

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

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

ORIGINAL

APPLICATION OF DEVON ENERGY
PRODUCTION COMPANY, L.P. TO
AMEND SPECIAL POOL RULES,
LEA COUNTY, NEW MEXICO.

CASE NO. 15147

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

June 12, 2014

Santa Fe, New Mexico

BEFORE: RICHARD EZEANYIM, CHIEF EXAMINER

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This matter came on for hearing before the
New Mexico Oil Conservation Division, Richard Ezeanyim,
Chief Examiner, on Thursday, June 12, 2014, at the New
Mexico Energy, Minerals and Natural Resources
Department, Wendell Chino Building, 1220 South St.
Francis Drive, Porter Hall, Room 102, Santa Fe,
New Mexico.

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APPEARANCES

FOR APPLICANT DEVON ENERGY PRODUCTION COMPANY, L.P.:

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1 (8:58 a.m.)

2 EXAMINER EZEANYIM: Okay. Let's go back to
3 the last page and call Case Number 15147, continued from
4 May 29th, and this is the application of Devon Energy
5 Production Company, L.P. to amend special pool rules,
6 Lea County, New Mexico.

7 Call for appearances.

8 MR. BRUCE: Mr. Examiner, Jim Bruce of
9 Santa Fe representing the Applicant. I have three
10 witnesses.

11 EXAMINER EZEANYIM: Any other appearances?
12 Okay. May the witnesses in this case stand
13 up, state your name individually and be sworn?

14 MR. HARRAN: Craig Harran, geologist for
15 Devon Energy in Oklahoma City.

16 MR. BROUSSARD: Andy Broussard, reservoir
17 engineer, Oklahoma City.

18 MR. WALKER: Samuel Walker, landman,
19 Oklahoma City.

20 (Mr. Harran, Mr. Broussard and Mr. Walker
21 sworn.)

22 EXAMINER EZEANYIM: Counsel, you may
23 proceed.

24 SAMUEL WALKER,
25 after having been previously sworn under oath, was

1 questioned and testified as follows:

2 DIRECT EXAMINATION

3 BY MR. BRUCE:

4 Q. Mr. Walker, who do you work for and in what
5 capacity?

6 A. I work for Devon Energy, and I'm a landman for
7 them.

8 Q. Have you previously testified before the
9 Division?

10 A. I have.

11 Q. And were your credentials as an expert landman
12 accepted as a matter of record?

13 A. They were.

14 Q. And are you familiar with the land matters
15 involved in this application?

16 A. I am.

17 MR. BRUCE: Mr. Examiner, I tender
18 Mr. Walker as an expert petroleum landman.

19 EXAMINER EZEANYIM: Mr. Walker, have you
20 testified before me before?

21 THE WITNESS: Yes.

22 EXAMINER EZEANYIM: You have. Okay. So
23 accepted.

24 Q. (BY MR. BRUCE) Mr. Walker, can you please
25 identify Exhibit 1 for the Examiner and briefly discuss

1 its contents?

2 A. Yeah. Exhibit 1 is a land plat that we have
3 that shows the boundaries of the North Paducah-Delaware
4 pool. Page 2 of Exhibit 1 gives a legal description of
5 the acreage of the pool. Page 3 is a C-102 of Devon
6 Energy that shows the project area of the subject well,
7 the Trionyx 6 Federal 4H, which is in the
8 Paducah-Delaware North pool.

9 EXAMINER EZEANYIM: Excuse me. The black
10 line on Exhibit 1 is the horizontal extent of that pool,
11 right?

12 THE WITNESS: Yes, the boundaries as they
13 are now.

14 Q. (BY MR. BRUCE) And a couple of things to follow
15 up, Mr. Walker. The black line is the current vertical
16 extent. Did you check that with Paul Kautz of the
17 Division's Hobbs office?

18 A. Yes.

19 Q. And so the pool has not been further expanded
20 at this point?

21 A. Not yet.

22 EXAMINER EZEANYIM: Since 1968, correct?

23 MR. BRUCE: Correct.

24 Q. (BY MR. BRUCE) But the well that caused you to
25 apply for a pool rules change is the Trionyx well, 4H

1 well, on page 3, right?

2 A. Yes, on the C-102, on page 3 of Exhibit 1.

3 Q. And that well is actually in Section 6, to the
4 west of the defined boundaries of the pool?

5 A. Yes.

6 Q. And that well was placed in the pool by the
7 Hobbs -- the Division's Hobbs office; was it not?

8 A. Yes, it was.

9 Q. And what is Exhibit 2?

10 A. Exhibit 2 is part of the order that created
11 this pool that we're talking about, the top perf, which
12 was 4,795 feet for the initial discovery well.

13 Q. And what is Exhibit 3?

14 A. Exhibit 3 is the Division's allowable bracket
15 for this particular depth of well, which is 80 barrels
16 of oil per day per 40 acres.

17 Q. So it's got the lowest allowable.

18 And I think the other exhibits -- or the
19 other witnesses have more data on this, but the Trionyx
20 4H well that is going to be discussed, was that
21 completed at a vertical depth below 8,000 feet?

22 A. Yes, it was.

23 Q. And then what is Exhibit 4?

24 A. Exhibit 4 is part of the order as well that
25 establishes rules for the pool. On pages 3 and 4 of the

1 order, you see some of the main rules there. One,
2 establishing a gas well pooling 160 acres and pool for
3 oil wells of 40 acres. The GOR classified 30,000 to 1
4 for a gas well, and some other rules for that order as
5 well.

6 Q. And the limiting GOR for a well in the pool is
7 3,000 to 1, correct?

8 A. It is for oil.

9 Q. And then briefly, what does Devon seek in this
10 case?

11 A. We're seeking to increase the pool of
12 allowables at 350 barrels of oil per day per 40-acre
13 unit retroactive to the first day of production for the
14 Trionyx Fed 4H.

15 Q. And what is Exhibit 5?

16 A. Exhibit 5 lists the operators of wells in the
17 pool of more than one mile of the pool and the Trionyx 6
18 Fed 4H as well.

19 Q. So you not only want within one mile of the
20 pool but within a mile of the Trionyx 6 Federal #4H?

21 A. Yes.

22 Q. And were all of these operators notified of the
23 hearing?

24 A. They were. Exhibit 6 shows how all the
25 operators were notified of this.

1 Q. And were Exhibits 1 through 6 either prepared
2 by you or compiled from company business records?

3 A. They were.

4 Q. And in your opinion, is the granting of this
5 application in the interest of conservation and the
6 prevention of waste?

7 A. Yes.

8 MR. BRUCE: Mr. Examiner, I'd move the
9 admission of Exhibits 1 through 6.

10 EXAMINER EZEANYIM: Exhibits 1 through 6
11 will be admitted.

12 (Devon Energy Production Company, L.P.
13 Exhibit Numbers 1 through 6 were offered
14 and admitted into evidence.)

15 MR. BRUCE: And I have no further questions
16 of the witness.

17 CROSS-EXAMINATION

18 BY EXAMINER EZEANYIM:

19 Q. Are you a land person?

20 A. Yes.

21 Q. I tend to ask engineering questions, but that's
22 okay.

23 That order that was issued in 1968 was very
24 obvious [sic] me, and now your counsel said -- is it
25 Devon? Devon Energy, right?

1 A. Yes.

2 Q. What do you seek? Do you seek to change the
3 allowable from 80 to 350?

4 A. Yes.

5 Q. When you look at that order, why is Devon not
6 asking for more than that?

7 MR. BRUCE: Well, I think, Mr. Examiner, if
8 I can answer that question, based on the production from
9 the well -- and this is just for a 40-acre allowable, so
10 the horizontal well is at 350 barrels a day.

11 EXAMINER EZEANYIM: I know. I know what
12 you are asking for. I'm not quarrelling with what you
13 are asking for, but there are other things you should
14 have asked for, because when I read that order -- it's a
15 misnomer to me. I expected Devon to do more than just
16 ask for 350. We could amend that order to change
17 certain information that is not really supposed to be in
18 that order.

19 They say the gas well will be permitted to
20 produce that amount of gas for a gas well. This is only
21 producing a gas well. A gas well can produce anything
22 it wants. Why are we admitting the gas well? It's a
23 gas well, and we do have defined gas well at 30,000
24 cubic feet per barrel. If you can produce a gas well,
25 you can produce anything. Then why are we

1 saying that -- you could have read that order and
2 amended that order. We're not going to amend it because
3 you are not seeking to do that, but that order is giving
4 me a headache.

5 So we are going to look at the allowables
6 and then see what we can do, but we still have to
7 revisit that because a gas well should not be -- we're
8 talking about a gas-oil ratio, right?

9 MR. BRUCE: Well, but the pool rules allow
10 both for oil and gas wells, and we're just asking for
11 the oil allowable.

12 EXAMINER EZEANYIM: Yeah. I know what you
13 are asking for, but you could have done more. See what
14 I mean? You could have done more. Even if you don't
15 agree with what I'm trying to say, we get this right.
16 In 1968, they don't know what's going to happen in 2014.

17 So when you -- if you are looking at it and
18 know what you're doing, you can look at that order and
19 trash it. So I'm not saying -- it's an order. We have
20 to obey it, because it has been written, whether wrong
21 or right. But what I'm saying is that Devon, as a very,
22 you know, prominent operator, should have looked --
23 should have looked at it and asked for several things.

24 If we include your allowable for oil, you
25 still have to comply with the gas. If you drill a gas

1 well, you have to comply with the gas-oil ratio. What
2 is going on here?

3 Well, it's up to you. We will look at 350.
4 But when I looked at the application, nobody mentioned,
5 you know, about amending that order. When I saw "amend
6 Order Number 3437," I say, Okay, that's good; maybe they
7 will amend everything. But it didn't happen. You see
8 what I mean?

9 MR. BRUCE: I see what you mean,
10 Mr. Examiner, but --

11 EXAMINER EZEANYIM: I'm sorry. You are the
12 land person. I will discuss this further with the
13 engineer. You have an engineer from Devon, and then see
14 what he says, because that order should be amended
15 today.

16 MR. BRUCE: Well, we can discuss that. If
17 necessary, we can amend the application, Mr. Examiner,
18 to get rid of whatever you think is proper.

19 EXAMINER EZEANYIM: It has to be a
20 different hearing because it wasn't contemplated today.
21 When I saw it, it was about 5:00. I just read it and
22 then looked at the order, and I thought we could amend
23 it. We can't amend it today. It's a Division order,
24 and the Division order is there whether right or wrong.
25 So you guys can go back and look at it. For your

1 operation in this pool, you need to amend several
2 things. If you drill a gas well, you have to comply
3 with that order in that pool. Yes?

4 MR. BRUCE: Well, I don't believe we're --
5 like I said, it's one of those orders that provides for
6 both oil and gas wells, and we're here for oil well
7 purposes.

8 EXAMINER EZEANYIM: But you don't know.
9 You might hit gas, and if you hit gas, you are going
10 to -- I don't know how you apply that oil-gas ratio.

11 MR. BRUCE: Well, if you look at the
12 Division records, firstly, every well out there in this
13 pool or within a mile of it is 40-acre oil well.

14 EXAMINER EZEANYIM: You know, sometimes I'm
15 angry at myself. I don't know if you were born before
16 1968. I still have a question for you so I can
17 understand what you are asking for as a land person.

18 Q. (BY EXAMINER EZEANYIM) Okay. The well you are
19 drilling, under the rule, it is designated as an oil
20 well, right?

21 A. Uh-huh.

22 Q. Now, when I look at this number one, I see
23 horizontal limit of the pool. Where is your well? What
24 is the name of your well? Where is that well located in
25 relation to this pool?

1 A. There is -- I think about two sections to the
2 west on Section 6 is where our well is located.

3 Q. And it's a mile closer to that pool, because in
4 two sections to the west, are you sure you are producing
5 from that pool?

6 A. That's how it's classified.

7 Q. In accordance with the rule?

8 MR. BRUCE: It's what the Division Hobbs
9 office did, Mr. Examiner.

10 Q. (BY EXAMINER EZEANYIM) Okay. Now, where is
11 Section 6? I'm trying to figure out where it is.

12 MR. BRUCE: Mr. Examiner, we're going to
13 submit this exhibit later. Although this one is
14 unmarked, but it will show --

15 EXAMINER EZEANYIM: Okay. Where is the
16 pool? Somewhere here? And the well is about two miles
17 away.

18 MR. BRUCE: Correct.

19 EXAMINER EZEANYIM: The order says that you
20 can produce from that pool if it's two miles away?

21 MR. BRUCE: Well, Mr. Examiner, we're just
22 doing what the Division Hobbs office told us to do.

23 EXAMINER EZEANYIM: Paul Kautz?

24 MR. BRUCE: (Indicating.)

25 Q. (BY EXAMINER EZEANYIM) Okay. The Trionyx.

1 Which one are you drilling? The 4H?

2 A. The 4H, yes.

3 Q. I see here 7H and 6H. There is no 4H. Which
4 one is it?

5 MR. BRUCE: Oh, well --

6 EXAMINER EZEANYIM: I want to know where
7 the 4H will be drilled. I can see 1H.

8 THE WITNESS: If you refer to page 3 of
9 Exhibit 1.

10 MR. BRUCE: The 4H well is in the east
11 half-west half of Section 6, Mr. Examiner.

12 THE WITNESS: That outlined boundary of the
13 east half-west half is where the 4H is located.

14 MR. BRUCE: The exhibit you have in your
15 hand was just to show the location of the other wells,
16 which the engineer will be discussing.

17 EXAMINER EZEANYIM: But the 4H is not
18 showing?

19 MR. BRUCE: Yeah.

20 EXAMINER EZEANYIM: And the 4H is shown in
21 green on this page, correct?

22 MR. BRUCE: Correct.

23 EXAMINER EZEANYIM: And it's two miles away
24 from the North Paducah pool, right?

25 MR. BRUCE: Roughly, yes.

1 EXAMINER EZEANYIM: Let me try to find
2 this. If I look at this page 1, 4H is outside --

3 MR. BRUCE: It will be just to the west of
4 the 6H well.

5 EXAMINER EZEANYIM: Yes, but it's not going
6 to fit [sic] on Section 5.

7 MR. BRUCE: Correct.

8 THE WITNESS: Correct.

9 EXAMINER EZEANYIM: I would have loved to
10 see that. Even this one doesn't show that.

11 I want to know what we can do with this
12 order that was issued in 1968. I'm not blaming them.
13 They just issued order based on information they have,
14 and things have changed. And they change and this order
15 doesn't --

16 MR. BRUCE: And that's my fault,
17 Mr. Examiner. Unless there is a special need, I just
18 leave the Division orders as they are.

19 EXAMINER EZEANYIM: I mean, you have to
20 obey if that's what it is, and it hasn't been changed.
21 It even says "on the further order of the Division," and
22 there has been no further orders of the Division, so
23 that's what you comply with. If I was out there, I
24 would be mad, and I don't know why you are not. I'm
25 sorry.

1. And then I'm going to note -- the record
2 will reflect that our district geologist says, Well,
3 even though your 4H is within two miles of the North
4 Paducah pool, you are going to produce from that pool,
5 right?

6 MR. BRUCE: Yes.

7 EXAMINER EZEANYIM: There is no other
8 nearby pool that you can produce from?

9 MR. BRUCE: There are other pools. There
10 is the Paducah-Delaware; there is the Double X-Delaware,
11 but they're further to the east and south -- or north
12 and south.

13 EXAMINER EZEANYIM: We need to get more
14 different pools.

15 MR. BRUCE: Well, Mr. Examiner, that's been
16 one of my complaints with the Division. They used to do
17 nomenclature cases virtually every month, and then they
18 stopped doing them for quite a number of years. And
19 that's part of the problem that affects the operators in
20 the pool -- or in the state.

21 EXAMINER EZEANYIM: Especially in this
22 case.

23 MR. BRUCE: Yes.

24 EXAMINER EZEANYIM: It's very evident in
25 this case.

1 MR. BRUCE: And we can certainly seek to
2 expand the pool. That's no -- that's no problem. As
3 you can see, we've already notified offsets, and they
4 have no problem to what Devon is seeking.

5 EXAMINER EZEANYIM: So -- okay. Now, why
6 you are here today, according to the docket, Devon seeks
7 an increase of allowable for a 40-acre oil spacing and
8 proration unit. You want the allowable from 80 to 350,
9 right? Right?

10 THE WITNESS: Correct.

11 EXAMINER EZEANYIM: And there is nothing
12 else you want to do to that order?

13 MR. BRUCE: No. But if there are certain
14 things the Examiner would like us to do in the future or
15 in the immediate future --

16 EXAMINER EZEANYIM: Yeah, I would.

17 MR. BRUCE: -- we'd like to know.

18 EXAMINER EZEANYIM: Sure. I'll let you
19 know.

20 As the land person, I have no further
21 questions. I'll go with the geologist and the engineer.
22 You may step down.

23 THE WITNESS: Thank you.

24 CRAIG HARRAN,
25 after having been previously sworn under oath, was

1 questioned and testified as follows:

2 DIRECT EXAMINATION

3 BY MR. BRUCE:

4 Q. Mr. Harran, who do you work for and in what
5 capacity?

6 A. I'm a geologist with Devon Energy in Oklahoma
7 City.

8 Q. Have you previously testified before the
9 Division?

10 A. Yes.

11 Q. And were your credentials as an expert
12 petroleum geologist accepted as a matter of record?

13 A. Yes.

14 Q. And are you familiar with the land matters
15 involved -- or excuse me -- the geology involved in this
16 application?

17 A. Yes.

18 MR. BRUCE: Mr. Examiner, I'd tender
19 Mr. Harran as an expert petroleum geologist.

20 EXAMINER EZEANYIM: Have you testified here
21 before?

22 THE WITNESS: Yes.

23 EXAMINER EZEANYIM: Okay. You are so
24 qualified.

25 Q. (BY MR. BRUCE) Mr. Harran, you have two

1 exhibits, Exhibits 7 and 8. Why don't you identify
2 Exhibit 7 for the Examiner and discuss its contents?

3 A. Okay. Exhibit 7 is a structure map of the top
4 of the Lower Brushy Canyon, and it shows the Trionyx 6
5 Fed 4H that we drilled from south to north roughly
6 subparallel to depositional strike in Section 6 of 25
7 South, 32 East.

8 Q. And in looking at this, you identified the
9 well. And then what you have marked as "CDU," over to
10 the east --

11 A. Correct.

12 Q. -- is that basically the acreage that is
13 currently in the North Paducah-Deleware pool?

14 A. The Cotton Draw Unit to the west --

15 Q. To the east.

16 A. Okay. Those are two extensions of that Cotton
17 Draw Unit, and those are shallower Delaware production.
18 Bell Canyon, I believe.

19 Q. But what I'm saying is when you look to the
20 east of the Trionyx 6 4H well, there is something marked
21 "CDU." That is in the Cotton Draw Unit, right?

22 A. No. The Trionyx 6 Fed 4H is not in the unit.
23 So only what's outlined in blue --

24 Q. No, no. Mr. Harran -- Mr. Harran, the acreage
25 to the east that is marked "CDU," that acreage is in the

1 Cotton Draw Unit?

2 A. Correct.

3 Q. And that acreage, if you compare that to
4 Exhibit 1, is also the current acreage within the North
5 Paducah-Delaware pool?

6 A. Correct.

7 Q. Okay. And Devon operates the Cotton Draw Unit?

8 A. We do.

9 Q. Now, as Mr. Walker testified, the original well
10 is completed in the North Paducah-Delaware pool, and in
11 that acreage, within the Cotton Draw Unit, were
12 shallow wells?

13 A. Correct.

14 Q. Shallow Delaware wells?

15 A. Correct.

16 Q. Which resulted in the low allowable?

17 A. Correct.

18 Q. And what is the approximate depth of the
19 Delaware completion in the Trionyx 6 Federal 4H well?

20 A. Roughly, 8,200 feet TVD.

21 Q. So based on the land exhibits, if the original
22 well in the North Paducah-Delaware pool had been
23 completed at that depth, we might not be here today
24 because the allowable would be substantially higher?

25 A. Yes.

1 Q. And in looking at this, has Devon drilled
2 number of Delaware wells in this general area?

3 A. Yes.

4 Q. And have they all been Brushy Canyon, the
5 deeper Delaware wells?

6 A. Correct. Our recent Delaware developments have
7 all been basal Brushy Canyon development wells.

8 Q. And in looking at development of the Delaware,
9 do you mainly rely on structure maps, not isopachs?

10 A. We use isopachs as well, structure maps,
11 isopach maps, amongst other information.

12 Q. And is the Brushy Canyon -- well, the Delaware
13 in general but specifically the Brushy Canyon continuous
14 not only across the north -- the defined North
15 Paducah-Delaware well but westward to the Trionyx 6 #4H
16 and even further west?

17 A. Yes.

18 Q. And so there is really no reason to
19 differentiate or create a new pool for the Trionyx 6 4H
20 well as apart from the Paducah-Delaware pool?

21 A. Correct.

22 Q. And then what is Exhibit 8?

23 A. So Exhibit 8 is cross section A to A prime that
24 you can see on the label A on Exhibit 7 and the label A
25 prime. So these are two vertical pilot holes, the

1 Trionyx 6 Fed 1H and the Trionyx 6 Fed 8H, on the west
2 and east side of Section 6, respectively, and the
3 Trionyx 6 Fed 4H drilled in between -- in between the
4 two of them.

5 And the perspective on the Trionyx 6 Fed 4H
6 is just shown in a total vertical depth manner, so you
7 can see that the 6 Fed 4H was landed and maintained in
8 what we call the descend of the basal Brushy Canyon, or
9 Lower Brushy Canyon. So the entire lateral was in that
10 unit.

11 Q. So you didn't -- you didn't drill a pilot hole
12 on the 4H?

13 A. No. So with these two pilot poles on both the
14 east and the west side of the section, we had sufficient
15 control.

16 Q. Okay. So when you're looking right at the
17 bottom of the log for the 4H well, that -- that is the
18 completion interval in that well?

19 A. Correct. That is -- that is the depth with
20 which the horizontal well was landed and the entire
21 lateral was drilled and completed in that zone.

22 Q. Based on the results of this well, does Devon
23 intend to continue drilling Delaware-Brushy Canyon wells
24 in the adjoining acreage?

25 A. Yes.

1 Q. Just based on geology, do you see any danger in
2 increasing the allowable for wells in this pool?

3 A. No.

4 Q. Is there the potential that allowables may need
5 to be increased in other Delaware pools in this area?

6 A. I would say yes.

7 Q. Were Exhibits 7 and 8 prepared by you?

8 A. Yes.

9 Q. And in your opinion, is the granting of this
10 application in the interest of conservation and the
11 prevention of waste?

12 A. Yes.

13 MR. BRUCE: Mr. Examiner, I'd move the
14 admission of Exhibits 7 and 8.

15 EXAMINER EZEANYIM: Exhibits 7 and 8 will
16 be admitted.

17 (Devon Energy Production Company, L.P.
18 Exhibit Numbers 7 and 8 were offered and
19 admitted into evidence.)

20 MR. BRUCE: I have no further questions of
21 the witness.

22 EXAMINER EZEANYIM: Thank you, Counsel.

23 CROSS-EXAMINATION

24 BY EXAMINER EZEANYIM:

25 Q. Let's go back to Exhibit Number 7, on your

1 contour maps here. First of all, what is Cotton Draw
2 area? What is that?

3 A. So it's just the -- it's just the greater area.
4 Obviously, you have the Cotton Draw units, and then
5 outside of the unit, you just kind of call it the
6 greater Cotton Draw area.

7 Q. In this map you gave me, where is the pool in
8 question located on this map?

9 A. So it would be --

10 Q. Maybe it's not even here.

11 A. It's not really outlined. This is just a
12 geologic structure map.

13 Q. Of the 4H?

14 A. Correct. You see the 4H on there.

15 MR. BRUCE: Mr. Examiner, on the right side
16 of the map, where there is a little outline of the --
17 Cotton Draw Unit is not a continuous unit. It's cracked
18 over the years, but that easternmost CDU, that is also
19 the acreage currently in the North Delaware -- North
20 Paducah-Delaware pool. So if you -- if you just crossed
21 out that CDU and put North Paducah pool, that's where
22 the pool is currently located.

23 EXAMINER EZEANYIM: That is where the pool
24 is. Okay.

25 Q. (BY EXAMINER EZEANYIM) And your well is about

1 two miles away from there?

2 A. Correct.

3 Q. Your Cotton Draw area -- I want to
4 understand -- that is a type of lease that Devon has,
5 right?

6 A. Yes. So what you see in this green color is
7 our acreage position.

8 Q. Okay. Who owns those in yellow?

9 A. That's 100 percent Devon. What's in green is
10 where we have partners.

11 Q. And then the other one in gray is what?

12 A. In the white, that is nonacreage. That's
13 nonDevon lease.

14 Q. I call white gray because I told you I'm
15 color-blind. So I'm sorry.

16 A. That's okay.

17 Q. It's white? Is it white?

18 A. It's white.

19 Q. Okay. I'm joking. Okay. Good.

20 You don't have any net isopach map here?

21 A. I do not.

22 Q. And you think drilling that well north-south is
23 the best way to strike the most hydrocarbons?

24 A. Based on our recent drilling completion
25 results, I would say yes. Drilling parallel or

1 subparallel depositional strike reduces the risk of
2 being out of zone, et cetera. It just makes --
3 facilitates ease of drilling.

4 Q. Okay. Your counsel may have known my take with
5 the allowables. If you don't know, I will say, because
6 it's not a secret.

7 Your counsel asked you whether there is
8 any -- increasing allowables from 80 barrels to 350. It
9 depends on what?

10 A. I'd say based on the quality of the reservoir
11 and as well as the modern drilling and completion
12 technology, has really facilitated development of the
13 basal Delaware in this area.

14 Q. That is all good, you know. That's good. And
15 then -- but we know -- you know, we put in the allowable
16 to protect our native rights --

17 A. Correct.

18 Q. -- and for all those things that we do, you
19 know.

20 As engineers, tell me why we can raise that
21 from 80 to 350. We can't just determine that in a
22 vacuum. So, of course, you know, you are ambitious.
23 You went to work for Devon. You want to get that
24 allowable. Don't get me wrong. I want to send you to
25 1 million barrels a day. Wouldn't it be nice if you can

1 do 1 million barrels per day in a 40-acre unit? I would
2 be all for getting it out. I don't want to leave any
3 hydrocarbons. That would be defeating my purpose. I
4 don't want to do that. So you know where I stand on
5 that.

6 We are going to look at your engineering
7 and see what happened, and, you know, I'm going to be
8 interested. If you want to increase it to 1,000 and you
9 can prove it, we can do that. But if you can't, the
10 rule is the rule. We have to obey the rule.

11 You may be excused. No further questions.

12 ANDY BROUSSARD,

13 after having been previously sworn under oath, was
14 questioned and testified as follows:

15 DIRECT EXAMINATION

16 BY MR. BRUCE:

17 Q. Mr. Broussard, who do you work for and in what
18 capacity?

19 A. I work for Devon Energy, and I am a reservoir
20 engineer.

21 Q. Have you previously testified before the
22 Division?

23 A. I have not.

24 Q. Would you summarize for the Examiner your
25 employment -- your educational and employment

1 background?

2 A. I have a bachelor's in petroleum engineering
3 from the University of Oklahoma, and I have been working
4 for Devon full-time for approximately three-and-a-half
5 years.

6 Q. Does your area of responsibility at Devon
7 include this portion of southeast New Mexico?

8 A. It does.

9 Q. And have you made a study of production from
10 Devon's recent Delaware wells in this area?

11 A. I have.

12 Q. And you are familiar with the engineering
13 matters related to this application?

14 A. I am.

15 MR. BRUCE: Mr. Examiner, I tender
16 Mr. Broussard as an expert petroleum engineer even
17 though he didn't go to A & M.

18 EXAMINER EZEANYIM: How is that?

19 THE WITNESS: Got to stay close to home
20 (laughter).

21 EXAMINER EZEANYIM: You are from Oklahoma?

22 THE WITNESS: I am.

23 EXAMINER EZEANYIM: Oh, okay. Yeah.
24 Oklahoma is also good. I will take University of Texas,
25 but it's good you didn't go there. Don't get me wrong.

1 It's a very good university. I am just joking with you.

2 You are so qualified.

3 Q. (BY MR. BRUCE) Mr. Broussard, you have two
4 exhibits, 9 and 10. Let's start with Exhibit 10.

5 In Exhibit 9, you are discussing a number
6 of -- production from a number of wells; are you not?

7 A. That is correct, yes.

8 Q. Does Exhibit 10 simply show the locations of
9 the wells other than the 4H well that you will be
10 discussing in Exhibit 9?

11 A. Yeah, it does. It does not have the tract 6
12 Fed 4H located, but it shows all the other five wells
13 that I'll be comparing production from the Trionyx 6 4H
14 to establish baselines for production data.

15 Q. Well, then let's move on to Exhibit 9. What
16 does page 1 show?

17 A. Page 1 just shows the current oil, gas and
18 water production data from the Trionyx 6 Fed 4H up to a
19 few days ago. So it's been a pretty prolific well for
20 us.

21 I mistakenly put a dotted green line for
22 what I was told at the time was the oil allowable, which
23 I actually recently found out it's lower than that as of
24 currently. But as you can see, what we're asking for
25 should adequately cover the production for this well.

1 Q. And let's look at this. You do have a
2 1,000-barrel-a-day line on this chart?

3 A. Uh-huh.

4 Q. Has the 4H well consistently produced at or
5 about 1,000 barrels a day?

6 A. It did for approximately the first month and a
7 half or so.

8 Q. Okay. And what are the gas rates?

9 A. Currently showing about -- definitely over a
10 million a day, 1.5 million, or 1,500 mcf per day
11 approximately, I would say.

12 Q. Let's move to page 2 of Exhibit 9. And as the
13 Examiner has mentioned, I think you have to be careful.
14 There are a bunch of colors on here.

15 A. Yes. It's a little difficult to see, I
16 suppose.

17 Q. Kind of difficult to see, but could you
18 describe the main features of this exhibit?

19 A. Sure. So this graph shows the total liquid
20 production normalized from times zero from the six wells
21 we're discussing. So total liquid is just considered
22 oil plus water. So the point that I'm trying to make
23 here is that the Trionyx 6 Fed 4H is not producing any
24 more total liquid than many of the other offset Delaware
25 wells that we've seen recently.

1 The Trionyx 6 Fed 4H well is indicated by
2 the green line, and as you can see, it falls about
3 average, somewhat below average liquid produced for --
4 compared to all the offset wells for the first 80 days
5 of production.

6 Q. And so is the 4H well the best oil producer
7 among these six wells?

8 A. It is indeed the best oil producer to date.

9 Q. So even though it's producing at a higher
10 rate --

11 A. Of oil.

12 Q. -- of oil, the total liquids production is not
13 out of line with the other lower-producing wells?

14 A. That is correct.

15 Q. And what is Exhibit 3?

16 A. Exhibit 3 is just showing the -- it's ESP hertz
17 data that we pulled for the six wells in question.

18 Generally, the hertz and the ESP, these are all -- you
19 know, these are all normally pressured wells. They
20 don't tend to flow on their own for any period of time,
21 so we have to put them on ESP pump because they do make
22 a large amount of fluid. Generally, ESP hertz is a good
23 indication of how hard you're pumping the well. If the
24 hertz are higher, then you're pumping it harder. If
25 it's lower, then you're not pumping as hard.

1 So the point I was trying to show on this
2 graph with the green line is that we're not -- we're not
3 running the ESP any harder than many of the offset
4 producers in the area. So we're not over -- we're not
5 intending to overproduce this well. It was just a
6 prolific oil productive well, and we've been producing
7 it with normal operating conditions similar to other
8 Delaware wells in the area.

9 EXAMINER EZEANYIM: I like that. I like
10 that language. I like a prolific well.

11 Do any of you don't like that?

12 Q. (BY MR. BRUCE) Let's move on to Exhibit 4. And
13 before we get to the next few pages, what type of
14 reservoir is this?

15 A. Solution gas drive reservoir.

16 Q. And what does Exhibit 4 -- or page 4 of Exhibit
17 9 show?

18 A. This is a plot of oil cut normalized times zero
19 for the six wells we're discussing. You can see quite
20 clearly that the green line is the highest oil-cut line,
21 which represents Trionyx 6 Fed 4H in general. We've
22 been seeing oil cuts 15 to 25 percent out of the
23 Delaware. It generally makes quite a bit of water --
24 associated water, but the Trionyx 6 Fed 4H and,
25 alternately, the Trionyx 6 Fed 6H right next to it were

1 both landed in the Lower Brushy Canyon D sand. As Craig
2 mentioned, seemed to be producing at higher oil cuts.
3 So we feel that is the main contributor for why we are
4 seeing the allowable, because we're producing more oil
5 relative to the amount of total fluid.

6 Q. By the same token, producing at an increasing
7 rate is not leading to an increased water cut?

8 A. That is correct, yes. Yeah. We seem to have
9 found a more oil-saturated portion of the reservoir by
10 landing it in the D sand.

11 Q. And what does page 5 show?

12 A. This just shows the gas-oil ratio of the
13 Delaware wells in question normalized times zero.
14 Generally, these wells will start -- the wells will come
15 on around 1,000 standard cubic feet per standard barrel
16 and slowly rise to about 3,000 standard cubic feet per
17 standard barrel at the first six months to a year or so
18 and then increase fairly steadily from that point on.

19 So this only shows about 140 days worth of
20 production, but you can see from the green line that we
21 are at or slightly below kind of the GOR trend in the
22 Trionyx 6 Fed 4H. In producing this well, we haven't
23 had an undue amount of gas flash-out of oil, you know,
24 changing, you know, relative permeability to oils and
25 things that would potentially leave reserves in the

1 ground.

2 Q. And because you're looking at, say, a 1,500 to
3 1 GOR, this is definitely an oil well even under these
4 special pool rules that are already in existence?

5 A. That's correct.

6 Q. And finally, what does page 6 reflect?

7 A. This is just pump intake pressure data versus
8 time for the six wells.

9 So we generally have a downhole pressure
10 monitor on our ESP pumps. And so, you know, the point I
11 wanted to show here is that, you know, in producing this
12 well, we haven't unduly drawn down the well.

13 We're also not seeing any kind of, like,
14 reservoir damage that might have been indicated by a
15 sharp decrease in bottom-hole flowing pressure, or the
16 flowing pressure is very normal compared to other wells
17 we see in the area over the same amount of time. And so
18 we don't feel like we are damaging the reservoir at all,
19 as indicated by this downhole pressure data.

20 Q. Now, a couple of things -- but the overall --
21 your overall conclusion is that producing at a higher
22 rate isn't reducing the reservoir energy?

23 A. That is correct. No.

24 Q. And so producing at a higher rate will not
25 either damage the reservoir, or it will not lead to an

1 decreased recovery type of hydrocarbons?

2 A. That is correct.

3 Q. And then a couple of other things. Is the 4H
4 well Devon's Delaware [sic] well?

5 A. That is correct, yes.

6 Q. Now that you've tested out certain -- and
7 Mr. Harran talked about a couple of the zones, the B
8 sand and the D sand.

9 A. Uh-huh.

10 Q. Based on your testing out here, it appears that
11 at this point the D sand has the best result?

12 A. That is correct, yes. Generally, the B sand
13 was the target landing interval in this area. And we
14 recently switched to the D sand, and it seems to be --
15 we seem to be getting a higher oil count, and we're
16 getting more prolific wells.

17 Q. And along that line, does the horizontal
18 drilling and completion technology continue to improve?

19 A. It does, yes. We have been changing some of
20 our frack designs recently as well. So I would say that
21 the reason why these wells are more prolific are mainly
22 reservoir quality but also improvements in completion
23 and designs to place a well.

24 Q. So you're learning as you go along developing
25 this area?

1 A. That's correct.

2 Q. And same question I asked Mr. Harran. Does
3 Devon intend to continue drilling D Sand Brushy Canyon
4 wells in its Cotton Draw area?

5 A. We do. We are.

6 Q. And based upon what you're seeing, especially
7 with the 4H well, is the 350-barrel-a-day allowable for
8 a 40-acre tract sufficient to allow Devon to produce
9 this well and its future wells that it intends to drill
10 in the area?

11 A. It should be sufficient.

12 Q. Were Exhibits 9 and 10 prepared by you or under
13 your supervision?

14 A. They were.

15 Q. And in your opinion, is the granting of this
16 application in the interest of conservation and the
17 prevention of waste?

18 A. It is.

19 MR. BRUCE: Mr. Examiner, I'd move the
20 admission of Exhibits 9 and 10.

21 EXAMINER EZEANYIM: Exhibits 9 and 10 will
22 be admitted.

23 (Devon Energy Production Company, L.P.
24 Exhibit Numbers 9 and 10 were offered and
25 admitted into evidence.)

1 MR. BRUCE: And I have no further questions
2 of the witness, Mr. Examiner.

3 EXAMINER EZEANYIM: Thank you.

4 CROSS-EXAMINATION

5 BY EXAMINER EZEANYIM:

6 Q. First of all, when was this well drilled?

7 A. Let's see. This well was spud on January the
8 1st, 2014. The record was released January 23rd, 2014.
9 I do not have the first -- I guess the first production
10 date was sometime in March.

11 Q. March 2nd?

12 A. Uh-huh.

13 Q. Initially, you had a high water cut?

14 A. Yeah. And that is not too unusual in terms of
15 getting flowback water back from the frack.

16 Q. Yeah, I know. Okay. Good.

17 Is this 160 acres?

18 A. This is 160-acre --

19 Q. Water [sic] on the well?

20 A. Yes.

21 Q. You said it's a solution gas drive reservoir,
22 right?

23 A. Yes.

24 Q. Does it have any gas cap?

25 A. No, not that I know of.

1 Q. Any water drive?

2 A. Not that I know.

3 Q. No gravity segregation? No gravity drainage?

4 Just purely solution gas drive?

5 A. That's correct, from everything I've read.

6 Q. Was the well drilled on a standard location?

7 A. I believe so.

8 Q. You met all the requirements.

9 What was initially the low pressure?

10 A. We considered it normally pressured here. I
11 believe I actually put that on the line on that final
12 pressure -- or pump intake pressure, producing days, I
13 think I'm calling it approximately -- approximately 3600
14 psi.

15 Q. And what is the bubble point, if you know?

16 A. My assumption is approximately around initial
17 reservoir pressure based on the GOR trends that we
18 generally see, generally increasing fairly steadily
19 initially -- I don't have any kind of robust PBT data on
20 this particular reservoir, so I don't know for sure.

21 Q. So you are saying that you probably calibrated
22 the low pressure and the bubble point the same?

23 A. That would be a pretty good assumption, I would
24 say.

25 Q. It's not unusual in most cases.

1 A. Yeah.

2 Q. The well has drilled -- been producing for how
3 many months? About three months now?

4 A. Yeah. Well, I guess. Yes, three months or so.

5 Q. I know you are making more than 80 barrels of
6 oil per day, right?

7 A. Absolutely, yes.

8 Q. Now, do you ever curtail that production?

9 A. We did not, mostly for the reason that I just
10 talked about. With the error that we had on this graph,
11 I assume that we had a higher allowable for this pool
12 and kind of, in the last-minute preparations, realized
13 that it was much lower than we had originally thought.

14 Q. So Devon produced above the allowable, right?

15 A. Yes.

16 Q. You did, right?

17 A. Yeah.

18 Q. Okay. Good. It's called illegal oil, but
19 that's okay (laughter). If you produce more than the
20 allowable, it's illegal oil, and that's what we are
21 trying to stop here. We're trying to stop producing
22 illegal oil.

23 Is this a sole solution gas drive? There
24 is no gas carb, no water drive, no -- you could produce
25 that at any rate you want. And you are at a standard

1 location. Somebody can also -- you know I'm not happy
2 with -- it's a 330-foot setback, right? It's a 330-foot
3 setback for that pool?

4 MR. BRUCE: That is correct, statewide
5 rules.

6 EXAMINER EZEANYIM: Okay. Statewide rules.
7 And that's -- this 160 foot of hydrocarbons is not
8 produced. That would be enough to protect correlative
9 rights. Do the calculation. Do you see how much better
10 it is to leave it underground?

11 Q. (BY EXAMINER EZEANYIM) And if I go back -- go
12 back to Exhibit Number 9, I think it is, and let's
13 examine what it's trying to do. Have you seen the
14 decline right now?

15 A. (Indicating.)

16 Q. Have you seen the letter [sic] of decline on
17 the oil production? It's still at 900 or 950?

18 A. Yeah. I believe we're slightly -- we're under
19 900 barrels a day right now. We're somewhere in, like,
20 the 850-barrels-a-day range, I think I saw recently,
21 last day or two.

22 Q. I want them to do something. Maybe work it
23 over and go back to 1,000 or 1,500, if you could. It's
24 a solution gas drive, right?

25 A. Yeah.

1 Q. You don't want to produce that gas. And
2 actually my fears have been that if you produce that
3 below PDU, you know what you do? What happens is the
4 gas migrates out of the solution and retards the energy.
5 That pushes that oil to the wellbore. But if you are
6 aggressively producing it at the highest rate, you tend
7 to maintain -- to maintain that energy to produce -- if
8 you have energy, then it moves it. It's just like
9 somebody climbing a mountain. If you stop your energy,
10 you fall down, and we don't want to do that. That's why
11 I asked you if you are curtailing production. If you
12 curtail production, you produce gas.

13 A. No. We have not curtailed production. It's
14 just declining at a -- at a normal -- I would say normal
15 Delaware decline rate. We could not produce over 1,000
16 barrels a day now.

17 Q. Yeah. That's okay. And, again, if you produce
18 gas -- the last time I checked, the oil was over 100
19 barrels a day or more. That's what we need to look at.
20 Good.

21 Let me see if I have more questions for
22 you.

23 MR. BRUCE: Excuse me, Mr. Examiner?

24 EXAMINER EZEANYIM: Yes, Counsel. May I
25 help you?

1 MR. BRUCE: Oh, I didn't understand you.

2 Did you say did I have any more questions?

3 EXAMINER EZEANYIM: No. I said let me see
4 if I have more questions for him.

5 You may step down.

6 THE WITNESS: Thank you.

7 EXAMINER EZEANYIM: Anything further?

8 MR. BRUCE: No further questions other
9 than -- no further witnesses, Mr. Examiner. I don't
10 know how you want to handle this, if you wanted this
11 case to be continued so we can clean up some of these
12 pool rules, things that you don't -- from the prior
13 order that you didn't care about. I didn't think about
14 that when we applied, but if there are certain issues
15 that you would like us to take care of with respect to
16 the 1968 order, we would be glad to do so.

17 EXAMINER EZEANYIM: Actually, I'm just
18 asking if there is anything prohibiting Devon from doing
19 work in that pool. But you guys have the advantage.
20 You have the geologist who can tell me if they're having
21 problems with that order, and I think if I'm working for
22 Devon, I would have problems in case I strike gas. I
23 don't know how you are going to comply with that, you
24 know, requirement for gas-oil ratio in the gas pool. I
25 don't like that. I don't know. I leave it to you to

1 determine if you want to amend that order. Even if you
2 don't do it -- I don't have time. If I have time, I
3 would call the case to remove those requirements.

4 But for you guys -- for you guys in the
5 field, if you have anything that you want to remove, we
6 will take a look. I'll be ready to work with you to
7 take out something that doesn't make sense. To me it
8 doesn't make sense to require a gas-oil ratio in a pool
9 that's gas.

10 I wish I'm producing oil from that gas
11 pool, and you tell me, It's an oil pool, and then we
12 follow the oil pool we talked about today. But instead
13 this is filed as a gas pool, and we are talking about
14 gas-oil ratio done by the oil pool. Maybe there is no
15 hydro- -- I mean, there are no additional hydrocarbons.
16 What are you going to apply it by? Zero? It doesn't
17 work.

18 So I want you, the engineer, the geologist,
19 the land person, to look at it and bring it forward. If
20 you want to continue this case, you can do it. I don't
21 know. I don't have any legal examiner here to see
22 whether that can be done or maybe we go ahead with this,
23 because I don't want that well to be curtailed because
24 of production of illegal oil. But as you practice in
25 that pool and you see that giving you trouble, I think

1 it's very constructive for the operator to bring it
2 forward and say, Well, this is not really helping us; we
3 need to amend the rule. I will take a look at it.

4 MR. BRUCE: Well, in that case,
5 Mr. Examiner, I'd ask that this matter be taken under
6 advisement. But I will confer with my clients to see if
7 there are certain elements of these old pool rules that
8 could be done away with.

9 One thing that's odd is that I didn't find
10 this pool -- as you know, there are a number of
11 associated pools in this state. I didn't find this one
12 listed.

13 EXAMINER EZEANYIM: I agree with you. And
14 to really be -- I would appreciate it if you guys would
15 go back and amend that rule, not just the allowables,
16 you know, but the language in those rules so we can
17 conform with the current industry practice, because
18 right now, it doesn't.

19 Maybe at that point, if we have a gas well,
20 there's oil in there. For me a gas well is a gas well
21 that produces -- produces dry gas. Now, when you have
22 to apply dry gas by zero, it's going to do nothing
23 because there is no liquid hydrocarbon in that gas,
24 unless we clarify them, you know, inappropriately, which
25 happens in this case. You agree with me what I'm trying

1 to say? When you read it, you'll see it doesn't make
2 sense. So please, if you want to bring it up, bring it
3 up in a different issue. Maybe, you know, if you talk
4 to the operators around the pool, they will agree with
5 you. If anybody objects to that, sure, that's why we
6 have hearings. Come to hearing, and we can take a look
7 at it. But meanwhile, this case will be taken under
8 advisement for today.

9 So for the record, Case 15147 will be taken
10 under advisement.

11 (Case 15147 concludes, 9:53 a.m.)
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18

19 I do hereby certify that the foregoing is
20 a complete record of the proceedings in
21 the Examiner hearing of Case No. 15147
22 heard by me on _____

23 _____, Examiner
24 Oil Conservation Division
25

1 STATE OF NEW MEXICO
2 COUNTY OF BERNALILLO

3

4 CERTIFICATE OF COURT REPORTER

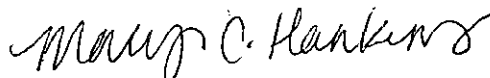
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6 Court Reporter No. 20, and Registered Professional
7 Reporter, do hereby certify that I reported the
8 foregoing proceedings in stenographic shorthand and that
9 the foregoing pages are a true and correct transcript of
10 those proceedings that were reduced to printed form by
11 me to the best of my ability.

12 I FURTHER CERTIFY that the Reporter's
13 Record of the proceedings truly and accurately reflects
14 the exhibits, if any, offered by the respective parties.

15 I FURTHER CERTIFY that I am neither
16 employed by nor related to any of the parties or
17 attorneys in this case and that I have no interest in
18 the final disposition of this case.

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