

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:

Applicaton of Cimarex	Case No. 22313
Energy Company for Compulsory	Case No. 22314
Pooling, Lea County, New Mexico	Case No. 22315
	Case No. 22316
Application of Devon Energy	
Production Company, LP	Case No. 22179
for Compulsory Pooling,	Case No. 22180
Lea County, New Mexico	Case No. 22382

REPORTER'S TRANSCRIPT OF PROCEEDINGS

THURSDAY, MARCH 24, 2022

EXAMINER HEARING

DAY ONE - PAGE 1-255

This matter came on for hearing before the New Mexico Oil Conservation Division, William Brancard, Esq. Hearing Examiner, John Garcia Technical Examiner, on Thursday, March 24, 2022, via Webex Virtual Conferencing Platform hosted by the New Mexico Energy, Minerals and Natural Resources Department.

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1 (Time noted 8:33 a.m.)

2 EXAMINER BRANCARD: Good morning, everybody.

3 This is March 24, 2022. This is a special hearing docket
4 of the New Mexico Oil Conservation Division. I am Bill
5 Brancard. I will be the hearing examiner today.

6 With me today is our technical examiner Mr.
7 John Garcia, sitting in his conference room there.

8 And we have a court reporter, Ms.
9 Macfarlane, Mary Macfarlane, today so please speak clearly
10 and slowly, despite how excited you might get.

11 Today we have seven cases on our special
12 docket, and I will introduce them. These are Cases 22313,
13 22314, 22315, 221315, 22316, Cimarex.

14 Who is here for Cimarex today?

15 MR. DeBRINE: Good morning, Mr. Examiner. Earl
16 DeBrine with the Modrall Sperling firm for Cimarex. Along
17 with me today is Deana Bennett, and also Bryce Smith, who
18 is also here in the room with us.

19 EXAMINER BRANCARD: Thank you.

20 And Cases 22179, 22180, 22382, Devon
21 Energy.

22 MR. FELDEWERT: Good morning, Mr. Brancard, good
23 morning Mr. Garcia. Michael Feldewert with the Santa Fe
24 office of Holland and Hart on behalf of Devon Energy
25 Production.

1 EXAMINER BRANCARD: And you're going solo today?

2 MR. FELDEWERT: Yes, sir.

3 EXAMINER BRANCARD: Are there any other
4 interested parties in today's seven cases?

5 MS. RYAN: Good morning, Mr. Examiner. This is
6 Beth Ryan. I'm entering an appearance for ConocoPhillips.
7 We have a non-op interest in these tracts, and we are not
8 protesting today, we are just entering our appearance and
9 listening in to what happens.

10 EXAMINER BRANCARD: Thank you. Are there any
11 other interested person for Cases 22313, -314, -315, -316
12 or 22179, -180, -382?

13 Hearing none, I guess we can proceed, then.

14 So, Mr. Feldewert, how many witnesses do
15 you have today?

16 MR. FELDEWERT: Mr. Brancard, I have three
17 witnesses today, all of whom have prefiled their
18 testimony.

19 EXAMINER BRANCARD: Thank you.

20 Mr. DeBrine.

21 MR. DeBRINE: Cimarex also has three witnesses,
22 Kelsi Henriques, Jennifer Blake and Eddie Behm, who filed
23 prehearing testimony.

24 EXAMINER BRANCARD: Thank you. SO I note that
25 we have a motion to strike submitted by Devon today, and

1 Cimarex filed a response to the motion to strike.

2 I guess I'm not going to bother with oral
3 arguments on the motion to strike.

4 I guess I agree with Cimarex's position
5 that this is really issues you can bring up on
6 cross-examination, Mr. Feldewert. I mean, thank you for
7 alerting us to the issues, but you can bring these up on
8 cross-examination and then we will deal with them as they
9 introduce the witnesses or the exhibits.

10 MR. FELDEWERT: Certainly.

11 EXAMINER BRANCARD: Okay. With that I guess we
12 are going in usual numerical order, so that would bring up
13 Devon first.

14 Are you prepared to go, Mr. Feldewert?

15 MR. FELDEWERT: Yes, sir.

16 EXAMINER BRANCARD: Would you like to start
17 out -- I guess we will have both parties start out with
18 sort of an opening statement, certainly what your position
19 is.

20 MR. FELDEWERT: Thank you. If I could have
21 sharing capability.

22 EXAMINER BRANCARD: Oh, just warn you they
23 installed all sorts of new software on our computers
24 yesterday.

25 MR. FELDEWERT: It's always a challenge.

1 EXAMINER BRANCARD: I think it was all Russian
2 made, so I'm not sure it will work.

3 MR. FELDEWERT: Can you all see what I have up
4 on the screen, which should be Devon's Exhibit A-1?

5 EXAMINER BRANCARD: We can.

6 MR. FELDEWERT: Great. Great. So far so good.

7 As you will see from the filings,
8 Examiners, Devon seeks to develop acreage where Devon owns
9 a majority of the working interest.

10 Starting down there in the west half of
11 Section 24 and then continuing -- where they own 100
12 percent -- continuing up into the west half of Section 13
13 where they own everything except the northeast of the
14 northwest quarter of a 40-acre tract, which is owned by
15 Cimarex, and then continuing into Section 12, which is
16 where Devon owns all of the northwest quarter.

17 And as of -- I think until yesterday
18 ConocoPhillip owned all of the southwest quarter. I
19 understand they have entered into and executed on a trade,
20 I'm assuming we will hear something about that, but my
21 understanding is that ConocoPhillips still owns in the
22 southwest quarter but they have divested some of their
23 interest in the southwest quarter to Cimarex.

24 Devon seeks to develop its acreage here
25 with these three-mile wells, with initial wells pooling

1 the Avalon and Second Bone Spring to create a Second Bone
2 Spring spacing unit comprised of what I will call this
3 west-half acreage. And then they have proposed initial
4 wells in Upper Wolfcamp to create a similar west-half
5 spacing unit for the Wolfcamp Formation, with the
6 understanding, as with all operators, that other Intervals
7 can be developed later in a timely fashion with infill
8 wells.

9 Cimarex, as you see from Devon's Exhibit
10 A-2, seeks to drill from acreage it owns up there in
11 Section 1 down into Section 12 through Devon's ownership
12 there in the northwest quarter into the southwest quarter
13 of Section 12. Uh, I think it's depicted on here. They
14 already have an existing one-mile well in the east half of
15 the west half of Section 1, and that's actually the well
16 that they have it -- uh, in 2018 when it was drilled as a
17 one-mile well, as a very successful -- give me a minute
18 here -- as a very successful one-mile filing by them.
19 They put it in their publications. They reference here it
20 as the -- I believe the 19H, but it's really the 9H. But
21 they touted that well in 2018 as being so successful that
22 it was worth putting on their publications that are put
23 out.

24 So they have an existing one-mile pattern
25 started in Section 1 but now they seek to extend down from

1 Section 1 into Devon's acreage in Section 2. And you'll
2 see from their filings -- Mr. Brancard, you're familiar
3 with this, Mr. Rose-Coss you're familiar with this as
4 well -- that it follows a familiar pattern, that Cimarex
5 has now decided they don't want to drill one-mile wells
6 anymore, so they want to overlap here, encroach upon
7 Devon's acreage to the south.

8 So we have competing proposals here with
9 the overlapping acreage in Section 12.

10 Now, like I said, when we filed this
11 Cimarex did not own any interest in Section 12. They
12 didn't own any interest in Section 12 when they proposed
13 their wells. When they filed their applications they
14 didn't own an interest in Section 12, and it was only
15 yesterday, I think, that they acquired an interest, a
16 partial interest in the southwest quarter of Section 12.

17 But despite that change, Devon still owns
18 the majority of the working interest ownership in the west
19 half of Section 12. I'm not sure exactly how the
20 percentage breaks out in the southwest quarter, but I know
21 that ConocoPhillips retained a position down there.

22 So Devon, even with the closing of the
23 trade, Devon still owns a majority interest in this
24 overlapping acreage.

25 What is interesting here is that with

1 respect to some of the other factors the Division
2 considers in these cases, if you look at the surface
3 factor, that's really a wash here, Mr. Brancard. We are
4 not going to have a lot of debate or discussion about
5 that, because no matter who prevails, since Devon is
6 drilling from the south half/south half of 24 North, and
7 Cimarex, whether they drill one-mile or two-mile wells,
8 are drilling from the north half/north half of Section 1
9 South, while the surface facilities are going to be the
10 same. And so there's not going to be any changes there,
11 so we don't need to spend a lot of time on that particular
12 factor.

13 Devon, as you may recall, is ready to
14 drill. They have been wanting to get these cases to
15 hearing some time ago, because they have been trying to
16 develop their acreage, because over here in the east half
17 of Sections 24 and 13, Titus has drilled wells, and, uh,
18 that are offsetting Devon's acreage.

19 So Devon has been trying to get these cases
20 to hearing, trying to get its three-mile development plan
21 approved so they can move forward; and so, you know, they
22 have the facilities in place, they are ready to drill as
23 soon as they can in order to protect their acreage.

24 We filed an exhibit demonstrating the AFE
25 costs. That was our Exhibit C-5. I know that's a factor

1 that the Division considers, so that's why we looked at
2 it. And what was interesting is, Mr. Brancard and Mr.
3 Garcia -- you know, you can't compare -- you can't take
4 the Devon AFE for a three-mile well and compare it to the
5 Cimarex AFE for a two-mile well, because it's apples to
6 oranges, to some extent, so what Devon did is they took
7 their standard costs of AFE for their two-mile wells that
8 they have drilled and compared it in various Intervals to
9 what Cimarex has filed here. And you will see that it
10 results in the fact that Cimarex is anywhere from 700,000
11 to 1 1/2 million dollars higher than Devon, depending upon
12 the zone.

13 We put this together and I presented it,
14 because this is not an insubstantial difference, it's a
15 substantial difference, and there doesn't seem to be any
16 debate about that.

17 But the big debate here is development, the
18 development plan for the Upper Wolfcamp.

19 It first deals with, uh, spacing. It first
20 deals with the spacing for the wells in the Upper
21 Wolfcamp. And I have, and I hope you can see it, I put up
22 here on the screen, Cimarex's Exhibit C-6-8. Can you see
23 that, gentlemen?

24 EXAMINER BRANCARD: We can.

25 MR. FELDEWERT: Okay. Thank you.

1 I thought this was a good depiction that
2 Cimarex put out there about the competing development
3 plans and what's -- and Devon, like I know Mr. Brancard
4 and Mr. Dylon-Coss heard last week -- Devon, just like
5 Chevron, contends that its west-half acreage should be
6 developed with what you would call an
7 eight-well-per-section pattern in the Upper Wolfcamp in a
8 wine rack. So that's what you see over here in the
9 right-hand side of this exhibit.

10 Since we are only dealing with the west
11 half, it would be four wells, but it would be an
12 eight-well-per-section pattern. And it's in a same type
13 of wine rack pattern that the Division saw last week from
14 Chevron: two wells in the Upper -- in the Wolfcamp Sand,
15 what they call the XY Sand Interval Reservoir, and then
16 two wells in the Upper Wolfcamp A, which is described, I
17 think by most, as a more shaley type of Interval.

18 But that's what they propose is needed to
19 efficiently and effectively drain that Upper Wolfcamp;
20 that is, this pattern, an eight-well-per-section-pattern
21 wine rack.

22 No surprise to the Division, probably,
23 having sat in the hearings last week, Cimarex contends you
24 don't need four wells -- eight wells per section in the
25 Upper Wolfcamp. They suggest it can be developed only

1 with two wells in the Upper Wolfcamp in this west half,
2 which would be a four-well-per-section pattern, which I'm
3 sure that sounds familiar to those who were at the hearing
4 last week.

5 What's interesting is that whereas last
6 week Cimarex was saying you should place the wells in the
7 Wolfcamp Sands, now they're saying no, you place the wells
8 in the more shaley zone. And you don't put any wells,
9 according to them, in the Wolfcamp Sands, which is now
10 surprising, based on the position they took last week
11 before the Division, but also because --

12 MR. DeBRINE: Mr. Examiner, I would like to
13 lodge an objection. Mr. Feldewert is making various
14 references to a hearing that took place last week. He
15 hasn't asked the Division to take notice of any of the
16 evidence in that proceeding. We were not -- although our
17 client was a party to that case, counsel for Cimarex was
18 not part of that case, and I think it's inappropriate for
19 him to be relying on anything presented in that case here.
20 It's not part of the exhibits that were presented or the
21 testimony.

22 EXAMINER BRANCARD: Well, I guess I agree, Mr.
23 Feldewert. If you could focus on what is being proposed
24 here today, and then I promise I won't mention that you
25 were opposing three-mile wells last week.

1 MR. FELDEWERT: Yes. And we are going to get to
2 that point.

3 That's fine, Mr. Examiner, if that's your
4 ruling. I mean, I can certainly ask the Division to take
5 note of that record. Does that help?

6 EXAMINER BRANCARD: We are aware. But I mean, I
7 think, you know, on the assumption that what the parties
8 sort of present to us in these cases is that their
9 development for each well program is based on the
10 particular geology of the area, which may vary from
11 several miles away.

12 So I think, you know, if we can focus on
13 what's going on at this particular area and why Devon's
14 proposal is better for the geology of this particular
15 area, that would be best.

16 MR. FELDEWERT: Okay. Well, continuing on then,
17 you will see that they suggest placing it only now in the
18 Wolfcamp Shale, even though this Wolfcamp Sand is
19 recognized by other operators as a very productive zone.
20 And even if you look at their Exhibit C-6, C-6-C, which is
21 from their geologist, you will see that she notes that the
22 Upper Wolfcamp Sands, which would be up here, you'll see
23 there is a reservoir here.

24 So just to orient you, you've got the
25 Cimarex plan over here on the left-hand side with their

1 two wells in shale, and then another development pattern
2 for the Bone Spring up there, the Third Bone Spring Sand.

3 Devon, of course, as I said, is suggesting,
4 believes it should be a wine rack pattern. So this isn't
5 necessarily depicting the wine rack but it does accurately
6 show that Devon is placing two wells in the Sands and two
7 wells in the Shale.

8 And you will see that she recognizes that
9 the Upper Wolfcamp really is two reservoirs and that the
10 Wolfcamp A itself, the Shale, is a separate reservoir from
11 the Upper Wolfcamp Sand.

12 So Devon believes that to adequately drain
13 what she describes as three reservoirs in the Upper
14 Wolfcamp, you'll need wells in a wine rack pattern at
15 eight wells per section, which here would be four wells in
16 the half section, two in Upper Sand reservoirs, and two in
17 the Lower Shale reservoirs.

18 Devon also believes, you will see from what
19 we filed, that based on their experience and recent
20 literature that these Upper Wolfcamp Sand wells have the
21 added benefit of also draining from the Third Bone Spring
22 Sands.

23 Now, Cimarex disagrees. They contend,
24 you'll see from their filing, that you need wells that
25 specifically target the Third Bone Spring Sands. And, you

1 know, that's a debate amongst Cimarex, Devon, and other
2 operators, because operators are doing different things
3 out here with respect to the Third Bone Spring Sands and
4 the Upper Wolfcamp.

5 But my point here is that even if Cimarex
6 is correct and that you need wells in this other reservoir
7 up here in the Third Bone Spring Sand, and even if they
8 are correct that the wells in the Upper Wolfcamp Sands are
9 not going to drain, Devon can certainly develop a Third
10 Bone Spring Sands later with an infill well drilling
11 program.

12 But what is clear, at least to Devon, is
13 that to properly drain the Upper Wolfcamp reservoirs, to
14 properly drain these reservoirs you need these wells in a
15 wine rack pattern split between the sand reservoirs and
16 the shale reservoirs.

17 Another area of debate is, as you pointed
18 out, Mr. Brancard, is the well length. And Cimarex is
19 contending now that three-mile wells are just too risky in
20 the Upper Wolfcamp and that they're too risky in the
21 Avalon Interval. And, you know, they can take the various
22 positions they want to take, but here is what we know, and
23 that is that when you look at Devon's Exhibit C-2, Devon
24 has successfully drilled and completed 20, 20 three-mile
25 wells in Lea and Eddy Counties.

1 Now, you will see on this map, you can see
2 the Area of Interest here outlined in purple, and that
3 Devon has identified the areas where they have
4 successfully drilled and completed three-mile wells. And
5 it is in various depositional environments, including the
6 environments that we see here in this area in the Avalon
7 and in the Upper Wolfcamp.

8 Further, any risk of drilling or completion
9 falls primarily on Devon for these three-mile wells.
10 Devon owns the northwest quarter of Section 12 where the
11 toe of those three-mile wells will be. Devon also owns 75
12 percent of one of the Wolfcamp spacing units and 83
13 percent of the working interest in the other Wolfcamp
14 spacing units. They own 80 percent of the working
15 interest in the three-mile west half Bone Spring spacing
16 unit, and that will be the area where Cimarex suggests is
17 the greatest risk for three-mile drilling.

18 So Devon is going to be footing the bill, a
19 vast majority of the bill, most of these costs, to
20 continue its success in drilling three-mile wells.

21 So while there may be disagreement over the
22 well length and over the development plan, Devon's
23 ownership here, and even its ownership in Section 12 where
24 it has a greater ownership than Cimarex, should carry the
25 day since Devon is going to be footing the bill here.

1 So we ask that the Division deny Cimarex's
2 pooling applications and grant Devon's applications so
3 that Devon has the opportunity here to continue with its
4 successful three-mile development on its acreage.

5 EXAMINER BRANCARD: Thank you.

6 Mr. DeBrine, are you prepared to give an
7 opening statement?

8 MR. DeBRINE: Yes. Thank you, Mr. Examiner.

9 May it please the Oil Conservation
10 Division, what's interesting is that Mr. Feldewert seems
11 to be living in the past talking about a Cimarex well that
12 was completed in 2018, and ownership percentages that have
13 drastically changed with regard to the proposed spacing
14 units as of yesterday.

15 These cases, as he indicated, involve
16 competing proposals by Cimarex and Devon to develop the
17 Wolfcamp Avalon and Bone Spring Formations in the west
18 half of the west half of Sections 1, 12, 13 and 24,
19 Township 23 South, Range 32 East, in Lea County.

20 We are in Lea County, not in Eddy County.
21 As the Division knows, the reservoirs differ substantially
22 even within counties a couple of miles away, and certainly
23 they differ substantially when you're talking about
24 different counties.

25 But the evidence in this case will

1 demonstrate that Cimarex has owned acreage in Sections 1,
2 12 and 13 for several years. It had not just the one-mile
3 well referred to by Mr. Feldewert but had existing
4 two-mile laterals in the east half/east half of Sections 1
5 and 12, and has been working to acquire the remaining
6 acreage of Section 12 from initially COG and later with
7 Conoco, dealing with Conoco with attempts to buy that
8 acreage, because it has been out here a long time and have
9 fixed development plans for that acreage.

10 Yesterday the fruits of that labor were
11 realized and a trade was closed with Conoco where Cimarex
12 acquired the remaining acreage from Conoco on the east
13 half of Section 12 so that Cimarex now owns 71 percent of
14 its proposed horizontal spacing units that are comprised
15 of the east half of the east half of Sections 1 and 12.

16 The evidence in this case is going to show
17 that Cimarex is ready, willing, and able to develop its
18 proposed spacing units as soon as the Division approves
19 them, as it has existing facilities in place for oil
20 production, gas takeaway, water disposal in existing wells
21 in the east half of Sections 1 and 12. And we believe
22 that that factor, which the Division obviously will look
23 at, shows there is a substantial difference between the
24 parties with regard to their ability to begin development.
25 Cimarex has the facilities in place, it has gas, oil and

1 water takeaway in place. All it has to do is hook them up
2 to the new wells in the other half of the section. Devon,
3 however, the evidence will show, has to build a four-mile
4 pipeline and substantial facilities in order to be ready
5 to take away the gas, oil and water for its proposed
6 three-mile laterals.

7 Also it's interesting that Devon is
8 contending that somehow Cimarex should be locked into a
9 one-mile well because it drilled one in 2018, ignoring the
10 fact that it since drilled two-mile wells right next door,
11 because when Devon acquired its acreage in this area it
12 actually permitted a one-mile well with the BLM in 2020,
13 representing under penalty of perjury that it was going to
14 drill a one-mile well, and then suddenly it shifted to
15 three-mile wells.

16 The Cimarex evidence will demonstrate in
17 this case that its plan will enable each party to develop
18 the acreage they control with two-mile laterals and
19 therefore fulfill a fundamental chore of the Division in
20 Compulsory Pooling cases, and that is to protect
21 correlative rights, which the statutes define as to afford
22 the owner of each property in a pool the opportunity to
23 produce its just and equitable share of the oil and gas,
24 or both, in the pool in an amount so far as practically
25 determined and so far as such can practically be obtained

1 without waste, substantially proportioned in the quantity
2 that is recoverable, oil or gas or both, under such
3 property, and that the total recoverable oil or gas or
4 both in the pool for this purpose to use its just and
5 equitable share of the reservoir energy.

6 Cimarex's proposed development plan, which
7 directly targets development of Third Bone Spring, is not
8 only supported by the geology in this case but it's been
9 proven through the results of both Cimarex's wells and the
10 wells immediately adjacent to the proposed spacing units
11 drilled by OXY, and the suggestion of theoretical papers
12 from looking at production 25 miles to the south in Texas
13 do not impeach actual well results.

14 We believe that Cimarex will demonstrate
15 that Devon's plan for three-mile wells presents
16 unnecessary risks, and that Cimarex's plan for two-mile
17 wells would allow each party to develop their own acreage
18 which they own a majority interest in. Two-mile wells not
19 only will protect correlative rights but will prevent
20 waste.

21 When the Division looks at each of the
22 factors that have been announced as important when looking
23 at these cases, we believe each of those factors either
24 favors Cimarex or is neutral. The geologic evidence
25 clearly favors Cimarex and it shows that the Third Bone

1 Spring is the most desirable target in the area, and that
2 two-mile laterals are optimal for developing both the Bone
3 Spring and the Wolfcamp, given the depth and pressure of
4 the Wolfcamp in this area. Both parties, I think, agree t
5 that there's limestone and chert that presents risk in
6 drilling longer three-mile laterals.

7 A comparison of the risk associated with
8 the parties' respective proposals for exploration and
9 development is approximately equal.

10 We believe the evidence will show that
11 Cimarex has gone above and beyond good faith in attempting
12 to reach voluntary agreement to avoid having to go to
13 hearing in this case. It worked with Cimarex and Conoco
14 prior to filing its proposed wells, prior to filing its
15 proposed case, tried to reach voluntary agreement with POI
16 (phonetic), continued to negotiate. As the examiner
17 knows, this hearing was continued to allow negotiations
18 with Conoco to proceed so that the proposed trade of the
19 acreage could take place. And as of yesterday that trade
20 finally did occur and now Cimarex owns a 71 percent
21 interest in Section 12, and proposed again to Devon to try
22 and again resolve the matters in dispute without having to
23 go to hearing today.

24 When you look at a comparison of the well
25 costs it's difficult to assess, as Mr. Feldewert

1 indicated, because you've got three- versus two-miles, but
2 in any event the Division has ruled in prior cases, in
3 Order 10731-B and 21826 the costs are not significant
4 factors in awarding operations.

5 We believe the evidence will show that
6 Cimarex has the superior ability to timely drill, complete
7 and produce its proposed wells, because it has existing
8 gathering wells in place and does not need to deal with
9 the uncertainties/costs of building additional pipelines
10 on four-mile right-of-ways that tend to delay the
11 companies trying to get sideways from the BLM or State
12 Land Office for such purposes.

13 In its Prehearing Statement it looks like
14 Devon was hoping that Cimarex would be unable to complete
15 its acquisition of COG's acreage in Section 12 before the
16 hearing, because Devon argues that the Division should be
17 guided by Order R-21436, (Note: Corrected to R-21416-A at
18 page **) which was the Marathon v. BTA case where the
19 Division ruled that the parties -- the proposal that
20 protects correlative rights by presenting the best
21 opportunity for each party to develop its own acreage
22 should be followed where there is contradictory evidence
23 regarding optimal well spacing and lateral lengths.

24 And that is essentially what you're going
25 to see today. The parties are going to present

1 contradictory evidence. We believe that the evidence
2 presented by Cimarex will be more persuasive, but it is
3 undisputed that Cimarex will own a controlling interest in
4 its proposed spacing units, and the Division should not
5 allow Devon to experiment with three-mile laterals
6 utilizing Cimarex's acreage to prove its case with regard
7 to optimal well spacing and well length.

8 When you look at the acreage that Devon
9 owns in this area, it has substantial blocks of continuous
10 acreage where it's free to experiment with its three-mile
11 laterals and if it wants to prove that that's the way to
12 go in this area without capturing Cimarex's acreage in a
13 compulsory pooling case.

14 We would ask that you grant Cimarex's
15 applications and deny the applications filed by Devon.

16 Thank you, Mr. Examiner.

17 EXAMINER BRANCARD: Thank you.

18 Mr. Feldewert, could you remove your
19 material? Thank you.

20 MR. FELDEWERT: Sorry about that.

21 EXAMINER BRANCARD: That's all right.

22 Mr. DeBrine, was that 21416 you were
23 referring to, the Order number?

24 MR. FELDEWERT: I think that's the one cited in
25 our Prehearing Statement, right, Earl?

1 MR. DeBRINE: Yes.

2 EXAMINER BRANCARD: All right. If there are no
3 further preliminary matters, I think we are ready to go
4 ahead with the evidence.

5 Are the parties okay with that?

6 MR. FELDEWERT: Yes, sir.

7 EXAMINER BRANCARD: Mr. DeBrine, are you ready
8 to roll?

9 MR. DeBRINE: Yes, Mr. Examiner.

10 (Note: Sound check off the record.)

11 EXAMINER BRANCARD: All right. With that
12 preliminary, let's go to Mr. Feldewert and your witnesses.
13 Do you have them ready to roll and with you?

14 MR. FELDEWERT: Yes. And I'm going to be
15 sharing here, if I may. Okay. (Note: Pause.)

16 So I should have my exhibit package back
17 up, Mr. Examiner. Is that correct?

18 EXAMINER BRANCARD: You do.

19 MR. FELDEWERT: Thank you. We would call Mr.
20 Ryan Cloer.

21 EXAMINER BRANCARD: Do you have your witnesses
22 all ready that I can swear them all in together right now?

23 MR. FELDEWERT: I would do that, yeah, if you
24 would like. I'll have them all get on, I hope.

25 EXAMINER BRANCARD: Are they all in one place or

1 on separate...

2 MR. FELDEWERT: I think they may be in separate
3 areas. I'm going to stop sharing here for a minute so I
4 can see.

5 There is Mr. Cloer, I know. We may have to
6 do them one at a time, Mr. Brancard, if that is okay.

7 EXAMINER BRANCARD: That's fine.

8 RYAN CLOER,
9 having been duly sworn, testified as follows:

10 EXAMINER BRANCARD: Sorry about that I didn't
11 have my video on so you could see my right hand.

12 All right. With that, Mr. Feldewert, you
13 may proceed.

14 DIRECT EXAMINATION

15 BY MR. FELDEWERT:

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

18 A. Ryan Cloer, employed by Devon Energy as a
19 landman.

20 EXAMINER BRANCARD: Could I just interrupt for a
21 second? Could you spell your name, please.

22 THE WITNESS: Yes, sir. R-y-a-n, C-l-o-e-r.

23 EXAMINER BRANCARD: Thank you.

24 Q. And I believe, Mr. Cloer, I think I have up on
25 the screen the affidavit that you presubmitted in this

1 case, and it's marked as Devon Exhibit A.

2 A. Yes, sir.

3 Q. Okay. And with that Exhibit A -- let me step
4 back.

5 In that Exhibit A you note that you have
6 previously testified before this Division as an expert in
7 petroleum land matters?

8 A. Yes, sir.

9 Q. And in addition to Exhibit A did you also put
10 together or compile under your direction and supervision
11 what's been marked as Exhibits A-1 through A-6?

12 A. Yes, sir.

13 MR. FELDEWERT: Mr. Examiner, at this time I
14 would move the admission -- I would ask to qualify Mr.
15 Cloer as an expert in petroleum land matters, and then
16 move to admit Devon Exhibits A, and then A-1 through A-6.

17 EXAMINER BRANCARD: Any objections?

18 MR. DeBRINE: No objections.

19 EXAMINER BRANCARD: Thank you.

20 Ms. Ryan, will you be participating at all
21 in this back and forth?

22 (Note: No response.)

23 EXAMINER BRANCARD: I guess not.

24 Okay. So Mr. Cloer is recognized as an
25 expert and A, A-1 through A-6 are admitted.

1 MS. RYAN: Sorry. No objection.

2 EXAMINER BRANCARD: Thank you.

3 MR. FELDEWERT: With that, Mr. Examiner, I would
4 pass the witness.

5 EXAMINER BRANCARD: So I guess we will start
6 with Cimarex questions for this witness, if you have any.

7 MR. DeBRINE: Sure.

8 Mr. Cloer, my name is Earl DeBrine. I
9 represent Cimarex Energy in this case.

10 CROSS EXAMINATION

11 BY MR. DeBRINE:

12 Q. Were you listening this morning to the opening
13 statements where I stated that Concho and Cimarex have
14 closed their trade for the acreage in Section 12?

15 A. Yes, sir.

16 Q. And as a result of that trade would you agree
17 that your statements in paragraph 11 of your affidavit and
18 your Exhibit A-3 that purports to show the working
19 interest owned by each party in each tract comprising the
20 proposed spacing units is no longer correct?

21 A. (Note: Pause.) Yes.

22 MR. FELDEWERT: Let me step back.

23 Mr. DeBrine, you're asserting that the deal
24 has closed and the ownership has changed even though it's
25 not of record yet?

1 MR. DeBRINE: We will provide testimony to that
2 effect, and if you would like, Mr. Feldewert, we could
3 provide you with a copy of the assignment, if you doubt
4 it.

5 MR. FELDEWERT: That's up to you guys.
6 Obviously we have not seen that, so I'm sure Mr. Cloer did
7 his exhibits based on the evidence in the record at the
8 time they were submitted, or available at the time they
9 were submitted.

10 EXAMINER BRANCARD: It sounds like the -- sorry.

11 MR. DeBRINE: Go ahead.

12 EXAMINER BRANCARD: Mr. DeBrine, Cimarex is
13 claiming that what is currently in the exhibits needs to
14 be updated, both your exhibits and their exhibits, and so
15 why don't we leave that to your testimony to do that.

16 MR. DeBRINE: Mr. Examiner, our exhibits
17 foreshadowed and contemplated that the trade would occur
18 and actually show the working interest before and after
19 the trade.

20 EXAMINER BRANCARD: Thank you. That's good
21 that you were good at predicting the future, but the
22 future is with us now and you need to present that actual
23 evidence to us.

24 MR. DeBRINE: Okay. We will do that.

25 But the witness is an expert in petroleum

1 land matters, and I was just asking a hypothetical asking
2 him to assume that was the case and if his exhibits were
3 incorrect as a result of that.

4 EXAMINER BRANCARD: If you make it as a
5 hypothetical, that's okay with me.

6 Q. So, Mr. Cloer, assuming that the representation
7 is correct that Cimarex acquired the interest owned by
8 Conoco in Section 12, would you agree that the statement
9 in paragraph 11 of your affidavit concerning the working
10 interest owners' percentage and your Exhibit A-3 that
11 shows the working interest owned by each party in each
12 tract comprising Devon's proposed spacing units is no
13 longer correct?

14 A. Yes. If the trade has closed prior to my making
15 this affidavit then it would be incorrect -- yeah, I mean
16 after I made the affidavit. Sorry.

17 Q. And if that were also the case that Cimarex
18 would now have a working interest in the bottomhole
19 locations of Devon's proposed wells if it is allowed to
20 drill a three-mile well?

21 A. No, the bottomhole location is located in the
22 northwest of 12 for our three-mile wells. To my knowledge
23 Cimarex does not own any acreage there.

24 Q. If you look at paragraph 15 of your affidavit,
25 you state that the costs reflected in the AFEs were

1 consistent with what Devon and other operators have
2 incurred for drilling similar horizontal wells in the
3 area. Isn't it true that Devon is the only operator
4 that's drilled three-mile horizontal wells in this area?

5 A. I have not looked at that.

6 Q. Are you aware of any other operator that's
7 drilled three-mile wells in this area of Lea County?

8 A. I have not looked at that.

9 Q. So what was the basis for your statement that
10 the costs were consistent with those charged by other
11 operators?

12 A. Based on communication with my engineering
13 department.

14 Q. Are the AFE costs that were sent with your Well
15 Proposal in the summer of 2021 still good today?

16 A. Yes.

17 Q. What's the difference in the market between July
18 of 2021 and March, 24, 2022?

19 A. Can you rephrase that, please?

20 Q. So the costs that Devon is incurring today are
21 the same as they were in the summer of 2021; is that
22 correct?

23 A. That's not something I follow.

24 Q. So what's the basis for your statement that the
25 AFE costs haven't changed since July of 2021?

1 A. Communications with my engineering department.

2 Q. And is the engineering department, are any of
3 those people going to testify today?

4 A. Yes.

5 Q. Do the AFE costs include the cost to build the
6 road, the pipelines that are necessary for oil, gas, and
7 water takeaway?

8 MR. FELDEWERT: Object to the form of the
9 question in that it assumes AFEs are supposed to include
10 those costs. AFEs only include well costs, Mr. DeBrine.

11 MR. DeBRINE: I'm just asking if it includes
12 those costs, Mr. Feldewert.

13 EXAMINER BRANCARD: Yeah, go ahead with the
14 question.

15 A. Our AFEs include the costs normally proposed in
16 a Well Proposal.

17 Q. That wasn't my question. The question is: Do
18 Devon's AFE costs include the cost to build the road and
19 gathering lines that are needed for oil, gas and water
20 takeaway in order for the production to be taken to the
21 market? Yes or no.

22 A. I have not looked at that.

23 Q. Is it your intent to bill those costs to the
24 working interest owners after the wells are drilled and
25 completed?

1 A. To the extent allowed under the Joint Operating
2 Agreement, yes.

3 **Q. Do the AFEs include the costs for flow line and**
4 **gas lift?**

5 A. Again I have not looked at that.

6 **Q. Do they include the costs for electrical?**

7 A. I have not --

8 MR. FELDEWERT: Mr. Examiner, I am going to
9 object to this line of the questioning in that those are
10 operating costs, and AFEs do not and should not include
11 those costs.

12 EXAMINER BRANCARD: Well, I'm more concerned
13 with the fact that the witness does not appear to be the
14 one to be asked these questions.

15 MR. FELDEWERT: Good point.

16 **Q. Mr. Cloer, you were the party that submitted the**
17 **AFEs with the Well Proposals, correct?**

18 A. Yes.

19 **Q. And you reviewed those AFEs before they were**
20 **sent out?**

21 A. Yes.

22 **Q. And you were representing to the working**
23 **interest owners that those were the estimated costs of**
24 **Devon in order to drill, complete and equip the well?**

25 A. Yes.

1 Q. I'm just trying to gain an understanding as to
2 whether particular costs were or were not included in the
3 AFEs, because practices by operators do differ as to what
4 they might include in the AFEs; isn't that correct?

5 MR. FELDEWERT: Mr. DeBrine, you're suggesting
6 that operators are including right-of-way costs in their
7 AFEs?

8 MR. DeBRINE: I'm not suggesting that at all,
9 Mr. Feldewert, and I would appreciate it if you don't
10 interrupt my questioning.

11 MR. FELDEWERT: Well, I object to the form of
12 the question.

13 Q. Mr. Cloer, you would agree that operators differ
14 with regard to the costs that they might include in
15 authorities for expenditures when they are proposing
16 wells?

17 A. I have not looked at that closely.

18 Q. Okay. And I'm just going to ask you questions
19 with regard to the particular AFEs that you sent out as to
20 whether particular costs are or are not included. Okay?

21 MR. FELDEWERT: I object to the form of the
22 question, Mr. DeBrine. As you know, the Division has
23 defined well costs.

24 EXAMINER BRANCARD: I guess I'm confused as
25 to -- Mr. Cloer, did you prepare the AFE?

1 THE WITNESS: No, sir.

2 EXAMINER BRANCARD: Is there someone testifying
3 today who prepared the AFE?

4 THE WITNESS: The AFEs are prepared based on
5 cost input from several different groups within the
6 organization. Not one party testifying today prepared the
7 entire AFE.

8 EXAMINER BRANCARD: Is there someone else
9 testifying today who would know better about what went
10 into the AFE?

11 THE WITNESS: I would probably defer to Mr.
12 Sprague, our engineer.

13 EXAMINER BRANCARD: Okay. So perhaps Mr.
14 Sprague should be the one you ask these questions to, Mr.
15 DeBrine.

16 MR. DeBRINE: That --

17 EXAMINER BRANCARD: Don't want to cut your --
18 you know, in terms of the cross examination, but it's just
19 that we prefer to have someone answer the questions who
20 knows the answer.

21 MR. DeBRINE: Yes. And that was my intent, Mr.
22 Examiner, and if Mr. Cloer is not the appropriate witness,
23 then we will ask the witness they put forward to give us
24 the information we seek. So I'm happy to move on.

25 EXAMINER BRANCARD: Thank you.

1 Q. Turning next to paragraph 17 of your affidavit,
2 it references Exhibit A-6 regarding the Chronology of
3 Contacts with Conoco and Cimarex, and you state that Devon
4 was the first to propose development of Section 12 with
5 ConocoPhillips being the only other interest owner in
6 Section 12. Is that correct?

7 A. That's correct.

8 Q. Isn't it true that Cimarex had been negotiating
9 with Conoco to acquire its interests in Section 12, and
10 proposed its wells to COG before Devon proposed its wells
11 in July of 2021?

12 A. Based on Ms. Henriques' affidavit, but I was not
13 aware of that communication.

14 Q. Okay. But you've since been made aware of that
15 communication, and you saw in Ms. Henriques' affidavit
16 Exhibit B-1, which was a March 18, 2021, Proposal Letter
17 to COG. Correct?

18 A. Yes.

19 Q. And so in fact Cimarex had proposed wells to
20 Conoco several months before Devon did; isn't that
21 correct?

22 A. Yes.

23 Q. There's nothing preventing Devon from drilling
24 two-mile wells, is there?

25 A. No.

1 Q. Devon owns 100 percent of the working interest
2 in the west half of Section 24; is that correct?

3 A. Yes.

4 Q. And 87 and 1/2 percent of the working interest
5 in Section 13. Correct?

6 A. That's correct.

7 Q. And Cimarex also owns 12 and 1/2 percent of the
8 working interest in the west half of Section 13; isn't
9 that correct?

10 A. That's correct.

11 Q. Did Cimarex indicate to Devon that if it were to
12 propose two-mile development covering the west half of the
13 west half of Section 24 and 13 Cimarex would agree to a
14 JOA for its interest in Section 13, allowing Devon to
15 operate those units?

16 A. I believe that's correct.

17 Q. And you wouldn't need to pool any other working
18 interest owners to develop two-mile laterals in the west
19 half of the west half of Section 24 and 13, correct? Just
20 the overrides?

21 A. That's correct.

22 Q. And you agree that if in fact Cimarex acquired
23 Conoco's interest in Section 12 that it would own 71
24 percent of the working interest in its proposed two-mile
25 spacing units?

1 A. I have not calculated the numbers.

2 Q. But you wouldn't dispute the numbers that are in
3 **Ms. Henriques' affidavit reflecting a 71 percent working**
4 **interest ownership?**

5 A. I would not.

6 Q. Have you, on behalf of Devon, ever negotiated or
7 **signed a JOA for a contract area in which the operator**
8 **only owned 39 percent of the contract area, whereas Devon**
9 **owns 71 percent of the working interest?**

10 A. That specific scenario?

11 Q. Yes.

12 A. No.

13 Q. Turning to paragraph 18 of your affidavit where
14 **you're talking about the timing for the rig schedule, if**
15 **you would turn to Exhibit A-2, which is a locator map of**
16 **the proposed unit. Do you have that?**

17 A. Yes.

18 Q. I notice that it does not reflect whether the
19 **proposed spacing units are located within the prairie**
20 **chicken map that restricts oil and gas development during**
21 **the spring and summer. Do you know whether these proposed**
22 **units are located within the prairie chicken area that**
23 **restricts development in the spring and summer?**

24 A. To my knowledge, they are not.

25 Q. Do you know if the APDs that Devon obtained from

1 the BLM include as conditions of approval limitations on
2 drilling and development activities during the spring and
3 summer due to the prairie chicken?

4 A. I have not reviewed the APDs.

5 Q. Are you familiar with the restrictions imposed
6 by the BLM with regard to oil and gas leases located
7 within the prairie chicken area?

8 A. Yes.

9 Q. And what are those restrictions?

10 A. Uhm, as you've stated, no drilling during the
11 summer and the spring months.

12 Q. So in fact you would not, if these -- if these
13 leases that are within that proposed spacing units of
14 Devon are located within the prairie chicken area, Devon
15 would not have been able to drill its proposed wells in
16 March of this year; is that correct?

17 A. That's correct.

18 Q. If you could turn to Exhibit -- the C-102s that
19 I guess are at the back of your Exhibit A-2.

20 A. Did you say A?

21 Q. If I've got the exhibit number correct. Maybe I
22 don't. But they appear right after the list of the
23 overriding interests you're seeking to compulsory pool.
24 The C-102s. They are Exhibit A-4.

25 A. Okay.

1 Q. Do you have those?

2 A. Yes, sir.

3 Q. I noticed in reviewing them that some of the
4 C-102s are unsigned but the C-102s submitted to the BLM
5 are signed. Is there any reason for the differences as to
6 whether they are signed or unsigned?

7 A. Yes.

8 Q. What is that?

9 A. The initial APDs were submitted as one mile.
10 When we acquired acreage in the west half of 24, the team
11 discussed moving those to three miles. It was poor
12 communication on my part to our regulatory group that we
13 did not own interest under all tracts, so a three-mile APD
14 could not be filed.

15 Q. The C-102s also have revised surveyor date
16 stamps, including one that was just recently revised on
17 March 9th of 2022. Do you know why the surveyor stamp was
18 revised for the C-102s?

19 A. Can you tell me which well number that is?

20 Q. If you look at the Sneaky Snake 24-13 Fed Com
21 12H, it's the one that has two dates, one of January 25th,
22 2022, and then one of March 9th, 2022. They are at the
23 lower-right-hand corner.

24 A. The original plat incorrectly depicted the
25 proposed horizontal spacing unit.

1 Q. How long have you been involved with the Sneaky
2 Snake development project?

3 A. Since July.

4 Q. July of 2021?

5 A. Yes, sir.

6 Q. Isn't it true that Devon submitted it's APD for
7 the Sneaky Snake wells in March of 2020 originally to the
8 BLM?

9 A. I have not looked at that.

10 Q. You have never seen the APDs for the wells that
11 Devon submitted and got approved by the BLM?

12 A. I have seen they have been submitted. I did not
13 look at the date they were submitted.

14 Q. Okay. But you have seen those original APDs
15 that were submitted in March of 2020, correct?

16 A. As I said, I have seen they were submitted, not
17 reviewed the APDs.

18 Q. Okay. You are aware that those APDs were only
19 for one-mile wells in Section 24, though, right?

20 A. Yes.

21 Q. Do you know when Devon acquired its interest in
22 the northwest quarter of Section 24?

23 A. Not as I sit here, no.

24 Q. Would it surprise you that Devon didn't acquire
25 that interest until April, 2020, after the APD was

1 submitted in March of 2020?

2 A. Yes.

3 Q. Do you know when Devon acquired its interest in
4 the northwest quarter of Section 24?

5 A. The northwest quarter of Section 24?

6 Q. I'm sorry. Do you know when Devon acquired its
7 interest in the northwest quarter of Section 12?

8 A. I don't know the timing of that, no.

9 Q. When did Devon first hatch its plan to develop
10 three-mile laterals in this area?

11 A. After we acquired interest in the west half of
12 24. Excuse me, the west half of 13.

13 Q. So when Devon first acquired its acreage it had
14 no plans to develop three-mile laterals in this area, it
15 was only planning to drill one-mile laterals; is that
16 correct?

17 A. Can you rephrase that, please?

18 Q. When Devon first acquired its interest in the
19 proposed spacing units in 2020, its only plan was to
20 develop it through one-mile laterals, correct?

21 A. I was not part of the communications in 2020.

22 Q. So you don't know if prior to your coming onto
23 this project if Devon was already planning to drill
24 three-mile laterals when it first acquired property within
25 this proposed spacing unit, when it got the acreage in

1 **March of 2020 in Section 24?**

2 A. I don't have knowledge of the communication and
3 the planning prior to my joining the team.

4 **Q. Are any of Devon's witnesses, were they involved**
5 **in the project from its beginning? Who would have that**
6 **information?**

7 A. Don't know that.

8 **Q. Devon has never submitted an APD for three-mile**
9 **laterals to the BLM for approval; is that correct?**

10 A. No, that's not correct.

11 **Q. You actually have an APD for a three-mile**
12 **lateral for the wells that have been proposed? Are you**
13 **sure about that?**

14 A. We submitted a three-mile APD. When we realized
15 that that was incorrect due to not owning an interest in
16 all the tracts, we have since sundried that back to two
17 miles.

18 **Q. So you got an approved APD for three miles that**
19 **you sundried back to two miles?**

20 A. That is my understanding.

21 **Q. Are you sure it isn't the other way around, that**
22 **you got your APDs for one mile and sundried them to three**
23 **miles?**

24 A. Yes. I apologize. They were approved for one
25 mile, we submitted for three. They have since been

1 sundried back to two.

2 Q. Have you submitted three-mile APDs to the Oil
3 Conservation Division, as well, for the proposed wells?

4 A. I don't know if they have or have not.

5 Q. As of today Devon has no fixed plan to develop
6 the Third Bone Spring; isn't that correct?

7 A. That's correct.

8 Q. And you did not propose any Third Bone Spring
9 wells with your Proposal Letters in July of last year.

10 A. That's correct.

11 MR. DeBRINE: I'll pass the witness.

12 EXAMINER BRANCARD: Thank you.

13 Ms. Ryan, will you be asking questions
14 today?

15 MS. RYAN: I will not. Thank you.

16 EXAMINER BRANCARD: Mr. Garcia, questions for
17 the witness?

18 EXAMINER GARCIA: I have a few, and if you don't
19 mind, Mr. Brancard, can I ask Mr. Feldewert a question,
20 also?

21 EXAMINER BRANCARD: Sure.

22 EXAMINER GARCIA: Mr. Feldewert, real simple
23 question.

24 Between the back and forth between the last
25 cross, I just want to clarify is Notice proper for this

1 hearing for lateral lengths and time, et cetera?

2 MR. FELDEWERT: So your question is whether
3 Devon has property notified all the interest owners of the
4 three-mile spacing units?

5 EXAMINER GARCIA: Yeah. Yeah. To be honest, I
6 was trying to keep up with Earl, Mr. DeBrine, but between
7 the one-mile, two-mile and three-mile, it was going --

8 MR. FELDEWERT: I understand the confusion.

9 So to answer your question, yes, everybody
10 has been notified of the three-mile spacing unit. Their
11 inquiry, which I will address in a little bit with the
12 witness, involved the sundried -- or the filing of a C-102
13 with the applications to drill with the regulatory agency.

14 EXAMINER GARCIA: Thank you for that. Just
15 wanted to clarify for my notes.

16 Good morning, Mr. Ryan. Most of my
17 questions were answered by both counsel during their
18 Prehearing Statements for both parties.

19 CROSS EXAMINATION

20 BY EXAMINER GARCIA:

21 Q. Real simple question. I understand engineers
22 tend to delay. That's normal for the industry. These
23 were sent out, it seems to be July of last year. Do you
24 know when and if Devon will update and notify parties of
25 the updated AFEs for changes in the industry? Things have

1 **changed a lot in the last year.**

2 A. I don't know. We have communication about that
3 amongst our energy groups, and I know when updated costs
4 are available we will do our best to notify all parties of
5 those as soon as we have them ready.

6 **Q. If you did update those, it would be nice to get**
7 **a copy of them.**

8 A. Yes, sir.

9 EXAMINER GARCIA: That's all my questions.

10 EXAMINER BRANCARD: Thank you.

11 Mr. Feldewert, any redirect?

12 MR. FELDEWERT: It sounds like you don't have
13 any questions, then, Mr. Brancard.

14 EXAMINER BRANCARD: No, I don't.

15 MR. FELDEWERT: Uh, yes.

16 REDIRECT EXAMINATION

17 BY MR. FELDEWERT:

18 **Q. Mr. -- hold on one second. Let me get set up**
19 **here. I should be sharing what has been marked as A-1.**
20 **Do you see that, Mr. Cloer?**

21 A. Yes.

22 **Q. Okay. Now, in your affidavit you talked about**
23 **Devon had hoped to commence drilling in March of this**
24 **year. Is that right?**

25 A. Yes.

1 Q. And am I correct that that is because Titus has
2 existing wells in the east half of Sections 13 and 24,
3 which would be down here offsetting Devon's acreage?

4 A. That's correct.

5 Q. Okay. And Mr. DeBrine talked to you about the
6 prairie chicken area and the restrictions. Are you aware
7 that those -- whether those restrictions apply when you
8 have a conservation agreement with the BLM? I forget the
9 proper term of that. Or when it's a candidate for a
10 conservation agreement?

11 A. Can you rephrase the question?

12 Q. Okay. Are you aware of the fact that Devon has
13 what they all a CCAA with the BLM?

14 A. Yes, I am.

15 Q. Okay. What's the proper term for that? I'm
16 sure I butchered it.

17 A. I have heard it referred to as a CCAA.

18 Q. Okay. CCAA. So let's talk, then, about that.

19 Are you aware, then, that Devon has a CCAA
20 with the BLM?

21 A. Yes.

22 Q. And under that CCAA the normal restrictions have
23 been modified in terms of your drilling opportunities?

24 A. Yes, I believe that's the truth.

25 MR. DeBRINE: I would object to the testimony on

1 the best evidence ground. We have not been provided with
2 any copy of any CCAA that would relieve Devon of its
3 conditions of approval in its APDs to restrict drilling
4 activities from March 1st to June 15th under the
5 conditions of each of its APDs.

6 MR. FELDEWERT: Mr. Examiner, Mr. DeBrine just
7 brought this up, so prior to this there would not have
8 been any reason to discuss or provide the CCAA.

9 EXAMINER BRANCARD: Yes. This seems like proper
10 redirect, Mr. DeBrine. You brought up chickens and
11 they're are talking about chickens, so...

12 MR. DeBRINE: We just don't have the document,
13 and I wasn't allowed to question the witness about a
14 specific document that he sent, but he's allowed to
15 testify about a document we don't even have?

16 EXAMINER BRANCARD: He was testifying about
17 prairie chicken restrictions from the BLM that nobody had
18 either.

19 Q. So Mr. Cloer, you're aware, then, that the
20 normal restrictions perhaps that the BLM put in do not
21 apply to Devon's efforts here to commence drilling in this
22 area?

23 A. Yes.

24 Q. Okay. Now, Mr. DeBrine went to great length to
25 talk about filings for applications to drill. Do you

1 remember that?

2 A. Yes.

3 Q. Okay. You mentioned that Devon had initially
4 filed APDs with the BLM for shorter wells on acreage where
5 Devon owned. Is that right?

6 A. That's correct.

7 Q. Is there a reason why a company would submit
8 APDs with shorter laterals in this regulatory environment?

9 A. Yes.

10 Q. Okay. What's the reason for that? What does
11 that allow you to do while you're waiting for a Pooling
12 Order?

13 A. You can begin preparing facilities and all the
14 planning required to take away; add fill, things of that
15 nature. Ready to go.

16 Q. So, for example, if Devon here is planning a
17 three-mile development and they do not own an interest or
18 have an interest signed up in all of the tracts in which
19 the wellbore is going to be located, under the Division's
20 rules you're not supposed to file your APD, correct?

21 A. Correct.

22 Q. Okay. But if you file your one-mile APD with
23 the BLM covering acreage you own, does that then allow you
24 to subsequently sundry that APD once you get the Pooling
25 Order?

1 A. That's correct.

2 Q. And is that a much shorter approval process with
3 the BLM?

4 A. That's my understanding.

5 Q. And does it thereby allow you to begin the
6 planning and development for the proposed three-mile wells
7 before you have your pooling?

8 A. That is correct.

9 Q. Okay. Mr. DeBrine represented or discussed the
10 change to, I believe it was the C-104 -- or C-102 for the
11 12H well. Do you remember that?

12 A. Yes.

13 Q. Okay. And just to be clear, the 12H well in
14 this case, I'm looking at bringing it up right now, that
15 is the well that Devon has proposed in order to
16 accommodate an existing well. Correct?

17 A. Correct.

18 Q. That is located in the east half of the west
19 half of Section 12.

20 A. Yes, sir.

21 Q. That will be an infill well; is that right, Mr.
22 Cloer?

23 A. The 12H will be an infill well, yes.

24 Q. And when you initially put this together, the
25 dedicated acreage, was it accurately reflected on the

1 C-102?

2 A. That's correct.

3 Q. Okay. It was not a --

4 Was it accurately reflected the first time
5 you put together the AFE and C-102s?

6 A. I -- I apologize. I misunderstood. It was
7 inaccurately reflected the first time.

8 Q. Okay. And so you modified that to accurately
9 reflect the dedicated acreage for this infill well?

10 A. Yes.

11 Q. Now, Mr. Garcia talked about AFEs and the timing
12 for AFEs.

13 Once Devon is awarded operatorship for its
14 three-mile wells, it will be required by the Pooling Order
15 then to update its AFEs and send out updated AFEs to all
16 of the pooled working interest owners, correct, Mr. Cloer?

17 A. That's correct.

18 Q. And again Devon certainly intends to do that to
19 comply with the terms of the Pooling Order?

20 A. Yes, sir.

21 MR. FELDEWERT: Okay. That's all I have, Mr.
22 Brancard. Thank you.

23 MR. DeBRINE: If I could have just a brief
24 recross, Mr. Examiner.

25 EXAMINER BRANCARD: Well, then you're going to

1 get a redirect, so -- re-redirect.

2 MR. DeBRINE: That's okay.

3 EXAMINER BRANCARD: All right.

4 MR. DeBRINE: Yeah, Mr. Cloer, I just had a
5 couple of questions about the APD process.

6 RE CROSS EXAMINATION

7 BY MR. DeBRINE:

8 Q. It sounds like Mr. Feldewert was suggesting that
9 it's a common practice for Devon to apply to obtain a
10 one-mile APD when it has plans to drill longer laterals
11 and is either acquiring acreage by purchase or seeking to
12 pool parties for its longer laterals. Is that correct?
13 Is that a common practice for Devon?

14 A. I would not say it's a common practice, no.

15 Q. But it's something that has been done in other
16 cases other than this particular one?

17 A. Not to my knowledge.

18 Q. You are aware that the APD has specific
19 representations with regard to the length of the well and
20 type of well that's going to be drilled, correct? You're
21 representing to the BLM that that is the actual well
22 you're going to drill.

23 A. Yes.

24 Q. And the BLM when it receives that APD will
25 conduct an environmental assessment based on the

1 environment of that one-mile lateral, correct?

2 A. Correct.

3 Q. And at the bottom of the APD form it
4 specifically warns the person signing it that it's a crime
5 for any person to knowingly and wilfully make to any
6 department or agency of the United States any false,
7 fictitious, or fraudulent statement or representation as
8 to any matter within its jurisdiction.

9 Are you familiar with that statement at the
10 bottom of the APD?

11 A. I am not familiar with that statement.

12 Q. But you wouldn't disagree with me that it's
13 there?

14 A. I have not reviewed it.

15 Q. Would you agree if it was the operator's intent
16 all along to drill a three-mile well that if it filed an
17 APD for the one-mile well it would be making a
18 misrepresentation to the BLM?

19 A. If it was the intent, yes.

20 MR. DeBRINE: No further questions

21 EXAMINER BRANCARD: Mr. Feldewert?

22 MR. FELDEWERT: Sure.

23 RE-REDIRECT EXAMINATION

24 BY MR. FELDEWERT:

25 Q. Mr. Cloer, when you file an APD and the

1 environmental assessment is done by the BLM it focuses
2 primarily on the impact on the surface, correct?

3 A. Correct.

4 Q. And the surface for your proposed well, that
5 location has not changed?

6 A. No.

7 Q. Okay. And with respect to Mr. DeBrine's other
8 characterizations with respect to the information on the
9 C-102 and the information admitted with the C-102, it
10 would be accurate for the one-mile wells, correct?

11 A. Correct.

12 Q. Okay. And then, once you're in a position to be
13 able to consider and actually proceed with a three-mile
14 development plan, then you have the ability to file
15 sundries that would update the previous filings to reflect
16 the extended lateral that you're now in a position to be
17 able to propose to drill?

18 A. That's correct.

19 MR. FELDEWERT: Okay. That's all the questions.
20 Thank you.

21 EXAMINER BRANCARD: Thank you.

22 Mr. Garcia, did you have anything further?

23 EXAMINER GARCIA: I do not.

24 EXAMINER BRANCARD: Thank you. We can move to
25 do the next witness, then?

1 Well, first let me check with Ms.

2 Macfarlane. (Note: Pause.)

3 We are going to go ahead with this witness,
4 start it, then before the cross-examination we'll take a
5 break.

6 MR. FELDEWERT: Okay. With that then, Mr.
7 Brancard, we would call our next witness, who I believe is
8 on screen and needs to be sworn.

9 EXAMINER BRANCARD: Okay. I do believe I see
10 him.

11 EXAMINER BRANCARD: Thank you. Could you spell
12 your name for us, please.

13 THE WITNESS: Last name P-e-r-y-a-m.

14 EXAMINER BRANCARD: Thank you.

15 Mr. Feldewert.

16 MR. FELDEWERT: Thank you.

17 THOMAS PERYAM, PhD.

18 having been duly sworn, testified as follows:

19 DIRECT EXAMINATION

20 BY MR. FELDEWERT:

21 Q. Mr. -- well, you have already stated your name.
22 Would you please identify for us by whom you're employed
23 and in what capacity.

24 A. Devon Energy. I am a geologist in the Delaware
25 Basin North Business Unit.

1 Q. And Mr. Peryam, you actually -- your affidavit
2 reflects that you have a PhD in geology?

3 A. Yes, I do.

4 Q. I apologize. I should call you Dr.

5 A. It's all right.

6 Q. Dr. Peryam -- because you earned it.

7 Dr. Peryam, you have previously testified
8 before the Division as an expert in petroleum geology,
9 correct?

10 A. Yes.

11 Q. And Doctor, did you submit what's been marked as
12 Devon Exhibit B, which is your affidavit?

13 A. Yes.

14 Q. And in that affidavit do you identify and
15 discuss what's been marked as Exhibits B-1 through B-7?

16 A. Yes.

17 MR. FELDEWERT: And with that, then, Mr.
18 Examiner, I would tender Dr. Peryam as an expert witness
19 in petrogeology, and move the admission of Devon's
20 Exhibit B, including the attachments or referenced
21 Exhibits B-1 through B-7.

22 EXAMINER BRANCARD: Thank you. Are there any
23 objections?

24 MS. BENNETT: No objections. Thank you. This
25 is Deana Bennett on behalf of Cimarex.

1 EXAMINER BRANCARD: Thank you. With that the
2 witness is recognized as an expert and Exhibits B and all
3 attachments are admitted into the record.

4 MR. FELDEWERT: Mr. Peryam, I want to --
5 everybody, have you turn to what's been marked as Cimarex
6 Exhibit C-6-B, which I'm going to share and bring up on
7 screen.

8 Do you have that in front of you?

9 A. Yes.

10 Q. Now, I want to first turn to the gunbarrel that
11 we see here for Cimarex that they presented. And it
12 reflects, does it not, a spacing pattern in the Upper
13 Wolfcamp that would reflect four wells per section.

14 A. In the Upper Wolfcamp, yes.

15 Q. And Devon has proposed on its acreage for Upper
16 Wolfcamp development at a pattern which would be eight
17 wells per section?

18 A. Yes.

19 Q. In what is commonly referred to as a wine rack
20 pattern?

21 A. Yes.

22 Q. Now, are you aware that their geologist has
23 suggested that this Upper Wolfcamp spacing, and I quote,
24 "is redundant" and that the reserve can be efficiently
25 captured by only drilling in the Wolfcamp A Interval?

1 A. Yes.

2 Q. If I turn then to what's been marked as Cimarex
3 Exhibit C-60-C, that's the next exhibit on here, that is a
4 depiction that they have created of what they have
5 interpreted as the geology in this area, correct?

6 A. Uh-huh.

7 Q. Looking at this, do you disagree with the
8 proposition that two wells in the west half acreage in the
9 Wolfcamp A Interval will efficiently drain the Upper
10 Wolfcamp?

11 A. Yes.

12 Q. Okay.

13 A. I -- while I --

14 Q. Let me --

15 A. That was a bit of a negative question, so I want
16 to make sure I answered it...

17 Q. It was a terrible question.

18 Do you agree with the proposition in
19 Cimarex's geology that two wells in the Wolfcamp, which
20 she identifies as the Wolfcamp A Reservoir, that that will
21 efficiently and effectively drain the Upper Wolfcamp?

22 A. I do disagree with that.

23 Q. Now, on this depiction she has the -- in the
24 middle there she has Devon's plan. She has the wells kind
25 of on top of each other. I'm sure she didn't mean to

1 **misrepresent but it's not going to be the case, right?**

2 A. Uh-huh.

3 **Q. It's going to be a wine rack pattern.**

4 A. Correct.

5 **Q. And she is -- am I reading this that she is**
6 **reflecting that there's roughly 390 feet of thickness**
7 **before you get to that frac barrier below the Third Bone**
8 **Spring Sand?**

9 A. Let me see here. Between the Wolfcamp A, their
10 Wolfcamp A well, you mean?

11 **Q. Yeah. Uh-huh. Well, between what she marks as**
12 **the Wolfcamp A and then --**

13 A. Yeah. That's approximately correct, yes, sir.
14 Yes.

15 **Q. What's the difference between the Wolfcamp Upper**
16 **Reservoir, as we see here, and the Wolfcamp A Reservoir?**
17 **Is there any substantive difference?**

18 A. There is a significant difference. Wolfcamp A
19 is a shale with associated carbonates, tends to be a
20 source rock for a lot of the petroleum system locally
21 here, and it's associated with a lot of black shaled high
22 resistivity.

23 The Wolfcamp Sands are a silty, fine
24 sandstone, which tend to have higher reservoir properties
25 across the basin. We know that various ways, from high

1 permeability porosity but are not shaley. That's why they
2 are called the Sands, the X and Y Sands.

3 Q. So we could call these the Upper Wolfcamp Sands
4 and the Upper Wolfcamp Shales? Does that make sense?

5 A. That would make sense.

6 Q. She also shows, does she not, what she described
7 as frac barriers, plural --

8 A. Uh-huh.

9 Q. -- between the Upper Wolfcamp Shale Reservoir
10 and then the two reservoirs above that in the Sands.

11 A. Yes.

12 Q. Uhm, have you also -- have you looked at this
13 and do you see that little white bar above what she marked
14 as the top of the Wolfcamp?

15 A. Yeah.

16 Q. That bar and what she calls the frac barriers
17 below the Third Bone Spring Sands?

18 A. Yes.

19 Q. What do you observe when you look at her cross
20 section with respect to that? I'll call it the white bar
21 area around where the 200 foot is.

22 A. So that particular interval is mapped by us, and
23 I think other operators, as the Lower Third Bone Sand. In
24 petrophysical analysis and core data it has the highest
25 reservoir properties in the Third Bone Sand. It's very

1 highly porous, high permeability, and critically it tends
2 to have the highest oil saturation within the Third Bone
3 Sand, meaning a well drilled there will make more oil and
4 less water. Which is not to say that, you know, the rest
5 of the Third Bone is 100 percent water, but moving up
6 through the Third Bone there's a consistent relationship
7 in Lea County, my area of expertise, of higher oil
8 saturation lower in the Third Bone, decreasing oil
9 saturation up section, and also there tends to be a
10 decrease in reservoir quality as more clay comes into the
11 system. That lowest Third Bone is the highest reservoir
12 quality and charge, frankly, of the Third Bone.

13 Q. And it's right above the Wolfcamp Sands?

14 A. Directly above it.

15 Q. Okay. Now, just focusing on the Upper Wolfcamp,
16 I want to make sure this is clear.

17 Is it your opinion that you need an eight
18 well per section in a wine rack pattern to properly drain
19 these Upper Wolfcamp reservoirs?

20 A. Yes.

21 Q. Now, is that -- is that opinion also not only
22 based on the geology but is it also based on Devon's
23 experience?

24 A. Yes.

25 Q. I want to turn then to what's been marked as

1 **Devon Exhibit F, which I don't have yet up here.**

2 **Can you pull that out for me, Mr. Peryam?**

3 **Do you have that?**

4 A. I have it on paper.

5 **Q. Okay.**

6 A. I don't have it to share.

7 **Q. Does everybody have -- I'm sorry. I apologize.**

8 **Does everybody have that on paper, Mr.**

9 **Brancard and Mr. Garcia?**

10 EXAMINER GARCIA: Can you recite the exhibit
11 number?

12 MR. FELDEWERT: It would be the first rebuttal
13 exhibit, Devon Exhibit F, as in Frank.

14 EXAMINER GARCIA: Is this the one you submitted
15 last night?

16 THE WITNESS: I actually do have it up now.

17 MR. FELDEWERT: I might be able to figure this
18 out. Does everybody see my supplemental exhibits on the
19 screen now?

20 THE WITNESS: Yes.

21 EXAMINER GARCIA: Yes.

22 MR. FELDEWERT: All right. Let's go to
23 Exhibit F.

24 THE WITNESS: Yeah, that's...

25 **Q. Would you please -- is this an exhibit that you**

1 put together, Mr. Peryam, after you saw their position on
2 the Upper Wolfcamp?

3 A. Yes.

4 Q. And would you please first explain what is --
5 what this first page in this exhibit, how it's put
6 together and what it reflects.

7 A. So this reflects several tests in the immediate
8 vicinity of Sneaky Snake where we have enough data to do a
9 good estimate of the well's ultimate recovery factor. We
10 are talking how much oil they will make, and water, over
11 the life of the well. So...

12 Q. Let me -- I want to step back.

13 A. Not water. I want to step back. Not water.
14 The total oil that make up the life of the well.

15 So there needs to be a certain amount of
16 time these wells are on line before you have a good
17 estimate of that, which is why we don't have something
18 like the Tap Rock development next door, because it's
19 just, frankly, too new.

20 Uhm --

21 Q. Let me stop you right there.

22 A. Okay.

23 Q. First off, you got the Sneaky Snake area
24 identified in this exhibit with a black --

25 A. Black.

1 **Q. -- box around it.**

2 A. Yes. And then our Danger Noodle test, which is
3 a mile and a half to the east; a Thistle two-mile test at
4 four-well-per-section spacing; our Bell Lake 18-19, which
5 is eight wells per section; and the then EOG's
6 Hemlock/Yarrow section, which is eight wells per section.

7 **Q. Let me ask you first about that Thistle**
8 **development.**

9 A. Yeah.

10 **Q. What area is targeted here? Where are the wells**
11 **located?**

12 A. Thistle is in the XY sands exclusively. Uhm --
13 yeah.

14 **Q. And then when you talk about Upper Wolfcamp and**
15 **the Hemlock/Yarrow, that's EOG, right?**

16 A. That's EOG. And those are correlated to the
17 Wolfcamp Sands, as well.

18 **Q. And are they in a similar pattern to what Devon**
19 **has proposed for its acreage?**

20 A. Yes, they're similar. They are more on plane.
21 Where Devon has gone to eight-well, we've
22 done a wine rack such as we've proposed today, whereas EOG
23 tends to put their wells in the XY Sands and stay one next
24 to the other without a wine rack.

25 **Q. And then the Bell Lake, you say Upper Wolfcamp**

1 **eight wells per section, what is that?**

2 A. That's again a wine rack, same or similar to
3 what we are proposing for Sneaky Snake.

4 **Q. Can you just briefly explain how you arrive at**
5 **the recovery factors shown on here for these wells?**

6 A. So recovery factor work, you take the geologic
7 properties, the porosity of the interval in question, in
8 this case the Upper Wolfcamp and the XY Sands, you get the
9 total pore volume, how much porosity is in the rock, and
10 then you subtract out of that how much of that you believe
11 to be water, and then you end up with the total oil in
12 place. It's the OOIP.

13 Then you forecast the wells forward in time
14 to their ultimate and how much they are going to make
15 throughout time, and then divide one by the other for a
16 percentage, recovery factor percentage.

17 So the graph in the bottom right is on the
18 Y axis, the recovery factor percentage for these four
19 tests and the wells per section on the X axis.

20 So we were happy with those Thistle wells,
21 they were very successful wells as far as economically,
22 but when we looked back at them we see that they drained
23 only 12 percent of the reserves in that Upper Wolfcamp.

24 That was an early test, and building on
25 that knowledge, moving up to eight wells per section, we

1 consistently see that 17 to 18 percent recovery factor, so
2 much higher reserves, and that's significantly more
3 reserves captured in that Upper Wolfcamp.

4 **Q. So approximately how much additional reserves on**
5 **a percentage basis were recovered from eight wells per**
6 **section in the Upper Wolfcamp versus four?**

7 A. I mean, moving from 12 to 18, that's a 50
8 percent increase. Moving from 12 to 17 is a 40 percent
9 increase. It's a dramatic increase in the oil coming out
10 of the ground in these sections in the Wolfcamp.

11 **Q. From the Upper Wolfcamp.**

12 A. From the Upper Wolfcamp. Yeah, from the Upper
13 Wolfcamp.

14 **Q. Now, you mentioned your Danger Noodle where you**
15 **had a 17 percent recovery factor. I'm assuming you would**
16 **consider that, as a geologist, to be a good recovery**
17 **factor.**

18 A. Yes. Recovery factors are -- I would say yes.
19 I'll just say yes.

20 **Q. As a result have you patterned the Sneaky Snake**
21 **development after the Danger Noodle development?**

22 A. Yes. If you will look to the next slide, I
23 think it's F-1 or the --

24 **Q. Next page?**

25 A. Next page. It's a direct pattern based on what

1 we consider our successful, you know, highly successful
2 Danger Noodle experience that we have patterned directly
3 in the Sneaky Snake.

4 Q. Anything more about this exhibit, Mr. Peryam?

5 A. No.

6 Q. Okay. Let's turn to a different topic. I want
7 to go to what is marked as Celebrex Exhibit D-6-D, as in
8 David. Have you previously seen that Exhibit C-6-D?

9 A. Yes.

10 Q. Now, it represents a lack of oil shows in the
11 Wolfcamp Sand. Do you see that?

12 A. Yes.

13 Q. Does that surprise you?

14 A. To some extent yes.

15 Oil shows in mud logs -- again, I don't
16 have access to this mud log, I have access to some other
17 mud logs. Oil shows in mud logs are always promising but
18 they are so susceptible to -- there's so many variables.

19 I was surprised that -- I'm surprised that
20 they leaned into it.

21 Q. Okay. Do you believe that there's oil in the
22 Wolfcamp Sand reservoirs?

23 A. Yes.

24 Q. And is that based on Devon's experience in this
25 area?

1 A. Yes. It's based on abundant wells in the area
2 by ourselves, competitors; scientific data, core data,
3 sidewall core data; petrophysical analysis.

4 Q. Does it -- is part of that experience what we
5 just discussed? That would be the Danger Noodle --

6 A. Yes.

7 Q. -- results that we saw on Exhibit F.

8 A. Uh-huh.

9 Q. Back up here. So first page.

10 You mentioned other operators in the area.
11 Are they targeting the Upper -- these Upper Wolfcamp Sand
12 reservoirs?

13 A. Yes. If you look at Exhibit G, Rebuttal
14 Exhibit G.

15 Q. Give me a minute, and everybody get oriented
16 here. It's Devon Exhibit G, as in Giant; is that right?

17 A. Yes.

18 Q. Did you prepare this exhibit?

19 A. I prepared this exhibit.

20 Q. Would you first orient the examiners to the
21 Sneaky Snake area and explain the legend.

22 And I'm going to tell you, Mr. Peryam, hold
23 on before -- before...

24 Uh, Mary has to make sure I finish my
25 question before you start your answer. Okay?

1 A. Okay.

2 **Q. Please.**

3 A. Sneaky Snake acreage is shown in this red box,
4 the acreage in question. The sticks are wells, existing
5 wells in this XY Sands, including the two Danger Noodle
6 wells which are a mile and a half to the east of Sneaky
7 Snake on the yellow acreage.

8 And then further east on that, a series of
9 Devon's wells in the XY Sands.

10 And then the one-mile development south of
11 Danger Noodle where EOG has the Hemlock/Yarrow wells.

12 The legend, though, is the standard oil
13 field legend for oil wells, producing oil wells, producing
14 gas, actively-drilling wells waiting on completion, et
15 cetera.

16 **Q. Now, I see that you placed a stick in the east**
17 **half of Sections 13 and 24 over in the Sneaky Snake area.**

18 A. Yes, that's right.

19 **Q. Actually I guess there's two there.**

20 A. There is two. One is underneath that box.
21 That's part of the Tap Rock Wild Salsa development.

22 **Q. You said Tap Rock. Is it Titus or Tap Rock?**

23 A. Titus. Titus. Thank you.

24 **Q. Wild Salsa. So right next door did Titus target**
25 **the Wolfcamp Sands?**

1 A. Yes. They are -- they did a wine rack of a sort
2 with two wells and four-well-per-section spacing in the
3 Wolfcamp Sands, and additional two wells in the Third Bone
4 Sands.

5 Q. Okay. Okay. But at least two of their wells
6 targeted the Sands.

7 A. Yes.

8 Q. In your opinion, does recoverable oil exist in
9 the Wolfcamp Sands underlying the Sneaky Snake acreage?

10 A. Yes.

11 Q. And does recoverable oil exist in the Wolfcamp
12 Shales underlying the Sneaky Snake acreage?

13 A. Yes.

14 Q. And, in your opinion, oil in what I'll call it
15 the eight-well-per-section wine rack pattern in this Upper
16 Wolfcamp, recoverable reserves?

17 A. Yes.

18 Q. And avoid leaving up to, what, you say 30 or 40
19 or 50 --

20 A. 40 to 50 percent of reserves, yeah.

21 Q. Leaving those reserves in the ground?

22 A. Yes.

23 Q. And thereby preventing waste?

24 A. Yes.

25 Q. Now, last topic I'm going to talk about Devon's

1 proposed three-mile development. Okay?

2 A. Okay.

3 Q. Are you aware that Cimarex's geologist
4 questioned the ability to -- of Devon to actually drill
5 that and complete three-mile wells?

6 A. Yes.

7 Q. And I think she especially focused on the Avalon
8 Interval; is that right?

9 A. Yes.

10 Q. That would be the Bone Spring?

11 A. Yes, the uppermost Bone Spring.

12 Q. Have you examined her analysis?

13 A. Yes.

14 Q. Okay. First off, before we get to it, what is
15 your response to that?

16 A. I don't disagree that there is chert, I don't
17 disagree that chert can cause drill bit wear and tear;
18 however, we still drill it, and the more we do, the better
19 we get at drilling it in terms of wellbore execution and
20 wellbore placement, geosteering, drill bit selection, et
21 cetera.

22 So Cimarex's geologist is not wrong in that
23 there is chert, plenty of chert, but I do take issue that
24 that constitutes any sort of existential risk. If
25 operators in Lea County were to avoid drilling cherty

1 intervals the Avalon would be entirely off limits to the
2 industry, and I don't think that's in anyone's interest.

3 Q. Okay. Then let's get specific.

4 I want to take a quick look at Cimarex's
5 geologist's Exhibit C-3-D, as in David.

6 A. Okay.

7 Q. Is this -- you've looked at this, right?

8 A. Yes.

9 Q. This reflects the chert concerns that she's
10 raised with the Avalon?

11 A. Yes.

12 Q. Now, I know this is hard to do in this virtual
13 world, but if people add that out, they keep this page
14 out, and then I want you to take a look at what's been
15 then marked as Devon Exhibit H, which I have up on the
16 screen now.

17 Did you create this?

18 A. I did.

19 Q. Did you do it for the purpose of comparing her
20 geologic assessment of the Upper -- of the Avalon with an
21 area that Devon has actually successfully drilled
22 three-mile wells?

23 A. Yes. That's exactly why I prepared that.

24 Q. Okay. So start over here on the left-hand side
25 and just orient us first before you talk about the

1 **similarities.**

2 A. So starting at the inset map on the bottom left,
3 you instantaneously see the Sneaky Snake acreage called
4 out. The two wells that we have executed three-mile in
5 the Avalon are the Thistle 159H and the 156H. They are
6 approximately three and a half miles due east to southeast
7 of the Sneaky Snake acreage, successfully drilled and
8 completed in 2019.

9 And mainly what I consider a similar plot
10 including the lithology curve. The lithology is a model
11 lithology, meaning it comes out of the various
12 petrophysics we do. But I did that to show three wells
13 along the wellbore of the 159H and the 156H, and where we
14 would call type -- you know, cherty zones called out in
15 the area. So this is meant to be a very similar look to
16 the Cimarex exhibit we just were looking at.

17 And just to say that, you know, we drilled
18 this, we knew we were drilling into some cherty rock, but
19 we succeeded. There were not significant drilling issues
20 outside the normal bounds of horizontal drilling in the
21 State of New Mexico. There's nothing unique about this.

22 I mean, we -- if you look at the gaps
23 between the arrows, in some cases that's almost 100 feet
24 of rock. So the industry now is able to successfully
25 geosteer in 100 feet of rock. Devon is.

1 Q. So, Mr. Peryam, when you look at the geology of
2 the Avalon -- I guess the better term is the lithology, I
3 guess. Is that right?

4 A. Yes.

5 Q. When you looked at the lithology of the Avalon
6 in this area where Devon has successfully drilled its
7 Thistle wells, in your opinion is it similar, if not
8 identical to the lithology under the Sneaky Snake, based
9 on the information presented by Cimarex's geologist?

10 A. Yes. It's extremely similar. I will not say
11 identical. Geology changes over time -- I mean over
12 distance, but the lithologies in question are the same:
13 shales, sands, carbonates, cherts. The distribution may
14 be a bit different but the lithologies are the same, the
15 proximate distribution of the difficult lithologies are
16 the same. So yes, in terms of difficulties in drilling, I
17 would say these are identical.

18 Q. And if I look at the second page of this
19 Exhibit H, does this identify on a map --

20 A. Yes.

21 Q. -- for the examiners, the area where Devon has
22 successfully drilled three-mile wells in relationship to
23 the Sneaky Snake acreage?

24 A. Yes. This map shows Sneaky Snake acreage near
25 the center. Called out in the pink box, Devon's, you

1 know, current acreage position in yellow, and our
2 successfully drilled three-mile wells.

3 Again the most proximate are those Thistle
4 wells to the east/southeast, and that is both Upper
5 Wolfcamp XY Sands and Avalon wells in that area.

6 **Q. Thank you. I think you anticipated my next**
7 **question.**

8 **So you have not only successfully, Devon**
9 **has not only successfully drilled three miles in the**
10 **Avalon but various other Formations and Intervals?**

11 A. Yes. As you can see to the west, there is a
12 small -- a subset of wells with the red dot. These are
13 three-mile Second Bone Sand wells, as well, so...

14 We have drilled three-mile in four
15 different horizons now.

16 **Q. And this would be in various areas in Lea**
17 **County; is that right?**

18 A. Yes.

19 **Q. And the success is a fact, it's not a matter of**
20 **opinion?**

21 A. Yes.

22 **Q. You successfully drilled these wells. They are**
23 **online and producing?**

24 A. Not every well on this map is online and
25 producing. That subset of wells to the southwest, the

1 three purple dots and a blue dot, those are drilled but
2 uncompleted. But the remainder, particularly those in
3 Thistle, are drilled and completed.

4 **Q. Okay. All right. And in your opinion is the**
5 **geology in Sneaky Snake conducive to Devon continuing with**
6 **its success with drilling three-mile wells in the Bone**
7 **Spring and Wolfcamp?**

8 A. Yes. I need to qualify what I just said.

9 There are still -- we're currently, as in
10 today, drilling Third Bone. Not -- sorry. Today we are
11 drilling more Wolfcamp three-miles in Thistle. When I
12 said that all the other wells were drilled and completed,
13 that was mistaken. Some of those are still drilling
14 today.

15 **Q. So Devon not only has drilled but is currently**
16 **drilling.**

17 A. It's currently thrilling.

18 **Q. Three-mile wells.**

19 A. Yes.

20 **Q. In the Avalon.**

21 A. Today, the ones that are drilling today, are
22 Wolfcamp.

23 **Q. In the Wolfcamp. Okay. So you drilled in the**
24 **Avalon and now you're drilling in the Thistle in the**
25 **Wolfcamp?**

1 A. Yes.

2 Q. Is that the Upper Wolfcamp?

3 A. Upper Wolfcamp, XY Sands.

4 Q. XY Sands. Okay. Thank you.

5 With that Mr. Examiner, I would move the
6 admission into evidence of Devon Exhibits F, G and H.

7 EXAMINER BRANCARD: Objections?

8 MS. BENNETT: No objections. Thank you.

9 MR. FELDEWERT: And I understand you're going to
10 take a break, because I'm in a position to pass the
11 witness.

12 EXAMINER BRANCARD: We will admit Exhibits F, G
13 and H into the record, and we will take a break and the
14 witness will be passed afterwards.

15 (Note: In recess from 10:29 a.m. to 10:40 a.m.)

16 EXAMINER BRANCARD: All right. With that I
17 believe we're back to the witness Dr. Peryam, and I think
18 we're ready for if anybody has any questions. We will see
19 if anybody has any questions.

20 Let's start with Cimarex.

21 MS. BENNETT: Thank you very much.

22 CROSS EXAMINATION

23 BY MS. BENNETT:

24 Q. Good morning, Dr. Peryam. My name is Deana
25 Bennett, and I represent Cimarex, and it's nice to be

1 meeting you today, and thanks for being here.

2 I was wondering at the outset how long
3 you've been involved in Devon's Sneaky Snake project.

4 (Note: Pause.)

5 And if you're speaking, you may be muted.

6 A. Thank you. I have been involved in the area
7 since about 2019.

8 Q. And when you say "in the area" does that mean
9 with the Sneaky Snake?

10 A. I don't recall when Sneaky Snake initiated. I
11 have been on the Lea County team since then, so I would
12 have been available.

13 Q. Were you part of the team that prepared the APDs
14 for submittal to the BLM in 2020?

15 Dr. Peryam, I think you're muted again.

16 A. Oh. How's that?

17 Q. Better. Thank you.

18 A. Sorry about that.

19 I would have provided the geology portion
20 of those APDs.

21 Q. Before diving into your exhibits I did want to
22 ask just a couple of overview questions.

23 First, there's no geologic or other
24 impediments to Devon drilling two-mile laterals in this
25 area, right?

1 A. Correct.

2 Q. And in fact the exhibits you presented and
3 prepared demonstrate Devon's success with drilling
4 two-mile laterals in this area, right?

5 A. Yes.

6 Q. And, for that matter, there's no geologic or
7 other impediment to Devon drilling a one-mile lateral or
8 one-mile laterals in this area, is there?

9 A. No.

10 Q. Thank you. I wanted to turn first in your
11 testimony to paragraph 4. Do you see that on the screen?

12 A. Yes.

13 Q. Here you testify that initial targets for
14 Devon's Sneaky Snake wells are the Avalon Second Bone
15 Spring and the XY and A Sand of the Wolfcamp Formation; is
16 that right?

17 A. Yes.

18 Q. I apologize for not having it right here on
19 my -- handy, but is it Devon's position now that Devon
20 plans to come back in and develop the First Bone Spring
21 Sand in the Sneaky Snake area?

22 A. Yes.

23 Q. And you didn't include a structure map or a
24 cross section for the First Bone Spring Sand in your
25 exhibits, did you.

1 A. No.

2 Q. And you knew, though, that -- or Cimarex knew, I
3 should say, that-- I'm sorry, Devon knew that Cimarex was
4 proposing First Bone Spring Sand wells; is that right?

5 A. Yes.

6 Q. And in your -- as I mentioned a moment ago, in
7 your rebuttal exhibits Devon indicates that it's intending
8 to drill First Bone Spring wells, right?

9 A. Yes.

10 Q. Is it fair to say that that's a fairly recent
11 decision from Devon?

12 A. Yes.

13 Q. When did Devon come up with the idea of adding
14 First Bone Spring wells to its proposal or the plan?

15 A. I would say we've been wanting to see six months
16 or so approximate production on two other First Bone
17 tests, and we now have that data and it's given us faith
18 in the reservoir.

19 Q. So you would agree that Cimarex has the right
20 idea here in drilling First Bone Spring Sand wells.

21 A. Yes.

22 Q. And had that idea prior to Devon. (Note:
23 Pause.) Based on --

24 A. I mean, in that section in dispute, yes.

25 Q. Thank you. So you don't have any APDs filed for

1 **the First Bone Spring Sand; is that right?**

2 A. That is correct.

3 **Q. But Devon has filed APDs for the Avalon and**
4 **Second Bone Spring Sand, right?**

5 A. I don't have the answer to that.

6 **Q. You don't know the answer to that?**

7 A. No.

8 **Q. Did you prepare geology to submit for portions**
9 **of the APDs for the Avalon APDs?**

10 A. Yes.

11 **Q. And did you prepare geology for APDs for the**
12 **Second Bone Spring?**

13 A. Yes.

14 **Q. Have you prepared geology for APDs for the First**
15 **Bone Spring?**

16 A. Yes.

17 **Q. Has Devon submitted APDs for the First Bone**
18 **Spring?**

19 A. I don't -- I don't know that. I can't answer
20 that.

21 **Q. Do you know who would have the answer to that?**

22 A. (Note: Pause.) Who would have the answer to
23 that. I imagine Mr. Cloer would.

24 **Q. Okay. A moment ago you testified that you did**
25 **prepare geology for the First Bone Spring Sand APDs. Is**

1 **that right?**

2 A. Yes.

3 **Q. When did you prepare the geology for the First**
4 **Bone Spring Sand APDs?**

5 A. Uhm, quite recently. I'd have to check that.

6 **Q. If you don't mind checking, that would be great.**
7 **We can wait. (Note: Pause)**

8 A. Uh...

9 EXAMINER BRANCARD: If the witness doesn't know
10 the answer right now, I guess we could try to get the
11 answer later.

12 MS. BENNETT: That's fine, if that's okay to
13 just kind of put a pin in this and have that information
14 maybe later today. It's not critical. I just was
15 wondering.

16 **Q. I guess I was wondering in part because if**
17 **you've already prepared the APDs for the First Bone**
18 **Spring, why didn't you identify -- and by "you" I mean**
19 **Devon, not you necessarily, Dr. Peryam, identify First**
20 **Bone Spring Sand wells in the exhibits that you filed?**

21 A. Uhm, I mean I am of the understanding that we
22 proposed the initial well that, uhm -- that's my
23 understanding.

24 **Q. Do you have an understanding of when Devon**
25 **intends to develop the First Bone Spring Sand wells?**

1 A. Uhm, I do not.

2 Q. Do you know if Devon intends to develop the
3 **First Bone Spring wells with the Avalon wells?**

4 A. So we have not -- that is how we've approached
5 the First Bone Sand, is co-development with the Avalon.

6 Q. But you did not propose that in your Proposal
7 **Letters, did you.**

8 A. No.

9 Q. And you didn't prepare any exhibits that support
10 **that for this hearing, did you?**

11 A. No. I mean -- well, wait, wait. Karsan may
12 have.

13 Q. If Karsan did, I'm happy to ask him about
14 **that -- Mr. Sprague. Excuse my familiarity.**

15 (Note: Reporter inquiry.)

16 MS. BENNETT: Just to clarify, I said if Mr.
17 Sprague has the material or the information on that I can
18 ask him about that later, and I apologized for using his
19 first name and being somewhat familiar.

20 Q. So now I wanted to turn to Exhibit 5. I'm
21 **sorry, paragraph 5 in your affidavit, and the**
22 **corresponding Exhibit B-1, and I'm going to just scroll**
23 **down to Exhibit B-1.**

24 So Exhibit B-1 is the structure map for the
25 **Avalon and Second Bone Spring wells; is that correct?**

1 A. Correct.

2 Q. And I think this is just a typo, but when I look
3 at these, they actually start down here in Section 25 and
4 go up through Section 13. And I think you meant to start
5 in 24 through 12; is that correct?

6 A. That is correct.

7 Q. Would that be the same thing on Exhibit B-2,
8 that it starts at Section 25?

9 A. Yes. Let me just double check that. Don't want
10 to say the wrong thing.

11 Yep, both those documents have the box in
12 the wrong -- one section too far south.

13 Q. I thought that was probably just a typo but just
14 wanted to clear it up for the record.

15 Moving back up to Exhibit -- I'm sorry, to
16 paragraph 5, you note that in terms -- and I'm
17 paraphrasing here so feel free to correct me -- that there
18 are no geologic faulting impediments to developing the
19 Bone Spring Intervals in this area. Is that right?

20 A. Yes.

21 Q. A moment ago, though, you agreed that there is
22 chert and limestone present here in the Avalon, though.
23 Right?

24 A. Yes.

25 Q. And your colleague Mr. Sprague, in fact,

1 testified that Devon's costs are higher for Avalon wells
2 due to the difficulty and additional time required to
3 drill Avalon wells. Is that accurate?

4 A. Yes.

5 Q. So Devon's experience is that its Avalon wells
6 do pose difficulty; is that correct?

7 A. Can you define "difficulty"?

8 Q. I cannot. All I can say is that your colleague
9 testified that Avalon wells are more difficult and require
10 additional time.

11 A. So I mean it's different geologic formations
12 treat differently. Sometimes you need heavier mud
13 weights, sometimes you need lighter mud weights, sometimes
14 you need a different drill bit, and these decisions have a
15 different costs. But I wouldn't say it's -- I wouldn't
16 call it an impediment. It's not stopping us.

17 Q. And I didn't use the word impediment.

18 A. Okay. Well, that's a word I used, so that's --
19 I stand by what I wrote there.

20 Q. Understood. But you don't challenge Mr.
21 Sprague's -- or you agree with Mr. Sprague that it is
22 difficult to drill Avalon wells, resulting in higher
23 costs.

24 A. In comparison to some other horizons, yes.

25 Q. Yes. Thanks.

1 In your original exhibits, though, you did
2 not discuss chert or limestone in the Avalon in this area,
3 did you.

4 A. No.

5 Q. And a moment ago you compared and contrasted a
6 rebuttal exhibit you prepared with an exhibit that Ms.
7 Blake compared showing the presence of chert and limestone
8 in this area; is that right?

9 A. Yes.

10 Q. Exhibit B-4 is your original cross section,
11 though, right?

12 A. Yes.

13 Q. Can you show me where on this cross section
14 there is chert or limestone?

15 A. You would have to really zoom in at this scale,
16 but in the line that says "Avalon B" you would be looking
17 in the left-hand, the leftmost column of each of these
18 logs. You would be looking for the places where the
19 little blue and black squiggles have major excursions to
20 the right.

21 Q. Thank you for pointing that out.

22 Is it fair to say that from the scale of
23 these processes it's difficult to identify the presence of
24 chert and limestone?

25 A. Yes.

1 Q. Again I'm going to paraphrase here, so feel free
2 to correct me. I don't intend to put words in your mouth.

3 But earlier in response to questions about
4 drilling in the Avalon your testimony was that with
5 additional experience you, Devon, gain additional
6 knowledge of how to better drill in the Avalon.

7 Is that an accurate paraphrasing of your
8 testimony?

9 A. Yes.

10 Q. And were you here earlier in the day when we
11 discussed the fact that Cimarex has now acquired
12 ConocoPhillips' or a portion of ConocoPhillips' interest
13 in the southwest quarter of Section 12?

14 A. Yes.

15 Q. So is it fair to say that you intend to
16 experiment with this Avalon three-mile well and get better
17 at it on Cimarex's acreage?

18 A. No.

19 Q. And why isn't that an accurate statement?

20 A. I think we have the knowledge -- this is not --
21 we're past -- the training wheels are off. We do this
22 all -- we do this all the time. This is du jour now.

23 Q. So it's du jour for Devon to drill three-mile
24 Avalon wells?

25 A. Well, to drill in the Avalon, and to drill

1 three-mile wells. Uh, this is not something I would
2 consider experimental or out of our experience.

3 Q. Would you say that you have more experience
4 drilling two-mile Avalon wells than three-mile Avalon
5 wells?

6 A. Yes.

7 Q. And would you agree with me that Cimarex's
8 proposal is for each operator to drill two-mile laterals?

9 A. That is Cimarex' proposal.

10 Q. And that's within your wheelhouse, right,
11 two-mile laterals?

12 A. Yes.

13 Q. I would like to turn now to Exhibit B-3, yeah,
14 B-3, which is your structure map. I'm sorry, excuse me,
15 B-2, which is your structure map for the Wolfcamp wells.
16 And I'm not sure that you're the right person to ask this
17 question to, so if it's Mr. Sprague, just let me know.
18 But are you the right person to talk about the influences
19 of pressure and depth along laterals in the Wolfcamp area?

20 In the Wolfcamp in this area, excuse me.

21 A. Probably not.

22 Q. Okay. Uhm -- sorry, I'm just orienting myself
23 to your... (Note: Pause.)

24 I want to talk about paragraphs 12 and 13
25 of your affidavit. And in paragraphs 12 and 13 that's

1 where you're comparing and contrasting Devon's development
2 plan to exploit the Upper Wolfcamp and Cimarex's plans to
3 exploit the Upper Wolfcamp; is that right?

4 A. Yes.

5 Q. And you cite several academic papers in the
6 footnote for paragraph 13; is that right?

7 A. Yes.

8 Q. Are those papers -- well, let me ask you this:
9 Did you provide those papers to the OCD?

10 A. No.

11 Q. And do you know for someone like myself, who is
12 not a member of a subscription service, could I acquire
13 those papers without having a subscription?

14 A. Uhm, I believe there may be a small fee. Uhm...

15 Q. Okay. That's my experience, too. When I tried
16 to access them myself I had to do a subscription.

17 In this original set of exhibits that you
18 prepared, the only -- or in your original testimony, I
19 should say, the only exhibits you cited to support your
20 contention that Devon's development plan is superior than
21 Cimarex's are the academic studies that aren't publicly
22 available; is that right?

23 A. Uh --

24 MR. FELDEWERT: Hold on. Let me object to the
25 form of the question.

1 Are you -- what -- there's been a number of
2 debates between the companies on a development plan.
3 Which one are you talking about, Ms. Bennett?

4 MS. BENNETT: Thank you for the clarification.

5 I'm speaking only about the difference
6 between eight wells per section targeting the XY and A or
7 eight wells per section targeting the A and Third Bone
8 Spring Sand, which is the subject of paragraphs 12 and 13.

9 A. You speak of these as if they're private. They
10 are, but they are publicly available for --

11 **Q. For a fee.**

12 A. -- a fee. Not unlike a newspaper.

13 So I would say these -- I'm going to
14 quibble with you saying they are not publicly available.

15 **Q. Okay. And I appreciate where you're going with**
16 **that, but I guess the main point I was trying to make is**
17 **that those are the only exhibits that you submitted to --**
18 **the citations are the only support you provided for your**
19 **conclusions in paragraph --**

20 A. Yes.

21 **Q. In paragraphs 12 and 13.**

22 A. Yes.

23 **Q. You knew, though -- Devon knew that Cimarex was**
24 **targeting the Third Bone Spring and the Wolfcamp A as**
25 **opposed to Devon's development plan, right?**

1 A. Yes.

2 Q. But you didn't include any slides in your
3 original exhibit comparing and contrasting Devon's plan
4 and Cimarex's plan for what we'll call the Upper Wolfcamp
5 and Upper Third Bone Spring Sand.

6 A. Hmm. Let me see if that's true.

7 Uhm, I provided my Exhibit B-4, and then
8 B-5 and B-6 I believe are comparing and contrasting the
9 plans in the gunbarrel sense.

10 Q. Okay. So these are the exhibits that you're
11 relying on in your original materials to demonstrate what
12 is your opinion that Devon's plan is superior to.

13 A. Well, that wasn't what you asked. You asked me
14 if I provided any evidence to compare and contrast.

15 Q. Okay. I'm sorry. I think that's what I meant,
16 by --

17 A. Oh, okay.

18 Q. -- comparing and contrasting, was an exhibit
19 that compared the relative benefits --

20 A. I see.

21 Q. -- and the merits.

22 A. Yeah. No, I understand.

23 Q. And with that understanding, does that change
24 your answer to the question?

25 A. How about you just re-ask the question again.

1 Q. Sure. Sure.

2 So in your original set of exhibits did you
3 provide any exhibits comparing the relative merits and
4 demerits of each operator's proposed plans for the Upper
5 Wolfcamp?

6 A. No. My response to that is no.

7 Q. Thank you. You did prepare some exhibits as
8 rebuttal exhibits, though, right?

9 A. Yes.

10 Q. And those rebuttal exhibits, though, that's all
11 information that you had prior to the hearing, isn't it?
12 I'm sorry, prior to submitting exhibits last week. Right?

13 A. Yes.

14 Q. And I think I asked you this question, and I
15 apologize if I didn't, but Devon knew that there was a
16 difference in the development plans for these two targets
17 before you received Devon's -- Cimarex's exhibits. Is
18 that right?

19 A. Yes.

20 Q. Okay. So turning back to the case studies,
21 those -- I read them, and I don't claim to understand them
22 by any means but I did read them, and my takeaway from the
23 case studies is that they are studying two sets of wells,
24 or well groups, I guess, in Texas.

25 Is that a fair --

1 A. Yes.

2 Q. -- statement? Okay.

3 And so those studies don't address the
4 specific geology of this area in Lea County, do they?

5 A. No.

6 Q. And these studies, also, as I read them,
7 emphasize the benefit of site-specific data, and that
8 modeling is just a proxy for site-specific data. Is that
9 right?

10 A. Yes.

11 Q. Your initial exhibit, excuse me, exhibits didn't
12 provide or rely on any specific site data, did it, though.
13 Do they?

14 A. That's correct.

15 Q. Again this is pretty high-level, so apologies,
16 but two of the papers are authored by OXY reservoir
17 engineers, is that right? Or OXY engineers.

18 A. Yes.

19 Q. And OXY would presumably then have the benefit
20 of not just the paper but this data underlying the paper.

21 Is that your understanding?

22 A. Yes.

23 Q. And OXY itself developed the Avogato wells that
24 target the Third Bone Spring only in this area, right?

25 A. Let me look. (Note: Pause.) Yes, drilled in

1 2019, it looks like. Yes.

2 Q. And those only target the Third Bone Spring
3 Sand?

4 A. I think there's a parent Bone -- I think there's
5 a parent Wolfcamp. Yeah, the infill development is Third
6 Bone Sand, yes.

7 Q. Okay. Were you here earlier when Mr. Feldewert
8 stated that one of the reasons that Devon is interested in
9 moving forward with this Sneaky Snake development is
10 because of the Wild Iris drainage? And again I'm
11 paraphrasing there, but is that accurate?

12 A. Well, I think you mean the Wild Salsa.

13 Q. Sorry. I love wild irises, so I can't help but
14 mention them. Yeah, Wild Salsa.

15 A. Yes.

16 Q. Let me start with my question again. I'm sorry.

17 But is that a concern for Devon, the
18 drainage or interference from Wild Salsa?

19 A. Yes.

20 Q. Did you include any exhibits in your materials
21 quantifying that risk?

22 A. No.

23 Q. Did you include any materials in your exhibits
24 qualitatively describing that risk?

25 A. No.

1 Q. Earlier I believe you mentioned that it's your
2 opinion that the Wild Salsa wells are targeting the
3 Wolfcamp XY; is that right?

4 A. The lower batch of -- yes, the lowestmost batch.

5 Q. And have you seen Cimarex's alternative view of
6 that, which is that the Wild Salsa wells are targeting the
7 Wolfcamp A?

8 A. I saw that.

9 Q. And so there's disagreement between the two of
10 you about ---

11 A. Yes. I'm basing that on communication from
12 Titus themselves, and -- which obviously I can't provide,
13 you know, their data. But, uhm, there's often -- when you
14 don't have access to all the data, there can be -- uhm,
15 especially in things just a few 10s of feet apart, there
16 can be differences of opinion between qualified geologists
17 on that kind of thing.

18 Q. Has Devon ever executed an
19 eight-well-per-section long lateral development testing
20 the Wolfcamp in this area?

21 A. No.

22 Q. So this will be the first attempt by Devon to do
23 this?

24 A. We have six-well-per-section development in the
25 county, Upper Wolfcamp, but not an eight-well-per-section.

1 We're talking three miles, of course, when
2 I say long lateral.

3 We have several eight-mile-per-section
4 two-mile tests.

5 Q. But no three-mile eight-well-per-section tests?

6 A. Correct.

7 Q. So I wanted to -- I'm going to try to share my
8 screen with a different set of exhibits, the exhibits that
9 Ms. Blake prepared. So give me just a second to switch
10 over here. (Note: Pause.)

11 So this is Exhibit C-6-B that you were
12 discussing with Mr. Feldewert earlier today, right?

13 A. Yes.

14 Q. And again for purposes of our discussion right
15 now, we're focusing on this area right here.

16 A. Yes.

17 Q. Upper Wolfcamp, Wolfcamp XY, and Third Bone
18 Spring Sand.

19 And you also discussed this exhibit with
20 Mr. Feldewert earlier, as well, right?

21 A. Yes.

22 Q. And then you discussed C-6-D with Mr. Feldewert
23 as well, right?

24 A. Yes.

25 Q. So I wanted to start with this exhibit.

1 You testified earlier that you were
2 surprised that Cimarex was leaning into the no oil shows
3 in the Wolfcamp Sand; is that right?

4 A. Yes.

5 Q. But there is a difference between oil shows,
6 right, and the presence of oil.

7 A. Yes.

8 Q. So is it fair to say that this slide does not
9 indicate that there's no oil in the Wolfcamp Sand? Is
10 that a fair assessment of this slide?

11 A. I -- (Note: Pause.) It's hard for me to know
12 the goal of this slide.

13 Q. But you would agree that "no oil shows" does not
14 equal no oil.

15 A. I would agree with that.

16 Q. Just to get to the nub of it all, agreeing that
17 we weren't intending to show these stats but just for
18 representative purposes.

19 So here is Devon's plan with a
20 Wolfcamp A/Wolfcamp XY, I'll call it. And here is
21 Cimarex's plan with a similar Wolfcamp A. So these are
22 not disputed.

23 And then a Third Bone Spring Sand well.

24 In my mind this sort of accurately, or best
25 it can be, kind of shows the differences.

1 A. Yes.

2 Q. When I look at Devon's plan here, and based
3 on -- well, earlier you testified that this layer right
4 here, this white layer is a rich oil layer. Is that
5 accurate?

6 A. Yes, it is.

7 Q. And so you're anticipating that this XY well,
8 the fracs from this XY will travel up into this rich oil
9 layer?

10 A. Yes.

11 Q. About how many feet is that?

12 A. Approximately 100.

13 Q. 100 feet?

14 A. 85 to -- I should probably actually answer that
15 with a better answer than a speculation. (Note: Pause.)

16 Yeah, 85 to 150 feet.

17 Q. Okay. And this is about 190?

18 A. Yes.

19 Q. But it's your position that this well, Cimarex's
20 Wolfcamp A well, will not frac up 150 or so feet to
21 capture this reserve --

22 A. That is not my position.

23 Q. Okay. So -- sorry. Is it your position, then,
24 that this Wolfcamp A well will deplete this section, or
25 this Wolfcamp XY?

1 A. In parts. Uhm, we obviously have data. Uh,
2 there's contribution from XY Sands' A wells. As I
3 testified earlier, it's not an efficient drainage, it's
4 coming, you know, up from below. There's contribution but
5 it's not efficient drainage across the section.

6 **Q. And --**

7 A. So it would be like the area directly above the
8 well would contribute.

9 **Q. But this well here is not subject to the same**
10 **constraints that you just described here?**

11 A. Believe it or not, my answer is no, it's not
12 subject to the same constraints. The basal Third Bone is
13 of such high quality that it can drain laterally in a way
14 that Wolfcamp horizons cannot.

15 **Q. So what you're proposing is using a Wolfcamp**
16 **well to drain the Third Bone Spring?**

17 A. That's what I put in the affidavit, yes.

18 **Q. Are you aware, though, that those are two**
19 **different pools, the Third Bone Spring and the Wolfcamp?**

20 A. I have been told that that is the case, yes.

21 **Q. Have you been -- were you involved in preparing**
22 **the C-102s at all for this case or for the APD?**

23 A. No.

24 **Q. Okay. But you have been told that these are two**
25 **different pools.**

1 A. Uhm, yes. In light of the data that I think is
2 publicly available, which your geologist actually cites
3 the study, as well, the HFTS2 study, I think -- you know,
4 I'm a geologist, I have to -- I have to say...

5 **Q. Okay. So your XY well here, though, you're**
6 **predicting will travel up into this area and drain the**
7 **Third Bone Spring Sand, Lower Third Bone Spring Sand**
8 **reserves?**

9 A. In this location yes. In the section, yes.

10 **Q. And you're not targeting at all the Upper Bone**
11 **Spring Sand; is that right?**

12 A. No.

13 **Q. And do you have an opinion -- our geologist did**
14 **cite the OXY Avogato Third Sand development approximately**
15 **here. Does that look more or less to you...**

16 A. I would have their Third Bone wells lower. And
17 again they do have the 35H, which is in the XY, which is
18 one of their wells in that pattern, but the others, the
19 Third Bone, I would have them lower to the Wolfcamp
20 interface than is shown there. I don't deny that they are
21 Third Bone Sand wells.

22 **Q. And you don't deny that you are not targeting**
23 **the Third Bone Sand; is that right?**

24 A. No. That is right.

25 **Q. I think I heard today, and I could be wrong**

1 about this, that if you decided, you, Devon, decided that
2 the Third Bone Spring Sand was productive in this area you
3 could go back in and drill infill wells. Is that right?

4 A. So that really comes back to -- obviously this
5 is an interpretation, your geologist has a different
6 interpretation.

7 If those frac barriers are so competent and
8 I'm wildly incorrect, you know, about that Third Bone
9 story and we have, you know, evidence of that from however
10 we may get evidence of that, as our learning in the basin
11 advances, then yes, then we would consider that a pristine
12 reservoir to go after.

13 Q. And would it be fair to say that the converse is
14 true, too, that if you or someone else hypothetically was
15 targeting the Third Bone Spring Sand first and it turned
16 out that this Wolfcamp XY is the way to go, that that
17 hypothetical operator could come back in and do infill
18 wells here, as well?

19 A. With that frac barrier above, uhm, that is
20 hypothetically the case. That's not been -- tests, such
21 as that have occurred and not been successful, so...

22 Q. But assuming for the moment that --

23 A. Yes.

24 Q. So either way, either Devon or Cimarex could
25 come back in based on further refinement and, if

1 warranted, drill Third Bone Spring Sand or Wolfcamp XY.

2 A. Yes.

3 Q. So in your opinion there's nothing precluding
4 either developer from coming back in and modeling
5 themselves after the other person's plan.

6 That's not very articulate, but you know
7 what I mean, hopefully.

8 A. In the event that frac baffles shown here
9 were -- persisted through stimulation, hydrofracture
10 stimulation, the reservoir pressure would be preserved
11 between, within the frac baffles. I do not believe that
12 to be the case, but yes.

13 Q. Thank you. I wanted to turn briefly to your
14 rebuttal exhibits.

15 So earlier you testified that you prepared
16 this exhibit, right?

17 A. Yes.

18 Q. And this exhibit is identifying only one-mile
19 and two-mile laterals; is that right?

20 A. Yes.

21 Q. And you don't have anything on this exhibit that
22 gives the recovery factor -- sorry, the recovery factor
23 for three-mile laterals, do you?

24 A. No, I don't.

25 Q. Okay.

1 A. Part of that is often because -- the same reason
2 I don't have the Wild Salsas on there. Frankly, the
3 history is not there to forecast those wells.

4 Q. So your three-mile well data is too -- I don't
5 want to use the world immature, but it's not ripe enough
6 to be -- to use it?

7 A. Well, let me -- that's true.

8 Q. That's true? Okay.

9 Turning to your Rebuttal Exhibit -- I guess
10 this is still F. Again this just shows that you, or
11 confirms that you are not in fact targeting the Upper
12 Third Bone Spring Sand. Right?

13 A. Yes.

14 Q. Here on Exhibit G you state that Cimarex is
15 implying that there's no oil in the Wolfcamp Sand. Is
16 that based on your interpretation of the words "no oil
17 shows"?

18 A. Yes.

19 Q. But you would agree with me that "no oil shows"
20 does not mean that there's no oil.

21 A. Yes.

22 MS. BENNETT: I think that might be all I have.
23 I just want to double check my notes real fast, so I
24 appreciate your giving me a couple of seconds here to
25 check my notes. (Note: Pause.)

1 Q. I did want to ask you about Exhibit 4, which is
2 your three-mile Avalon wells in a geologically complex
3 setting. This slide. This one.

4 A. Yes.

5 Q. And here I believe we talked about this earlier
6 that Cimarex is not claiming that Avalon wells are
7 dangerous but that they are more difficult to complete,
8 which is your -- which you don't disagree with, right?

9 A. I -- I don't disagree with that. Uhm, I
10 disagree that -- I mean, there's an inherent -- you can
11 use the words "difficulty" in drilling the Avalon. I
12 disagree that that difficulty is somehow multiplicative in
13 a three-mile setting.

14 Q. Understood. But you would also agree that that
15 difficulty is -- it's present whether there is a two-mile
16 or three-mile is basically what you're saying, right?

17 A. Yes. Or one-mile.

18 Q. Or one-mile.

19 But here the third mile where you would be
20 encountering that difficulty is in acreage that's owned
21 now by Cimarex and Devon; is that right?

22 A. Yes.

23 Q. Okay. And then looking back at your Rebuttal
24 Exhibit F -- I'm sorry. This -- I have page 2 of F.

25 I just want to reconfirm Danger Noodle is

1 **only a two-mile lateral. Right?**

2 A. Yes, that's correct.

3 **Q. And so my takeaway from Exhibits F-1 and F-2 is**
4 **that Devon has had success drilling two-mile and one-mile**
5 **laterals. Is that a fair assessment of your Exhibits F-1**
6 **and -2?**

7 A. Yes. I think Mr. Sprague will have better data
8 on the three-miles this afternoon.

9 **Q. You may not be the right person to ask this**
10 **question, but earlier we were talking about how, from a**
11 **geologic perspective anyway, the Third Bone Spring and the**
12 **Upper Wolfcamp maybe don't recognize the OCD's pool code**
13 **differences. Is that sort of a fair restatement of your**
14 **testimony?**

15 A. Yes.

16 **Q. Do you agree with that?**

17 A. Yeah.

18 **Q. Do you have enough evidence of communication**
19 **between those two sections for the OCD to combine them**
20 **into a single pool?**

21 A. I have not put that together. I would be
22 interested in a Wolfbone pooling such as exists in other
23 places.

24 **Q. But you haven't sought to do that here?**

25 A. No.

1 **Q. And the OCD hasn't done it here, either, even**
2 **though it's done in other places?**

3 A. Yes.

4 MS. BENNETT: Okay. I believe that might be it
5 for me. I appreciate you answering those questions and
6 being here today. Thank you very much.

7 THE WITNESS: Thank you.

8 EXAMINER BRANCARD: Thank you.

9 Ms. Ryan, did you have any questions?

10 MS. RYAN: No questions. Thank you.

11 EXAMINER BRANCARD: Just checking if you're
12 awake there.

13 MS. RYAN: I am.

14 EXAMINER BRANCARD: Mr. Garcia.

15 EXAMINER GARCIA: I believe Ms. Bennett covered
16 all my questions, so I have no questions either.

17 EXAMINER BRANCARD: Wow. Okay.

18 Well, she covered one of my questions.

19 The other question is, this, Dr. Peryam.

20 CROSS EXAMINATION.

21 BY EXAMINER BRANCARD:

22 **Q. Your Exhibit F with this recovery factor I find**
23 **totally fascinating. I have no idea how you got to that**
24 **number, but...**

25 A. I can walk you through it if you want.

1 Q. That's all right. But let me just use the
2 numbers you have here to see if you agree with the
3 conclusion I came to, which is if you double your well
4 spacing you end up with a 40 to 50 percent increase in
5 recovery.

6 A. That's true. And the concept is familiar to
7 most, you know, industries not just the oil industry, but
8 there's a great economic value to both our shareholders,
9 and I would argue this, the State of New Mexico, to
10 accelerate. So you -- granted, if -- you know, if we
11 wanted to drill the biggest wells, we would only drill
12 one, right, and we would have one well in every section
13 and it would be a really huge well, and then you'd be
14 done. And of course, that would be a big well. But it's
15 not in anybody's interest, because we have lots of oil
16 total. So you drill two- and they are a little worse,
17 drill three-. You know, there's a maximum amount where
18 you push things over the edge and they start getting
19 worse, but that incremental value is hugely advantageous
20 to all parties because it brings forward that production
21 in the current day rather than pushing it out decades, or
22 more, if you are waiting for, you know, a single well to
23 drill. And of course a single well may never drain the
24 whole thing, anyway.

25 So that's the concept. You don't get a

1 free ride, unfortunately, just adding wells and adding the
2 same amount of oil every time. But the concept here is why
3 a parent well is so much better than all the child wells,
4 because it's not competing for any resource.

5 So these percentages I'm putting out, they
6 would not be the same for every company, different
7 companies have their own models, but the order of
8 magnitude would probably be about the same for every
9 company. I can't speak for every company, though.

10 **Q. So you're saying it wouldn't necessarily be the**
11 **same percentage increase if you went to 16 wells per**
12 **section.**

13 A. No. There's definitely a point of diminishing
14 returns, and that's what we all try to find. We don't --
15 nobody wants to lose money, but the economics work out
16 that even if the next incremental well going from four to
17 eight doesn't quite make as much oil on a per-well basis,
18 it still makes more money overall.

19 **Q. So I guess my conclusion is to do eight wells**
20 **per section is more effective at producing oil --**

21 A. Yes.

22 **Q. -- but it isn't necessarily more efficient.**

23 A. I think it is more efficient in that it
24 happens -- well, the total percentage at the end of the
25 day, fast forward to the end of these wells' life span,

1 you have more oil out of the ground. But divided by per
2 well it is less efficient, yes. But it's more effective
3 in the near term and overall, right?

4 Q. Thank you.

5 A. Yeah.

6 EXAMINER BRANCARD: That's all I have. And I'm
7 guessing, Mr. Feldewert, you might have some redirect.

8 MR. FELDEWERT: Yes, sir. Thank you. If I
9 could have sharing capability.

10 REDIRECT EXAMINATION

11 BY MR. FELDEWERT:

12 Q. Uhm, Dr. Peryam, there was some discussion about
13 the First Bone Spring Interval in the Bone Spring
14 Formation and Devon's decision recently to look at
15 developing that interval. Do you recall that?

16 A. Yes.

17 Q. The decision of Devon to now look at that
18 interval was based on actual data that Devon has received;
19 is that right?

20 A. Uhm, decision to look at the Upper Wolfcamp, you
21 mean?

22 Q. No, I'm talking about the First Bone --

23 A. Yes, yes, yes.

24 Q. And was that based on what you've seen in
25 development in a nearby area?

1 A. Yes. Yes, we did two First Bone Spring tests in
2 Danger Noodle. The first one was in our Danger Noodle
3 development and the second was in our Bell Lake 24. And
4 those were both done last summer, and gave us
5 confidence -- like I said earlier, we wanted to see the
6 results not just instantaneously but over some time before
7 we move forward with that.

8 **Q. And does it make sense when you're developing,**
9 **for example the Bone Spring, not to necessarily drill all**
10 **of the intervals in the Bone Spring with one drilling**
11 **package? Does it make sense to sequence your drilling?**

12 A. Yes, it makes -- as I was actually sort of
13 alluding to with the previous examiner, on a per-horizon
14 basis you are introducing depletion, but we've -- I'm sure
15 everyone in this room is familiar with parent, you know,
16 degradation due to offset depletion, and so it is -- you
17 know, there are other concerns but best practice is to
18 develop a formation at a time across the section, and then
19 come back for another horizon then, we'll say.

20 **Q. I'm assuming here, for example, with the Upper**
21 **Wolfcamp Devon intends to simultaneously complete those**
22 **wells to avoid the parent/child effect. Is that right?**

23 A. Yes.

24 **Q. Okay. Now getting back to the First Bone**
25 **Spring, that then could be subsequently developed now with**

1 infill wells once your spacing unit is established,
2 correct?

3 A. Yes.

4 Q. But you're aware -- or maybe you're not,
5 Mr. Peryam -- that once you get a Pooling Order you do
6 have to drill a well in some interval in the Bone Spring
7 in order to establish and perfect your spacing unit.

8 A. Okay.

9 Q. Assuming that is the case, you don't need to go
10 out and immediately drill all of the intervals, correct?

11 A. Correct. Uhm...

12 Q. And -- sorry. And when we look at the First
13 Bone Spring Interval, you would agree that that is an
14 independent reservoir?

15 A. We'd have to look at that. It is definitely
16 independent from the Second Bone. It may be too soon to
17 make that statement about independence from the Avalon.

18 Q. When we look at the -- and I want to share here
19 Cimarex Exhibit C-6-C. I have that up on the screen, Mr.
20 Peryam.

21 A. Okay. Yes. Uh-huh.

22 Q. As depicted here by their geologist, it would
23 appear that she is at least of the opinion that the Third
24 Bone Spring Sand is an independent reservoir.

25 A. That would be -- yeah. Invoking that many

1 barriers, you're -- seems to be you're stating -- yes,
2 stating -- showing it's an independent reservoir, yes.

3 Q. In other words she's showing two, what she calls
4 frac barriers between the Upper Wolfcamp and the Third
5 Bone Spring, the Upper Third Bone Spring Sands.

6 A. Yes.

7 Q. Which then again can be developed under an a
8 infill drilling program if that is determined to be
9 appropriate. Is that right, Dr. Peryam?

10 A. Yes.

11 Q. When you get down here to the Upper Wolfcamp, is
12 there concerns about, as you mentioned,
13 parent/child effects if you don't simultaneously develop
14 the sands with the shale?

15 A. Yes.

16 Q. And is that based on what Devon has actually
17 seen?

18 A. Yes.

19 Q. Okay. And that -- that would be the Danger
20 Noodle development, right?

21 A. Well, Danger Noodle did not have offset
22 depletion, but we have several examples where we do across
23 Lea County.

24 Q. But when you developed the Danger Noodle, did
25 you do it in a wine rack pattern?

1 A. Yeah. Sorry. Maybe -- I think I misunderstood.

2 Yes, we did Danger Noodle in a wine rack
3 and all at once, yes.

4 Q. And that then resulted in what was marked as
5 part of that analysis, then, and that development plan
6 resulted in the recovery factor we see in what has been
7 marked as Devon Exhibit F?

8 A. Yes.

9 Q. Which is the eight-well-per-section --

10 A. Yes.

11 Q. -- wine rack pattern.

12 Are you concerned that if you only would
13 drill the Wolfcamp A Shale and not at the same time
14 simultaneously complete the Upper Wolfcamp Sands that you
15 could -- you could have a parent/child effect?

16 A. Yes.

17 Q. And not have the efficiency of recovery that you
18 saw in the Danger Noodle?

19 A. Yes.

20 Q. There was some discussion about difficulty in
21 drilling three-mile wells in the Avalon, which they
22 characterize as difficulty.

23 A. Uh-huh.

24 Q. But --

25 MS. BENNETT: Mr. Examiner, I would object to

1 that. I am quoting from Mr. Sprague's testimony. That's
2 not my -- if Mr. Feldewert is referring to how I
3 characterized it, that is a direct quote from Mr.
4 Sprague's testimony.

5 MR. FELDEWERT: I don't really care about the
6 adjectives, whatever you want to call it.

7 Q. But with respect to the Avalon, in terms of
8 drilling in the Avalon, you mention that the issues, the
9 same issues and drilling factors came into play with
10 one-mile wells; is that right?

11 A. Yes.

12 Q. And with two-mile wells?

13 A. Yes.

14 Q. And now as Devon's moved to three-mile wells you
15 saw the same type of drilling issues?

16 A. Yes.

17 Q. And with all three lengths, Devon has
18 successfully drilled the Avalon, correct?

19 A. Yes.

20 Q. My last question has to do with that eight-well
21 spacing we were talking about and the efficiencies
22 associated with that.

23 Does the well life impact the efficiencies
24 associated with well spacing?

25 A. Well life impacts efficiencies associated with

1 well spacing? I may have to defer that to the engineer.

2 MR. FELDEWERT: Okay. Okay. That's all the
3 questions I had, Mr. Examiner. Thank you.

4 MS. BENNETT: Mr. Examiner, may I ask brief
5 questions on re-redirect, most of them following up on
6 questions you asked, Mr. Brancard?

7 EXAMINER BRANCARD: I believe that you have
8 recross and Mr. Feldewert could then have re-redirect.

9 MS. BENNETT: Thank you. That's what I meant.
10 Thank you.

11 RE CROSS EXAMINATION

12 BY MS. BENNETT:

13 Q. Dr. Peryam, I apologize if I am mispronouncing,
14 your last name. If you saw my first name, I can guarantee
15 you I live in the same universe of mispronunciation all of
16 our lives.

17 Mr. Brancard, Hearing Examiner Brancard
18 asked you about the efficiencies of eight wells per
19 section earlier. Right?

20 A. Yes.

21 Q. And fundamentally both Devon and Cimarex are
22 proposing eight wells per section in the Lower Third Bone
23 Spring/Upper Wolfcamp area, it's just that the targets are
24 different, is that right? But they are both proposing
25 eight wells per section.

1 A. Yes.

2 Q. When you were speaking with Hearing Examiner
3 Brancard you mentioned that there's benefit in what I
4 think you called like near-term production as opposed to
5 long-term delay, and the benefit to the state and benefit
6 to your shareholders. Uhm, that in the current day there
7 is benefit to developing things in the current day.

8 Is that a fair sort of summary of your
9 colloquy with Hearing Examiner Brancard?

10 A. Yes.

11 Q. But you haven't proposed the First Bone Spring
12 wells yet, have you?

13 A. No.

14 Q. And you agreed, or you wouldn't deny that
15 there's a chance that the First Bone and the Avalon needs
16 to be developed co-extensively, or co-developed?

17 A. That is sort of a question I don't think
18 industry has answered yet.

19 Q. Earlier when we were speaking you didn't have
20 information -- I'm not meaning this snarkily or anything,
21 I just think it's a fact that you didn't have information
22 about when first Devon might develop the First Bone
23 Spring, right?

24 A. I do not have that.

25 Q. But you do know that just with respect to the

1 First Bone Spring alone, Cimarex is proposing that and is
2 ready to drill those wells in the near term, or at least
3 Cimarex has proposed those wells in the near term.

4 A. Yes. They have.

5 Q. Thank you. Uhm, one follow-up question about
6 the parent/child effect that you mentioned with respect to
7 the Wolfcamp XY and Upper Wolfcamp Camp A. And I didn't
8 ask you this on cross initially because it's not in your
9 exhibits anywhere that I saw where you addressed the
10 parent/child effect between Wolfcamp XY and Wolfcamp A.

11 Is that in your exhibits and I missed it?

12 A. No.

13 Q. Is that a basis for Devon's belief that
14 developing the Wolfcamp XY and Wolfcamp A is similar to
15 Cimarex's plan?

16 A. Let me think about that. (Note: Pause.) Is
17 that the basis...

18 No, it's -- the questions, uh, Mr.
19 Feldewert asked about, would you be able to come back to
20 the XY Sands, and my opinion that there would be
21 parent/child. So yes, that's a part of it but that's not
22 the sole basis, I guess.

23 Q. Okay. So the parent/child effect is a part of
24 your rationale but not the full --

25 A. Yes.

1 Q. -- picture. Okay.

2 But that isn't anywhere in your exhibits,
3 right?

4 A. Uhm, no.

5 MS. BENNETT: Okay. Thank you very much. Those
6 are all the questions I have.

7 EXAMINER BRANCARD: Thank you. Mr. Feldewert,
8 did you have any follow up to that?

9 MR. FELDEWERT: I do not.

10 EXAMINER BRANCARD: Mr. Garcia, any follow up?

11 EXAMINER GARCIA: I do not.

12 EXAMINER BRANCARD: Thank you. All right.
13 Well, I believe we are done with Witness No. 2.

14 It's 11:46 by my calculations. I guess
15 I'll turn to Ms. Macfarlane. How are you doing?

16 (Note: Discussion off the record.)

17 EXAMINER BRANCARD: So I'm wondering whether to
18 take a lunch break now or should we go through the next
19 witness, which would be probably at least an hour, maybe
20 more.

21 So Mr. DeBrine, I assume you have a few
22 questions for the next witness.

23 MR. DeBRINE: Ms. Bennett will likely be
24 questioning him, and I'm sure she has a bunch.

25 EXAMINER BRANCARD: Since the first two

1 witnesses have been pretty good at dumping on that third
2 witness.

3 MR. FELDEWERT: Mr. Examiner, if I may, I think
4 obviously my witnesses, perhaps Cimarex's witnesses are on
5 a different time zone, so perhaps lunch now may be
6 appropriate.

7 EXAMINER BRANCARD: That's a good point, Mr.
8 Feldewert. Yes, we forgot about Texas time. So --

9 MR. FELDEWERT: Or Oklahoma.

10 EXAMINER BRANCARD: Okay. Thank you.

11 So an hour. Is that okay with folks?

12 MS. BENNETT: That's fine from our perspective.

13 MR. FELDEWERT: Yes, Mr. Examiner.

14 EXAMINER BRANCARD: All right. So around about
15 12:45, 12:50 we will be back here, wherever that is.

16 Right. Thank you.

17 (Note: In recess from 11:48 a.m. to 12:51 p.m.)

18 EXAMINER BRANCARD: Well, I believe, Mr.
19 Feldewert, we are still on your side of the aisle.

20 MR. FELDEWERT: Correct, Mr. Brancard. We have
21 our last witness, who needs to be sworn, and that would be
22 Karsan Sprague.

23 (Note: Pause to correct audio issues.)

24 EXAMINER BRANCARD: Can you hear us?

25 THE WITNESS: Yes, sir. Can you hear me?

1 EXAMNER BRANCARD: So when you're not speaking,
2 please mute yourself if that is possible.

3 So, Mr. Sprague, raise your right hand.

4 (Note: Witness sworn.)

5 MR. FELDEWERT: Mr. Brancard, I tell you what.
6 Give me a can couple of minutes. I want to see if we can
7 get him onthe Webex with this issue. I think it may be
8 worth five minutes to let me check. Can we do that?

9 (Note: Pause to remedy audio/video issue.)

10 MR. FELDEWERT: Thanks for your patience.

11 KARSAN SPRAGUE,

12 having been duly sworn, testified as follows:

13 DIRECT EXAMINATION

14 BY MR. FELDEWERT:

15 **Q. Would you state your full name, by whom you are**
16 **employed, and in what capacity.**

17 A. I'm Karsan Sprague and I'm an employee of Devon
18 Energy. I'm working as a petroleum engineer, currently
19 production engineering starting two weeks ago, and prior
20 to that I was a reservoir engineer for five years.

21 EXAMINER BRANCARD: Can you spell your name,
22 please.

23 THE WITNESS: Yes, sir. It's K-a-r-s-a-n, last
24 name Sprague, S-p-r-a-g-u-e.

25 **Q. Mr. Sprague, did you execute the affidavit**

1 that's been marked as Devon Exhibit C?

2 A. Yes, sir.

3 Q. And in connection with that did you also prepare
4 or compile under your direction and supervision the
5 exhibits that have been marked as Devon C-1 through C-6?

6 A. Yes, sir.

7 Q. You mentioned in your affidavit that -- you
8 provide with your affidavit as Exhibit C-1 your
9 educational background and work experience.

10 A. Yes, sir.

11 Q. Do you seek to be qualified as an expert witness
12 in petroleum engineering?

13 A. Yes, I do.

14 MR. FELDEWERT: Mr. Examiner, I would first
15 tender Mr. Sprague as an expert witness in petroleum
16 engineering.

17 EXAMINER BRANCARD: Thank you. Any objections?

18 MS. BENNETT: No objections.

19 EXAMINER BRANCARD: Thank you. So qualified.

20 MR. FELDEWERT: Secondly, then, we would move
21 the admission of Devon Exhibit C along with the associated
22 Exhibits C-1 through C-6.

23 EXAMINER BRANCARD: Any objections?

24 MS. BENNETT: No objections subject to testing
25 the foundation for certain exhibits that are included in

1 Mr. Sprague's materials.

2 EXAMINER BRANCARD: The C exhibits?

3 MS. BENNETT: Yes. Yes.

4 EXAMINER BRANCARD: All right. These exhibits
5 will be admitted for now.

6 Q. Mr. Sprague, I want to -- let me see, do I have
7 the sharing capability?

8 I want to go to what has been marked as
9 Cimarex Exhibit D-3.

10 A. Moving to that now.

11 Q. Okay. And I will bring this up on the screen.
12 Does everybody see Exhibit D-3?

13 A. Yes.

14 Q. Now, the box has some representations associated
15 with it with respect to Devon's plan to develop this
16 acreage with three-mile wells, and then it assumes that
17 Cimarex would develop its section with 1-mile wells.

18 Do you see that?

19 A. Yes, I do.

20 Q. It suggests that in the last column that this
21 plan would strand reserves in the First Bone Spring. Do
22 you see that?

23 A. Yes.

24 Q. Is that true?

25 A. With the knowledge that we have for

1 de-risking -- are you -- let me ask for a rephrase on that
2 question. Are you asking for our current development plan
3 that we have submitted or what we would drill in the
4 future?

5 **Q. Does Devon intend to eventually develop the**
6 **First Bone Spring Interval?**

7 A. Yes.

8 **Q. And has Devon recently developed a First Bone**
9 **Spring interval in a nearby area?**

10 A. Yes, we have. We recently ran an appraisal
11 project in the Danger Noodle Program two to three miles
12 east of our Sneaky Snake development block that
13 successfully tested the First Bone Spring and Avalon --

14 **Q. Okay.**

15 A. -- packaged together.

16 **Q. If I can turn to what has been marked as Devon**
17 **Exhibit I, is that an exhibit that you put together, Mr.**
18 **Sprague?**

19 A. Yes, sir.

20 **Q. And does it reflect the location of the Danger**
21 **Noodle acreage with respect to Sneaky Snake acreage on the**
22 **left-hand side?**

23 A. Yes, it does.

24 **Q. And with this new information you have, this new**
25 **data, does it reflect how Devon intends to develop the**

1 **First Bone Spring Interval?**

2 A. Yes, it would.

3 MS. BENNETT: Mr. Examiner, I am going to object
4 to the testimony about the First Bone Spring in Exhibit I,
5 because that's all new material here today. We are here
6 today on the cases as they were proposed and as they were
7 presented in the exhibits and the materials to the
8 Division, and the First Bone Spring is clearly just
9 hypothetical at this point from Devon's perspective and so
10 all the questions about the First Bone Spring are
11 irrelevant and not pertinent to this case.

12 MR. FELDEWERT: Mr. Examiner, I don't see how it
13 is irrelevant after Cimarex takes the position that Devon
14 is going to be stranding the First Bone Spring Interval.

15 As you know, and you have commented
16 previously, to form a spacing unit parties do not have to
17 come in and with their Well Proposal Letters propose their
18 development plan for every single potential interval in
19 the Bone Spring or in the Wolfcamp, and that instead they
20 are to propose the initial wells in those proposed spacing
21 units for purposes of perfecting the spacing unit.

22 Cimarex has taken what Devon has done,
23 which is to propose the initial wells for perfecting the
24 spacing unit, and translated that into somehow stranding
25 reserves, which is incorrect, and that's a rebuttal to

1 that.

2 MS. BENNETT: Mr. Examiner, may I briefly
3 respond?

4 EXAMINER BRANCARD: All right.

5 MS. BENNETT: I think it's fair to say that if
6 Cimarex had known that Devon was anticipating drilling
7 First Bone Spring wells we would have done a different
8 slide. So we cannot be faulted for preparing a slide
9 based on the information that Devon had presented to
10 Cimarex, nor can we be expected to refute or address
11 arguments or nonexistent evidence in the record.

12 So I think for those reasons any discussion
13 about the First Bone Spring Sand is irrelevant and is not
14 properly before the Division.

15 EXAMINER BRANCARD: Well, you know, the cat's
16 out of the bag. We've already had prior witnesses discuss
17 Devon's ideas now, current ideas about First Bone Spring,
18 and so Devon has testified that it intends to drill in the
19 First Bone Spring. And that's really all we need to know,
20 because we don't have an actual plan about how they're
21 going drill in the First Bone Spring, nor should we have
22 one because they didn't put it in the application.

23 So, with that, I think that's all we need
24 to know about the First Bone Spring and Devon's plans.

25 MR. FELDEWERT: Thank you, Mr. Examiner. And

1 the point being solely to rebut this idea that there's
2 somehow going to be stranded reserves.

3 EXAMINER BRANCARD: I think we got it.

4 MR. FELDEWERT: What's that?

5 EXAMINER BRANCARD: I think we got that.

6 MR. FELDEWERT: Okay. Then let's move on to --

7 I want to move to what was marked as -- Mr. Sprague, I
8 want to move to what was marked as Cimarex Exhibit D-9.

9 Would you bring that up, please.

10 THE WITNESS: Okay.

11 Q. Now I want to orient you to this exhibit. I
12 recognize -- and this is an exhibit you received from
13 Cimarex and you examined, correct?

14 A. Yes, sir.

15 Q. You'll see in the upper-left-hand corner it
16 talks about the OXY Avogato wells. Do you see that?

17 A. Yes.

18 Q. Did you confirm those are completed only in the
19 Third Bone Spring Sand?

20 A. I believe five of those are. The actual parent
21 well on the far east side is not labeled as an Avogato
22 well, I think it's labeled as a different name, a Red Tank
23 or -- but regardless of what it's called, the first offset
24 to that one, the Avogato 35H, it actually landed below the
25 First Bone Spring in the Upper Wolfcamp Sands.

1 Q. This is us just northeast of the Sneaky Snake
2 acreage, correct?

3 A. Yes, sir.

4 Q. Then they point out the Matador Rodney Robinson
5 wells. Did you confirm that those are completed in the
6 Third Bone Spring Sand and then the Upper Wolfcamp?

7 A. Yes.

8 Q. Okay. They point out the Wild Salsa wells right
9 next door to the acreage. Do you see that?

10 A. Yes, sir.

11 Q. And there's already been testimony, has there
12 not, about that being completed in the Third Bone Spring
13 Sand and the Upper Wolfcamp Sand.

14 A. Yes, sir.

15 Q. And then we see the Devon Danger Noodle
16 development you were talking about. Correct?

17 A. Yes.

18 Q. Okay. Now, they depict that here as being
19 completed in the Third Bone Spring Sand and the Wolfcamp X
20 Sand staggered. Is that correct?

21 A. No, sir. We developed that particular
22 development block in the Wolfcamp XY Sand along with the
23 Wolfcamp A. So the wine rack would have been shifted down
24 to the Wolfcamp A and Wolfcamp XY that Tom, or Dr. Peryam
25 had testified to earlier.

1 Q. So that pattern in the Devon Danger Noodle on
2 here is actually the same pattern as has been proposed for
3 Sneaky Snake?

4 A. Yes, that is correct.

5 Q. With that clarification then I will move to
6 their Exhibit D-10, the very next exhibit. And then did
7 you get a chance to review that exhibit when it was filed?

8 A. Yes, sir, I did.

9 Q. Okay. And we see at the bottom it starts with
10 Day 1 production from a certain subset of wells.

11 A. Yes.

12 Q. Okay. Do you see where it shows what they
13 characterize as the Cimarex average Wolfcamp. Do you see
14 that in the dashed green line?

15 A. I do see that.

16 Q. Do you have any idea what that's based on?

17 A. It looks to be based on that one well that's in
18 Section 3 to the northwest of the Sneaky Snake, Sneaky
19 Snake development block. And, then, uhm, it looked to be
20 a parent well at that matter.

21 Q. Okay. But is it true that that seems to track
22 to some extent the production that was seen from those OXY
23 Avogato wells?

24 A. It looks to appear to be higher than the average
25 for the Avogato wells.

1 Q. And those Oxy Avogato wells, again just to keep
2 this all straight, was in the Third Bone Spring Sand only.
3 Right?

4 A. There was one, the Avogato 35H was landed in the
5 Wolfcamp XY, which is a direct offset of the Red Tank 34H,
6 which would have been the far eastern well in that
7 development block.

8 Q. Okay. All right. Not necessarily just the
9 Third Bone Spring Sand.

10 A. No, sir. There was at least one Wolfcamp XY.

11 Q. Now, what was not platted on here was the Devon
12 Danger Noodle wells, correct?

13 A. Correct.

14 Q. Even though they were identified on the prior
15 page.

16 A. Yes, sir.

17 Q. And what was not drafted on here was the Titus
18 Wild Salsa wells that they had identified on the prior
19 page.

20 A. Correct.

21 Q. Did you plat the Wild Salsa and Devon Danger
22 Noodle wells in the Upper Wolfcamp Shales and Sand?

23 A. Yes, I did.

24 Q. If I then turn to what has been marked as Devon
25 Exhibit J, is that the plat that you put together?

1 A. Yes, sir, it is.

2 **Q. And similarly does it start, as they did, with**
3 **Day 1 production?**

4 A. Correct. It would have been time zero for the X
5 axis.

6 **Q. And did you plot the production from all wells,**
7 **not just a single well in these groups?**

8 A. I plotted them from all wells in the fully
9 developed sections from Danger Noodle, Avogato, the legend
10 on the right, the Rodney Robinson, the Wild Salsa. I did
11 not include either of the parent wells that Cimarex had
12 shown in their exhibits, their D-9, which would have been
13 the one Concho well and the one Cimarex well that were
14 both parent wells. I looked at only the development of
15 the full section or full development pattern for each of
16 the programs.

17 **Q. Why did you do that?**

18 A. That's typically the way we look at programs
19 that how well you can -- you know, the best way to recover
20 resource is not based on an individual well performance,
21 as they call a parent well, but as a full development
22 section how well are you draining that full section, you
23 know, with your wine rack or your pattern to drill versus
24 just that single well for a headliner. That's typically
25 the way our team has moved through the programs since I've

1 been working with this DGR team.

2 **Q. Now, just to stay oriented here, because all**
3 **these names are confusing, when we see the Danger Noodle,**
4 **that's the wine rack pattern that Devon utilized nearby**
5 **that's the same as the Sneaky Snake. Right?**

6 A. Correct.

7 **Q. The green line, which is the Avogato or the OXY**
8 **wells in the Third Bone Spring Sand only, with the**
9 **exception of I think you considered one well in the XY**
10 **Sands?**

11 A. Correct. And that one that you see the longer
12 green line on is actually that Red Tank 34, because it
13 would have been the parent well in that section.

14 **Q. The longest green line.**

15 A. Correct.

16 **Q. Okay. Then the Rodney Robinson or the Matador**
17 **wells that they have identified which are in the Third**
18 **Bone Spring Sand and the Upper Wolfcamp, right?**

19 A. Correct.

20 **Q. And then the Wild Salsa or the Titus wells next**
21 **door that are in the Third Bone Spring Sand and the Upper**
22 **Wolfcamp?**

23 A. Correct.

24 **Q. Okay. When you plat those, how does the Danger**
25 **Noodle wells only in the Upper Wolfcamp in a wine rack**

1 **pattern compare?**

2 A. They are, uhm -- when we look at this line, we
3 see that they are on the top tier of the statistical
4 average of all those different well sets, and if we looked
5 at an average, which I believe is the next slide, we see
6 that the Danger Noodle program on a per-well average is
7 producing a higher Cum of oil per normalized GPI when you
8 look at that versus days.

9 And that's at the eight well per section.
10 The Avogato well is at six well per section, and eight
11 well per section in the Upper Wolfcamp is still Cuming, on
12 a normalized GPI, higher performance per day from time
13 zero.

14 **Q. So does this reflect that the eight well per**
15 **section in the Upper Wolfcamp is producing the same amount**
16 **of reserves or higher amount of reserves than the wells**
17 **that are in the Third Bone Spring Sand and the Upper**
18 **Wolfcamp?**

19 A. Would you rephrase that question, please?

20 **Q. Sure. The Danger Noodle are just in the**
21 **eight-well-per-section Upper Wolfcamp, right, not the**
22 **Third Bone Spring Sand.**

23 A. Correct. Correct.

24 **Q. And the performance we see on here is compared**
25 **to wells that, patterns that are in the Third Bone Spring**

1 and the Upper Wolfcamp?

2 A. Correct.

3 Q. So you're getting this recovery without even
4 tapping into -- directly into the Third Bone Spring Sand.

5 A. That is correct.

6 Q. Did you see where Cimarex's engineer has
7 suggested that Devon's Wolfcamp wells underperform in this
8 area? I think that's the term he used.

9 A. I have seen that slide for one of their
10 exhibits.

11 Q. Okay. If we turn to what was marked as Cimarex
12 Exhibit D-13, D as in David, is this one of the slides you
13 were talking about?

14 A. Yes, sir.

15 Q. It seems to purport to study the Upper Wolfcamp
16 wells in Lea County?

17 A. Yes.

18 Q. Now, at the time, of course, did we have
19 difficulty understanding exactly what wells they were
20 studying?

21 A. Yeah. I didn't see an aerial map with any wells
22 highlighted to show which ones they were using in
23 proximity to the Sneaky Snake acreage, and at the time I
24 first looked at it there was no well list to be able to
25 pull that information together.

1 Q. When you look at this study, if indeed it
2 purports to talk about all Upper Wolfcamp wells in Lea
3 County, would that include much older wells?

4 A. Yes, sir, it could.

5 Q. And these older wells wouldn't have modern
6 completion techniques; is that right?

7 A. Correct. As we know that in the industry we
8 have slowly tried to optimize our completion design to
9 gain better access or better recovery factors for our
10 performance of the wells in each different horizon.

11 Q. So if you didn't have a particular time frame
12 involved, would that potentially skew the results that you
13 see?

14 A. Yes, sir, it could.

15 Q. Is there another potential problem when you just
16 look at all of the Upper Wolfcamp wells in Lea County
17 dating back to the first well?

18 A. For the area in question, with the Sneaky Snake
19 area I would think proximity to that location, because if
20 you look at Lea County would be a pretty large data set
21 and some of those could be 20 to 30 miles away. What we
22 tend to look at from reservoir engineering standpoint, you
23 try to build your type curves based on local well results.
24 And that's something that we do at Devon is we look at
25 proximity of wells to the area we're developing and use

1 those for analog wells versus, say, the entire production
2 of Upper Wolfcamp in Lea County.

3 **Q. Would the analysis, like apparently was done**
4 **here, would it also include standalone parent wells?**

5 A. Yes, sir, it would. And that would potentially
6 skew the result also, because, as I mentioned before with
7 the previous exhibits we discussed, the parent wells tend
8 to perform at a higher performance in a fully developed
9 section, and when you look at how would we move on a
10 point-forward basis, we want to get to the point were
11 you're doing fully developed sections, and that's the type
12 curve that you want to build and that's the type curve you
13 want to be able to display and then build most of your
14 economics on.

15 **Q. So is it your opinion that, you know, that the**
16 **industry has evolved, right?**

17 A. Yes, sir.

18 **Q. And that is it more efficient to develop areas**
19 **without parent wells and instead drill a certain number of**
20 **wells at spacing that then can be simultaneously**
21 **completed?**

22 A. Yes.

23 **Q. Is that a more efficient way to produce the**
24 **reservoir?**

25 A. Yes, it is.

1 **Q. And does it avoid the parent/child effect?**

2 A. Yes, it does.

3 **Q. And what is the parent/child effect, just for**
4 **the record. Could you just briefly identify it?**

5 A. Normally when we look at parent/child
6 interaction we see very strong results from the parent and
7 then the subsequent well, which would be the first
8 offset -- because you have first-order offset and
9 second-order offset, and we have seen historically that
10 the first order offset is hit the hardest for performance
11 on a per-well basis. But we have even seen to the point
12 where a second order offset or second child could also be
13 hit in performance, depending on how long the parent well
14 has been producing, because this creates a pressure gap in
15 the reservoir that doesn't allow for the hydrocarbons to
16 be produced efficiently from the rest of that development
17 section.

18 **Q. In your opinion does the parent/child effect**
19 **have the result of leaving reserves in the ground that**
20 **could otherwise be recovered if you were simultaneously**
21 **completing wells at certain spacing?**

22 A. If I heard you correctly, would I leave oil in
23 the ground or hydrocarbons in the ground if I did the
24 parent first and came back and did the child subsequently
25 versus doing the full development up front?

1 And I would say yes, you would leave
2 hydrocarbons in the ground versus the full development up
3 front based on interaction with your completions on how
4 well you, uhm, 1) come back and drill the well timing.
5 But you're also going to cause performance degradation on
6 your parent well, also, once you come back and frac those
7 subsequent child wells.

8 **Q. As a result of what Cimarex has put out here,**
9 **did you conduct your own study of Upper Wolfcamp wells in**
10 **the area around the Sneaky Snake?**

11 A. Yes, sir, I did.

12 **Q. If I turn to what has been marked as Devon**
13 **Exhibit K, is that the first page of your study?**

14 A. Yes, it is. And that's --

15 **Q. Before you get into it, I want to orient the**
16 **examiners to the Sneaky Snake area and what all the blue**
17 **and red means there.**

18 A. Yes, sir. The Sneaky Snake acreage is the red
19 box highlighted, and it says Sneaky Snake on the left-hand
20 side. And the different colors were horizontal wells that
21 are producing in a surrounding area for both Devon Energy
22 and Cimarex.

23 And I tried to look at initially close
24 proximity to Sneaky Snake but I had to move further south
25 to find any Cimarex wells, other than just one or two that

1 were developed in the Upper Wolfcamp.

2 And in response to their D-13, looking at
3 that image on the right, it's similar to what we saw
4 previously for the Danger Noodle-Avogato plot. It shows,
5 you know, cumulative of oil normalized on the Y axis
6 versus just on-time production on the X axis. And as we
7 can see from that plot Cimarex does not have all their
8 wells producing above Devon wells. It does show that both
9 Cimarex and Devon are in the realm of possibility for the
10 statistical distribution that we're gonna be able to go
11 out and expect to drill in the Upper Wolfcamp package,
12 which would include the Upper Wolfcamp A and the Upper
13 Wolfcamp XY.

14 **Q. Now, did you include in this exhibit a list of**
15 **wells that you studied?**

16 A. Yes. At the very end of the response it shows
17 all the different wells that were in this study, both
18 operated by Devon and both operated by Cimarex that I was
19 able to find on the IHS or New Mexico Oil and Gas Website.

20 **Q. Okay. Now, I know that sometimes an examiner is**
21 **not a big fan of a spaghetti graph like this and they want**
22 **to see how the averages look, so did you create not only**
23 **what we see on the first page of Exhibit K but then did**
24 **you create an Average of Production Line for Cimarex and**
25 **Devon in the Upper Wolfcamp in this area?**

1 A. Yes, sir, I did.

2 **Q. And if I turn to the second page of Exhibit K,**
3 **does that -- is that what your analysis showed?**

4 A. Yes, sir. It showed that as we dropped parent
5 wells for both Devon Energy and Cimarex the results showed
6 that both Cimarex and Devon ultimately are producing very
7 similar in cumulative oil per GPI versus time, which would
8 make sense because the reservoir should be similar as the
9 close proximity to the Sneaky Snake.

10 We did exclude parent wells, as mentioned
11 before, just because they skewed the average to a higher
12 extent.

13 And one thing I forgot to mention on the
14 previous slide was that Devon in that slide had 106 wells
15 that we've successfully drilled and completed, and Cimarex
16 had 22 wells. But most of the Cimarex wells, as you can
17 see in that map to the left, are quite a few miles to the
18 south of the Sneaky Snake acreage.

19 **Q. So if I look -- and that's a good point. I**
20 **forgot to bring that out.**

21 **If I look at the first page of this**
22 **exhibit, the text there at the bottom notes that Devon has**
23 **106 Upper Wolfcamp wells compared to Cimarex's 22 Upper**
24 **Wolfcamp wells.**

25 A. Correct.

1 Q. That includes all wells, including parent wells,
2 right?

3 A. Yes. On slide 4, that includes all wells.

4 Q. Okay. Got it.

5 And then slide 2, it's the second page of
6 this exhibit, is what you just discussed when you -- how
7 it looks when you remove those parent wells?

8 A. Yes, sir.

9 Q. Okay. If I look at what was marked as Cimarex
10 D-14 -- do you see that up in front of you now?

11 A. Yes, sir.

12 Q. Am I correct when I look at the right-hand side
13 that this purports to be a study of Devon's
14 two-and-a-half-mile wells, as well as their three-mile
15 Wolfcamp wells?

16 A. It does state that in the text, yes, but I'm not
17 sure where they pulled the two-and-a-half miles from. I
18 know in the immediate area surrounding Sneaky Snake we
19 either have two-mile wells or three-mile wells in close
20 proximity. We don't have two-and-a-half-mile wells in
21 close proximity to this acreage.

22 Q. Okay. Talk to me a little bit about the
23 two-and-a-half-mile wells. Why would it be inappropriate
24 to include all of the two-and-a-half-mile wells
25 purportedly, I guess, in Lea County?

1 A. A lot of those wells were farther south in Lea
2 County that we've run into infrastructure constraints that
3 would have skewed the results and showed a lower Cum of
4 oil per GPI in normalized time.

5 **Q. So you had pipeline constraints --**

6 A. Yes, sir.

7 **Q. -- that forced you to curtail production on some**
8 **of your two-and-a-half-mile wells?**

9 A. Yes, sir.

10 **Q. So when you see the reported production on the**
11 **Division's website, that would be reflective of the**
12 **artificial curtailment due to the pipeline constraints?**

13 A. Yes, sir.

14 **Q. Now, did you also look at Cimarex Exhibit D-15?**

15 A. Yes, I did.

16 **Q. What does this purport to examine based on what**
17 **you can tell?**

18 A. This looks to show that Cimarex -- there's a
19 fair number of Cimarex wells that are substantially
20 outperforming Devon-operated wells, but I couldn't find
21 any data that supported that. And the three wells that
22 they show in the text, I looked on the New Mexico Oil and
23 Gas website and there was no record of data for any
24 production or if those wells had even been drilled yet, if
25 I remember correctly.

1 **Q. No production report?**

2 A. No, sir.

3 **Q. No monthly C-115s?**

4 A. If the C-115 is what they report the production
5 on, no, there was none of those in there.

6 **Q. Good point. I'll represent to you that it's a**
7 **Form C-115 under which operators are required by rule to**
8 **report their monthly production. Your examination**
9 **indicated that they were not reporting their monthly**
10 **production for these wells?**

11 A. Correct.

12 **Q. They reference Devon's Thistle wells. Do you**
13 **see that?**

14 A. Yes, sir.

15 **Q. Now, the wells on there, are they three-mile**
16 **completions?**

17 A. Yes, sir, they are. The Thistle 121 and 108H
18 are the first two three-mile wells that Devon successfully
19 drilled in the Upper Wolfcamp, and they have been online
20 for a little over a year and a half.

21 And the remaining -- well, the Thistle 180,
22 181 and the Thistle 182 are Devon's wells, but the Thistle
23 179H does not exist.

24 **Q. So there is no Thistle 179?**

25 A. No, sir. The third Thistle well for that

1 development package would have been the Thistle 182H.

2 Q. Now, given -- did you then, yourself, examine
3 and compare the results for Devon's three-mile completions
4 here with these Thistle wells versus the Cimarex one- or
5 two-mile wells in the area that you could locate
6 production data for?

7 A. Yes, sir, I did.

8 Q. And I turn to what has been marked as Devon
9 Exhibit K again but now go to the third page.

10 A. We had identified --

11 Q. Hold on. Explain what that is.

12 A. Yes, sir. That light blue line is just in
13 addition to the previous slide that shows an extraction of
14 just those five Thistle wells that are three miles and
15 show their performance for the cumulative oil per GPI
16 normalized versus time, and they show to be producing
17 higher than both the Devon average including parents and
18 the Cimarex average including parents, which shows that
19 there's no degradation when you drilled that third mile
20 for performance for each of those wells.

21 Q. And where are these Thistle wells that Cimarex
22 called out specifically? Where are they located?

23 A. Those five wells corrected from the 179 to the
24 182H are the purple stars. If you look southeast of the
25 Sneaky Snake development block there's five purple stars

1 in the Thistle unit area. That is our five currently
2 producing three-mile Upper Wolfcamp wells.

3 **Q. In your opinion does Devon's Wolfcamp drilling**
4 **experience in this area reflect that Devon is somehow**
5 **underperforming in the Wolfcamp, particularly its more**
6 **recent wells?**

7 A. I have not seen any data to suggest that Devon's
8 Upper Wolfcamp wells are underperforming any of the
9 averages of any of the other operators in the area.

10 **Q. And you have over a 100 Upper Wolfcamp wells,**
11 **right?**

12 A. That is depicted on that aerial view to the
13 left, correct. There are more than that that we've
14 drilled, but in just this aerial that's the depiction on
15 the left side of that map deal, there's just 106 wells in
16 there that we've successfully drilled and brought on line.

17 **Q. And does your analysis indicate that Devon's**
18 **more recent three-mile wells in close proximity to the**
19 **Sneaky Snake area were actually outperforming Cimarex's**
20 **one- to two-mile wells in the Upper Wolfcamp?**

21 A. Yes, as long as you exclude the parents. When
22 you look at the full point down there, fully developed
23 sections, then yes, the three-mile average is higher than
24 relatively both Devon and Cimarex's averages for just
25 fully developed sections. And that is just based on that

1 view of those wells that I pulled in for this analysis.

2 MR. FELDEWERT: Mr. Examiner, I would move the
3 admission into evidence of Devon Exhibits I, J and K.

4 EXAMINER BRANCARD: Any objections?

5 MS. BENNETT: No objection subject to
6 cross-examination.

7 EXAMINER BRANCARD: Thank you. So admitted.

8 MR. FELDEWERT: Thank you, Mr. Examiner. I will
9 pass the witness.

10 EXAMINER BRANCARD: Thank you. Any questions
11 for Cimarex?

12 MS. BENNETT: Yes. Thank you.

13 Before I start my questions I think I will
14 reorient.

15 Mike, do you mind stopping sharing your
16 screen?

17 MR. FELDEWERT: Certainly. Hold on.

18 MS. BENNETT: Thank you.

19 And Ms. Salvidrez, would you mind giving me
20 screen sharing.

21 Thank you. So just one minute here and
22 I'll get the exhibits back up. Thank you.

23 CROSS EXAMINATION

24 BY MS. BENNETT:

25 Q. Good afternoon, Mr. Sprague. My name is Deana

1 **Bennett. I'm a lawyer for Cimarex. It's nice to meet**
2 **you. Thank you for being here, virtually anyway.**

3 A. Nice to meet you, too.

4 **Q. Before I talk too much about your exhibit and**
5 **get into that, I did just want to ask you a couple of**
6 **questions.**

7 **How long have you been working on the Devon**
8 **Sneaky Snake project?**

9 A. I came onto this particular project back in
10 March of 2020.

11 **Q. Oh, okay.**

12 A. I joined the team relatively new. I was working
13 with them for about seven to eight months, or a little
14 longer.

15 **Q. Okay. I think I may have misunderstood.**

16 **Did you start working with Devon on the**
17 **Sneaky Snake in March of 2020?**

18 A. Yes, I started working on the Sneaky Snake and
19 other programs that encompass our, uhm, asset area, the
20 Sneaky Snake development.

21 **Q. But then you said something, and I missed it and**
22 **I apologize, you said something about seven or eight**
23 **months.**

24 A. Oh, yes. Then in March of 2020 till the end of
25 February, '21, before I switched over to production

1 engineering recently.

2 Q. And in production engineering you have still
3 been working on Sneaky Snake matters or is that a
4 different project area within Devon's...

5 A. It's a different project area, but as far as --
6 I've had the most knowledge of this Sneaky Snake program
7 from the reservoir engineering perspective for the last
8 year, roughly.

9 Q. Okay. So did you assist with preparing and
10 submitting the APDs in March, 2020?

11 A. Those were submitted right as I came onto the
12 team, but I am familiar with them.

13 Q. Okay. Those original APDs were for one-mile
14 laterals; is that right?

15 A. That's correct.

16 Q. And there's no reservoir engineering reason why
17 Devon can't drill a one-mile lateral in this area, right?

18 A. There is not.

19 Q. And there's no reservoir engineering basis why
20 Devon can't drill two-mile laterals in this area, right?

21 A. Correct.

22 Q. And in fact a lot of the exhibits that you
23 relied on today have been Devon two-mile laterals; is that
24 right?

25 A. Devon two-mile and as we've started to extend

1 into the three-mile range for better optimization and
2 reduction of surface footprint.

3 Q. Thanks. I wanted to talk briefly about your
4 original exhibits, which are the exhibits that were
5 attached to your affidavit, and those are Exhibits -- let
6 me just make sure I get the right ones -- C-2 through C-6.

7 Those are your original exhibits, right?

8 A. Yes, ma'am.

9 Q. And when I look at Exhibit -- I'm going to try
10 to minimize or make this a little smaller so it's easier
11 to read. Can you see both of these pages now? Is it
12 easier or harder to read?

13 A. I could see both of them. It's pretty -- let me
14 collapse the video on the right side, see if that helps.

15 Yes, I can see both of them.

16 Q. I'm just going to go to a single slide.

17 And this is -- so Devon C-2, C-3 and --
18 well, C-2, C-3 are the ones I'm primarily interested in.

19 So those exhibits you did not compare
20 Devon's drilling programs to any offsets, did you?

21 A. These ones, no. I looked at the Devon-operated
22 wells.

23 Q. So you just compared Devon to Devon; is that
24 right?

25 A. Yes, ma'am.

1 Q. Didn't earlier you say, though, that as an
2 operator you would locate, or you would look for well
3 results in the proximity of your development for analogous
4 wells, and use those to tier off of?

5 A. Yes, you would. This was to show that Devon has
6 a history of drilling three-mile wells. This was not to
7 build type curves from, this was to help influence type
8 curves that we can build, and also use the proximity of
9 offset wells that we have in the area to build and improve
10 our type curves.

11 Q. So your exhibits do not purport to show any
12 relative merits or demerits between Devon's drilling
13 proposals and Cimarex's drilling proposals; is that right?

14 A. Could you rephrase that question, please?

15 Q. Sure. Sure.

16 So your exhibits just focus on Devon's
17 history and production; is that right?

18 A. Yes.

19 Q. And so you are not using these exhibits to show
20 any flaws in Cimarex's proposals, right?

21 A. No. This was to show that Devon could execute
22 three-mile wells successfully.

23 Q. So you don't have any evidence in your original
24 exhibits, and that's all I'm talking about here, in your
25 original exhibits that show any problems with Cimarex's

1 proposed plan.

2 A. I did not have anything that shows -- to
3 contradict Cimarex's proposed plan.

4 Q. I wanted to ask you about the -- I think this is
5 Exhibit C-2. Let me just see if I can make it a little
6 smaller to see the exhibit numbers.

7 C-2 is this exhibit right here: Devon has
8 been drilling three-mile wells since 2019 and has 20
9 operating wells. Do you see that?

10 A. Yes.

11 Q. For your three-mile wells -- and this was a
12 question I had asked Dr. Peryam but he deferred to you --
13 do you take into account for three-mile wells in this
14 area -- and I'm only talking about this area of Lea
15 County, so excluding any Eddy County three-mile wells. So
16 do you take into account any -- so first of all, Mr.
17 Sprague, I need to apologize because I'm a lawyer not an
18 engineer so I'm not going to use the right words, and I
19 hope that you'll help me figure out the right words, but
20 I'm going to do the best I can.

21 A. Okay.

22 Q. So have you taken into account any -- I don't
23 want to use the word degradation because I'm not sure
24 that's the right word, but any decline or any difficulties
25 in drilling three-mile Wolfcamp wells due to the different

1 **depths and pressure in this area, than in, say, Eddy**
2 **County?**

3 A. I think it would be difficult to exclude Eddy
4 County wells, because we are so close to the Eddy County
5 line with Sneaky Snake. So when you look at the close
6 proximity of saying there's the entirety of Eddy County or
7 the entirety of Lea County, I don't know if that's the
8 right way to answer that question.

9 Looking at the wells that are depicted in
10 that aerial view there, we have not seen any issues
11 drilling the longer lateral wells due to reservoir
12 pressure or anything else in the Formation.

13 **Q. Okay. So which wells are these that I'm**
14 **hovering over right now?**

15 A. Those would be -- let me grab this. They are
16 our Todd (phonetic) acreage, and they are to the west of
17 the Sneaky Snake block there where the wells that are to
18 the southeast of that the purple block -- the purple block
19 is the Sneaky Snake development area, and the wells to the
20 southeast are the Thistle unit three-mile wells both in
21 the Avalon and in the Upper Wolfcamp.

22 **Q. Do you know what the relative depth and pressure**
23 **is for these Todd wells?**

24 A. They are slightly shallower than on the Sneaky
25 Snake acreage, but the pressure would be comparable as you

1 looked at the gradient as you move across the basin east
2 to west.

3 And if we look at the wells that are to the
4 east of that Sneaky Snake acreage, those are actually
5 deeper because the structure would go down there before it
6 goes to the Bell Lake fault, and that would have the
7 slightly deeper than what the Sneaky Snake is, with
8 slightly higher pressure.

9 Q. And this is the Thistle unit, right?

10 A. Correct.

11 Q. And how many months of Thistle, for the newer
12 wells, the 180, 181 and 182, how many months of production
13 data do you have for the new Thistle wells?

14 A. I believe we have six to seven months for the
15 Thistle 180 through 182, and then the original two
16 Wolfcamp wells, which were the 108 and the 121, we have a
17 year and a half of production on those wells.

18 Q. Okay. Did you put anything in your testimony
19 about depth and pressures for the Wolfcamp wells?

20 A. I did not.

21 Q. Okay. I'd like to, let me see, go back to
22 Exhibit C.

23 This is your declaration, or your
24 affidavit, and it says Devon has found three-mile laterals
25 are more efficient and effective than two-mile wells

1 and -- I'm paraphrasing -- Devon generally pursues
2 three-mile laterals in areas where the land ownership is
3 conducive to longer laterals.

4 Do you see that?

5 A. Correct.

6 Q. Were you here earlier today when we discussed as
7 a group the fact that Cimarex has now acquired a majority
8 of ConocoPhillips' interest in the southwest quarter of
9 Section 12?

10 A. Yes, that they would be slightly lower working
11 interest on that west half of 12 than Devon is?

12 Q. Yes, but they have acquired an interest in that
13 area now?

14 A. Correct. Yes, ma'am.

15 Q. And let's see. I guess the converse of what you
16 say or the opposite of what you say in paragraph 3 is that
17 when land ownership isn't conducive Devon will drill
18 two-mile wells or one-mile wells. Is that right?

19 A. Devon -- yes, we will drill one-mile wells,
20 two-mile wells and three-mile wells depending on the
21 development of the area, how we are able to go in there
22 and really effectively develop each of the development
23 blocks.

24 Q. And let's see. I want to turn to Exhibit C-5,
25 which is the AFE comparison.

1 A. Yes, ma'am.

2 **Q. Now, earlier Mr. Feldewert explained that this**
3 **is a comparison of gross type costs. And your exhibit,**
4 **though, does not show where these costs were derived from,**
5 **does it?**

6 A. No, it doesn't. That cost is something that we
7 would use for our -- any two-mile wells that we were
8 drilling in the area at that time, similar to what Cimarex
9 has for their gross AFE costs.

10 **Q. But you can't tell me which wells, if any, these**
11 **costs actually relate to, can you.**

12 A. The Avalon would relate to the Danger Noodle
13 wells that we just drilled, and any of the First Bone
14 Spring wells would be comparable to the First Bone. So
15 the Danger Noodle wells that we just drilled last year.

16 **Q. So if that is accurate, why didn't you just put**
17 **in the Danger Noodle costs so that we would have a more**
18 **tangible exhibit to look at, rather than this**
19 **undeterminable costs here.**

20 A. I looked at it trying to get an average, which
21 is an estimate that our drilling engineers put in place,
22 and completion engineers at Devon here, and I grabbed
23 those costs because they were more representative at the
24 time, and I didn't want to grab just a single set of wells
25 that may be misrepresented, either higher or lower, than

1 what the actual cost would be.

2 **Q. But again that is not --**

3 A. Same --

4 (Note: Reporter interruption.)

5 **Q. Mr. Sprague, if you want to finish answering the**
6 **question before I move on, that's fine.**

7 A. Yes. What I was going to say is that the type
8 cost we've billed from averages of a larger data set of
9 wells, not just a single set of wells, and that we used to
10 predict future development, similar to like we discussed
11 building type curve wells. You grab the analogous wells
12 that are in the surrounding area. And that's similar to
13 what we do with our type costs. In essence, Devon's gross
14 type costs were put in there just based on an average that
15 we had for the area so we could put forth our best
16 estimates at that time, which is what we do with any of
17 our AFEs for any of two-mile and three-mile wells also.

18 **Q. Okay. So just to reiterate, they don't relate**
19 **to any particular well or any particular area.**

20 MR. FELDEWERT: Object to the form of the
21 question. Mischaracterizes his answer.

22 **Q. (Continued) Mr. Sprague, did those costs in**
23 **Exhibit C-5 relate to a particular area such as this area**
24 **in Lea County?**

25 A. Yes, ma'am, they did. They were relevant for

1 the asset that I was covering, which would be the Thistle
2 asset for that area.

3 **Q. You also used these same costs for an asset in**
4 **Eddy County?**

5 A. The costs are very similar for the Todd. I
6 don't know where you're talking about in Eddy County, so
7 it's hard to say the entire county, but if we are looking
8 at adjacent acreage offsetting Sneaky Snake to the west,
9 then yes it could be very representative of costs in that
10 particular acreage there.

11 But in the entire Eddy County, no, it would
12 not represent the entire Eddy County, based on different
13 depths and pressures as you move further west.

14 **Q. So depths and pressures do affect completion and**
15 **completion costs?**

16 A. Yes, they do. Depths and pressures will affect
17 completion costs. As you move further west you tend to
18 move up shallower, what they call the northwest shelf,
19 which I don't think either of us talked about in our
20 exhibits. But as you move shallower you're drilling less
21 rock, so as you're drilling less rock, your costs are
22 going to go down because you can improve your time, and
23 your materials are going to go down, also.

24 As you look at completion with moving up in
25 structure, you're going to have lower pressure and you're

1 going to have cheaper cost from your completion standpoint
2 also.

3 Q. Okay. In all of my papers here I lost my
4 outline, so I'm sorry.

5 Okay. Here it is. All right. I think
6 we'll move off of the costs.

7 So on Exhibit -- this is an exhibit that
8 you prepared, right?

9 A. Yes, ma'am.

10 Q. And this compares two-mile Bone Spring wells
11 with what? Three-mile Bone Spring wells?

12 A. Correct. And that is only Second Bone Spring
13 production. When we looked at that, the previous well
14 slides, I can't recall which one it was but it showed that
15 it was just the Second Bone Spring production.

16 Q. This one?

17 A. Yes, ma'am. So all of those wells would be
18 labeled in the Second Bone Spring, and they are just
19 relative there to -- I use those for comparison to show
20 there is no degradation moving from a two-mile to a
21 three-mile well in that third mile.

22 Q. And how many months of data do you have for the
23 two-mile wells?

24 A. For the -- you said two-mile or the three-mile,
25 ma'am?

1 **Q. The two-mile.**

2 A. (Note: Pause.) I'm sorry, I'm losing my
3 (inaudible) here. (Note: Pause.)

4 Uhm, we have every -- the newest ones were
5 producing from a little over eight months ago to -- where
6 we were on again? I'm sorry, I'm just trying to grab the
7 data for you.

8 Looking at the Second Bone Spring, the
9 newest ones for the two-mile appear to be 17, roughly a
10 year and a half ago, and a lot of the data for the
11 three-mile wells is between 9 to 24 months.

12 **Q. Okay.**

13 A. Yeah.

14 **Q. And for some reason I thought you were including**
15 **Avalon wells in this, but it's just Second Bone Spring**
16 **wells?**

17 A. Correct. If you look at my Exhibit C-2 this
18 depicted all the three-mile wells that Devon's drilled,
19 and that shows some of the Avalon wells. But because
20 there was only two wells, it doesn't give you a very good
21 statistical average of showing the increased output from
22 going from a two-mile to a three-mile, so I grabbed these
23 Second Bone data sets, and one off the Third Bone data set
24 to show that -- you need more wells than two for a
25 statistical average, so I think -- you would want at least

1 30 normally, but as I continue to look at this it's just
2 showing how well they are trending currently.

3 Q. And I think that is the point I was trying to
4 make from these two slides, or the question I had about
5 these two slides is this is a snapshot in time where
6 you're extrapolating essentially from limited data to try
7 to predict what performance would look like in the future.
8 Is that fair?

9 A. It's the same method that we use, the decline
10 curve analysis that is used for the SEC reporting, how we
11 report all our reserves. So all of the previous history
12 that we look at, the surrounding wells as far as B factor,
13 some of them are type curves, and determining from the
14 analog wells what the performance of them are. And then
15 we use that and all the historical production data to
16 apply point forward for an EUR estimate.

17 Q. And on this exhibit, which is page 5, showing
18 the Wolfcamp performance comparisons --

19 A. Yes, ma'am.

20 Q. -- the green lines are the Wolfcamp wells,
21 right?

22 A. The green lines are the --

23 (Note: Reporter interruption.)

24 Q. Sorry, Mary. The green lines are the three-mile
25 Wolfcamp wells; is that right?

1 A. Yes, ma'am.

2 **Q. And then the red lines are the two-mile Wolfcamp**
3 **wells?**

4 A. Correct.

5 **Q. And how many months of data do you have for the**
6 **three-mile Wolfcamp wells?**

7 A. (Note: No response.)

8 **Q. Did we lose you, Mr. Sprague?**

9 A. No, ma'am, I was just pulling up the exact dates
10 for you.

11 **Q. Okay. Sorry.**

12 A. Looking at the three-mile wells for those five
13 producing wells, two of them have been producing for 18
14 months, so a year and a half, and the other three have
15 been producing for eight months.

16 **Q. Okay. Is the -- do you have any -- does Devon**
17 **have any experience with an eight-well-per-section**
18 **Wolfcamp development in Lea County?**

19 A. Yes, we do. The Danger Noodle program is spaced
20 at eight wells per section, and our Bell Lake 18-19 is
21 also spaced at eight wells per section.

22 **Q. Is Danger Noodle a three-mile Wolfcamp plan?**

23 A. No. Our Danger Noodle development area is only
24 two miles, based on our leasehold.

25 **Q. And how about the West Bell Lake? Or Bell Lake.**

1 A. The Bell Lake 19-18s are also two-mile based on
2 our leasehold.

3 Q. Does Devon have any experience with three-mile
4 Wolfcamp laterals spaced eight wells per section?

5 A. Currently we do not have that.

6 Q. Okay.

7 A. In the immediate area.

8 Q. I wanted to look at the -- turn to your exhibits
9 about the surface layout well pad and facility plan.

10 These facilities are all just plans, right?
11 Is that correct?

12 A. Yes, ma'am. We were waiting for the pooling to
13 be done so we could officially go out there, propose these
14 wells and build sites.

15 Q. And on Exhibit C-4 you have these turquoise dots
16 and then red dots; is that right?

17 A. Yes. I see those. The two different-colored
18 dots, yes, ma'am.

19 Q. And the red dots represent what you have
20 identified as Phase 1 and the turquoise dots are Phase 2;
21 is that right?

22 A. Currently yes. That was our plan originally.

23 Q. Uh-huh. And on your Phase 2 Bone Spring wells,
24 was that originally contemplated to be the Second Bone
25 Spring and the Avalon?

1 A. Yes. At the time that we developed this
2 analysis we were looking at just about developing the
3 Second Bone and the Avalon for our Phase 2 Bone Spring.

4 **Q. When do you anticipate that your Phase 2 will be**
5 **deployed?**

6 A. That would be as soon as we have an
7 understanding of the outcome of this hearing and when we
8 can actually have approved permits to go drill. We would
9 have a better understanding of that.

10 I know the program has moved around a lot
11 on our drilling schedule, both phases, and it's just
12 trying to optimize when we can move rigs there once we
13 have the full understanding of what we can drill.

14 **Q. And have you submitted APDs for the Second Bone**
15 **Spring and Avalon wells?**

16 A. I'm not sure. I would have to defer to Land on
17 that matter, ma'am.

18 **Q. Okay. But it's fair to say that this exhibit as**
19 **it stands does not contemplate any other phases except**
20 **Phase 1 and Phase 2.**

21 A. That's what we had originally planned, correct.

22 **Q. Okay. This is your page 2 of Exhibit C-4, and**
23 **this exhibit I believe is showing the surface facilities**
24 **that need to be built to address water, gas, and oil**
25 **takeaway.**

1 **Is that an accurate summary of this slide?**

2 A. Yes, ma'am. Those are pipelines that we would
3 have in place prior to ID-ing the wells, so that way we
4 wouldn't have to truck any of the volumes. Everything
5 would be on pipeline.

6 **Q. But it's my understanding, and correct me if I'm**
7 **wrong, but none of those are currently built, are they?**

8 A. No. We've had to shuffle around our priorities
9 based on this program being moved out and other programs
10 being moved into place, so we've had to prioritize what we
11 were able to go build to meet the requirements of other
12 programs for our entire drilling schedule.

13 **Q. But this represents your plan, both of these**
14 **slides represent your plan as of the time that you filed**
15 **exhibits last week, right?**

16 A. That was what we had submitted last week,
17 correct.

18 **Q. Okay. I would like to now turn to your**
19 **supplemental or rebuttal exhibits. Give me just a second**
20 **while I open those, please. (Note: Pause.)**

21 Okay. Are you able to see your slide J on
22 the screen in response to D-9 and D-10?

23 A. Yes, ma'am.

24 **Q. Okay. Great. So on Response -- this slide,**
25 **it's comparing and contrasting, or comparing two-mile**

1 **laterals, right?**

2 A. Yes, that's comparing the different development
3 blocks in the area that Cimarex had called out that were
4 fully developed.

5 **Q. And so this does show, and I believe your**
6 **testimony was that the Danger Noodle two-mile laterals are**
7 **performing wells. Is that right?**

8 A. Yes, ma'am.

9 **Q. One thing I wasn't quite clear about is that I**
10 **thought you had said that you identified all of the wells**
11 **on this. And I don't mean all the wells in Lea County but**
12 **all the wells that are relevant: the Wild Salsa, Rodney**
13 **Robinson -- and by "all" I mean Upper Wolfcamp, sorry, or**
14 **Third Bone Spring as the case may be.**

15 **Does this reflect all of the wells?**

16 A. This reflects the wells that were in Cimarex's
17 Exhibit D-9 that showed the different programs in close
18 proximity to the Sneaky Snake acreage.

19 **Q. Yeah. And --**

20 A. Cimarex had called out specifically I believe
21 the Danger Noodle, the Avogato, the Rodney Robinson, and
22 the Wild Salsa wells on D-9, along with a Concho well and
23 I believe one more, their Cimarex well.

24 **Q. I'm not trying to be opaque. And I'm sorry,**
25 **it's just on Rodney Robinson, for example, the red sticks,**

1 **how many red sticks are there on this exhibit?**

2 A. There would have been four Rodney Robinson wells
3 that were in that development pattern.

4 **Q. So a couple of them have just been combined?**

5 A. I believe that has to do with the way that --
6 Matador is the operator for Rodney Robinson. It would be
7 the way they are flowing back the wells. If they are
8 bumping chunks (phonetic) at the same time then you could
9 see a stacking of lines based on cumulative oil normalized
10 per GPI versus time.

11 That would be the reason that they would
12 line up like that.

13 **Q. How about the Wild Salsa wells? I thought there**
14 **were four of those.**

15 A. Yes, ma'am. There are. Again, they are just --
16 they are -- all four of them are in there, they're just --
17 it's because they are producing near, they are kind of
18 towards the left-hand side of that plot and the other side
19 is clear, and that was the reason that we moved to the
20 next slide to show the averages for each of the different
21 programs to see how effective the different spacing
22 patterns were.

23 **Q. Looking at this slide J, you mentioned that the**
24 **longest green line is the Red Tank/Avogato wells, right?**

25 A. Correct. It was the original parent well in the

1 Avogato development section, which is called the Red Tank.
2 It's a 34H on the far eastern side of that development
3 block.

4 Q. So if we exclude that well from this diagram,
5 the remaining wells, the remaining Avogato wells are all
6 Upper Third Bone Spring Wells, right?

7 A. That's incorrect. The Avogato 35H that's
8 directly offset to that Red Tank well was a Wolfcamp XY
9 well with how our geologists have landed it.

10 Q. Okay. So how many of the Avogato sticks are, in
11 your opinion, Third Bone Spring wells?

12 A. For Avogato, with just that name, it would have
13 been four out of the five, and they would have been to the
14 western side of that development block, ma'am.

15 Q. So when you say that in the, uh -- so I see what
16 you're saying now. You said this is Wolfcamp and Third
17 Bone Spring Sand because you characterize the Avogato
18 wells as Wolfcamp wells. Is that right?

19 A. No, ma'am, just the one Avogato well, just that
20 Avogato 35. The remaining wells in that section are
21 landed in the Third Bone Spring.

22 Q. Okay. On the Danger Noodle wells that you have
23 identified in purple, is the production that you're
24 showing there both production from XY and A Sands?

25 A. That's correct. That's the Upper Wolfcamp

1 package as we would develop it, similar to our pattern in
2 Sneaky Snake.

3 Q. But taking, for example, Rodney Robinson, does
4 the Upper Wolfcamp include Wolfcamp A?

5 A. I would have to defer to geology on exactly
6 where those are landed. I do know that two of the wells
7 are Upper Wolfcamp and two of them are Third Bone Spring.

8 Q. But sitting here right now you can't say whether
9 spacing for Danger Noodle and Rodney Robinson are the
10 same?

11 A. They wouldn't be the same. They're still eight
12 wells per section but they're in that Upper Wolfcamp/Lower
13 Third Bone development package. But I don't know the
14 exact landing of the two Wolfcamp wells in the Rodney
15 Robinson.

16 Q. Okay. Turning to, uhm, D-13 and D-14, here you
17 have compared for the first time Devon and Cimarex; is
18 that right?

19 A. Yes, ma'am. That was in response to the D-13
20 exhibit from Cimarex.

21 Q. Was this -- sorry. Let me think of a good way
22 to ask the question.

23 You said that you include -- did you
24 include all of Cimarex's Upper Wolfcamp wells?

25 A. When you look at that map for the left, that

1 aerial view, all the red dots were the wells that I could
2 find in IHS that had production data on them that were
3 labeled in the Upper Wolfcamp in our systems.

4 So using that aerial map, if there was any
5 wells outside of that map review, they were not included
6 in my analysis. What was included was the close proximity
7 of these wells to the Sneaky Snake acreage, and all the
8 wells that I could find that had Cimarex labeled as the
9 operator with production data on those wells.

10 Q. And including -- when you look at this Exhibit
11 D-13 it shows that Cimarex has a number of wells that are
12 outperforming Devon, right?

13 A. Yes. There is -- out of the averages of the
14 wells there's a few that Cimarex has that are
15 outperforming, primarily because they were the parent
16 wells.

17 Q. And then the -- but another way to put this
18 slide is that in your opinion, in any event, Devon and
19 Cimarex are somewhat aligned in their production reports?

20 A. Could you rephrase that question, please?

21 Q. Sure. I thought I took a note on something that
22 you said that basically -- I mean, more or less when you
23 look at this response to the D-13 slide it shows that
24 Cimarex and Devon are somewhat equal in their production
25 from two-mile wells. That's your point from this slide,

1 **right?**

2 A. This includes one-mile wells, two-mile wells and
3 three-mile wells in the Upper Wolfcamp, and it shows --
4 this is all normalized per GPI, so we look at normalized
5 cumulative oil produced per GPI just to normalize the
6 production so we can measure things equally, and it does
7 show that Cimarex and Devon, neither one of them are
8 outperforming the other as far as performance. It is
9 clearly shown that the reservoir in this immediate area is
10 producing similar with modern completions.

11 **Q. So is it fair to say that your response to D-13**
12 **establishes that Cimarex or Devon could equally produce**
13 **from the Sneaky Snake area?**

14 A. Yes, that would indicate that.

15 **Q. Okay. On Exhibit -- I'm looking at my notes to**
16 **see.**

17 Oh, earlier today I think you talked about
18 how it's helpful, and I could be confusing your testimony
19 with Dr. Peryam so please correct me if I am wrong, but I
20 thought you were testifying that it's better to get oil to
21 market sooner rather than later.

22 **Did you testify about that earlier in**
23 **response to questions from your counsel?**

24 A. I believe that was Dr. Peryam that responded to
25 that.

1 Q. Okay. You discussed parent effect quite a bit
2 in your discussion with Mr. Feldewert. Do you recall
3 that?

4 A. Yes, ma'am.

5 Q. Now, earlier today Dr. Peryam I thought was
6 testifying that he did not believe that it would be
7 prudent to come back in and infill XY wells, you know,
8 after you have already drilled A wells.

9 Did you hear him say that or am I
10 mischaracterizing what I heard him say?

11 A. After -- I think that's correct.

12 Q. And is that because of the parent/child effect,
13 or why would it be a bad idea to come back in and infill
14 XY wells?

15 A. I think when you look at, as he mentioned
16 before, that HFTS II project -- or if I mispronounced the
17 acronym, I'm so sorry. But looking at the parent/child
18 interaction when you look at the Upper Wolfcamp, Lower
19 Third Bone, it almost behaves as one flow unit. So when
20 you look at a lot of that stuff, sometimes when you come
21 back and drill you're going to get depletion effects.
22 When you come back for to try to infill, that's why Wolf's
23 (sic) on top of A.

24 Q. So doesn't that necessarily mean that A is
25 draining XY?

1 A. Not necessarily. It could drain a portion of it
2 but it may not be effectively draining all of that XY
3 Sands.

4 **Q. But if you have concerns about parent/child,**
5 **that only arises in the context of depletion from one well**
6 **depleting a later drilled well; is that right?**

7 A. When you look at parent/child interaction? What
8 was the question again? I'm sorry.

9 **Q. No, I'm sure it's my fault.**

10 So when you're concerned -- if there is a
11 parent/child concern it is because the parent well is
12 impacting the production of the child well; is that right?

13 A. That's correct.

14 **Q. And so by -- if there are parent/child effects**
15 **between the XY and A, that's because there is an**
16 **interrelationship between those two -- that flow unit,**
17 **right?**

18 A. Yes, there could be an interaction that way.

19 **Q. Thank you. Now, did you in any of your**
20 **testimony discuss the parent/child effect?**

21 A. In my original testimony --

22 **Q. That's right.**

23 A. -- or the rebuttal testimony? I'm sorry.

24 **Q. Let's start with your original testimony.**

25 A. No, I did not discuss any parent/child

1 interactions at that point.

2 Q. And were you here earlier when Dr. Peryam
3 discussed the potential drainage from the Wild Salsa
4 wells?

5 A. Yes.

6 Q. There isn't anything in your exhibits that
7 addresses drainage from Wild Salsa, is there?

8 A. No, there's not.

9 Q. So there's no evidence in the record that you
10 have presented that the Wild Salsa wells present a problem
11 for Devon.

12 A. (Note: Pause.) Sorry. Would you rephrase that
13 question, please?

14 Q. So there is no evidence in the record, that
15 you've introduced into the record, that shows the -- or
16 that establishes drainage from the Wild Salsa next door to
17 Devon.

18 A. There's nothing specifically that directly talks
19 about the drainage from Wild Salsa to Devon, but it's just
20 the industry knows for the basin that you do see
21 parent-to-child interactions when you're drilling the
22 same, whether it's upper horizons in the Wolfcamp and
23 Lower Third Bone Spring, or the horizons in the Second
24 Bone Spring or the Avalon.

25 Q. So are you aware that Cimarex is developing the

1 east half of Sections 1 and 12?

2 A. I saw that Cimarex was developing the east half
3 of the east half.

4 Q. Okay. The east half of the east half of
5 Sections 1 and 12.

6 A. Yes, ma'am.

7 Q. And we will provide some evidence later in the
8 day, when we have our geologist testifying, that is
9 actually the east half of Section 12.

10 But that's neither here nor there.

11 Earlier today you said it was important to
12 have fully developed sections. Do you remember saying
13 that?

14 A. Yes, I do.

15 Q. And here Cimarex is attempting to do fully
16 developed sections by developing Sections 1 and 12, east
17 half and west half, is that right? Or do you know?

18 A. I would have to let them answer that question.
19 I'm not sure what their full development plan is, 100
20 percent. I know they talked about trying to get that, but
21 I'll let them testify to that.

22 MS. BENNETT: Okay. Thank you. That might be
23 the end of my questions.

24 Q. Oh, I did want to ask you: We talked a bit
25 about the surface facilities, and when I looked at the

1 map, and I'm going to defer to you on this, it looked like
2 you needed to cross BLM and State surface. Is that right?

3 A. I'm not -- we have surface landmen that cover
4 most of that area that would provide that for us, but I
5 believe we would have to cover both of that. But I'm not
6 the expert in that matter, ma'am.

7 Q. Okay. Are you -- did you -- so you don't assist
8 with getting rights-of-way for surface access?

9 A. I do not typically. My -- as a reservoir
10 engineer I primarily worked downhole, and then aided the
11 team in any way, shape or fashion to, you know, move the
12 programs forward to drill and develop those.

13 Q. Okay. Do you have any role in preparing the
14 AFEs?

15 A. No, ma'am, I don't.

16 Q. Okay. So you can't answer the questions that we
17 asked of Mr. Cloer earlier today about the process
18 included in the AFEs?

19 A. The costs that we put in our AFEs are what it
20 costs to drill, complete and equip the wells to bring them
21 to first production.

22 Q. Okay. I'm not sure it makes a lot of sense to
23 go back over the costs that we asked you, since you -- it
24 sounds like you understand -- well, never mind.

25 Okay, I think that's -- oh I did want to

1 ask you one other question. And I'm sorry, I don't mean
2 to keep jumping back and forth, but it's fluid -- that's a
3 pun.

4 So you were talking about Cimarex's
5 exhibits, one of our exhibits where our reservoir engineer
6 looked at a large data set of wells. And your testimony
7 was that it was skewed because it included old wells, and
8 there is no newer techniques that have come online.

9 Is that a fair characterization?

10 A. Yes, because it was skewed based on looking at
11 the entire Lea County, which when we -- as I mentioned
12 before, we tend to look at wells that are in close
13 proximity to the development area to build for analog
14 wells.

15 Q. And wouldn't it be skewed against everyone?
16 Like, it would be like agnostic skewing, if that makes
17 sense, because it would include everyone's bad wells,
18 everyone's good wells, everyone's parent wells.

19 Is that fair?

20 A. I don't know if that's fair, based on --
21 depending on the number of wells you have that are old and
22 vintage versus the number of wells that are designed with
23 newer completions.

24 Similar with lateral lengths. There's a
25 lot of historical wells out there that were drilled at one

1 mile before the industry started moving to two-mile wells.

2 MS. BENNETT: Okay. I think that's all I have,
3 then, unless there's any other questions.

4 No? No.

5 That's all I have. Thank you very much for
6 taking the time to answer our questions today. I
7 appreciate it.

8 THE WITNESS: Thank you, ma'am.

9 EXAMINER BRANCARD: Thank you. Mr. Garcia, are
10 you ready to go?

11 EXAMINER GARCIA: I have a few questions.

12 CROSS-EXAMINATION

13 BY EXAMINER GARCIA:

14 Q. Good afternoon, Mr. Sprague. Did I say that
15 correctly?

16 A. Yes. It's Sprague.

17 Q. Have you experienced any unusual issues drilling
18 these three-mile stick and zones, cementing processes,
19 that you wouldn't see with a two-mile?

20 A. No, sir, we haven't. Not that I'm aware of.
21 We've been able to successfully drill and complete each of
22 the three-mile wells without any issues.

23 Q. Thank you. Excuse my pause. I'm checking my
24 notes.

25 Have you guys had any issues on the

1 completion size, such as fracking a longer lateral tends
2 to be more friction, which tends to increase treating
3 pressures, which tends to become less of an overall frac
4 rate, which people argue will hinder frac lengths? Have
5 you had any issues with that?

6 A. Not that I'm aware of, sir. We've been able to
7 successfully complete all the way to the toe on each of
8 the wells that we've drilled, and essentially produce out
9 of those third miles, the last portion of that gross per
10 frac interval.

11 Q. Assuming a lot of friction reduced there.

12 So with that, then, you don't have any lack
13 of toe production on that third mile?

14 A. Not that I'm aware of, sir.

15 Q. All right. If the Cimarex case was to be
16 awarded for a two-mile well, that would make you guys have
17 a two-mile well. Would being granted a two-mile well for
18 Devon change its drilling schedule priority list, and if
19 so do you know how far it would push it out?

20 A. As far as I'm tracking, I don't think we would
21 be pushing out anything for a two-mile or a three-mile
22 well at this point. We would --

23 Q. Then --

24 A. We were --

25 Q. Go ahead. Sorry.

1 A. Apologize, sir. We were just trying to develop
2 the acreage and we were trying to develop our leasehold
3 which we had the majority in for all three-miles was our
4 intent, just to make sure we didn't have stranded acreage
5 in that third mile.

6 **Q. If Devon does have other three-miles on its**
7 **drilling schedule, would those be done first, prior to any**
8 **two-miles being completed?**

9 A. That's a good question for the planning
10 department, and that would be based on a lot of factors
11 that go into that. We would have to look at takeaway
12 capacities for the region, because, as you know, as you
13 move out the infrastructure, each region is different, and
14 it would be based on what do we have ready and in the
15 queue that we could go execute on.

16 But primarily our planning group does a
17 wonderful job on that. I'd feed them programs when I was
18 a reservoir engineer, and they would take them and have
19 our schedule planned out accordingly.

20 **Q. Okay. I understand.**

21 **I don't know the correct exhibit number.**
22 **Is it your comparison of Wolfcamp wells, of the Wolfcamp**
23 **performance? I don't know, Mr. Feldewert, if you want to**
24 **share with everybody.**

25 MR. FELDEWERT: At this point, Mr. Garcia, I

1 don't have sharing.

2 EXAMINER GARCIA: If everyone can follow, I
3 believe it's page 144 of your initial exhibit packet, the
4 Wolfcamp Performance Comparison.

5 MR. FELDEWERT: So I believe you're looking at
6 Exhibit C-3, perhaps.

7 EXAMINER GARCIA: Perhaps.

8 Q. Essentially, Mr. Sprague, I was curious there's
9 a two-mile well in there that is essentially competing
10 with some of these three-miles on the (inaudible)
11 production. Do you know why that three-mile is such an
12 outlier?

13 A. That two-mile well is one of our Danger Noodle
14 wells. And it's a Wolfcamp A well that basically it's on
15 the outside of the development packet and it's just
16 getting the benefit of only being bound on one side. So
17 it's a semi-bound well that's essentially getting a
18 phenomenal increase in production. That's just showing
19 that it's -- the reservoir has a very strong performance
20 in the area.

21 Q. And then Exhibit J, I believe on your rebuttal
22 exhibits, page 10 of 15, your Danger Noodle, what was the
23 reading on the initial reading? Why was it so high
24 compared to the other three?

25 A. Sir, if I am understanding correctly you're

1 talking about Exhibit J, you said?

2 **Q. I believe so. It's page 10 of 15 of your**
3 **rebuttal exhibits.**

4 A. I was looking at -- I think page 10 had the
5 averages on there sir, and the page 9 --

6 **Q. Okay.**

7 A. Okay. When we looked at that average it was
8 just showing that on an average basis that the program
9 that Danger Noodle drilled was just exceeding slightly on
10 the other programs that had been called out by Cimarex
11 that were close to the Sneaky Snake acreage.

12 **Q. Yeah. I guess I was interested in why the**
13 **intercept on line was so high to begin with?**

14 A. When I look at that, I think my time zero
15 happened when I pulled in the harmony plots it just
16 happened that it was adding in all the first performance
17 for like that, you know, first month. And as you look at
18 how they're kind of flat then pull in, that's how much
19 those wells produced in the first month, they look on
20 average.

21 As you look at the other three programs
22 they also show a little bit higher on that first because
23 they're not quite at zero. So it's just that when you
24 average the IHS data, because I can't give it a zero month
25 they tend to pull in a little bit higher for that first

1 month average.

2 EXAMINER GARCIA: I see what you're saying. I
3 was reading the graph wrong, so thank you for that.

4 I believe that's actually all my questions.
5 I'll pass to Mr. Brancard.

6 EXAMINER BRANCARD: Thank you.

7 I just have a quick clarification,
8 Mr. Sprague, on your Exhibit C-4, which is more detail of
9 your surface layout.

10 CROSS-EXAMINATION

11 BY EXAMINER BRANCARD:

12 Q. I assume that We are looking at like the
13 southwest quarter of Section 24. There's no label.

14 A. Yes, sir. If I understood you, where we planned
15 to put the two drilling pads and the CTV pad is in the
16 southwest section of 24.

17 EXAMINER BRANCARD: Okay. Thank you. It just
18 wasn't labeled so I just wanted to make sure.

19 THE WITNESS: Yes, sir.

20 EXAMINER BRANCARD: Mr. Feldewert, any rebuttal?
21 Any redirect? Sorry.

22 MR. FELDEWERT: Yes, sir, if I may.

23 If I could have sharing capability it might
24 be helpful. Maybe.

25 REDIRECT EXAMINATION

1 BY MR. FELDEWERT:

2 Q. Mr. Sprague, I think I have up here now Exhibit
3 C-4 that Mr. Brancard was referencing. Do you see that?

4 A. Yes, sir.

5 Q. Okay. Now, there was some questions about
6 Devon's ability to execute and move forward with its
7 three-mile drilling plan. To your knowledge, does Devon
8 have all the rights-of-way in place to begin construction
9 of the well paths and the takeaways necessary to
10 accommodate the production?

11 A. I think at this time I'm not sure if we have all
12 the rights-of-way approved yet. We've submitted them, I
13 believe. And the reason that we've had to prioritize
14 our -- move these wells out was because we weren't able to
15 drill them when we had planned to, so we were shuffling
16 the priorities with the BLM to make sure that we were able
17 to execute on our other programs that we moved up in its
18 place, as we continue to shuffle around the drilling
19 schedule.

20 Q. You mentioned in your affidavit that the surface
21 pads have been approved, right?

22 A. Yes, sir.

23 Q. And that you have all your contracts in place
24 for your takeaway.

25 A. Yes, sir.

1 Q. So when you start drilling these three-mile
2 wells, it does take some time, does it not, to get them
3 drilled.

4 A. Sorry. Could you repeat that question, sir?

5 Q. In other words, if you were approved here to
6 operate this acreage and develop your acreage with
7 three-mile wells, you have both -- you have the ability
8 then to commence drilling, right?

9 A. Yes, sir. Once we have the ability to -- of the
10 known lateral lengths that we can drill, our planning crew
11 can move these wells up on the schedule as soon as
12 feasibly possible.

13 Q. Then during the drilling you will have time to
14 get any infrastructure necessary to accommodate the
15 simultaneous completion when you're ready to do that?

16 A. Yes, sir. Because typically our turnaround is a
17 few months after we drill the wells prior to being able to
18 complete them and ID them.

19 Q. Now, there was some discussions about the
20 offsetting Titus Wild Salsa wells.

21 A. Yes, sir.

22 Q. Those are in the ground producing, correct?

23 A. Yes, sir, they are.

24 Q. And you mentioned that there's the industry
25 standard to offset producing acreage to protect your

1 acreage. Right?

2 A. Yes, sir.

3 Q. So Devon has every incentive here to drill as
4 quickly as possible, do they not?

5 A. Yes, sir, we do.

6 Q. You mentioned the desire of Devon to develop its
7 acreage with three-mile wells, and I think you said in
8 response to a question that you get better optimization.
9 Do you remember that?

10 A. Yes, sir, I do.

11 Q. Can you explain what you mean by better
12 optimization? In other words, why does Devon desire to
13 develop its acreage with three-mile wells in areas where
14 they have the working interest predominance to do that?

15 A. That allows Devon to be able to reduce our
16 surface footprint and really recover the reserves in each
17 of those subsequent three-mile sections for a lower cost
18 than it does to drill -- say for this development block
19 when we first looked at it, we looked at going from, you
20 know, originally one-mile. Then we received that Marathon
21 trade and we were allowed to extend to either two miles,
22 or because we had acreage in Section 12, we could have
23 done two mile-and-half development blocks. But ultimately
24 because of Devon's success with drilling three-mile wells
25 we chose to move forward with the three-mile well plan to

1 minimize surface disturbances in the area.

2 Q. And you mentioned it's more capital efficient
3 for the company and working interest owners?

4 A. Yes, sir, it is. When you look at the capital
5 efficiencies of drilling three-mile versus, say, two
6 mile-and-a-half development blocks that Devon would have
7 tried to develop from this three-mile section, you have to
8 drill less vertical rock to get to the horizontal pay. So
9 if you can get that with one well versus two, your cost
10 savings is going to be substantial for the working
11 interest owners.

12 Q. Now, you mentioned that the reason that Devon
13 was proposing eight wells, an eight-well-per-section
14 pattern for the Upper Wolfcamp was because of the success
15 you had in the Danger Noodle acreage. Correct?

16 A. Yes, sir.

17 Q. And the Bell Lake acreage.

18 A. Yes, sir.

19 Q. And those were each two-mile developments; is
20 that right?

21 A. Yes, sir. That is all the leasehold that we had
22 at the time to develop those two development programs.

23 Q. Here's my question for you: When it comes to
24 efficient and effective well spacing in the Upper
25 Wolfcamp, does it make -- does your well spacing change if

1 **you're drilling one-mile, two-mile, or three-mile wells,**
2 **or do you use the same efficient plan?**

3 A. As we've continued to optimize on the Upper
4 Wolfcamp, depending on if we have the same two landings in
5 the Wolfcamp A and the Wolfcamp XY, then we would be able
6 to develop either one mile, two mile, or three miles with
7 the same pattern of wells per section.

8 **Q. In other words, the length of the well, Mr.**
9 **Sprague, does not impact your effective well spacing?**

10 A. Yes, sir.

11 **Q. It does not, correct?**

12 A. The length would not change the well spacing in
13 any way for a specific area. So as you move around the
14 basin and change lithologies or change the different
15 target zones, that will change the spacing pattern, but in
16 the Upper Wolfcamp if we have the Wolfcamp A target and
17 the Wolfcamp XY target, we've found that an
18 eight-well-per-section spacing across that is the most
19 optimal way to develop the acreage.

20 **Q. Now, with respect to that pattern that Devon has**
21 **received data on, uhm, if you're -- if concerns related to**
22 **the Upper Wolfcamp for the parent/child effect is not**
23 **dependent upon drainage, is it? Isn't it dependent upon**
24 **other factors that come into play? If, for example, you**
25 **develop the -- only put wells in the Wolfcamp A and then**

1 **try to come back later and put wells in the Wolfcamp**
2 **Sands.**

3 A. Typically it has to do with -- yes, with a --
4 the effective fracture growth of our completions. And
5 when you look at the parent-and-child interaction, if you
6 drill a Wolfcamp A well, your fracture growth is
7 predominantly upwards. There is slight growth down but
8 predominantly most of the frac does go upward in each of
9 the cases that we've observed.

10 **Q. Okay. And if you subsequently came in and tried**
11 **to wait and place wells in the Wolfcamp Sands later, is**
12 **there concerns about the parent/child effect?**

13 A. Yes, sir, there would be concerns. We would see
14 a reduction in pressure in the fracture network from the
15 original frac of the parent wells, and we could interfere
16 with both reduced performance of the XY landings, along
17 with "bashing", as we call it in the industry, of the
18 parent wells, which could affect their offset recovery
19 also.

20 **Q. And you mentioned that Devon agrees that you**
21 **want to try to get the oil out of the ground sooner rather**
22 **than later. Right?**

23 A. Yes, sir.

24 **Q. But, Mr. Sprague, do you want to do that at the**
25 **expense of efficient and effective production to prevent**

1 **waste?**

2 A. No, we would not want to have waste at all in
3 our development programs. We would want to be able to
4 drill and complete the wells and bring as much oil forward
5 as humanly possible while ultimately developing each of
6 the different development blocks.

7 MR. FELDEWERT: Okay. That's all the questions
8 I had, Mr. Examiner.

9 EXAMINER BRANCARD: Thank you.

10 MS. BENNETT: Mr. Examiner, may I ask some brief
11 recross questions, please.

12 EXAMINER BRANCARD: Brief. Brief.

13 RECROSS EXAMINATION

14 BY MS. BENNETT:

15 Q. **Mr. Sprague, in response to questions from Mr.**
16 **Feldewert you described optimization and efficiencies as**
17 **reduction in surface facilities and capital costs. Is**
18 **that right?**

19 A. When we were discussing after the Marathon trade
20 acquisition for Devon and looking at the development of
21 that three-mile section, or three-mile versus
22 two-mile-and-a-half block, ma'am?

23 Q. **Yes. Or just more generally, I'm sorry, the**
24 **benefits of drilling three miles versus shorter laterals**
25 **from a capital perspective.**

1 A. The benefit of drilling it, we're receiving --
2 we are able to access the same reservoir hydrocarbons with
3 reduced capital and reduced surface footprint, yes.

4 **Q. But here it's Devon's position that Cimarex's**
5 **Section 1 won't be stranded. Right?**

6 A. It will not be stranded. That one-mile section
7 could be developed on one mile.

8 **Q. And that would require surface facilities, would**
9 **it not?**

10 A. Yes, it would.

11 **Q. And that would require vertical cuts into the**
12 **rock, would it not?**

13 A. Yes, it would.

14 **Q. So there's really no capital efficiency or**
15 **efficiencies from a three mile/one mile as opposed to a**
16 **two mile/two mile, is there?**

17 A. No, there would not be any capital efficiencies
18 for a three mile/one mile versus a two mile/two mile.

19 **Q. Okay. On the Wild Salsa wells, those wells are**
20 **only two-mile wells, right?**

21 A. That is correct.

22 **Q. So any perceived or purported parent effect**
23 **would only affect, immediately anyway, affect your**
24 **two-mile laterals, your ability to drill two-mile**
25 **laterals. Right?**

1 A. The parent/child interaction would happen for
2 just the first two miles of the gross perforated interval.

3 **Q. And right now Devon could drill two-mile**
4 **laterals; is that right?**

5 A. That would be correct. We could drill two-mile
6 laterals. That would just be at the expense --

7 **Q. And it's --**

8 A. Sorry.

9 **Q. No, I'm sorry. No, go ahead. I apologize.**

10 A. I just said that would be at the expense of
11 leaving our undeveloped 160-acre tract in Section 12.

12 **Q. And you -- so Devon does not want to leave**
13 **undeveloped a 160-acre tract in Section 12 but is willing**
14 **to sacrifice Cimarex's entire section. Is that it?**

15 A. We were not trying to sacrifice any of Cimarex's
16 section. We recently just successfully drilled and
17 completed one-mile wells in our program that competed with
18 our two- and three-mile wells, so anywhere that we have
19 the ability to do any of the lateral length we can
20 actually execute an economic program.

21 **Q. And I apologize. That question didn't come out**
22 **quite right, I think.**

23 **Cimarex has -- in your testimony has proven**
24 **it can drill two-mile wells as effectively as Devon can.**
25 **Is that right?**

1 A. Looking at the production from the Upper
2 Wolfcamp we are aligned in our cumulative oil per GPI
3 versus time.

4 **Q. So taking that as true, then your 160-acre tract**
5 **in Section 12 would not be in any way harmed or unaccessed**
6 **by virtue of two two-mile tracts as the laterals.**

7 A. It could not be, as long as the timing aligned
8 with the way Devon's is currently executing our Sneaky
9 Snake program and able to put the --

10 (Note: Reporter inquiry.)

11 THE WITNESS: I'm sorry, Mary.

12 A. (Continued) I was just saying that for the
13 160-acre tract that was referenced, it's just that as long
14 as the timing aligned with our Sneaky Snake acreage and
15 our development we wouldn't have it stranded and the value
16 would be pulled forward for both overriding royalty
17 interest owners and any working interest owners in those
18 two-mile tracts.

19 MS. BENNETT: Thank you. That's the end of my
20 questions. I appreciate it again.

21 THE WITNESS: Yes, ma'am.

22 EXAMINER BRANCARD: Mr. Feldewert, are we done
23 with this witness?

24 MR. FELDEWERT: Yes, sir.

25 EXAMINER BRANCARD: Fine. So we are going to

1 take a break here now. Is that okay, Ms. Macfarlane?

2 (Note: The reporter responded.)

3 EXAMINER BRANCARD: All right. So when we get
4 back we are going to start, I believe, I hope with
5 Cimarex's case. I see in front of me a whole field of
6 dead horses of issues here, so hopefully we could move
7 along a little faster. If not, we will figure out how to
8 continue this matter.

9 So we will take a break here to 3:00 p.m.

10 (Note: In recess from 2:49 p.m. to 3:00 p.m.)

11 EXAMINER BRANCARD: It is 3:00 o'clock, Mountain
12 Daylight Time. Just want to have a sense, since we seem
13 to have lots of clever questions here for the witnesses,
14 how long this is going to go today and maybe tomorrow. I
15 am free tomorrow if we need to continue it. Just saying.

16 (Note: Discussion held off the record.)

17 EXAMINER BRANCARD: Why don't we start off with
18 Cimarex.

19 Let me see. Do you have any witnesses
20 today?

21 MR. DeBRINE: We do, Mr. Examiner. For our
22 first witness we would like to call Kelsi Henriques.

23 EXAMINER BRANCARD: Is it possible to swear
24 everybody at the same time or do you like to do just one
25 at a time?

1 MR. DeBRINE: We could do three at once if
2 everybody is on and listening.

3 (Note: Kelsi Henriques, Jennifer Blake and
4 Eddie Behm were duly sworn by Examiner
Brancard.)

5 EXAMINER BRANCARD: Thank you. Please proceed
6 with your first witness.

7 KELSI HENRIQUES,
8 having been duly sworn, testified as follows:

9 DIRECT EXAMINATION

10 BY MR. DeBRINE:

11 **Q. Could you please state your name for the record**
12 **Ms. Henriques.**

13 A. My name is Kelsi Henriques.

14 **Q. Have you testified --**

15 EXAMINER BRANCARD: I'm sorry, Mr. DeBrine.
16 Would you please spell your name for the
17 record. Thank you.

18 THE WITNESS: Yes. First name is K-e-l-s-i,
19 last name H-e-n-r-i-q-u-e-s.

20 **Q. Have you testified before the Division and had**
21 **your credentials as an expert in oil and gas matters been**
22 **accepted as a matter of record?**

23 A. Via affidavit, yes, I have.

24 **Q. Could you just provide the examiner with a brief**
25 **summary of your educational background and experience in**

1 **the oil and gas industry.**

2 A. Yes. I graduated from the University of Tulsa
3 with a Bachelor's degree in energy management in 2017.
4 While at the University of Tulsa I had four internships,
5 three of which were at Concho Resources. I have been
6 working as a landman since graduation in 2017, and I
7 started with Cimarex in November of 2020.

8 MR. DeBRINE: Mr. Examiner, I would move to have
9 Ms. Henriques qualified a an expert in petroleum land
10 matters.

11 EXAMINER BRANCARD: Any objections?

12 MR. FELDEWERT: No objection.

13 EXAMINER BRANCARD: So qualified.

14 **Q. Ms. Henriques, did you prepare some Direct**
15 **Written Testimony and exhibits for these cases --**

16 A. Yes.

17 **Q. -- for Devon?**

18 A. Yes.

19 **Q. Since you submitted your testimony and exhibits**
20 **have there been any new developments that are pertinent to**
21 **the issues presented by these competing pooling**
22 **applications?**

23 A. Yes.

24 **Q. Could you explain what those new developments**
25 **are.**

1 A. Yes. Yesterday, as mentioned previously, we
2 closed on the trade that we have been working on with
3 Concho/ConocoPhillips to acquire their acreage in
4 Section 12 in the proposed horizontal spacing units.

5 **Q. Did you discuss that potential trade in your**
6 **original testimony exhibits submitted in these cases?**

7 A. Yes.

8 **Q. Did the exhibits and your testimony take into**
9 **account the potential that the acreage would be acquired**
10 **from Concho and the effect it would have on the ownership**
11 **percentage in Cimarex's proposed spacing units?**

12 A. Yes.

13 **Q. What are those -- what I'd like to do is share**
14 **my screen, and if you could take a look at your Exhibit**
15 **B-6 and tell the examiner what the effect of the**
16 **acquisition of the Concho acreage with respect to the**
17 **working interest owners in the proposed spacing unit is.**

18 A. So after this acquisition of Conoco's interest
19 Cimarex now owns a 71 percent working interest in the
20 proposed spacing units in the west half of Sections 1 and
21 12, and this is reflected in the Post-Trade Percentage
22 Table.

23 **Q. Does the addition of this additional acreage by**
24 **Cimarex change any of your opinions or the opinions**
25 **reflected in your exhibits in your Prepared Testimony?**

1 A. No. Now that Cimarex has a large majority
2 interest in its proposed spacing unit, that only
3 reinforces my opinions that the granting of Devon's
4 application in seeking three-mile laterals and forcing
5 Cimarex to develop its acreage with one-mile laterals will
6 impair Cimarex's correlative rights and cause waste.

7 MR. DeBRINE: Mr. Examiner, I would like to move
8 the admission of the affidavit testimony of Kelsi
9 Henriques, and the land Exhibits B-1 through B-16 into the
10 record.

11 EXAMINER BRANCARD: Any objections?

12 MR. FELDEWERT: No objection.

13 **Q. Ms. Henriques, were you --**

14 EXAMINER BRANCARD: Mr. DeBrine, are we going to
15 get any other evidence that supports this trade?

16 MR. DeBRINE: We can present that right now, if
17 you would like, Mr. Examiner. We can bring it up onto the
18 screen. We have not distributed it, but I don't know
19 there is any dispute. I mean, none of parties typically
20 prove up their ownership in these cases through
21 assignments of their interests and how they acquired their
22 interest, it's just accepted on the testimony of the
23 landman as to what they own. But we would be happy to
24 provide that here.

25 EXAMINER BRANCARD: I'm anticipating -- Mr.

1 Feldewert, Mr. Garcia, do you see any need for further
2 documentation or will you accept the testimony of the land
3 person here?

4 MR. FELDEWERT: I suppose I would have -- I tell
5 you what, give me two or three questions. Would that --
6 maybe talk about that right now.

7 VOIR DIRE EXAMINATION

8 BY MR. FELDEWERT:

9 **Q. My question would be they say it's closed. I**
10 **mean, are there any stipulations or things of that nature**
11 **that remain to be accomplished to effectuate the trade?**

12 A. No, there are not. We would just need to --
13 which is in the process of being done, is submitting the
14 assignment to the courthouse to be recorded.

15 **Q. So the documents have all been executed?**

16 A. Correct.

17 **Q. And what's unclear, I think, because we don't**
18 **have the documents, is what ConocoPhillips ownership did**
19 **you acquire in the southwest of Section 12.**

20 A. They owned 100 percent of the ownership and we
21 acquired 84 percent of their 100 percent.

22 **Q. Okay. And I think that's -- I'm looking at your**
23 **Exhibit B-2, does that accurately reflect, then -- you say**
24 **Cimarex is in negotiations with Conoco for 84 percent of**
25 **Conoco's 50 percent working interest in Section 12.**

1 So I think you're saying the same thing,
2 right. You acquired 84 percent of their interest in the
3 southwest quarter.

4 A. Correct.

5 Q. An do you know what that translates to in terms
6 of the ownership in the west half of 12?

7 A. As to the entire west half, yes.

8 Q. Yeah, the entire west half of 12 in and of
9 itself. Because I don't think that's what you have broken
10 down anywhere in your exhibits, do you? Or maybe I missed
11 that.

12 A. Just --

13 Q. And I'm not very good at math, Ms. Henriques.

14 A. Okay. So, yeah --

15 EXAMINER BRANCARD: I was going to request the
16 parties provide that as a document itself, which is just
17 Section 12. Just the overlap percentages.

18 MR. FELDEWERT: Which would be the west half of
19 12, Mr. Brancard?

20 EXAMINER BRANCARD: Yes.

21 THE WITNESS: So in the west half of 12 it
22 should just be 42 percent.

23 Q. 42 percent Cimarex?

24 A. Sorry. If it's --

25 Q. I think that's right. That's what I --

1 A. Yeah.

2 MR. DeBRINE: And Mr. Examiner, we would be
3 happy to provide that, but we also have Conoco here as a
4 party, and I'm sure they can affirm on the record as to
5 the particulars of the transaction and what was sold by
6 them to Cimarex.

7 MR. FELDEWERT: You know, I don't know if we
8 need to do that. I mean, Ms. Henriques has testified
9 under oath.

10 **Q. So if I understand it, Ms. Henriques, when you**
11 **look at the west half, the 42 percent Cimarex, I guess**
12 **that's 8 percent ConocoPhillips, right?**

13 A. Yes. So if we are also looking -- if you notice
14 on the exhibit there is also the purple acreage in the
15 west half of the east half. We also acquired that
16 interest from them, as well, and that was the same. We
17 acquired 84 percent interest there.

18 So I think in paragraph 33 of my affidavit
19 I do stipulate as to as far as the entire section 12 we
20 own a 67.1875 percent interest, Devon would still own the
21 25 percent, and Conoco would be left with their 7.8125
22 percent.

23 **Q. And I appreciate that breakdown, but the**
24 **breakdown that I think is important here is the west half**
25 **of Section 12.**

1 Am I correct that Cimarex would have a 42
2 percent interest in the west half of Section 12 as a
3 result of this trade?

4 A. From my understanding. I would want to be able
5 to sit down and calculate that to give you an exact
6 confirmation.

7 Q. Okay. That's what we need.

8 Ms. Henriques, maybe you can clarify at the
9 break. I had in the west half as a result of the trade
10 that Cimarex would own 42 percent, ConocoPhillips would
11 own 8 percent, and Devon would own 50 percent of the west
12 half of Section 12. Does that sound about right?

13 A. Yes, that sounds about right.

14 EXAMINER BRANCARD: That's also the math I came
15 up with, too.

16 Mr. Garcia?

17 EXAMINER GARCIA: Your request for interest by
18 Section 12 on its own west half would work for me.

19 EXAMINER BRANCARD: Thank you.

20 MR. FELDEWERT: Then I have no problem, Mr.
21 Examiner, with moving on.

22 EXAMINER BRANCARD: You know, I didn't mention
23 this with your landman, Mr. Feldewert, but I would like to
24 see your percentages for the three-mile unit that you have
25 be updated based on this trade.

1 MR. FELDEWERT: Which, now that we have the
2 information, we can certainly do.

3 EXAMINER BRANCARD: All right. It sounds like
4 everybody is comfortable, then, with the new status here,
5 and I wish Ms. Ryan was here so I could drag her out and
6 embarrass her, but it seems like she left the meeting. So
7 we don't need to hear anything, then, from Conoco.

8 And we can go ahead with your witness, Mr.
9 DeBrine. Sorry for the interruption.

10 MR. DeBRINE: At this point, Mr. Examiner, I
11 will pass the witness for cross-examination.

12 MR. FELDEWERT: Already?

13 EXAMINER BRANCARD: Caught you off guard there,
14 Mr. Feldewert.

15 CROSS EXAMINATION

16 BY MR. FELDEWERT:

17 Q. Ms. Henriques, you have already -- so -- well,
18 let's do it this way.

19 I was curious. I was looking at your
20 affidavit, and in paragraph 26 you summarized the spacing
21 units that Cimarex seeks to create under their pooling
22 applications. And I want to draw your attention to
23 Case 22315, which is on page 6 of your affidavit at the
24 bottom.

25 A. Yes, sir.

1 Q. You state in there (Note: Internet freeze)...to
2 the Avalon as it would to the second Bone Spring. So is
3 there a reason, does the company still seek an independent
4 Avalon spacing unit, and if so, why?

5 A. (Note: Pause.) I don't know how to answer that
6 question at this time.

7 Q. I'm sorry?

8 A. I don't know how to answer your question at this
9 time.

10 Q. Okay. Uhm, now, when I look at -- may I have
11 sharing capabilities?

12 I want to go to what has been marked as
13 Cimarex Exhibit B-9. Do you have that in front of you,
14 Ms. Henriques? Let me know.

15 A. Yes.

16 Q. Okay. You point out in here some existing
17 development in the east half of what would be Sections 1
18 and 12, correct?

19 A. Correct.

20 Q. Now, the -- you show three wells, three two-mile
21 wells called your Coriander wells, in the east half of the
22 east half of Section 1 and 12?

23 A. Correct.

24 Q. Now, those are drilled in the Avalon?

25 A. I do not know.

1 Q. Okay. Do you -- let's see. And with respect to
2 these existing Coriander wells, I believe the first well
3 was permitted and drilled in 2017. Is that correct?

4 A. That sounds about correct.

5 Q. Okay. And that would have been, I think, the
6 1H.

7 Then, as I understand it, when we go over
8 to the west half of the east half up there in Section 1,
9 we have the Thyme API Fed 9H well.

10 A. Correct.

11 Q. And that was drilled after the spacing unit in
12 the east half of the east half was established, is one
13 they drilled in 2018?

14 A. I wasn't working at Cimarex at that time. I do
15 not know.

16 Q. Let me show you the -- I was hoping to show it
17 to you. I'm sorry. Devon Exhibit -- did you see the
18 Devon exhibit, Ms. Henriques, that had the article or the
19 information that Cimarex published about that Thyme well?

20 A. Yes, I saw the exhibit.

21 Q. And wasn't that, didn't it indicate that the
22 well was actually drilled sometime in 2018?

23 MR. DeBRINE: Mr. Examiner, I would object to
24 this line of questioning as beyond the scope of direct
25 exam. The witness already testified she wasn't working

1 for the company at that time and doesn't know the
2 particulars of drilling of that well. It's not going to
3 serve any useful purpose to ask her questions about a
4 document that was prepared before she started working for
5 Cimarex.

6 MR. FELDEWERT: My question is, uh, are we
7 saying that she does not know when it was drilled, even
8 after she saw this? I'm using it to refresh her
9 recollection, Mr. Brancard.

10 MR. DeBRINE: She doesn't have a recollection
11 because she wasn't there at the time. All you're doing is
12 showing her a document to read.

13 EXAMINER BRANCARD: That's what it looks like to
14 me. And if she agrees that it says what it says in the
15 document, that doesn't help us very much.

16 MR. FELDEWERT: Okay.

17 **Q. I believe you testified in your affidavit, Ms.**
18 **Henriques, that the company does not want to continue**
19 **one-mile development in the west half because it's not**
20 **prioritized on your drilling schedule.**

21 A. That is correct. One-mile wells are not
22 prioritized at this time.

23 **Q. So at this time Cimarex has other areas to drill**
24 **with longer laterals?**

25 A. We are seeking to develop in two-mile locations,

1 and that is what we were doing here with the Conoco trade
2 in order to get longer laterals and to develop Section 1
3 and 12 as two-mile wells.

4 Q. And I think you testified that if you, if Devon
5 prevailed here that your drilling of these one-mile wells
6 in Section 12 could be deferred as late at 2029.

7 A. That is correct.

8 Q. That would be the company's internal decision?

9 A. That is correct.

10 Q. Okay. Isn't it true that Cimarex has actually
11 been invoking the Division's Pooling Order within the last
12 year for the purpose of drilling one-mile wells?

13 A. I am unaware of what you are referring to.

14 Q. Are you familiar with the Parkway 16 State 4H
15 well?

16 A. That's not my area and I am not familiar with
17 it.

18 Q. So you're not aware there was a Pooling Order
19 that was issued by the Division in October of 2021 for
20 that particular one-mile well?

21 A. As I stated, that's not the area that I work,
22 and I am not familiar with the particulars of that case.

23 Q. Is there any witness that's going to be here
24 today that's familiar with that?

25 A. I do not believe so.

1 Q. Okay. Then, Mr. Examiner, for the record I
2 would want the Division to take notice of the Pooling
3 Order issued for the Parkway well with that. It's Case
4 22146, Division Order R-21893, which was issued in October
5 of 2021, just five months ago.

6 MR. DeBRINE: Mr. Examiner, we would object to
7 the request to take notice. Devon had the opportunity to
8 present affidavit and testimony to support the contentions
9 it was making in favor of its applications and any
10 evidence to oppose Cimarex's application. We've been
11 sandbagged throughout the day by the fact that none of
12 Devon's direct exam testimony exhibits did anything to
13 impeach or criticize Cimarex's applications. They have
14 chosen to lay in the weeds and do it all through rebuttal
15 exhibits, and now are asking to take notice of an Order
16 that we don't know anything about. We don't know it's a
17 well with an expiring lease or anything else. It has no
18 relevance and shouldn't be admitted to evidence or noticed
19 in this case.

20 MR. FELDEWERT: Well, I disagree.

21 EXAMINER BRANCARD: What is the possible
22 relevance of this Order?

23 MR. FELDEWERT: And that is, Mr. Examiner, that
24 Cimarex as a company picks and chooses when it's going to
25 drill one-mile wells, and as recently as five months ago

1 invoked the Division's pooling authority to drill one-mile
2 wells.

3 EXAMINER BRANCARD: We know everybody drills
4 one-mile wells still. They don't want to, but they do.
5 So thanks but no thanks.

6 Q. Ms. Henriques, I believe you state in your
7 affidavit that you understood that the ownership in the
8 west half of Section 12 was central to this case. Isn't
9 that right?

10 A. That is correct.

11 Q. In fact you called that west half of Section 12
12 the overlap acreage.

13 A. Correct.

14 Q. And as you have indicated, with the closure of
15 your trade with ConocoPhillips Devon still has the
16 majority of the working interest in that critical overlap
17 acreage at 50 percent. Correct?

18 A. I believe that our proposed spacing unit --
19 like, our proposed spacing units we have majority
20 interests. If you are just looking at Section 12, they
21 have 50 percent and we would have the 42 percent, but when
22 looking at our overlapping in regards to the horizontal
23 proposed spacing units, that is where we would have a
24 majority working interest.

25 Q. Just like Devon has a majority working interest

1 in its proposed spacing unit, right, Ms. Henriques?

2 A. Right.

3 Q. All right. So if the Division looks at the
4 overlapping acreage, which you point out is central to
5 this case, and you look in that ownership of that
6 overlapping acreage, Devon has the majority of the working
7 interest in the west half of 12, correct?

8 A. Right?

9 MR. DeBRINE: I'll object to the form of the
10 question, Mr. Examiner, in that 50 percent is not a
11 majority. You need 51 percent for a majority.

12 EXAMINER BRANCARD: How about 50.1 percent for a
13 majority.

14 Q. Devon has 50 percent, Ms Henriques, and Cimarex
15 has 42 percent and ConocoPhillips has 8 percent. Correct?

16 A. Correct.

17 Q. Okay. Now -- and I think, uh, it was -- would
18 it be -- your counsel made a point that it is important to
19 allow the parties to, in their opening, to develop acreage
20 when they own a majority of the interest. And when you
21 keep that in mind, when you acquired this acreage from
22 ConocoPhillips, you were aware, were you not, that Devon
23 had proposed the drilling of three-mile wells across this
24 acreage that you just acquired.

25 You were aware of that, right, Ms.

1 **Henriques?**

2 A. I was aware that they owned the northwest
3 quarter and we were actively seeking to acquire Conoco's
4 interest during that time.

5 **Q. And you were aware that that interest was**
6 **subject to a pooling proceeding for Devon's three-mile**
7 **wells where it has the majority of the interest.**

8 A. I was aware that it was subject to a pooling
9 proceeding.

10 MR. FELDEWERT: Okay. That's all the questions
11 I have, Mr. Brancard.

12 EXAMINER BRANCARD: Thank you. Wow. Now Mr.
13 Garcia.

14 EXAMINER GARCIA: I believe the Conoco trade
15 verification answered all my questions. I have none.

16 EXAMINER BRANCARD: Thank you.

17 Any redirect?

18 MR. DeBRINE: Just briefly, Mr. Examiner.

19 REDIRECT EXAMINATION

20 BY MR. DeBRINE:

21 **Q. Ms. Henriques, although you were aware that**
22 **Devon owned a working interest in Section 12 in the**
23 **southwest quarter, when did Cimarex first attempt to**
24 **acquire the acreage from COG and Conoco? How long has**
25 **that plan been in the works?**

1 A. It has been in the works since before I started
2 at Cimarex, so at least since before November of 2020.

3 Q. And in fact if we look at your exhibit with your
4 Proposal Letter that was sent to Conoco in March of 2021,
5 at that time you did not propose wells to Devon because
6 you did not even know that they owned an interest in the
7 proposed spacing unit for Cimarex's wells. Is that
8 correct?

9 A. Correct. We had ran title, and by the time
10 Devon had filed their assignment we had already finished
11 and were preparing to propose everything, so they did not
12 come up in our title search.

13 Q. And at that time you had already drilled
14 two-mile wells in the east half of Section 12 and
15 Section 1, correct?

16 A. Correct.

17 Q. And so you were just trying to fulfill your full
18 two-section development plan that you had for the
19 Corianders on Conoco's acreage?

20 A. That is correct.

21 Q. And is it your understanding at that time that
22 Conoco owned all the interest in the southwest quarter,
23 including the portion that was subsequently acquired by
24 Devon from Conoco?

25 A. Yes.

1 MR. DeBRINE: No further questions.

2 EXAMINER BRANCARD: Thank you.

3 I believe we are done with this witness.

4 THE WITNESS: Thank you.

5 MS. BENNETT: At this time we would like to
6 call, then, Jennifer Blake, Cimarex's geologist. And she
7 has been sworn in.

8 So if you're ready, I'm ready.

9 JENNIFER BLAKE,

10 having been duly sworn, testified as follows:

11 DIRECT EXAMINATION

12 BY MS. BENNETT:

13 Q. Good afternoon, Ms. Blake.

14 Can you please state your name for the
15 record and spell your name for the record.

16 A. My name is Jennifer Blake, J-e-n-n-i-f-e-r,
17 B-l-a-k-e.

18 Q. Thank you. You have not testified before the
19 Division, have you?

20 A. I have not.

21 Q. Did you include your resume as an exhibit in the
22 exhibit packet?

23 A. Yes, I did.

24 Q. Could you briefly summarize your identification
25 and experience for the examiners.

1 A. Sure. I attended Texas A&M for undergrad, where
2 I received my Bachelor's of Science in geology. Then I
3 attended the Colorado School of Mines for grad school,
4 where I received a Master's of Science in geology.

5 I've had two internships with oil and gas
6 operators, one of which was with Cimarex, beginning in the
7 summer of 2019. I continued my internship part time while
8 I finished my Master's until I began working full time as
9 a geologist for Cimarex in 2020.

10 And my time at Cimarex has been focused on
11 the Permian Basin, and my full-time work has been focused
12 on Lea County, New Mexico.

13 **Q. Great. Thank you.**

14 **With that, I would like to have Ms. Blake**
15 **qualified as an expert in geology.**

16 EXAMINER BRANCARD: Any objections?

17 MR. FELDEWERT: No objection.

18 EXAMINER BRANCARD: So qualified.

19 MS. BENNETT: Thank you.

20 **Q. Ms. Blake, I'm going to ask you a few questions**
21 **about your testimony and exhibits.**

22 **Did you prepare your Direct Testimony and**
23 **the exhibits that we submitted on your behalf?**

24 A. Yes.

25 **Q. Do you have any corrections to your testimony**

1 and exhibits?

2 A. Yes, I do.

3 Q. Okay. Let's go through those changes, and let
4 me -- I'll go ahead and pull up your declaration -- or
5 your affidavit while we're talking, so we can be clear
6 about which exhibits you're referring to. So give me just
7 a second here.

8 Okay. Let me minimize this just a bit.

9 Are you able to see your affidavit?

10 A. I see your File Explorer.

11 Q. How about now?

12 A. Yes.

13 Q. Okay. Great. Okay. What is the first change
14 you would like to make to your affidavit?

15 A. Go to paragraph 10.

16 So Exhibit C-3-C, the cross section is
17 actually C-3-D, so the bullet that starts C-3-C should be
18 changed to C-3-D.

19 And similarly that next bullet should be
20 changed to C-3-C.

21 Q. Great. And then --

22 MR. FELDEWERT: Hold on one second. So the
23 third bullet point is 3-C-D and the fourth bullet point is
24 C-3-C?

25 THE WITNESS: Correct.

1 **Q. What paragraph is the next paragraph that needs**
2 **to be changed?**

3 A. Paragraph 12. It's very similar. So Exhibit
4 C-4-C should be changed to C-4-D, and then the next bullet
5 Exhibit C-4-D should be changed to C-4-C.

6 **Q. Thank you. Is there another change?**

7 A. There is one final change. So paragraph 24,
8 Exhibit C-6-I, the Third Bone Spring Gross Isopach Map,
9 the first sentence should read: In the area of interest
10 there is a localized thick Third Sand with some of the
11 thickest areas being located over Cimarex's proposed HSU.

12 And then the rest stays the same, reading:
13 The formation is about 440 to 460 feet thick and Cimarex's
14 proposed HSU in Sections 1 and 12, which thins to the
15 south of Section 12 into Devon's proposed HSU.

16 **Q. Thank you.**

17 EXAMINER BRANCARD: Is it possible for you-all
18 to file a revised affidavit for our case file?

19 MS. BENNETT: Yes, we would be happy to.

20 EXAMINER BRANCARD: Thank you.

21 MS. BENNETT: Yeah, that was definitely my fault
22 on that, especially the C-6-I you can see that it was
23 definitely my fault. So apologies for that.

24 All right. Thank you for those
25 corrections, and we will definitely prepare a revised

1 affidavit.

2 Q. With those -- I'm sorry, did you also prepare
3 rebuttal exhibits for today's hearing?

4 A. Yes, I did. These are Exhibits RC-7 to RC-9.

5 Q. And so that these three exhibits, right, RC-7,
6 -8 and -9?

7 A. Correct.

8 Q. So with the changes that we discussed today, do
9 you adopt your testimony and exhibits?

10 A. Yes.

11 Q. Thank you.

12 MR. BRANCARD: Okay. Ms. Bennett, have we seen
13 these rebuttal exhibits?

14 MS. BENNETT: Yes, Mr. Brancard. They were
15 filed yesterday.

16 EXAMINER BRANCARD: Okay.

17 MS. BENNETT: Uhm --

18 EXAMINER BRANCARD: Mr. Feldewert, you received
19 a copy of these?

20 MR. FELDEWERT: I received a copy of them, yes.

21 I guess I'm wondering why they are
22 rebuttal.

23 And I'm assuming she'll be talking about
24 them.

25 MS. BENNETT: Yes, she will be.

1 MR. FELDEWERT: Because one of them looks like
2 it's just a repeat of an existing exhibit, but maybe I'm
3 missing something, Ms. Blake.

4 MS. BENNETT: Yes.

5 **Q. So let's quickly talk through your rebuttal**
6 **exhibits.**

7 EXAMINER BRANCARD: Do you want to admit these
8 at this time, or...

9 MS. BENNETT: I would like to admit Ms.
10 Blake's -- or I move to admit Ms. Blake's Affidavit and
11 her exhibits C-1 through C-9, which include the rebuttal
12 exhibits.

13 MR. BRANCARD: Objections?

14 MR. FELDEWERT: Mr. Brancard, I have no problem
15 with the admission of her, I guess it would be an updated
16 affidavit, and the exhibits referenced in her affidavit,
17 but I would like to hold off on the admission of what they
18 purport to be rebuttal exhibits until I understand exactly
19 what they are saying there.

20 EXAMINER BRANCARD: So these will -- at this
21 point admit Exhibit C with the current attachments that
22 were filed a week ago, and we also have no objections to
23 corrections to Exhibit C that will be filed.

24 Please proceed.

25 MS. BENNETT: Thank you.

1 **Q. Ms. Blake, looking first at the exhibit that I**
2 **have up in front of me, RC-9, can you explain for the**
3 **Division why you created this exhibit and what you're**
4 **rebutting in terms of Devon's testimony.**

5 A. Sure. So this is a repeat of my original
6 exhibit which is C-3-D. I did make a few updates to it,
7 so if you -- it's a three-mile Cross Section going from D
8 to D prime in the Coriander and Sneaky Snake area.

9 And in Devon's exhibits they showed a
10 Sneaky Snake gunbarrel plot and they used the Triste Draw
11 25 Fed 1H well as their type log, and that well is the
12 right-handmost well on this cross section. And I
13 extrapolated where they showed their Avalon landings in
14 reference to this well, and it shows them landing both the
15 Upper and Lower Avalon landing in the most chert-rich
16 intervals in both the Upper and Lower Avalon, and we see
17 this as suboptimal landing targets, based on what we've
18 talked about earlier, the chert being -- destroying bits
19 and being very hard and difficult to drill through.

20 **Q. Thank you. And so to confirm, this is a slide**
21 **that you prepared or updated to address Devon's assertion**
22 **that the Avalon is laterally consistent; is that right?**

23 A. Correct. That's what the original slide was
24 supposed to identify. You can see just looking across
25 this short area here that no single chert-rich interval

1 can be mapped out continuously in an area.

2 Q. Thank you. Now, would you please explain to the
3 Division what did you do to create Rebuttal Exhibit C-8.

4 A. Sure. So this is the same -- a cross section
5 using the same wells that Devon showed in their A to A
6 prime Cross Section in their Exhibit B-4.

7 As we discussed earlier, their Cross
8 Section was so zoomed out, the resolution was so coarse
9 that you could not make out the variability within the
10 Avalon and identify the chert-rich intervals, so I shot in
11 the same wells that they showed in that Cross Section but
12 I was zoomed into the Avalon so you can see the
13 variability and see the chert-rich intervals which were
14 identified here in the yellow-shaded boxes, and you can
15 see how variable it is and laterally inconsistent.

16 Q. Thank you. And so you prepared this exhibit to
17 zoom in and provide more detail than Devon did.

18 A. Correct.

19 Q. But it's the same three logs that Devon used.

20 A. That's correct.

21 Q. Okay. And then -- sorry, I'm apparently going
22 in reverse order.

23 Let's look at RC-7, then. Can you please
24 explain to the examiners or to the Division why you
25 prepared RC-7 and how it is related to the testimony that

1 Devon just submitted this week. Or last week, excuse me.

2 Q. Okay. So in their exhibits and affidavits they
3 interpreted our Lower wolfcamp landing as being in the
4 Wolfcamp XY Sands, and this is evidence to show that that
5 is not the case.

6 So we -- the TVDs that we proposed with our
7 Lower -- with our Wolfcamp wells were indicated that the
8 TVDs were representative of the surface hole location, and
9 the TVDs we gave were 12,330 feet. And the structure map
10 on the right shows the structure of the face of the Y
11 Sand, and in the surface hole location in the north of
12 Section 1 you can see that the base of the Y sand is
13 roughly about 12,270 feet, so our TVDs indicate that we
14 are landing below the Wolfcamp XY Sands.

15 MS. BENNETT: Thank you. With that I would like
16 to renew my request to admit Rebuttal Exhibits C-7, C-8
17 and C-9.

18 MR. FELDEWERT: May have I ask one question,
19 Mr. Examiner --

20 EXAMINER BRANCARD: Yes, you may.

21 MR. FELDEWERT: -- before they are admitted.

22 VOIR DIRE EXAMINATION

23 BY MR. FELDEWERT:

24 Q. I'm trying to figure out, Ms. Blake, you
25 mentioned that RC-9 is a repeat of your Exhibit C-3-D

1 **Okay. I did not follow what the update is.**

2 A. Okay. I can clarify that.

3 On the last log the well sticks -- the
4 black lines with the round black circles on the log, do
5 you see those?

6 **Q. Yes. Thank you. Yes.**

7 A. Those are supposed to represent Devon's Upper
8 Avalon and Lower Avalon landings as they showed on their
9 gunbarrel plot in their exhibits.

10 So I added those and then I added the text
11 box off to the left to explain that.

12 **Q. Oh, I see. So that's their proposed landings in
13 the Avalon Interval, Devon's proposed landings.**

14 A. Yes, as referred on the gun barrel plot that
15 they provided.

16 **Q. Gotcha. Okay. Thank you.**

17 **No objection, Mr. Examiner.**

18 EXAMINER BRANCARD: So we are admitting at this
19 point RC-7 through -9, is that correct, Ms. Bennett?

20 MS. BENNETT: That's correct.

21 EXAMINER BRANCARD: So admitted.

22 MS. BENNETT: Thank you. At this point I will
23 turn Ms. Blake over for cross-examination.

24 EXAMINER BRANCARD: Okay. Mr. Feldewert.

25 MR. FELDEWERT: Thank you.

1 CROSS-EXAMINATION

2 BY MR. FELDEWERT:

3 Q. Ms. Blake, let's stay on RC-7-9 since you have
4 that out in front of you, right?

5 A. I have it, yes.

6 Q. Okay. And you mentioned that you also did
7 RC-7-8 to map the Avalon Interval; is that right?

8 A. Yes, I did.

9 Q. And these are the intervals that Devon has
10 successfully navigated and drilled?

11 A. Yes, that's correct.

12 Q. Now, with respect to RC-7.

13 A. Okay.

14 Q. If I'm understanding you correctly this is for
15 the purpose of demonstrating that Cimarex is proposing to
16 place the Upper Wolfcamp wells in the Wolfcamp A zone,
17 correct?

18 A. Yes.

19 Q. And that's that shaley zone that was discussed
20 previously today; is that right?

21 A. That's correct. When I go to -- let me see
22 here. Hold on a sec.

23 Uhm, are you aware, Ms. Blake, that other
24 operators are placing Upper Wolfcamp wells in the Sands?

25 A. We have seen other operators place wells in the

1 Sands and the Wolfcamp A, yes.

2 Q. Okay.

3 A. And we have also done that ourselves, not in
4 this area.

5 Q. And those operators that have placed it in the
6 Sands and in the Wolfcamp A shales, they have done that to
7 effectively drain what you identified on your exhibit as
8 three reservoirs?

9 MS. BENNETT: Mr. Examiner, I'm going to object
10 to that question because she doesn't know what other
11 operators are -- the reasons behind what other operators
12 do. I think if you wanted to keep this to her
13 understanding and her opinion, but she certainly wouldn't
14 know what, unless she's had conversations with other
15 operators.

16 EXAMINER BRANCARD: Well, she can let us know.

17 MS. BENNETT: Okay.

18 A. I have not had conversations with other
19 operators, no.

20 Q. So you don't know why they are placing wells in
21 both the Upper Wolfcamp Sands and the Upper Wolfcamp A
22 zones.

23 A. When I said that other operators target those, I
24 did not necessarily mean that they targeted, like Devon's
25 proposal in a wine rack. I meant operators do target the

1 Y Sands and X Sands sometimes, and also target that A
2 shale.

3 Q. And your exhibit that you have submitted,
4 Exhibit C-6-C, identifies three separate reservoirs in the
5 Upper Wolfcamp Interval, correct?

6 A. We do not view those as three separate
7 reservoirs. We view the Upper Wolfcamp and Third Bone
8 Spring Sands as one flow unit, and I believe your, or
9 Devon's reservoir engineer also discussed this as being
10 one flow unit.

11 Q. When I look at your exhibit you identify them as
12 Wolfcamp A as a reservoir, right, on your Exhibit C-6-C.

13 A. Yes, those intervals act as reservoir sands,
14 correct.

15 Q. And then you somehow show what you call -- you
16 call it a frac barrier above the Wolfcamp A reservoir.

17 A. I say frac barrier/baffle. And so baffle is a
18 looser term meaning that it can hinder determine or slow
19 down the upward growth of fractures. It does not mean
20 that these carbonates will completely separate these two
21 zones.

22 Q. So you call it frac barriers/baffles.

23 A. Correct.

24 Q. Did you create this exhibit?

25 A. I did.

1 Q. So this is your language, right?

2 A. Yes, sir.

3 Q. Okay. And in fairness you identify that blue
4 section there as carbonates identified as low gamma ray,
5 low porosity and high resistivity barrier, right?

6 A. Yes, sir.

7 Q. Okay. And you show that above the Wolfcamp A.
8 And then when we get into the sands, that
9 yellow line at the top, that would be -- I think some
10 people call that the X Sands. Is that correct?

11 A. I'm sorry, I'm not sure where you're referring
12 to exactly.

13 Q. I'm on your Exhibit C-6-C.

14 A. Yes, I'm looking at that.

15 Q. And I'm looking at -- I'm above the Wolfcamp A.

16 Maybe I should do it this way.

17 So the reservoir at the bottom below what
18 the call the frac barrier/baffles, that's the Wolfcamp A
19 shale, a shaley zone?

20 A. Yes, sir.

21 Q. And above that you have a yellow line that you
22 identify as a reservoir. That would be what some
23 operators, and perhaps Cimarex, call the Y Sands; is that
24 correct?

25 A. Yes.

1 **Q. Okay. You then show on your exhibit a second**
2 **reservoir which some operators identify as the X Sands.**
3 **Correct?**

4 A. Yes.

5 **Q. And you don't show any frac barriers or baffles**
6 **between the Y Sands and the X Sands.**

7 A. Not off to the right, but if you look at the
8 left-two-most logs, there are frac baffles. So those blue
9 shaded areas that are carbonate rich, those are frac
10 baffles that exit within the Wolfcamp Sands Interval.

11 **Q. Okay. And that, as you said, could inhibit the**
12 **fractures.**

13 A. It could hinder, slow them down, yes.

14 **Q. Okay. So we may have somewhat of a barrier,**
15 **frac barrier, or I'll call it a baffle, between the Y**
16 **Sands and the X Sands. Is that what you're saying?**

17 A. Yes. Well, no, not a barrier, but I -- from the
18 HFTS II data we believe that Wolfcamp A wells will access
19 the Wolfcamp Sands Interval.

20 **Q. Okay.**

21 A. Because we know fractures grow upwards. We are
22 not as concerned about the carbonates within the Upper
23 Wolfcamp, we are more concerned -- or excuse me. Well,
24 yeah, the carbonates within the Wolfcamp Sands Interval,
25 we are more concerned with the carbonates at the top of

1 Wolfcamp and the base of the Third Sand.

2 Q. But you'll agree with me that there is
3 sufficient evidence of what you call frac barriers or
4 baffles in these three Upper Wolfcamp reservoirs that
5 there could be a difference of opinion there. Correct?

6 MS. BENNETT: Objection: Mischaracterizes the
7 witness's testimony.

8 MR. FELDEWERT: I'm asking whether she believes
9 there could be a difference of opinion because of the frac
10 barriers and baffles that she sees in the Upper Wolfcamp.

11 MS. BENNETT: And I don't think she testified
12 that she saw a frac barrier in the same place that you're
13 intimating that she did. So I think if you maybe back up
14 just a little bit, that might be helpful for her.

15 Q. Ms. Blake, do you understand my question?

16 EXAMINER BRANCARD: If she can remember it.

17 The witness can agree or disagree with the
18 statement, so...

19 A. I believe you're asking about the carbonates
20 within the Upper Wolfcamp Interval, that there could be a
21 difference of opinion on whether those are considered
22 baffles or barriers. Is that what you're asking?

23 Q. Yes.

24 A. Yes, sure.

25 Q. Okay.

1 A. I --

2 Q. And would you?

3 A. I --

4 Q. You don't --

5 EXAMINER BRANCARD: Mr. Feldewert, she wasn't
6 finished answering your question.

7 A. I would like to point out that Dr. Peryam,
8 though, Devon's geologist witness, also agreed, though,
9 that these carbonates would not be acting as barriers,
10 where that the Wolfcamp and -- the Upper Wolfcamp and
11 Third Sands would not be communicating.

12 If I'm remembering correctly.

13 Q. The question, Ms. Blake, is how much
14 communication. Correct?

15 A. Correct.

16 Q. Okay. And because of what you identified in
17 here, and I'm using your language, frac barriers and
18 baffles, there could be -- we really don't know the extent
19 of the communication. Is that fair?

20 A. Yes, that's fair. But we believe that the
21 frac -- the carbonate that is in the Upper Wolfcamp and
22 Lower Third Sand, there's more carbonate there, it's
23 thicker, so that has a higher probability of acting as a
24 baffle; and therefore we think it's best to land our wells
25 above that, and so we can access the Third Bone Spring

1 Sand reserves that are proven to be in this area.

2 Q. I totally understand the independent nature of
3 the Third Bone Spring Sand as you're representing it here.
4 My question had to do with the Upper Wolfcamp.

5 A. Yes, sir. Sorry.

6 Q. Okay. Fine. Now I'm looking at your Exhibit
7 C-6-E, as in Edward.

8 A. Yes.

9 Q. You represent that in the upper-left-hand side
10 that the Wolfcamp X Sand is not a common target this far
11 north. Do you see that?

12 A. Yes.

13 Q. Okay. What about the -- you were very careful
14 to say the X Sand, you didn't say anything about the Y
15 Sand.

16 A. Yes. So this was --

17 Q. Isn't it true that operators have targeted the Y
18 Sand in this area?

19 A. If I created a map of the -- the same map of the
20 Wolfcamp Y Sand, it would show a few wells just offset so
21 down in the southeast corner, but it would not show any
22 more Y Sands -- excuse me, I'm sorry. I'm looking at the
23 black inset box. So in that box it would show a few more
24 Y Sand wells in the southeast corner, but how I or we have
25 interpreted the Wolfcamp landings in the rest of the box,

1 we do not say that there's any more in there.

2 Q. But isn't it true that EOG and XTO and Matador
3 have targeted these Upper Wolfcamp Sands?

4 We -- the EOG are the wells that I was referring
5 to that would show up in that southeast corner. We
6 interpret Matador's Rodney Robinson wells as being
7 Wolfcamp A, and we also interpret -- do not interpret
8 OXY's Avogato well, the 35H, I believe, uhm, we interpret
9 that as also being Third Sand, we do not think that is a
10 Wolfcamp Sands well.

11 It's just a difference of interpretation,
12 because as the previous exhibits showed in the Cross
13 Section, carbonates are prominent in this area and so it
14 makes correlating the tops difficult. So there's
15 differences of opinion in this area.

16 Q. So is it your opinion, Ms. Blake, that the
17 Wolfcamp X and Y Sands that you have identified on your
18 exhibit as two reservoirs, your statement is that no other
19 operator is targeting those sands in this area?

20 Is that your opinion?

21 A. They are not. It's my opinion that they are not
22 preferentially landing in those laterals.

23 Q. But isn't true that they are landing in those
24 sands, landing wells in those sands?

25 A. Not in that black box. It's not as common as a

1 Third Bone Spring Sand target.

2 Q. I'm not asking for relative, whether it's common
3 or not, I'm asking you whether they have landed horizontal
4 wells in the X or Y Sands in this area.

5 A. Only in the southeast corner where the Danger
6 Noodles are located. Just south of that are OXYs -- or
7 not OXY's, excuse me, EOG's Wolfcamp Y Sand wells, and
8 those are the only wells. Anything to the west or north
9 or northwest of that southeast corner of that black box, I
10 would say no.

11 Q. So if we go to your Exhibit C-6-F. Turn to that
12 for me, please.

13 A. Yes, sir, I found it.

14 Q. Okay. When we look at the Matador Rodney
15 Robinson, you say "Upper Wolfcamp Stagger". Do you see
16 that?

17 A. Yes, sir.

18 Q. And it's your opinion that none of those wells
19 in the Upper Wolfcamp are in the X or Y Sands?

20 A. It is an interpretation, and we have interpreted
21 the wells that we have directional surveys for landing in
22 the Upper A shale, not in the sands.

23 Q. And then I see the Titus Wild Salsa down right
24 next door, you say "Upper Wolfcamp Stagger". And you're
25 telling me that in that circumstance they have not landed

1 **a well in either the X or the Y Sands? That's your**
2 **opinion?**

3 A. Yes, that's my opinion. When I say Upper
4 Wolfcamp Stagger, actually I'm saying Third Bone Spring
5 Sand and Upper Wolfcamp Stagger, meaning they are
6 staggering between the Upper Wolfcamp A and the Third
7 Sand, just as we are proposing.

8 **Q. And when you get to Devon Danger Noodles I see**
9 **the same terminology. But that's not correct, is it?**

10 A. No, sir. That was a mistake on our end. We
11 looked at those wells before we had directional surveys,
12 and based off of the TVDs that were on the APDs we
13 interpreted them landing in the Third Bone Spring Sand.

14 I have since looked at that and I do agree
15 that they are in the Wolfcamp.

16 **Q. Have you since looked at either the Matador**
17 **Rodney Robinson or the Titus Wild Salsa?**

18 A. I did. I checked those, as well as the OXY
19 Avogato wells.

20 **Q. The OXY Avogato is just in the Third Bone Spring**
21 **Sands, right? Would you agree to that?**

22 A. Yes, sir.

23 **Q. Okay. Other than -- isn't there one well that's**
24 **in the Sands, in the Wolfcamp Sands?**

25 A. Not according to us. We interpret it as being

1 as the Basal Third Sand for that one well.

2 Q. Okay. Now, I see that you created some Isopach
3 maps. You recall that, right?

4 A. Yes, I do.

5 Q. Would you agree with me that to properly analyze
6 the productivity of a reservoir that you look at porosity?

7 A. Yes, sir, that's an important factor.

8 Q. And you look at water saturation?

9 A. Yes.

10 Q. And you look at resistivity?

11 A. Yes.

12 Q. Okay. And when I look at your Isopach maps it
13 appears to me that you only map resistivity.

14 A. Which maps are you referring to specifically?

15 Q. Let's go to your C-6-K.

16 A. This map is just a Gross Isopach. It does not
17 use any logs to create it.

18 Q. So it doesn't take into account porosity or
19 water saturation?

20 A. No, sir. I do have a net reservoir map which
21 uses gamma ray, and we have looked at porosity and a cross
22 section view, and we have nearby offsets which indicate --
23 which all show low water press in the Third Sands in this
24 area.

25 Q. But I'm looking at what you presented, right?

1 I'm looking at your Isopach maps. And this one does not
2 map porosity or water saturation, right?

3 A. This map does not map that. True.

4 Q. And the same is true with your other Isopach
5 maps that you've presented?

6 A. Yes, that's true.

7 Q. And --

8 A. But I do show a net reservoir map -- I'm trying
9 to find where that is exactly -- and that uses a gamma ray
10 cutoff, and it -- well, sorry. Let me find the exhibit.

11 Well, I guess I have one for the Third Sand
12 in C-6-G, which is -- well, let me know when you're there.

13 Q. Okay. Now, --

14 A. So --

15 Q. This is a -- on the right-hand side, what are
16 you showing here?

17 A. This is a net, what I am calling a net reservoir
18 map of the entire Third Bone Spring Sand Interval on the
19 right, and it is -- it was created by netting up the
20 number of feet that have gamma ray values greater than 50
21 APIs, which cuts out the carbonates which are known to
22 have low porosity.

23 So in a sense this map is netting up the
24 sands which have high quality and high porosities.

25 And in this area, these -- the nearby Third

1 Bone Spring Sand wells show low water cuts.

2 Q. I'm just going by -- I'm looking at your map
3 here. I see GR greater than 50. That means gross
4 resist -- what does that mean?

5 A. Gamma ray is the GR.

6 Q. Gamma ray. And that measures resistivity?

7 A. No, it measures the amount of uranium, thorium
8 and potassium in the rock. It's a measure of the amount
9 of radioactivity in the rocks.

10 Q. Does this at all map a porosity (inaudible)?

11 A. Not directly, but indirectly it does, because
12 the rocks that have gamma ray values less than 50 API are
13 the carbonates which have the low porosity. The values
14 that are greater than 50 are the sands and silts in this
15 Third Bone Spring Sand Interval which have higher
16 porosities.

17 Q. What about water saturation?

18 A. It does not directly map water saturation, no.

19 Q. Okay. Now, I think you also testified about --
20 well, you have testified about the three-mile, proposed
21 three-mile wells. And I think you, in your affidavit, say
22 that you believe that they are risky.

23 A. Yes, sir.

24 Q. And that drilling and completion -- and using
25 your words, I'm going to say "more difficult".

1 A. Yes. We believe that in the third mile of a
2 three-mile well in this area in Lea County where we
3 have -- these formations are very deep and we have high
4 reservoir pressures, that it's going to be harder to
5 efficiently frac that last lateral -- or that last mile in
6 a three-mile well. And our engineer will get into this
7 more later, but we do see that we believe that Devon's
8 three-mile Wolfcamp wells do underperform two-mile wells
9 and we believe that it's for this reason.

10 Q. So let's talk about the drilling aspect of that.

11 Didn't you say the drilling is risky and
12 more difficult, or do you just mean that the completion
13 is?

14 A. With the drilling I was referring to the Avalon.

15 Q. Okay. And you believe the drilling in the
16 Avalon is more difficult. Is that what you're saying?

17 A. I believe that drilling a three-mile well in the
18 Avalon poses more risk, is riskier than drilling a
19 two-mile well in the Avalon.

20 Q. You are not saying, though, it cannot be done,
21 though, are you?

22 A. I am not saying it cannot be done.

23 Q. And -- maybe you have answered this. Is that
24 "more difficult," is that associated with all Formations,
25 or just the Avalon?

1 A. As far as geologic impediments, I see that as
2 the Avalon.

3 Q. Yeah. And is it just in this area, on this area
4 where the Sneaky Snake is, or in other areas? In other
5 words, how far out is this problem that you perceive in
6 the Avalon? How far does it exist?

7 A. The Avalon is known to have chert throughout it,
8 and I believe all of New Mexico. So I would expect it
9 to -- this problem/issue to exist everywhere in New
10 Mexico.

11 Q. Okay. And the drilling risk that you are
12 concerned about, is that associated -- what's the drilling
13 risk that you're concerned about? Just focus on the
14 drilling.

15 A. Sure. So the chert is hard and destroys bits,
16 and it's very inconsistent and you cannot predict it. I
17 know in one of Devon's rebuttal exhibits they talked
18 about, like, excellent well planning, but I don't -- you
19 can't predict the chert. It's going to come up, you're
20 going to run into it, and if both -- if we know that
21 two-mile wells in the Avalon work, I don't see why we
22 would risk it and not just have both operators drill
23 two-mile Avalon wells.

24 Q. Don't you have the same risk associated with
25 drilling two-mile Avalon wells?

1 A. I believe that it increases the farther you go.
2 And also Cimarex has drilled three two-mile Avalon wells
3 within Sections 1 and 12, so we are familiar with the
4 Avalon within -- less than half a mile away from where our
5 proposed horizontal spacing unit is, whereas I believe
6 Devon's closest Avalon wells are four miles away, at
7 least.

8 **Q. So you believe, because you have been**
9 **successful, that you can do the two-mile in the Avalon**
10 **even with the difficulties that you talked about?**

11 A. Yes. So we have proved that two-mile Avalon
12 wells are successful, so why not just have both operators
13 do two-mile Avalon wells. We believe that that's the most
14 optimal way to develop not only this Formation but all
15 Formations.

16 **Q. And Devon likewise believes three-mile wells**
17 **because they have had success with three-mile drilling.**
18 **You can understand that, right?**

19 A. I understand that, yes.

20 **Q. Good. Now, is the problem that you're worried**
21 **about with the drilling -- and I just want to finish this.**
22 **You mean that you wouldn't be able to get to the end point**
23 **with your wellbore? Is that the problem?**

24 A. No. I think it would be more costly. You would
25 have more wear and tear on your bit, you would have to

1 trip out more, and that's just more rig time. It's just
2 going to cost more to do that.

3 Q. Okay. So your concern is it's more costly.

4 A. Yes. And if you can't map these chert bodies
5 out maybe you're not necessarily landing in the best zone.

6 Q. So I just want to make sure I understand, Ms.
7 Blake. Correct me if I am wrong.

8 So when you talk about concerns about
9 drilling two- or three-mile wells, you point out that the
10 concern is that it's going to be more costly because of
11 the wear and tear on the drill bit because you don't know
12 where those cherts are located. Is that right?

13 A. Yes, sir.

14 Q. And is there anything else about the drilling
15 that you're concerned about in this chert area?

16 A. Not that I can think of right now.

17 Q. Then with respect to the -- you mentioned that
18 there is a completion risk. Is that right, or did I
19 mischaracterize you?

20 A. No, I think there is some risk there, as well.

21 Q. Maybe I ought to -- I don't want to put words in
22 your mouth. I'm trying to see what you said in your--

23 A. I believe I did say that, yes.

24 Q. -- affidavit. Let's you and I go take a look at
25 that so we're... (Note: Pause.)

1 So if I'm understanding it, you're saying
2 the risk of drilling in, there's a risk of completion? Is
3 that right?

4 A. Do you see that in my affidavit? I have not
5 found it yet. If you -- okay, I see it. Yes. So our --

6 Q. Just so we are on the same page, where are you,
7 Ms. Blake?

8 A. Well, I'm looking at paragraph 7 in the first
9 bullet point.

10 Q. Paragraph 7 in the first bullet. Okay. We are
11 both in the same spot.

12 You say makes drilling and completing wells
13 more difficult. Did you mean to say "in completing".

14 A. Yes, I did.

15 Q. With respect to completing, what do you mean?
16 What's the risk?

17 A. Similarly to the Wolfcamp three-mile argument,
18 we think that the third mile of a three-mile lateral will
19 be the most difficult to complete. It will be the most
20 difficult to get fractures to effectively propagate, and
21 these limestone and chert beds are very tight and they
22 will be difficult to fracture, and so we think that that
23 adds more risk, basically not being able to as effectively
24 frac the third mile of an Avalon well, just due to the
25 added limestone and chert.

1 Q. Okay. And that would then, in this case, relate
2 to the west half of Section 12?

3 A. Yes, sir.

4 Q. And the northwest quarter of Section 12 is owned
5 100 percent by Devon, right?

6 A. Yes.

7 Q. And the southwest quarter is owned now by
8 Cimarex and ConocoPhillips.

9 A. Yes.

10 Q. And the costs associated with drilling these
11 three-mile wells is going to fall primarily on Devon,
12 correct? To the extent to 79 to 80 percent?

13 A. Yes. But we would not be as concerned about the
14 costs but more the fact that our interest is in the third
15 mile of these laterals where we don't think that the fracs
16 will be effectively draining the reserves here, and so
17 that degrades our volume, that degrades our interest.

18 Q. And Devon has the ownership of the last half
19 mile of that?

20 A. But that would be -- that's true, but that's --
21 you guys believe that, apparently, drilling three-mile
22 wells is as efficient and effective.

23 Q. And Cimarex has no experience drilling
24 three-mile wells, do they?

25 A. Not in Lea County.

1 **Q. Okay.**

2 A. We have drilled three-mile wells in other areas
3 where there are lower reservoir pressures, much shallower
4 depths.

5 **Q. What depths? Let me ask this: What Formation?**

6 A. I don't work that area so I can't tell you off
7 the top of my head, but I know we've drilled three-mile
8 wells all the way in Texas close to the western edge of
9 the Delaware Basin, pretty much some of the shallowest
10 depths and shallowest reservoir pressures.

11 **Q. You say shallowest depths, shallowest reservoir
12 pressures, but you don't know the Formation?**

13 A. Well, the whole basin, all of the Formation is
14 shallow together, so if it's Bone Spring or Wolfcamp it
15 will still be shallower relative to the depths, the Bone
16 Spring and Wolfcamp depths here in Lea County.

17 **Q. And you're aware, and as you point out, Devon
18 believes it can accomplish this because it's actually done
19 this in this area. Correct?**

20 A. They have drilled them and frac'd them, that's
21 true.

22 MR. FELDEWERT: That's all the questions I have,
23 Mr. Examiner.

24 EXAMINER BRANCARD: Mr. Garcia.

25 EXAMINER GARCIA: Good afternoon, Ms. Blake. I

1 just have a few. Mr. Feldewert hit on a lot of them.

2 CROSS EXAMINATION

3 BY EXAMINER GARCIA:

4 Q. The east half of Section 12, are those Cimarex
5 already drilled wells in the Avalon? That's what it looks
6 like.

7 A. Yes, they are.

8 Q. Did you guys have lots of issues with chert in
9 that area?

10 A. I did not work here then but I have looked back
11 on those wells and the comments that we've left, and yes,
12 we did.

13 And I do actually have an exhibit from two
14 of the laterals, we have some mud logs that show the
15 significant amount of chert that we encountered.

16 Sorry. I have the exact exhibit. It's
17 Exhibit C-3-E if you care to look.

18 Q. Yeah. Is that in the primary exhibits or
19 rebuttal?

20 A. That's in the primary.

21 EXAMINER GARCIA: Okay. I was going to ask you
22 if you had an exhibit like this, but that answered that.

23 I believe that's all my questions.

24 THE WITNESS: Okay. Thank you.

25 EXAMINER BRANCARD: I don't have any questions,

1 but that is a cute dog that's behind you.

2 THE WITNESS: You could see that?

3 EXAMINER BRANCARD: Yeah.

4 THE WITNESS: Thank you.

5 EXAMINER BRANCARD: Redirect.

6 MS. BENNETT: Thank you, Mr. Brancard. Just a
7 couple of questions.

8 REDIRECT EXAMINATION

9 BY MS. BENNETT:

10 Q. Ms. Blake, do you recall Mr. Feldewert asking
11 you questions about your geology exhibits, whether they
12 included information on porosity, water saturation, et
13 cetera?

14 A. Yes.

15 Q. Are you familiar with -- you've looked over
16 Devon's exhibits, haven't you?

17 A. I have.

18 Q. And did you see any Isopach maps in Devon's
19 exhibits?

20 A. I did not.

21 Q. Any reservoir maps?

22 A. None.

23 Q. Did you see any exhibits that show water
24 saturation?

25 A. No.

1 Q. I'm going to share my screen just for a second.
2 Theoretically. I feel like at this point of screen
3 sharing we should all be pros but it still takes me a
4 minute to figure it out, so let me see if I can maximize
5 this.

6 Are you seeing Devon's exhibits right now?

7 A. Yes. Yes.

8 Q. I'm going to turn to Devon's Exhibit -- it's the
9 engineer affidavit, Mr. Sprague's affidavit. It's Devon
10 Exhibit B. And before I do that I'll try to make this a
11 just a little bit bigger so you can see it better.

12 Can you see Mr. Sprague's affidavit?

13 A. Yes.

14 Q. I am going to turn to page 3 of his affidavit.

15 Do you see this footnote here on page 3?

16 Can you read it?

17 A. Yes, I can read it.

18 Q. And have you seen this footnote before?

19 A. I have not, actually.

20 Q. Okay. So what do you see in that footnote?

21 A. It says: Devon's costs for Second Bone wells
22 are lower than the costs for Avalon or First Bone Spring
23 wells due the to the difficulty and additional time Devon
24 has observed when drilling the horizontal portion of the
25 wellbore in these shallower zones.

1 Q. And is that consistent with your testimony
2 today?

3 A. Yes, it is.

4 Q. Thank you. You mentioned when you were
5 preparing your exhibits that there's no control log in
6 Section 13 -- or no control well in Section 13. Is
7 that -- is that important for you when you're looking at
8 development?

9 A. Yes. So with -- with well planning, the more
10 well control you have, the better you can stay -- plan
11 your wellbore to best be able to stay in zone.

12 MS. BENNETT: Thank you. I have no other
13 questions. Thank you very much, Ms. Blake.

14 THE WITNESS Thank you.

15 MR. FELDEWERT: Mr. Examiner, I do want to take
16 advantage of Ms. Blake's knowledge, if I can, to circle
17 back to the question I asked of the land person that he
18 didn't know. If I may.

19 EXAMINER BRANCARD: Yes, you may.

20 MR. FELDEWERT: Ms. Blake, if you would look at
21 your exhibit, Exhibit B-9.

22 Do I have sharing capability here?

23 Do you have Exhibit B-9 in front of you,
24 Ms. Blake? It's not one of yours.

25 THE WITNESS: Yeah, I just have mine in front of

1 me.

2 MR. FELDEWERT: Okay. Let me see if I can bring
3 it up.

4 Okay. I think I can get it up here fairly
5 quick. Do you see it now?

6 THE WITNESS: Yes.

7 EXAMINATION

8 BY MR. FELDEWERT.

9 Q. Okay. Mr. Garcia asked you about those existing
10 wells that Cimarex has in the east half of Sections 1 and
11 12. And this depicts those, correct?

12 A. Yes.

13 Q. Okay. We have the Coriander two-mile and then
14 the Thyme API Federal 9H is the one-mile.

15 A. Yes.

16 Q. I believe you stated, and I just want to
17 clarify, these wells are all drilled in the Avalon?

18 A. That's correct.

19 Q. The company has not drilled in the First Bone
20 Spring.

21 A. That's true. That is because the First Bone
22 Spring is a relatively new landing zone in this area and
23 these wells were drilled almost four years ago. So that
24 is new knowledge to us.

25 Q. Gotcha. I think that's new knowledge to

1 everybody.

2 Okay. Thank you. That's all. Appreciate
3 your time.

4 EXAMINER BRANCARD: Thank you. Okay. We are at
5 4:30, and I'm wondering whether we should start this
6 witness or not. Judging from the length of this witness'
7 affidavit and rebuttal this could be a lengthy witness.

8 Mr. Feldewert, do you have a lot of
9 questions for this witness?

10 MR. FELDEWERT: Mr. Examiner, to be honest I
11 have not had a chance to take a look to see what I could
12 pair down. It's already been, uh -- yeah, but I suspect
13 it's going to be similar to what I just did on behalf of
14 Ms. Blake. So it's not that long.

15 I think it's up to you. I don't --

16 I think there's a possibility we could
17 finish tonight. I don't know how long the direct is going
18 to take.

19 EXAMINER BRANCARD: Ms. Bennett, Mr. DeBrine,
20 you do have rebuttal exhibits, correct?

21 MS. BENNETT: We do.

22 EXAMINER BRANCARD: Is it going to take a while
23 to get through those?

24 MS. BENNETT: I don't think so, but I would note
25 that in between the time we started Ms. Blake's testimony

1 until now it's been maybe an hour, hour and a half. So
2 it's up to the Division. We're here, we're ready, but I
3 also am cognizant of Ms. Macfarlane' length of day and our
4 witnesses' length of day. So totally up to you.

5 MR. FELDEWERT: We're off the record, I hope.

6 (Note: Discussion off the record.)

7 MR. RITTENHOUSE: Mr. Examiner, if I may. I
8 apologize.

9 Yes. So I have not yet entered an
10 appearance in this matter. Provided it is now extending
11 into tomorrow, I would kindly ask that you accept my
12 entrance of appearance in this matter on behalf of
13 ConocoPhillips Company.

14 EXAMINER BRANCARD: That's fine. You lucked out
15 as far as we didn't grill you about the great trade that
16 your company did.

17 MR. RITTENHOUSE: I was ready to at least try to
18 dodge those questions. Nonetheless, either myself or Ms.
19 Ryan will be available tomorrow, most likely myself. That
20 being the case, if you wouldn't mind, or Marlene please
21 send me that link information, as well, I would appreciate
22 it.

23 (Note: Discussion off the record.)

24 EXAMINER BRANCARD: Well, appreciate everyone.
25 It was a lot to get through here, but we've made real good

1 progress, and I think we can finish up really quickly
2 tomorrow morning and move forward.

3 Thank you all. We will see you tomorrow.

4 (Note: Time noted 4:36 p.m.)

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REPORTER'S CERTIFICATE

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I, MARY THERESE MACFARLANE, New Mexico Reporter
CCR No. 122, DO HEREBY CERTIFY that on Thursday, March 24,
2022, Volume 1 of the proceedings in the above-captioned
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