production characteristics within the  
9 reservoirs.

10 Q. So from the slide, what do you conclude in  
11 terms of Concho's application?

12 A. That the -- the Yeso should be separate  
13 from the Grayburg San Andres as it has in most other  
14 places along the Shelf.

15 Q. Thank you. Could you turn to Concho  
16 Exhibit Number 13. If you could, explain to the  
17 Examiner what this shows.

18 A. Mr. Broughton hit on this just a minute  
19 ago. This is the results of an oil analysis done on  
20 oil types from two wells that were approximately a half  
21 mile apart, the Electra Federal 1, which is a Paddock  
22 completion and the ETZ 113, which is a Grayburg San  
23 Andres completion. And as Mr. Broughton pointed out,  
24 there is much different maturity displayed within the  
25 oils. The Paddock is a little bit higher API, and

1 those differences are noticeable enough to -- in that  
2 there are different oil types within the reservoirs,  
3 another indication that they are different reservoirs  
4 and should be treated as such.

5 Q. And that ties into my next question and  
6 something actually Mr. Jones asked earlier. If -- if  
7 we had heard of any interest from other operators in  
8 the Grayburg Jackson Pool about making the same changes  
9 outside of the unit. Are you familiar with the  
10 Grayburg Jackson Pool and the other Yeso Pools in this  
11 area on the Shelf?

12 A. Yes, I am. This is, Mr. Examiner, this is  
13 really the last part, from my understanding, of the  
14 Grayburg Jackson. It still extends down this far. We  
15 are asking to break it off, you know, to produce the  
16 Yeso separately. As you can see from the pools that  
17 are up there, those are all Yeso Pools outside of the  
18 Dodd and BKU Unit boundaries that are up there. Those  
19 are actually pool boundaries that have been broken off  
20 of the GJ Pool, so it's been done everywhere else.

21 Q. I'm sorry to interrupt. This is our  
22 Exhibit Number 1 that you are pointing to?

23 A. Yes.

24 Q. I'm sorry, what were you saying?

25 A. I was going to say that this -- the reason

1 that we were doing this, this was originally part of  
 2 our main allowable hearing to increase the allowable  
 3 across the Shelf, just as the allowable has already  
 4 been justified in places, we -- the next step was to  
 5 also break off this pool to allow it to be able to  
 6 produce independently.

7 Q. And in our Burch Keely Unit, we are only  
 8 asking down to 5,000 feet. Why is that?

9 A. That was an ownership boundary that was  
 10 created by Conoco Philips, and whenever the property  
 11 were acquired, that's where the ownership went down to.

12 Q. Thank you, Mr. Midkiff.

13 MS. MUNDS-DRY: Mr. Examiner, we move to  
 14 admit Concho Exhibits 12 and 13 into evidence.

15 EXAMINER JONES: Any objection?

16 MR. CAMPBELL: No, sir.

17 MS. MUNDS-DRY: And that concludes my direct  
 18 examination. I pass the witness.

19 EXAMINER JONES: Exhibits 12 and 13 will be  
 20 admitted.

21 (Exhibits 12 and 13 admitted.)

22 MR. CAMPBELL: May I inquire whether Mr.  
 23 Midkiff is your last witness?

24 MS. MUNDS-DRY: Yes.

25 MR. CAMPBELL: I do have some questions.

## CROSS-EXAMINATION

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

BY MR. CAMPBELL:

Q. You just said, Mr. Midkiff, that the 5,000 foot line was created by Conoco?

A. That was my understanding, yes, sir.

Q. What facts do you have to make that statement?

A. You know, I believe, in talking with our landman, that was what they expressed to me because obviously, as Mr. Broughton indicated, there is no geologic barriers there, so it was created by someone and in talking with them, that is my understanding that it was created by Conoco Philips.

Q. Have you seen any documents relative to the party who can be attributed with creating the 5,000 foot line?

A. No. I'm sure they can be found. I haven't found them. I haven't personally seen them.

Q. My question is simply whether you have seen any documents.

A. Personally, no, sir.

Q. All right. So your testimony that the 5,000 foot line was created by Conoco comes from talking to your Concho landman?

A. Yes, sir. In our -- in our development

1 meetings, yes, sir.

2 Q. Now, as I understand your application to  
3 carve out a new pool from the top of the Glorieta to  
4 the 5,000 foot line within the Burch Keely, your  
5 production intervals will be the Paddock and Blinebry?

6 A. Yes, sir. Both have been productive in  
7 the area.

8 Q. And, in fact, Concho has dual completed  
9 wells in the Burch Keely and Paddock and Blinebry,  
10 right?

11 A. I'm not aware of a well that is dual  
12 completed. I know we have completed a well in the  
13 Blinebry within the unit. I'm not aware that that well  
14 has been completed in the Paddock as well.

15 Q. Does your company have a habit or practice  
16 of completing wells in both the Paddock and Blinebry?

17 A. That was the original development within  
18 the area, yes, sir. A lot of wells were originally  
19 drilled with the Paddock, but over time they have since  
20 learned that Blinebry was productive and newer wells in  
21 some instances were drilled all the way through the  
22 Blinebry and older wells were sometimes deep into the  
23 Blinebry.

24 Q. So just to understand, your current --  
25 your current policy is to drill wells within the Burch

1 Keely to complete in both the Paddock and Blinebry?

2 A. Not necessarily, no, sir.

3 Q. You have done that in the past?

4 A. In other areas where it was required, or,  
5 you know, I guess that most efficient way to develop  
6 the acreage. The thing that we have here that's unique  
7 at the Burch Keely and the Dodd is that the Blinebry  
8 has been mostly undeveloped, and it leaves really an  
9 open canvas to develop it and there are other ways that  
10 are being explored right now to develop the Blinebry  
11 and not necessarily all in a vertical sense to complete  
12 both the Blinebry and Paddock.

13 Q. I mean, you are fracking your wells  
14 completed in the Blinebry now?

15 A. Yes, we frac our wells, yes, sir.

16 Q. Are you aware that the Blinebry, within  
17 the Burch Keely Unit, dips substantially below the  
18 5,000 foot line?

19 A. Yes, sir. A large part of the Blinebry is  
20 below the 5,000 foot line in the Burch.

21 Q. Did I hear you say that there is no  
22 geologic barrier created by the 5,000 foot line?

23 A. You heard me say that Mr. Broughton said  
24 there was no 5,000.

25 Q. You don't have any independent --

1 A. There was no geologic -- I'm sorry.

2 Q. You don't have an independent view on  
3 that?

4 A. Well, obviously looking at a log, you can  
5 see there is no boundary there, but as far as geologic  
6 signal that shows up on a log, I have not seen that,  
7 and I'm not aware of anyone that has.

8 Q. You have some expertise in fracking  
9 mechanics?

10 A. Very little.

11 Q. Hypothetically, Mr. Midkiff, if your  
12 application is granted here, you would agree with me  
13 that your company could perforate a well at 4,999 feet  
14 below the surface?

15 A. We could, but I don't believe that we  
16 would do that.

17 Q. I appreciate that observation, but stick  
18 with me on the hypothetical. You would be permitted to  
19 perforate at 4,999 feet?

20 A. If we were permitted to perforate there,  
21 we would not probably perforate there.

22 Q. But you are seeking a vertical extension,  
23 your establishment of a new pool with a vertical  
24 extension to 5,000 feet, are you not?

25 A. We are attempting to establish a pool that



1       envelops all of our ownership.

2               Q.     Is there any geologic impediment --

3               A.     Again --

4               Q.     I haven't finished my question, sir.

5               A.     I'm sorry.

6               Q.     Is there any geologic impediment that  
7       would preclude your company if it were to perforate and  
8       frac at 49,999 feet?

9               EXAMINER BROOKS:   49,000?

10              MR. CAMPBELL:   4,999.   Let me start again.

11              EXAMINER BROOKS:   You would be setting some  
12       records.

13              MR. CAMPBELL:   Let me start again.

14              Q.     Is there any geologic impediment to the  
15       flow of gas or oil below 5,000 feet to a well you  
16       drill, perforate at 4,999 and frac?

17              A.     I mean, if you're drilling that close, I  
18       mean, you could be perforating that far.   That's --  
19       that's just something that doesn't happen.   We are not  
20       going to drill -- try to attempt to stay one foot off  
21       the boundary like that.

22              Q.     Well, you are an expert engineer.   I'm  
23       asking you a hypothetical question, and whether you say  
24       you would do it or not, can you answer the question I  
25       asked you?

1           A.     You know, we -- it's my understanding that  
2     the tendency in this area is for fractures to grow up.  
3     Now, if it was drilled right there at the boundary,  
4     yes, there would be -- you could say there would be  
5     hydrocarbons that may be recovered across that  
6     boundary.

7           Q.     You don't have the expertise, as I  
8     understand it, to state as an engineering opinion that  
9     the fracs Concho places on its wells only grow up, do  
10    you?

11          A.     I didn't say that they only grow up, I  
12    mean, but I will defer all completion questions. I  
13    mean, I'm not an expert in completions.

14          Q.     Are you an expert on drilling?

15          A.     No, sir.

16          Q.     You can tell us, you can confirm, can you  
17    not, that your company's drilling mechanics affect  
18    generally a uniform set of four 200-foot perforations?

19          A.     In a vertical wellbore?

20          Q.     In a vertical wellbore.

21          A.     Across the entire Yeso.

22          Q.     Yes, sir.

23          A.     Okay.

24          Q.     That's true, is it not?

25          A.     Yes, sir.

1 Q. Can you tell us what the depth is of the  
2 bottom 200-foot perforation set?

3 A. It depends on the well. I mean, there is  
4 no way to give a definite depth.

5 Q. Who would, within your company, would be  
6 able to answer these kinds of questions?

7 A. Well, there is, again, there is nobody  
8 that's going to be able to say there is one specific  
9 depth we perforate at. Again, that depends on the well  
10 and the logs that we get.

11 Q. But it's your company's course of conduct  
12 to generally perforate four different 200 foot  
13 intervals?

14 A. Yes, sir.

15 Q. And who makes the decision as to where  
16 those perms are going to be set?

17 A. Typically the geologist and completion  
18 engineers will make those decisions.

19 Q. And can you give me the names of those  
20 people? Were any of them here witnesses today?

21 A. No, they were not.

22 Q. Who makes those decisions?

23 A. Our completions engineers and our  
24 geologists.

25 Q. By name.

1           A.     By name, well, we've got multiple  
2     completions engineers and multiple geologists. Mr.  
3     Broughton is a geologist. We've also got, you know --

4           Q.     I appreciate that you've got a lot of  
5     people, but in this Yeso area --

6           A.     Yes, sir.

7           Q.     -- Southeast New Mexico, who is the person  
8     within your company who makes the decision as to where  
9     the four 200-foot interval perfs are made?

10          A.     That would be either Harvin Broughton,  
11     Raymond Reyes. Let's see. Ryan Denaud, George  
12     Freeman, Lee Martin. I mean, there's -- there is many  
13     names there.

14          Q.     Is that a chain of command, or they can  
15     all make that decision?

16          A.     Well, within -- I don't work with those  
17     guys, but these are the guys that work on that end.  
18     I'm not sure what their chain of command is.

19          Q.     Are those the same people that will design  
20     the frac itself?

21          A.     Yes, sir. They will work with the service  
22     companies to develop a design.

23                 MR. CAMPBELL: That's all I have.

24                 EXAMINER JONES: Mr. Midkiff, Lee Martin,  
25     isn't he almost ready to retire? If it's the same Lee

1 Martin.

2 WITNESS: Maybe I got his name wrong.

3 EXAMINER JONES: Different guy?

4 WITNESS: Different guy.

5 EXAMINER JONES: Is there a significant  
6 drilling or completing and reserves above the Grayburg  
7 San Andres in these two waterfloods?

8 WITNESS: As far as the completion within a  
9 well, in the Grayburg San Andres versus completion in  
10 the Yeso?

11 EXAMINER JONES: I just mean, is there -- do  
12 you guys or other people drill and complete above?  
13 Obviously it would be you guys because you own all the  
14 interest.

15 WITNESS: Yes, sir, we do have interest in  
16 developing both the Grayburg San Andres and the Yeso.  
17 That's part of the reason why we are having to do this,  
18 in discussions with BLM, San Andres, there is a  
19 waterflood there, and they have concerns with us  
20 developing primary in the Yeso and what is considered a  
21 secondary in the Grayburg San Andres. That's why we  
22 need to break this off, so we can continue development  
23 within the unit.

24 EXAMINER JONES: Okay. But above the  
25 Grayburg San Andres in the Seven Rivers.

1 WITNESS: Oh, above the San Andres, I'm sorry.

2 EXAMINER JONES: That's all right.

3 WITNESS: I am, you know, I'm not sure if any  
4 of those zones have been productive out here. I'm not  
5 sure.

6 EXAMINER JONES: But for some reason the  
7 pool --

8 WITNESS: Goes all the way up.

9 EXAMINER JONES: -- goes all the way up.

10 WITNESS: Yes, I mean, that pool has been  
11 around for a long time, a long time, and I'm not sure  
12 why it's like that. We have seen no need to break off  
13 anything above the Grayburg San Andres, so we haven't  
14 done that yet, but that situation could arise.

15 EXAMINER JONES: Okay. And drilling on the  
16 outside of the Burch Keely and Dodd Federal Units in  
17 the Grayburg San Andres, is there quite a bit of  
18 drilling? Do you know? Are you aware of it?

19 WITNESS: Outside of these units?

20 EXAMINER JONES: Within the --

21 WITNESS: Yes, sir. Yes, sir. That's why  
22 it's so big. There is quite a bit of Grayburg San  
23 Andres.

24 EXAMINER JONES: Do you see other  
25 waterfloods? You guys might have part interest in

1 other leases outside of that.

2 WITNESS: I know there are other floods out  
3 there. There is other places where water is being  
4 injected, but I'm not exactly sure where within that  
5 area, within that pool.

6 EXAMINER JONES: Okay. So it almost seems  
7 like the Grayburg San Andres is the logical waterflood  
8 candidate.

9 WITNESS: Yes, sir.

10 EXAMINER JONES: And the upper Yeso is not.

11 WITNESS: I would not say that. We are  
12 actually investigating that right now. We believe that  
13 the Yeso does have secondary potential.

14 EXAMINER JONES: Okay. In the Paddock?

15 WITNESS: Yes, sir, in the Paddock.

16 EXAMINER JONES: And you're not stating that  
17 here, but isn't one of the reasons for this, the need  
18 to split this pool because of upcoming proposed  
19 allowable increase?

20 WITNESS: Well, that's -- originally we were  
21 going to talk about that at this hearing.

22 EXAMINER JONES: You're avoiding that  
23 totally.

24 MS. MUNDS-DRY: We are not avoiding that.  
25 That was a discussion we had with Mr. Brooks and Mr.

1 Campbell. We are waiting to have that allowable  
2 discussion until after that other case that --

3 EXAMINER JONES: The volume of the allowable,  
4 right?

5 MS. MUNDS-DRY: Right.

6 EXAMINER JONES: But you are not talking  
7 about here about the volume of the allowable being a  
8 need to split the pool.

9 WITNESS: Well, that -- that --

10 EXAMINER JONES: It's like the elephant in  
11 the room.

12 MS. MUNDS-DRY: It is. We just were  
13 reserving because we are not presenting that evidence  
14 to justify today, so we are preserving that discussion.

15 EXAMINER JONES: I understand. The attorney  
16 is leading you.

17 MS. MUNDS-DRY: I just want you to  
18 understand, we are not trying to avoid.

19 EXAMINER JONES: No, that's all right.

20 WITNESS: We were told to limit it to just  
21 separating the pools, so that's what we are talking  
22 about.

23 EXAMINER JONES: When you do -- you guys  
24 don't use second parties to do the reserve calculation?

25 WITNESS: We have auditors, but we do it in



1 house.

2 EXAMINER JONES: But you do it?

3 WITNESS: Yes.

4 EXAMINER JONES: And you have to wait until  
5 production is in for the previous year before you have  
6 the totals and do your reporting, right?

7 WITNESS: That is my understanding, yes, sir.

8 EXAMINER JONES: So it's around May -- April,  
9 May, somewhere around there?

10 WITNESS: No, that's --

11 EXAMINER JONES: June?

12 WITNESS: That's a whole other group. I do  
13 work with them from time to time, but I'm not sure what  
14 their time frame is.

15 EXAMINER JONES: But you turn in the data to  
16 them?

17 WITNESS: I don't personally turn in the  
18 data. We work from the same data set input into our  
19 system by the people collecting those numbers.

20 EXAMINER JONES: So you gather the data into  
21 a big database?

22 WITNESS: Yes, sir.

23 EXAMINER JONES: And probably have the same  
24 program that does economics?

25 WITNESS: Yes, sir. We use the same program

1 to do -- to do our evaluations.

2 EXAMINER JONES: That leads me to when you --  
3 these are oil reservoirs, so do you -- how do you  
4 project your gas reserves? Do you use a GOR times your  
5 oil, or do you use a projected decline on your cap?

6 WITNESS: We use typically a GOR.

7 EXAMINER JONES: Times the oil?

8 WITNESS: Yes, sir, times the oil.

9 EXAMINER JONES: So you are expecting the GOR  
10 to be constant?

11 WITNESS: No. We use increasing GOR. This  
12 is a solution gas drive reservoir.

13 EXAMINER JONES: So you project the GOR curve  
14 and then apply it to --

15 WITNESS: No, sir. We -- Aries is the  
16 program that we use, and it has a functionality in  
17 there to apply an increasing GOR over time, so we  
18 forecast an oil curve and then use Aries to apply a GOR  
19 that is increased based off the oil production curves.

20 EXAMINER JONES: So it's automated?

21 WITNESS: Yes, sir.

22 EXAMINER JONES: A little guidance there.

23 And the GOR, obviously for secondary recovery would be  
24 totally different than the primary recovery you are  
25 doing in the Yeso?

1                   WITNESS: Yes, sir -- I'm sorry, could you  
2 state that one more time?

3                   EXAMINER JONES: So the primary recovery  
4 mechanism now is horizontal drilling in the Paddock for  
5 the Yeso. Is that correct?

6                   WITNESS: We -- there's been some horizontals  
7 that have been drilled and the results early have been  
8 favorable, but I don't know that -- we will continue to  
9 drill verticals in places where it necessitates, but in  
10 general, yes.

11                  EXAMINER JONES: So it's a mixture?

12                  WITNESS: It is a mixture, but it's kind of  
13 an internal discussion that we are having right now  
14 with our -- we have a group focused on secondary  
15 recovery in the Yeso, and we are discussing the, you  
16 know, the effects within -- within the waterflood with  
17 horizontals and verticals and how the two put together.

18                  EXAMINER JONES: Okay. David, do you have  
19 any questions?

20                  EXAMINER BROOKS: Same question I asked the  
21 last witness. Are you aware of how the vertical limits  
22 of the Grayburg Jackson Pool -- I guess I should say  
23 pools because there are more than one of them -- are  
24 currently defined, and I wouldn't really ask that about  
25 the -- about the Burch Keely Unit because it seems to

1 me that is clearly stated in this order that we have a  
2 copy of up here. But what about the Dodd Federal Unit,  
3 do you know what the definition of a base of the  
4 Grayburg Jackson Pool currently is within the Dodd  
5 Federal Unit?

6 WITNESS: The base of the Grayburg Jackson  
7 Pool, no, sir. We can get that for you quickly.

8 EXAMINER BROOKS: Very good, but you don't  
9 personally know?

10 WITNESS: Off the top of my head, no, sir.

11 EXAMINER BROOKS: That's all I have.

12 EXAMINER JONES: Any more questions for this  
13 witness?

14 MS. MUNDS-DRY: I have no more questions for  
15 Mr. Midkiff.

16 EXAMINER JONES: Well, thanks for --

17 WITNESS: Thank you, sir.

18 EXAMINER JONES: Are we going to continue?

19 MS. MUNDS-DRY: I forget we need to ask for a  
20 continuance, but I don't know how long.

21 EXAMINER BROOKS: Well, I will address that.  
22 I have a question I want to ask Mr. Campbell, if that's  
23 okay. It's in the nature of where you are going with  
24 this, and I can certainly -- I think I understand the  
25 point you are making.

1 MR. CAMPBELL: Well, that's good to know.

2 EXAMINER BROOKS: It seems to me that there  
3 may well be a need, particularly acute in this  
4 situation because the pools have not -- because you  
5 have a pool separation that's generated by an ownership  
6 boundary and not by a geologic boundary which hopefully  
7 is not a very complex situation, but it seems to me  
8 there may be a need for the New Mexico Oil Conservation  
9 Division to establish in some circumstances vertical  
10 setbacks, especially if New Mexico ends up agreeing  
11 with the Supreme Court of Texas, that the rule applies  
12 to oil produced through a wellbore within your own  
13 ownership from fractures that penetrate into another  
14 person's ownership.

15 What I don't quite see is what that has to do  
16 with what we are doing in this case, because, number  
17 one, it seems to me that you do not have to -- if you  
18 own particular subsurface space, your right to drill  
19 into it, under our rules, does not depend on it being  
20 assigned to an existing pool, so it doesn't really  
21 matter whether it's assigned to an existing pool or not  
22 for that reason.

23 And second, at least as to Burch Keely Unit,  
24 it is assigned to an existing pool by virtue of this  
25 order, and I understand you are going to be arguing

1 about that to the Commission, but I don't know exactly  
2 what you are going to be saying to the Commission, but  
3 I guess I would say, why isn't Conoco Philips filing  
4 their own application asking us to establish vertical  
5 setbacks in this pool?

6 MR. CAMPBELL: We just filed a pleading with  
7 the Commission. Ms. Leach, in the Commission hearing,  
8 filed a motion to exclude us, on behalf of Concho, to  
9 exclude us, limit us in that proceeding from arguing  
10 that the regulatory body should establish vertical  
11 setbacks.

12 EXAMINER JONES: Yeah, okay.

13 MR. CAMPBELL: She -- she wanted to do that  
14 because her assertion was that we could not seek to  
15 establish vertical setbacks in an individual  
16 application, that it had to be subjected to a  
17 rule-making authority, which she well knows would  
18 basically deprive us of that defense in this individual  
19 proceeding.

20 So what we are seeking in the Commission de  
21 novo proceedings resulting from the prior orders that  
22 are now being characterized as insufficient, we are  
23 going to ask the Commission to overrule the Division's  
24 approval of the vertical extensions of the pre-existing  
25 Grayburg Jackson down to 5,000 feet and to return that

1 vertical depth to its pre-existing level which was 500  
2 feet above the Paddock. That result would accomplish  
3 within the Burch keely unit effectively a vertical  
4 setback thereby accommodating Ms. Leach's objection and  
5 provide us some degree of protection.

6 EXAMINER BROOKS: Why would it -- how would  
7 it preclude Concho from drilling a well into that  
8 vertical space as a wildcat well?

9 MR. CAMPBELL: I don't know the rules well  
10 enough.

11 EXAMINER BROOKS: That's what I was trying to  
12 get somebody to explain this to me, because it seemed  
13 to me that we were going on a -- you know, you or  
14 somebody underlined my statement in the order that I  
15 wrote that says that Conoco Philips did not articulate  
16 any objection to the granting of this application, but  
17 that was basically based -- it wasn't so much because I  
18 didn't understand what you were doing, it's because I  
19 didn't understand how that would -- how that impacted  
20 what we were doing in that case and/or what we were  
21 doing in this case. That was the reason for my  
22 question.

23 MR. CAMPBELL: I have not discussed with  
24 Conoco Philips the answer to your question of why can't  
25 they just drill a wildcat well. I have not done that.

1 I don't know what that would result in. All I know is  
2 if the Commission reverses the Division's order  
3 granting vertical extension of their pre-existing  
4 Grayburg Jackson Unit, then we may have more protection  
5 than we currently have.

6 EXAMINER BROOKS: Okay. Well, obviously you  
7 and Ms. Leach have a difference of opinion on this  
8 subject, and I am not going to get further educated  
9 today, I don't think. So perhaps the Commission will  
10 -- will be able to see through these things. I have  
11 nothing further.

12 EXAMINER JONES: As far as how far to  
13 continue it, the date that you can continue it to, do  
14 you tend to show up with witnesses, and is it --

15 MS. MUNDS-DRY: Assuming we have -- that's  
16 why we would like it to be after --

17 EXAMINER JONES: Definitely after the other.

18 MS. MUNDS-DRY: After.

19 EXAMINER JONES: Which was a month ago we had  
20 that.

21 EXAMINER BROOKS: I think we should specify a  
22 date so they won't have to give notice again, and then  
23 we should -- to do that, we should continue it to  
24 whatever date we select with the understanding that if  
25 an order has not been issued in the other case, it will



1 be continued again.

2 MS. MUNDS-DRY: In that event, we can  
3 continue for two weeks, and I hate --

4 EXAMINER BROOKS: I hate to do a -- I hate to  
5 do an indefinite continuance, because, as I read the  
6 rules, that means you have to do the notice all over.

7 MS. MUNDS-DRY: I agree. I would rather  
8 continue it to a docket definitely and then we can  
9 continue it as needed. So I think two weeks is  
10 probably optimistic.

11 EXAMINER JONES: So the 21st is at least four  
12 weeks away.

13 MS. MUNDS-DRY: That's probably more  
14 realistic. I would assume, I would hope the Division  
15 would have an order in that case by then.

16 EXAMINER BROOKS: Okay. Let's continue it to  
17 the 21st.

18 EXAMINER JONES: So continued. We are going  
19 to continue Cases 14669 and 14670 to July the 21st.  
20 And that being the last case of the docket, the docket  
21 is adjourned.

22 MS. MUNDS-DRY: Thank you, Mr. Examiner.

23 \* \* \* \* \*

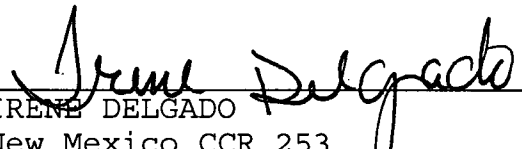
24 I do hereby certify that the foregoing is  
25 a complete record of the proceedings in  
the Examiner hearing of Case No. \_\_\_\_\_  
heard by me on \_\_\_\_\_

## REPORTER'S CERTIFICATE

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

I, IRENE DELGADO, NM CCR 253, DO HEREBY CERTIFY  
that on June 23, 2011, I did, in stenographic shorthand  
transcribe the proceedings set forth herein, and that  
the foregoing pages are a true and correct  
transcription to the best of my ability.

I FURTHER CERTIFY that I am neither employed by  
nor related to nor contracted with (unless excepted by  
the rules) any of the parties or attorneys in this  
matter, and that I have no interest whatsoever in the  
final disposition of this matter.

  
IRENE DELGADO  
New Mexico CCR 253  
License Expires: 12-31-11