

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: )

APPLICATION OF CONCHO EXPLORATION, INC., ) CASE NO. 13,108  
TO INCREASE THE DEPTH BRACKET ALLOWABLE )  
FOR THE SHUGART-DELAWARE POOL, EDDY )  
COUNTY, NEW MEXICO )

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: MICHAEL E. STOGNER, Hearing Examiner

July 24th, 2003

Santa Fe, New Mexico

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Oil Conservation Division

This matter came on for hearing before the New Mexico Oil Conservation Division, MICHAEL E. STOGNER, Hearing Examiner, on Thursday, July 24th, 2003, at the New Mexico Energy, Minerals and Natural Resources Department, 1220 South Saint Francis Drive, Room 102, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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## I N D E X

July 24th, 2003  
 Examiner Hearing  
 CASE NO. 13,108

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\* \* \*

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

## FOR THE APPLICANT:

HOLLAND & HART, L.L.P., and CAMPBELL & CARR  
110 N. Guadalupe, Suite 1  
P.O. Box 2208  
Santa Fe, New Mexico 87504-2208  
By: MICHAEL H. FELDEWERT

FOR DEVON ENERGY PRODUCTION COMPANY, L.P.,  
and DEVON OEI OPERATING, INC.:

JAMES G. BRUCE  
Attorney at Law  
P.O. Box 1056  
Santa Fe, New Mexico 87504

\* \* \*

1 WHEREUPON, the following proceedings were had at  
2 9:05 a.m.:

3 EXAMINER STOGNER: At this time I'll call Case  
4 13,108. This is the Application of Concho Exploration,  
5 Inc., to increase the depth bracket allowable for the  
6 Shugart-Delaware Pool, Eddy County, New Mexico.

7 Call for appearances.

8 MR. FELDEWERT: May it please the Examiner, my  
9 name is Michael Feldewert. I'm with the Santa Fe office of  
10 the law firm of Holland and Hart, appearing on behalf of  
11 the Applicant, Concho Exploration, Inc.

12 EXAMINER STOGNER: Any other appearances?

13 MR. BRUCE: Mr. Examiner, Jim Bruce of Santa Fe,  
14 entering an appearance on behalf of Devon Energy Production  
15 Company, L.P., and also Devon OEI Operating, Inc.

16 EXAMINER STOGNER: I'm sorry, Devon OEI?

17 MR. BRUCE: Yes, sir.

18 EXAMINER STOGNER: Operating?

19 MR. BRUCE: Operating, Inc.

20 EXAMINER STOGNER: Any other appearances?

21 Mr. Bruce, do you have any witnesses?

22 MR. BRUCE: I have no witnesses.

23 EXAMINER STOGNER: Do you have witnesses today,  
24 Mr. Feldewert?

25 MR. FELDEWERT: Mr. Examiner, I have two

1 witnesses that need to be sworn.

2 EXAMINER STOGNER: Will the witnesses please  
3 stand at this time?

4 (Thereupon, the witnesses were sworn.)

5 EXAMINER STOGNER: Is there any need for opening  
6 remarks at this time by --

7 MR. BRUCE: No, I'm not here in objection of the  
8 case, Mr. Examiner.

9 EXAMINER STOGNER: Well, do you want to make a  
10 remark anyway?

11 Mr. Feldewert?

12 MR. FELDEWERT: We will proceed with our witness,  
13 Mr. Examiner.

14 JAMES TURBYFILL,  
15 the witness herein, after having been first duly sworn upon  
16 his oath, was examined and testified as follows:

17 DIRECT EXAMINATION

18 BY MR. FELDEWERT:

19 Q. Could you please state your name and where you  
20 reside for the record?

21 A. I'm James Turbyfill from Midland, Texas.

22 Q. Mr. Turbyfill, by whom are you employed and in  
23 what capacity?

24 A. Staff geologist with Concho Resources.

25 Q. Have you previously testified before the Division

1 and had your credentials as an expert witness in petroleum  
2 geology accepted and made a matter of public record?

3 A. Yes, I have.

4 Q. And are you familiar with the Application that  
5 has been filed by Concho Exploration in this case?

6 A. Yes, I am.

7 Q. And you've made a geologic study of the area that  
8 is the subject of this Application?

9 A. Yes.

10 Q. And are you prepared to share the results of your  
11 work with the Examiner?

12 A. Yes, I am.

13 MR. FELDEWERT: Mr. Examiner, are the witness's  
14 qualifications acceptable?

15 EXAMINER STOGNER: Mr. Turbyfill is so qualified.

16 Q. (By Mr. Feldewert) Would you briefly summarize  
17 what Concho seeks with this Application?

18 A. Concho seeks to increase the depth bracket  
19 allowable for the Shugart-Delaware Pool from 80 to 142  
20 barrels a day, to conform to the depth of a 6100-foot well  
21 we recently completed in that pool.

22 Q. Now, why does Concho seek to increase the  
23 authorized producing rates for this pool?

24 A. Our newly completed well in the Shugart-Delaware  
25 is producing from a separate source of oil at a depth of

1 6100 and is capable of producing at a rate of about 200  
2 barrels a day.

3 Q. Okay. Now, why don't you go through a little bit  
4 of the history of the pool? When was this pool created?

5 A. It was created in 1959 with Commission Order  
6 Number R-1324.

7 Q. And what was the initial discovery well?

8 A. Discovery well was the Gulf Federal Littlefield  
9 "AB" Number 1, which is in the southwest quarter of Section  
10 22 of 18-31.

11 Q. And just so we can orient everybody, is Concho  
12 Exploration Exhibit Number 1, is that a land map -- plat,  
13 of the area?

14 A. Yes, it is. The scale on it is one inch equals  
15 4000 feet. What I've highlighted are all of the Delaware  
16 wells on the map. In the center is the Shugart-Delaware  
17 Pool with the Concho Principle Federal Number 1, the  
18 subject of the hearing, indicated by the green circle.

19 Shugart West Field is obviously the one to the  
20 west, Shugart-Delaware is in the center, and the Shugart  
21 East is the other field.

22 Q. Okay. Now, you were talking about the initial  
23 discovery well. Which well is that with respect to what's  
24 shown on Exhibit Number 1?

25 A. That would be in Unit Letter M of Section 22.

1 Q. Okay.

2 A. The southwest quarter of the southwest quarter.

3 Q. Do you know what the top perforations were for  
4 that initial discovery well?

5 A. Top perforations were at 4970.

6 Q. Okay. And was that then assigned a depth bracket  
7 allowable based on those perforations pursuant to Rule 505?

8 A. Yes, it was, and that allowable was 80 barrels a  
9 day.

10 Q. And that's for the depth range of zero to 4999  
11 feet; is that correct?

12 A. That's correct.

13 Q. All right, for each 40-acre unit?

14 A. Right.

15 Q. What acreage is presently included in the  
16 Shugart-Delaware Pool?

17 A. Okay, in Section 22 it's the west half of the  
18 southwest quarter and the southwest quarter of the  
19 northwest quarter. And then in Section 27 it's the west  
20 half of the northwest quarter and the northeast quarter of  
21 the northwest quarter.

22 Q. Okay. Now, your Exhibit Number 1 shows all of  
23 the current Delaware producers; is that right?

24 A. Yes, all of the current producers and all of the  
25 wells that may have been plugged out also in the Delaware.



1 Q. Okay, and Concho's new deeper well has a green  
2 highlighting to it; is that correct?

3 A. Yeah, that's correct, in Section 27.

4 Q. So am I correct that there is no other Delaware  
5 production within a mile of this Shugart-Delaware Pool?

6 A. That's correct.

7 Q. All right. Now, why don't you turn to Concho's  
8 Exhibit Number 2? Would you identify that and review that  
9 for the Examiner, please?

10 A. Okay, this is a structure map on top of the  
11 shallow Delaware pay in the Shugart-Delaware field. The  
12 subsea values that are mapped are indicated in the red  
13 numbers beneath the wells, and the contour interval is 50  
14 feet. And on this map only the wells that penetrated that  
15 zone are shown.

16 The Delaware producers are indicated by the green  
17 dots, and the Principle Fed Number 1 is the well that has a  
18 red circle around it and also a green dot around it.

19 Q. That's Concho's new deeper well?

20 A. That's correct.

21 Q. Okay. What do the triangles represent?

22 A. Okay, those are the surrounding wells that tested  
23 -- or that penetrated the upper Delaware sand and tested  
24 it, and there's seven of them -- they were nonproductive in  
25 the Delaware -- five of which were recompleted in the

1 Grayburg.

2 Q. Is that the Grayburg sand?

3 A. Yes, it is.

4 Q. Okay. Now, is the producing area for this  
5 shallower Delaware zone, has it largely been defined?

6 A. I believe it has. The five wells that are lined  
7 up on the crest of the structure all have a subsea value of  
8 greater than a subsea of minus 1300, and the flank wells  
9 are somewhat below that. Our new well came in about 30  
10 feet low to that.

11 Q. Okay. Now, I don't know if you've testified to  
12 this yet or not. What is the depth of Concho's new well  
13 that's depicted on here with the red circle around it?

14 A. I think we TD'd around 6300 feet.

15 Q. Okay.

16 A. And the production ranges from 6120 to 6194.

17 Q. All right, 6120 to 6194.

18 A. Uh-huh.

19 Q. Now in comparison, what is the depth of the  
20 producing wells that are shown along the structure on your  
21 Exhibit Number 2?

22 A. All of them are right around 4900 feet.

23 Q. In your opinion, Mr. Turbyfill, is Concho's new  
24 well producing from the same source of supply as the  
25 existing shallower wells, or is this a different source of

1 supply?

2 A. It's a different source. We're about 1100 feet  
3 lower in the Delaware than the shallower zones.

4 Q. What has Concho's well -- Or what is the  
5 producing capability of Concho's new well, based on your  
6 testing to date?

7 A. I think it potentialized for 205 barrels a day, and  
8 we've got it choked back to 77, to meet the current  
9 allowable.

10 Q. Okay. Now, what other geologic information do  
11 you have to indicate that Concho's new well is producing  
12 from a separate source of supply within this Delaware  
13 formation?

14 A. Exhibit 3.

15 Q. Okay, why don't you pull that out, identify that  
16 and explain that to the Examiner?

17 A. Okay, this is a structural cross-section that has  
18 every well in the Shugart-Delaware field in it. It runs  
19 from north to south. The Principle Fed Number 1, which is  
20 the subject well, is the last well on the cross-section.

21 And I've got some correlation lines in there.  
22 The top correlation line is the top of the shallow Delaware  
23 sand pay. Then down below that we've got a correlation  
24 line for the lower Delaware sand pay that we're currently  
25 producing from in the Principle Fed, and below that is the

1 Bone Spring lime.

2 Q. Okay, so you have two wells here that were  
3 drilled deeper?

4 A. Yes, that's correct. The discovery well, the  
5 "AB" Number 1, was a Devonian test, so it penetrated the  
6 whole section, and our well did, but the other four did  
7 not.

8 Q. Okay, now let me ask you something. On here it  
9 shows Ricks Exploration, Inc., Principle Federal Number 1.  
10 Is that Concho's new well?

11 A. Yes.

12 Q. Okay.

13 A. Yes.

14 Q. Did you purchase the -- Was there a merger or a  
15 purchase of Ricks Exploration, Inc.?

16 A. That's correct.

17 Q. All right. Now, what does this map indicate to  
18 you?

19 A. Well --

20 Q. I should say what does this cross-section  
21 indicate to you?

22 A. I've indicated the perforations on each of the  
23 wells in that depth column, and that's indicated in green.  
24 And if you -- It's not real plain, but if you look real  
25 close, all of the first five wells are all productive from

1 that package of sands up near the top of the Delaware pay  
2 sand correlation line, and that package is present and  
3 correlative in the Principle Fed Number 1, the last well on  
4 the section.

5 And then 1100 feet below that you can see there's  
6 an additional sand at the basal part of the Brushy Canyon  
7 that is productive in the Principle Fed Number 1.

8 Q. Now, you indicated that Concho's new well is  
9 producing from this deeper, what you call Brushy Canyon  
10 sand?

11 A. Yes, that's correct.

12 Q. And there's an 1100-foot difference between the  
13 sands in which the shallower Delaware wells are producing  
14 and your new well?

15 A. That's right. And that section should be water-  
16 wet sands and tight siltstones.

17 Q. In your opinion as a geologist, is there any  
18 chance that there's any communication between the shallower  
19 producing sand and the deeper producing sand in which  
20 Concho's well is located?

21 A. I don't believe there is any communication.

22 Q. Under Division Rule 505, what is the depth  
23 bracket allowable for a well that is 6000 feet deep?

24 A. That would be 142 barrels a day per 40.

25 Q. Okay. And is that the depth bracket allowable

1 that Concho is requesting that the Division now assign to  
2 this pool?

3 A. Yes.

4 Q. Okay. Is Concho's Exhibit Number 4 an affidavit  
5 giving notice of this hearing?

6 A. Yes.

7 Q. Okay, and was notice of this hearing provided to  
8 all Division-designated operators of wells in the Shugart-  
9 Delaware Pool?

10 A. It was. I think the only other operator is  
11 Devon.

12 Q. Okay, and I think you indicated there are no  
13 other Delaware wells within one mile of this pool area?

14 A. That's correct.

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

19 A. Yes, it will.

20 Q. And is Concho planning on calling a petroleum  
21 engineer to testify further about this Application?

22 A. Yes.

23 Q. Were Concho Exhibits 1 through 4 prepared by you  
24 or compiled under your direction and supervision?

25 A. Yes.

1 MR. FELDEWERT: Mr. Examiner, at this time I  
2 would move the admission into evidence of Concho Exhibits 1  
3 through 4.

4 EXAMINER STOGNER: Any objections?

5 MR. BRUCE: No, sir.

6 EXAMINER STOGNER: Exhibits 1 through 4 will be  
7 admitted into evidence.

8 MR. FELDEWERT: And that concludes my questioning  
9 of this witness.

10 EXAMINER STOGNER: Mr. Bruce, your witness.

11 EXAMINATION

12 BY MR. BRUCE:

13 Q. Just a couple of questions. On your Exhibit  
14 Number 2, Mr. Turbyfill --

15 A. Okay.

16 Q. -- the black dots, are those Grayburg or just  
17 shallower wells?

18 A. Yes, they were drilled deeper and recompleted to  
19 the Grayburg.

20 Q. Now, all of them or just the ones with the  
21 triangles?

22 A. No, all of them, other than the ones highlighted  
23 with green, were recompleted to the Grayburg.

24 Q. Okay, they were all deeper wells then?

25 A. That's correct. And there's a couple of gas

1 wells, Morrow gas wells, as well.

2 MR. BRUCE: Okay, that's all I have, Mr.  
3 Examiner.

4 EXAMINER STOGNER: Just a procedural question  
5 here. Mr. Bruce, you're representing Devon OEI. When I  
6 looked at Exhibit Number 4, they have the Devon OEL.

7 MR. BRUCE: Yes, I think that's just -- I think  
8 that's a typo on Holland and Hart's --

9 EXAMINER STOGNER: Is there a problem with this?

10 MR. BRUCE: No, there's no problem --

11 EXAMINER STOGNER: Okay.

12 MR. BRUCE: -- Mr. Examiner. This acreage was  
13 owned by Ocean Energy, Inc., so Devon OEI Operating, Inc.  
14 is the -- they purchased Ocean and renamed it.

15 EXAMINER STOGNER: How many Devons are there?

16 MR. BRUCE: Boy, I couldn't tell you.

17 EXAMINER STOGNER: Okay.

18 MR. BRUCE: There's been a few mergers lately, so  
19 most of them are under Devon Energy Production.

20 EXAMINER STOGNER: Okay.

21 EXAMINATION

22 BY EXAMINER STOGNER:

23 Q. Mr. Turbyfill, first of all, as far as you know,  
24 this was a vertical well drill and not a horizontal?

25 A. Oh, yes.



1 Q. Okay.

2 A. It was vertical.

3 Q. Now, the Delaware is normally made up of the  
4 Brushy Canyon and the Cherry Canyon, and there's another  
5 one --

6 A. Bell.

7 Q. -- there's a Mountain or something.

8 A. Bell Canyon.

9 Q. Bell Canyon. Is that specific in this area of  
10 the Delaware? I mean, can you tell where the Cherry  
11 Canyon, Brushy Canyon and the other member --

12 A. I think you can. I believe if you look at the  
13 Principle Fed, the last well on the cross-section, most  
14 folks would consider the Brushy Canyon to extend from a  
15 depth of 5140 down to the top of the Bone Spring lime, and  
16 above that -- the sands that are productive above that  
17 would be in the Cherry Canyon. And then you go into the  
18 Grayburg, because you're in a shelf-to-basin transition.

19 Q. Now, did you contact the geologist in the Artesia  
20 Office to maybe have the vertical limits contracted in the  
21 existing pool and then have this as a new pool?

22 A. We tried that, and we tried to put it into a  
23 Shugart-Brushy Canyon field, and he was hesitant to do  
24 that.

25 Q. Did he say why? Did you talk to him?

1           A.    His explanation was, the Delaware is one  
2   reservoir, or one formation, and they're not breaking it  
3   out into three groups anymore, or three formations anymore.

4           Q.    Okay. What's your feeling on that? Should it be  
5   broke out or should it remain one, just with the allowable?  
6   I mean, that's what you're asking for today, but is there a  
7   preference?

8           A.    Well, technically, the Delaware is a group, not a  
9   formation, and it's comprised of three formations, so it's  
10  not one formation.

11          Q.    Granted. Most of the Delaware pools that do  
12  exist are Delaware and, well, they range from -- what? 300  
13  feet --

14          A.    Yeah.

15          Q.    -- but there are a few Cherry Canyon, Brushy  
16  Canyon and upper and lower Delaware, but you're not seeking  
17  that today, you're just wanting an allowable to reflect?

18          A.    That's correct.

19          Q.    Okay. The discovery well is still producing.

20          A.    All of them are still producing. They range from  
21  2 to 14 barrels a day in the shallow zone, and like I said,  
22  our well is pumping at 70 to 80 barrels a day.

23          Q.    Okay, in your Principle Federal well, there's no  
24  current perms up there in the shallower portion or the --  
25  I'm sorry, the upper portion of the Delaware; is that

1 correct?

2 A. That's correct.

3 Q. Do you see that as a potential layer, or do you  
4 plan to open it, or has that watered out, or have you  
5 tested it and have any information on it?

6 A. I think it's going to be water-wet. I know it's  
7 going to be depleted if it's not water-wet. But on the  
8 structure map you can see there's a couple wells north of  
9 there, in Units K and N, that encountered that sand at a  
10 higher subsea elevation than our Principle Fed, so I think  
11 we are offstructure, and below the -- what I'd call the  
12 oil-water contact, or the commercial oil-water contact of  
13 the field. So I don't really expect it to be much of a  
14 producer, if it is productive.

15 Q. And who's the current operator of the discovery  
16 well?

17 A. Ocean. Ocean operates -- I mean Devon operates  
18 the wells in 22, and we operate the three in 27.

19 EXAMINER STOGNER: Okay, I have no other  
20 questions of Mr. Turbyfill. You may be excused -- unless  
21 you have any other questions, Mr. Bruce?

22 MR. BRUCE: No, sir.

23 MR. FELDEWERT: No, Mr. Examiner.

24 EXAMINER STOGNER: Okay.

25 MR. FELDEWERT: We'll then call our next witness.

1                                    LOIS K. FOLGER,  
2     the witness herein, after having been first duly sworn upon  
3     her oath, was examined and testified as follows:

4                                    DIRECT EXAMINATION

5     BY MR. FELDEWERT:

6                Q.     Would you please state your name and where you  
7     reside for the record?

8                A.     My name is Lois Folger, and I reside in Midland,  
9     Texas.

10              Q.     And by whom are you employed and in what  
11     capacity?

12              A.     I'm employed by Concho Resources, Incorporated,  
13     as a petroleum engineer.

14              Q.     Now, the Applicant in this case is Conoco  
15     Exploration, Inc. What is the relationship between Concho  
16     Resources, Inc., and Concho Exploration, Inc.?

17              A.     Concho Exploration, Inc., is a wholly owned  
18     subsidiary of Concho Resources, Inc.

19              Q.     Okay. Now, have you previously testified before  
20     the Oil Conservation Division?

21              A.     I have not.

22              Q.     All right. Is Concho Exhibit Number 5 a copy of  
23     your current résumé?

24              A.     It is.

25              Q.     It indicates that you received a master's of

1 science degree in petroleum engineering from the University  
2 of Texas in 1995; is that correct?

3 A. That is correct.

4 Q. And that you are registered as a professional  
5 engineer in the State of Texas?

6 A. That's correct.

7 Q. And that you have indeed testified as an expert  
8 witness in petroleum engineering before the Texas Railroad  
9 Commission?

10 A. That is correct.

11 Q. All right. Now, it lists your work experience  
12 from 1984 to the present. Has that included the Permian  
13 Basin area?

14 A. Yes, I've worked in various capacities as a  
15 petroleum engineer for the last 19 years, all in the  
16 Permian Basin.

17 Q. Okay, and the second page lists a number of  
18 professional organizations that you are currently a member  
19 of, correct?

20 A. Correct.

21 Q. Are you familiar with the Application that has  
22 been filed by Concho in this case?

23 A. I am.

24 Q. And have you studied the area that is the subject  
25 of this Application?

1           A.    I have.

2           MR. FELDEWERT:  Mr. Examiner, I would submit Ms.  
3  Folger as an expert witness in petroleum engineering.

4           EXAMINER STOGNER:  Any objection?

5           MR. BRUCE:  No, sir.

6           EXAMINER STOGNER:  Ms. Folger, you said you've  
7  testified before the Railroad Commission.  Is that an  
8  organization kind of like us or something?

9           THE WITNESS:  It is.

10          (Laughter)

11          EXAMINER STOGNER:  Okay.  It looks like all your  
12  résumé stuff has stuff in Texas.  Did you do something  
13  wrong to get over here in New Mexico?

14          THE WITNESS:  It was a promotion.

15          EXAMINER STOGNER:  Oh, okay, well, you're  
16  definitely qualified, Ms. Folger.  You may continue.

17          Q.    (By Mr. Feldewert)  In light of your expertise,  
18  have you conducted a study of the five producing shallower  
19  wells within this pool?

20          A.    I have.

21          Q.    Okay.  The first question I have, are they  
22  capable today of producing at the present allowable of 80  
23  barrels --

24          A.    No.

25          Q.    -- per 40 acres?  Okay.

1           How would you characterize the production status  
2 of these five wells that are currently producing from a  
3 shallower zone?

4           A.    The shallower Delaware wells produce from a  
5 mature field, and it's largely depleted. The wells are all  
6 on artificial lift, and they produce only 2 to 14 barrels  
7 of oil a day.

8           I'd like to refer to Exhibit Number 6, which is a  
9 base map that shows the wells that produce from the  
10 Shugart-Delaware field, and these wells are depicted by  
11 green dots, and for each of these wells I've got an  
12 information box that gives some pertinent data about each  
13 well. It lists the perforations, the original initial  
14 potential for each well, the well's current rate and its  
15 cumulative production.

16          Q.    Now, the Concho well has a red circle around it?

17          A.    It does.

18          Q.    Okay, and it shows that it's producing at a rate  
19 of -- on average, a rate of 77 barrels a day. Is that well  
20 being choked back?

21          A.    It is.

22          Q.    Okay. The other five producing wells in the  
23 shallower zone, what is their range of current production?

24          A.    They range from two barrels a day to 14 barrels  
25 of oil a day.

1 Q. And how old are these wells?

2 A. On average, they're 40 years old. The discovery  
3 well, the Littlefield "AB" Federal Number 1, was discovered  
4 in 1958, and the most recent of these five wells that  
5 produce from the shallow Delaware zone were completed in  
6 1966.

7 Q. And I think you testified that none of these five  
8 wells are flowing?

9 A. No, they're all produced on artificial lift.

10 Q. What is the -- To the extent it remains, what is  
11 or was the reservoir drive for this shallower zone?

12 A. It's solution gas drive.

13 Q. In your opinion, will increasing the depth  
14 bracket allowable from 80 barrels a day per 40 acres to 142  
15 barrels have a negative impact on the shallower zone?

16 A. No.

17 Q. And why is that?

18 A. I'd like to refer to Exhibit 7, which has some  
19 tabular data that backs up Exhibit 6. There's three  
20 sections on this exhibit. The top section shows the well  
21 name, original operator, gross perforations, completion  
22 date, which we've already gone over, the well's initial  
23 potential.

24 The second section has much of the same data for  
25 those original five wells, and in addition it has the



1 cumulative production through February of 2003, as well as  
2 current rates.

3 And then lastly, the bottom section has  
4 information on the newly completed well, which is the lower  
5 Delaware pay.

6 Q. Based on their present producing capabilities, is  
7 it going to make any difference whether the allowable is at  
8 80 barrels or 142 barrels?

9 A. The allowable will not -- A change in allowable  
10 will not impact the five original shallow Delaware wells.

11 Q. Okay.

12 A. And I'd like to refer now to Exhibit 8, which is  
13 in five parts. The first page of Exhibit 8 shows  
14 historical production data for the very first well, the  
15 Littlefield "AB" Federal Number 1, and the subsequent pages  
16 show production decline curves for all the wells in the  
17 shallow Delaware -- Shugart-Delaware fields.

18 This is a semi-log plot of production data,  
19 showing oil, water and gas production over the entire life  
20 of each well. At the top not only do I show the well name  
21 but when it was completed. And on this plot I have denoted  
22 a horizontal line at 80 barrels a day, which is the top  
23 allowable for the field.

24 Q. That's the horizontal dark black line?

25 A. Correct.

1 Q. Okay.

2 A. And so you can see the first well, the discovery  
3 well, never averaged top allowable during its entire 45-  
4 year life.

5 Q. Have any of these five wells averaged close to  
6 the allowable?

7 A. No, none of the wells have.

8 Q. Okay.

9 A. So increasing the allowable from 80 barrels a day  
10 to 142 barrels a day would not have an impact on these  
11 wells.

12 Q. Now, Concho's new well is located at a depth of  
13 6120 feet. What is the reservoir drive for this deeper  
14 zone?

15 A. It's solution gas drive.

16 Q. Now, Mr. Turbyfill testified that Concho's new  
17 well is producing from a different source of supply than  
18 these five original wells. Do you agree with that  
19 observation?

20 A. I do agree with that.

21 Q. Okay. Why don't you turn to Exhibit Number 9,  
22 identify that and review that for the Examiner, please?

23 A. Okay, Exhibit Number 9 is a plot that shows daily  
24 test data for some wells in the Shugart-Delaware field.  
25 Concho operates two of the shallow Delaware wells, those in

1 Section 27, the Hinkle Federal Number 1 and the Greenwood  
2 Pre-Grayburg Unit Number 4. Because we operate these wells  
3 we have daily test data for them, and Exhibit Number 9  
4 shows daily test data for 2003, and you can see that the  
5 Hinkle Federal Number 1 and the Greenwood Pre-Grayburg Unit  
6 Number 4 produce about 10 barrels a day.

7 In late April of 2003, we completed the Principle  
8 Federal Number 1, and its official completion date was in  
9 May of 2003 with an IP of 205 barrels of oil a day. We did  
10 not continue to produce that well at that rate since the  
11 allowable for the field is 80 barrels a day.

12 You can see that there is no interference from  
13 the Principle Federal at the deeper Delaware zone  
14 interfering with production from the shallower Delaware  
15 zone.

16 Q. In your opinion, is there any communication  
17 between the shallower producing zone and the deeper  
18 producing zone in which Concho's new well is completed?

19 A. No, there is no communication between these  
20 zones.

21 Q. Do you see any potential damage to this deeper  
22 producing zone if the depth bracket allowable for this pool  
23 is increased to 142 barrels?

24 A. No, 142 barrels is the normal depth bracket  
25 allowable Division Rule 505 would establish if this deeper

1 well had been the first well in the pool.

2 Q. In your opinion, will increasing the depth  
3 bracket allowable for the Shugart-Delaware Pool from 80  
4 barrels to 142 barrels per 40-acre spacing unit have a  
5 negative impact on the reservoir as a whole?

6 A. No.

7 Q. In your opinion, will approval of this  
8 Application be in the best interests of conservation, the  
9 prevention of waste and the protection of correlative  
10 rights?

11 A. Yes.

12 Q. Were Concho Exhibits 5 through 9 prepared by you  
13 or compiled under your direction and supervision?

14 A. They were.

15 MR. FELDEWERT: Mr. Examiner, at this time I  
16 would move the admission into evidence of Concho Exhibits 5  
17 through 9.

18 EXAMINER STOGNER: Any objection?

19 MR. BRUCE: No, sir.

20 EXAMINER STOGNER: Exhibits 5 through 9 will be  
21 admitted into evidence.

22 MR. FELDEWERT: Mr. Examiner, that concludes my  
23 questioning of this witness.

24 EXAMINER STOGNER: Mr. Bruce, your witness.

25 MR. BRUCE: Really just one question.

## EXAMINATION

BY MR. BRUCE:

Q. On your Exhibit 6, the northernmost well producing at 2 barrels of oil, is that at an economic limit yet?

A. It is very close. I made some assumptions about what our operating costs were for our wells, and I think I've got about one year left on that well.

MR. BRUCE: Okay, that's all.

EXAMINER STOGNER: Any other questions?

MR. BRUCE: No, sir.

MR. FELDEWERT: No, Mr. Examiner.

## EXAMINATION

BY EXAMINER STOGNER:

Q. Whenever I'm looking at your Exhibit 8 here, and this is the first stage, the discovery well, it looked like the production increased over the first 10 years. Am I reading that right?

A. You are. Originally this well was flowing. By the late 1960s it was put on artificial lift.

Q. The late 1960s?

A. I don't know the exact date off the top of my head, but it was between 1966 and 1969.

Q. So that's actually reflecting a flow rate of about 10 years?

1 A. Yes.

2 Q. How about the completions on the other wells?  
3 Same thing, did they go on artificial lift, or did we see a  
4 natural decline? Like I'm looking on the second page, on  
5 the Number 3 well.

6 A. The Number 3 well always produced on rod pump.

7 Q. Was there any other wells flowing?

8 A. Yes, the Greenwood Pre-Grayburg Unit Number 4,  
9 the second to the last well in Exhibit 8, and the Hinkle  
10 Federal Number 1, the last page of Exhibit 8.

11 Q. Okay.

12 A. Those both produced for -- you know, through the  
13 late 1960s, flowing.

14 EXAMINER STOGNER: A somewhat prolific zone.  
15 Now, you had mentioned also that under the current rules,  
16 if this had been the discovery well you would have been  
17 eligible or automatically received the 142-barrel-a-day  
18 allowable. In fact, you would have been eligible for the  
19 oil-discovery allowable. That would have been a higher --  
20 There is an oil-discovery allowable, first well, according  
21 to 509; you can get some additional allowable for that  
22 particular well. But since we're going this way...

23 I have no other questions of this witness at this  
24 time.

25 MR. FELDEWERT: Mr. Examiner, that concludes our

1 presentation.

2 EXAMINER STOGNER: There's quite a few people in  
3 here today, and the reason we're here is, Rule 505.D, as in  
4 delta, special allowables of more or less than the regular  
5 depth bracket allowable shall be assigned only after notice  
6 and hearing. Now might be a time to reflect and think  
7 about how this might be changed, maybe a part of the  
8 regular nomenclature with data information submitted to the  
9 District Office and/or here, and let it be attached to a  
10 regular nomenclature case as periodically comes forth.  
11 That would probably satisfy that Rule, so maybe a policy.  
12 I'm just throwing some ideas out.

13 When this Rule was first established, and it's  
14 still true today, one would want to at least look at the  
15 allowable in case the reservoir could not sustain it, and  
16 it lets everybody else that has potential in that pool to  
17 come in and voice their opinion. That's what we're here  
18 today. But just throwing out some ideas for people to  
19 ponder and think about how this Rule could be changed, how  
20 you'd want it changed, if you want it changed. But I think  
21 there's some leeway here to do this at the District and/or  
22 attach it to a regular nomenclature without changing the  
23 Rule, but I also think notice to the other operators is  
24 still applicable out there, and I think this reflects that  
25 Devon is here today. Just some points to ponder.

1 With that, is there anything further in Case  
2 13,108?

3 MR. FELDEWERT: No, Mr. Examiner.

4 EXAMINER STOGNER: Okay, then this matter will be  
5 taken under advisement. Thank you.

6 Let's take a 15-minute recess at this time, after  
7 which we will call the Fasken case, 13,107.

8 (Thereupon, these proceedings were concluded at  
9 9:42 a.m.)

10 \* \* \*

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16 I do hereby certify that the foregoing is  
17 a complete record of the proceedings in  
18 the Examiner hearing of Case No. 13108  
19 heard by me on 24 July 2003

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Examiner  
Oil Conservation Division



## CERTIFICATE OF REPORTER

STATE OF NEW MEXICO    )  
                                  )   ss.  
COUNTY OF SANTA FE    )

I, Steven T. Brenner, Certified Court Reporter and Notary Public, HEREBY CERTIFY that the foregoing transcript of proceedings before the Oil Conservation Division was reported by me; that I transcribed my notes; and that the foregoing is a true and accurate record of the proceedings.

I FURTHER CERTIFY that I am not a relative or employee of any of the parties or attorneys involved in this matter and that I have no personal interest in the final disposition of this matter.

WITNESS MY HAND AND SEAL July 25th, 2003.



STEVEN T. BRENNER  
CCR No. 7

My commission expires: October 16th, 2006