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PUBLIC HEARING
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

Pecos Hall, 1st Floor, Wendell Chino Building
1220 S. Saint Francis Drive
Santa Fe, New Mexico

TRANSCRIPT OF PROCEEDINGS
April 8, 2025
9:06 a.m.

HEARD BEFORE: HEARING OFFICER RIPLEY HARWOOD

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- BAYLEN LAMKIN, Member
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Cross-Examination Mr. Rankin

5

1 (Technical difficulty with reporter.)

2 HEARING OFFICER HARWOOD: Mr. Rankin,
3 will you rewind.

4 MR. RANKIN: Sure. It's a good thing
5 we didn't do much.

6 CROSS-EXAMINATION OF JOSEPH McSHANE

7 BY MR. RANKIN:

8 Q. Mr. McShane, I don't think we got just a
9 high summary of what your background is. You
10 started your undergraduate at Steven F. Austin
11 University in geology, correct?

12 A. Yes.

13 Q. And then you did some postgrad work
14 towards a master's degree, but didn't complete your
15 master's in geology, correct?

16 A. That's correct.

17 Q. Just give us a recap of -- just start with
18 your first job out of undergraduate.

19 A. I went to school at Chesapeake -- or
20 graduate school, I went to work for Chesapeake
21 Energy --

22 Q. Okay.

23 A. -- as an operations geologist starting
24 out. Worked multiple basins and then start -- also
25 while I was there, started to do appraisal work with

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1 different groups on potential active acquisitions.

2 Then after a few years went to work for
3 Petrohawk Energy, again, as a -- now as a
4 development geologist, helping put together
5 development plans for Petrohawk's South Texas
6 assets, including the Eagle Ford. And worked for
7 Petrohawk until BHP acquired Petrohawk, at which
8 time I ended up moving with the team, the ownership
9 team from Petrohawk.

10 And after about a year, we established
11 Halcon Resources, and I worked for Halcon, then, for
12 another few years, again working multiple basins
13 with Williston, the Tuscaloosa Marine Shale looking
14 at tight gas sands and -- in East Texas and the
15 Permian as well.

16 And then after that, I was -- I got
17 attached to a team that started -- there's a --
18 started private equity-backed company, Ajax
19 Resources. We operated in the Permian Basin in
20 Martin and Andrews County. And after three years we
21 sold the company to Diamondback, at which point I
22 worked as a consultant for a couple years until
23 coming to work for Empire.

24 Q. Going back to your time with Chesapeake,
25 that was your first oil and gas industry job; is

1 that correct?

2 A. While I was in graduate school, I worked
3 for a small company, EnerQuest, out of Plano. And I
4 was working the Applebee fields in East Texas, which
5 was Travis Peak, petit tight gas sands.

6 Q. Okay.

7 A. But it was just a part-time job while they
8 were -- they were funding my thesis work.

9 Q. While you're at Chesapeake, did you have
10 any experience with enhanced oil recovery?

11 A. No, I did not.

12 Q. Any experience with carbonate systems?

13 A. Yes.

14 Q. Where?

15 A. In East Texas, we -- working with the
16 James Lime, as well as the Cotton Valley Lime. And
17 then -- but primarily it was focused on tight gas
18 sands and then shales and conventional. But we were
19 also -- had to do a rotation through an
20 unconventional team that would do asset evaluations
21 around the -- around the globe. So we can look at
22 various plains throughout to see if there were any
23 assets we wanted to acquire.

24 Q. Okay. You said you hadn't -- didn't have
25 any experience in Chesapeake with enhanced oil

1 recovery. Did you have any experience with residual
2 zone operations or assessments or evaluations of
3 those types of projects?

4 A. Not operations. Obviously, I mean, at
5 Chesapeake, not -- no exposure to residual oil
6 zones. At Halcon, when we were set -- when we were
7 working Houliston, obviously there's some residual
8 oil zones in that area. But, again, they were
9 mainly on regional mapping and evaluation. It was
10 not in operations or development.

11 Q. All right. I'll get up to that point in a
12 moment. Just taking it in order here.

13 A. Um-hmm.

14 Q. Okay. So primarily, tight sands
15 unconventional for Chesapeake, correct?

16 A. That's correct.

17 Q. And at that time did you do any work in
18 the Permian Basin for Chesapeake?

19 A. Just some minor cross assets that they
20 need somebody to help put a well plan together or
21 something like that, but not directly, no.

22 Q. Nothing in the Central Basin Platform?

23 A. No.

24 Q. Okay. So Petrohawk is primarily the Eagle
25 Ford Shale; is that right?

1 A. Correct.

2 Q. Again, no enhanced oil recovery?

3 A. Not at this time, no.

4 Q. No carbonate?

5 A. No.

6 Q. Then you moved over to Comstock, correct?

7 A. Correct.

8 Q. And was that all shale or unconventional
9 sands?

10 A. Yes.

11 Q. No EOR, no enhanced oil recovery?

12 A. Correct.

13 Q. And no carbonate?

14 A. Correct.

15 Q. And then Halcon -- so did I pronounce that
16 correctly? Halcon?

17 A. Halcon.

18 Q. Halcon? Okay. This was more of a mix, it
19 sounds like. Some people for shale, some marine
20 shale. So there's some carbonates that you worked
21 on with Halcon?

22 A. Correct. You know, we had -- we had --
23 when I started with Halcon, when we established it,
24 I started working primarily the Williston Basin, but
25 we were also doing asset evaluations, kind of out of

1 our Denver office. And transferred down to Houston,
2 and then I -- again, working Eagle Ford Shale and
3 Tuscaloosa Marine Shale. We did not have any
4 carbonate assets other than the Dawson Chalk, but
5 nothing primary.

6 Q. When you say "nothing primary," what do
7 you mean by that?

8 A. We had some non-off acreage and acreage
9 that we picked up through various acquisitions, but
10 it was nothing that we were currently operating in.

11 Q. So at Halcon, there were no -- you didn't
12 have any enhanced oil recovery experience?

13 A. Correct.

14 Q. And no -- you mentioned assessing or
15 reviewing residual oil zones. What exactly did you
16 do for Halcon in that -- in that respect?

17 A. Well, it just -- primarily just -- you
18 know, when we were -- we would go in and review an
19 asset, we were aware, you know, during the mapping
20 process and during the evaluation of the data that
21 the operator would give us. We were aware that
22 there were residual oil zones present in the
23 Williston Basin primarily in North Dakota, western
24 North Dakota, but it was nothing that we worked and
25 operated in.

1 Q. How about --

2 A. We -- when we would see oil in place, but,
3 you know, no production or movable oil, we would be
4 aware that you had a primary -- primarily, probably,
5 an ROZ in place there.

6 Q. But you didn't undertake any formal
7 evaluation or assessment to confirm whether it was a
8 residual oil zone or what type of residual oil zone
9 it was?

10 A. No. We were not interested in that at
11 that time.

12 Q. Are there any ROZ place in -- up there at
13 this point?

14 A. I believe that they're -- they are working
15 to develop some by the Cobra operating -- operates a
16 residual oil zone. But, no, other than that, that's
17 the only . . .

18 Q. Okay. And then Ajax, this was most
19 primarily Permian development asset; is that right?

20 A. Correct. We purchased the asset from
21 W&T Offshore that was in -- on the Martin
22 County/Andrews area.

23 Q. It's all Texas side Permian?

24 A. Correct.

25 Q. All conventional shale or sands?

1 A. Correct.

2 Q. Any enhanced oil recovery experience
3 working for Ajax?

4 A. No.

5 Q. Okay. No carbonate experience?

6 A. No.

7 Q. Okay. And nothing on the residual oil
8 zone front?

9 A. Other than when we were evaluating assets
10 and we started seeing -- you know, if we would
11 have -- if we started seeing assets moving up
12 towards Ferguson and Seminole field just north of
13 our asset play that they were -- that they were
14 chasing residual oil zones up in that area, but no.

15 Q. So you're telling me that as you were
16 developing your acreage, you were aware that there
17 was some other operators looking at . . .

18 A. Correct. Because we were always
19 evaluating potential asset acquisitions in the
20 Permian, Delaware, and the Central Basin Platform.

21 Q. So you were tracking what -- the
22 activities in the Seminole and San Andres unit?

23 A. Correct. Because we were also evaluating
24 San Andres in our area as well.

25 Q. But you didn't, yourself, perform any work

1 to evaluate a potential development in the
2 San Andres in your acreage there?

3 A. No.

4 Q. Okay. And then -- and then you went solo,
5 right, as a geology consultant?

6 A. Yes, for the last few years.

7 Q. Okay.

8 A. Prior to coming to Empire, after we sold
9 Ajax.

10 Q. And in that role, you did some work on
11 A&D, meaning acquisition and divestitures?

12 A. Correct, just to -- helping those smaller
13 operators with -- did a couple projects where they
14 were looking at potential acquisitions. They were
15 all primarily in the Permian and -- on the Texas
16 side for the most part or in East Texas, Ark-La-Tex
17 Basin.

18 Q. So you were primarily assisting with due
19 diligence reviews on the acquisition side?

20 A. Correct. I did a few operational projects
21 for them, helping to drill a couple wells in the
22 Haynesville, as well as Travis Peak. But other than
23 that, no.

24 Q. Then you joined Empire in 20- -- what --
25 when did you join Empire?

1 A. I joined Empire about a year ago this
2 month.

3 Q. In April?

4 A. Yes, 2024.

5 Q. As it's not included on your CV, but you
6 are -- you're an employee of Permian at this point?

7 A. I'm -- I cover multiple assets for Ajax --
8 I mean for Empire.

9 Q. Okay. But you are an employee of Empire
10 at this point?

11 A. Correct, yes.

12 Q. Okay. What's your job title with Empire?

13 A. Senior geologist.

14 Q. And you started back in April of 2024?

15 A. That's correct.

16 Q. Okay. And what was your job -- what are
17 your job responsibilities? What were you told your
18 job would be when you joined the company?

19 A. To offer senior geological perspective to
20 multiple plays, helping with development of assets,
21 as well as being a part of potential acquisition,
22 appraisals, or evaluations.

23 Q. What's your role and responsibility with
24 respect to the EMSU?

25 A. I'm the development geologist over the

1 EMSU.

2 Q. What do those responsibilities include?

3 A. Includes just a regional perspective of
4 the EMSU, operations, well planning for potential
5 verticals, horizontals, and multiple zones that
6 are -- that we have rights to; as well as evaluating
7 with our engineering team workover and completion
8 targets with existing wells; as well as looking for
9 potential upside on the EMSU as well as adjacent to
10 it.

11 Q. How much of your time is devoted to work
12 on the EMSU?

13 A. Right now I would say probably 70 percent.

14 Q. Okay. And is that the case since you
15 joined the company?

16 A. No. I -- for the first few months, I
17 worked primarily our North Dakota assets and -- as
18 well as we have some East Texas assets.

19 Q. Okay.

20 A. But then in July, end of July I got pulled
21 in primarily for the EMSU, especially for the
22 hearing.

23 Q. Okay. Now, in your summary here, you --
24 your focus was primarily on unconventional
25 horizontal plays, agree?

1 A. Yes.

2 Q. And would you agree that your experience
3 with carbon systems and reservoirs is primarily in
4 the Gulf Coast region; is that right?

5 A. Primarily, yes, mainly the Ark-La-Tex area
6 as well as South Texas.

7 Q. And your A&D experience, we just touched
8 on it briefly, but when you were consulting for
9 operators on the acquisition side, would you rely on
10 what sellers had to say about their assets?

11 A. We would -- we would utilize all
12 information given to us by the seller as well as
13 information that we had access to public and
14 private.

15 Q. And that's what you would call due
16 diligence, right?

17 A. Yes.

18 Q. Okay. And what -- when you were doing
19 your due diligence, what would that typically
20 involve?

21 A. We'd first -- you know, we'd do -- review
22 the sales packet and then, you know, depended on the
23 asset and, you know, the size and the amount of
24 information as well as the amount of resources and
25 economic availability of the operator who was

1 looking to purchase, how deep they wanted to go.

2 Q. What did you -- what was your general
3 recommendation for companies when they were
4 undertaking due diligence prior to considering an
5 acquisition? Did you have a recommendation for your
6 client?

7 A. It would be to just -- to utilize the
8 information available to make the best decision
9 based on the information that they had available.

10 Q. Are you aware of whether Empire conducted
11 due diligence prior to the acquisition of EMSU?

12 A. No. I was not here at that time.

13 Q. You're not aware of whether they have a
14 file that reviews their work prior to acquisition of
15 the EMSU?

16 A. No.

17 Q. Okay. You haven't reviewed any records
18 that Empire prepared leading up to the acquisition
19 of this field?

20 A. No. The only thing that I've seen -- that
21 I reviewed is the sales package that -- the sales
22 packet that Exxon put together.

23 Q. Okay. I'm going to pull over to your
24 summary slides.

25 In your summary of your -- that you set

1 out yesterday, you reviewed some of your exhibits.
2 And first set of exhibits that you reviewed, I
3 think, were the structure maps that are on the top
4 of the San Andres, correct?

5 A. Yes.

6 Q. And I think at the time when you were
7 reviewing this, you identified that there's a top
8 structure sort of in this north central part of the
9 EMSU that I'm hovering over with my cursor, correct?

10 A. Yes. That's the structural closure.

11 Q. Okay. And you called that sort of the
12 crestal area?

13 A. Yes.

14 Q. Okay. And the crestal area is where you
15 said -- where the highest point you would expect the
16 best wells or the best production in the San Andres;
17 is that correct?

18 A. In conventional basic petroleum geology,
19 yes, that's where you'd expect it.

20 Q. Okay. And that's -- I think you also said
21 that that's where, if there were injections, that
22 you would expect the best chance of damage to be
23 done, correct?

24 A. No, I did not. I said --

25 Q. What did you say?

1 A. I said that would be -- those -- the
2 quality of those wells are where I would be
3 concerned the most, but that the damage would be
4 done -- that there's oil in place throughout the
5 San Andres based on our log assumption. So damage
6 could be done across the EMSU.

7 Q. Okay. I thought you said that injection
8 in that zone would result in a better chance of
9 damaging reserves?

10 A. From those upper wells that are better
11 rock, yes.

12 Q. Okay. And then you also said there is
13 risk also of injecting down-dip, because the
14 migration disposal water could migrate up-dip,
15 correct?

16 A. Correct, up-dip through the stratigraphic
17 column as well as up-dip through the structure.

18 Q. Okay. Okay. Now, you don't show it here,
19 but just about the very top of this structure -- and
20 I'm -- let me pull up my -- another exhibit to show.

21 This is Empire's Exhibit B-8 as part of
22 Mr. McGuire's testimony. This shows some of the
23 same wells that you -- or proposed wells that you've
24 got on your exhibit, but it also shows the --
25 Empire's EMSU SWD Number 1 well, which is here in

1 the southeast part of Section 4.

2 Now, you don't have the section numbers on
3 your map, but it's -- would you agree with me, it's
4 about where my cursor is hovering here, just north
5 of 6 -- 673 well; is that right?

6 A. Yes. Yes.

7 Q. Okay. And that's -- would you agree
8 that's about the top of the -- of the crestal high?

9 A. Yes.

10 Q. Okay. Did I say -- yeah, forgive me, let
11 me just correct the record. This is -- what I
12 pulled up is -- stupid thing -- is Goodnight's
13 Exhibit B-8. Apologies if I -- for clarity of the
14 record.

15 So this EMSU Number 1 is the disposal well
16 that Empire has operated since acquiring the EMSU,
17 correct?

18 A. Correct, but it's not a largely commercial
19 disposal well. It's a low volume well.

20 Q. Right. And here in Mr. McGuire's exhibit,
21 he's got the cumulative volumes as of the date of
22 this exhibit, which was approximately
23 4.4 million barrels off of OCD records. Is that
24 about right?

25 A. I don't have the production numbers in

1 front of me to confirm that.

2 Q. Okay.

3 A. But it sounds close.

4 Q. Yeah. You have no reason to dispute those
5 numbers based off of OCD's records?

6 A. No. But I believe that well was drilled
7 in 1966, if I remember correctly. So it's a long
8 time.

9 Q. Well, I think actually the EMSU SWD
10 Number 1, it was converted --

11 A. Oh, yeah, it was converted.

12 Q. Drilled in 1987, correct?

13 A. Yeah.

14 Q. So it's been injecting since 1987; do you
15 agree?

16 A. It -- I would have to see the record --

17 Q. Okay.

18 A. -- to confirm.

19 Q. But the records will speak for themselves,
20 whatever they are?

21 A. Yes.

22 Q. So that's one well. That well -- now
23 Chevron -- I mean, Chevron drilled that well and
24 created it as an SWD, right?

25 A. Yes, by pumping -- by injecting very low

1 volumes.

2 Q. But they placed it right at the top of
3 this crestal high, agree?

4 A. Correct.

5 Q. And Empire acquired this unit back in the
6 spring of 2021, correct?

7 A. I think it's a little bit before that,
8 but, yes -- I'm not sure -- sounds right.

9 Q. It's been operating that well since it
10 acquired the unit, correct?

11 A. Yes.

12 Q. And when Empire acquired the unit, the
13 intent was to develop the San Andres as a residual
14 oil zone, correct?

15 A. Yes.

16 Q. But nevertheless, after acquiring the
17 unit, it continued to inject disposal volumes into
18 that well at the crestal high of the San Andres,
19 correct?

20 A. Yes.

21 Q. And my understanding in my deposition with
22 Mr. West, that Empire has minimized or if not,
23 stopped injecting volumes into that well; is that
24 correct?

25 A. I would refer to his testimony.

1 Q. So you're not familiar --

2 A. I'm not familiar with what that the
3 current injection rates are.

4 Q. You're not familiar with how Empire is
5 currently managing its disposal needs?

6 A. No. That would be on the production team.

7 Q. Okay. I mean, if the highest point of the
8 structure is where the best production is likely to
9 be found, why do you think Chevron put their unit
10 disposal well right at the top of that crestal high?

11 A. I'm not going to speculate to what their
12 thought process was.

13 Q. Okay. But subsequent to Chevron, XTO
14 operated that well, correct?

15 A. Yes.

16 Q. And they're the ones that marketed the
17 unit to Empire, correct?

18 A. Yes.

19 Q. And they're the ones that marketed
20 potential for San Andres ROZ, correct?

21 A. Correct.

22 Q. And they continue to operate that
23 saltwater disposal well at the top of the crestal
24 high, correct?

25 A. Yes.

1 Q. Okay. Now, in addition to the EMSU SWD
2 Number 1 at the top of the crestal high, there's a
3 few other wells that I don't think are indicated on
4 your map, and I'll go back to Goodnight Exhibit B-8.

5 And the other wells I want to point out
6 that are in and around that crestal high are the
7 EMSU's water supply wells, which are called fuchsia,
8 I'm not sure what color to call that, pink. There's
9 the water supply well at 459 in the northern part of
10 the Section 5, the 457 in the southern part of
11 Section 5, the 460 in Section 8, the 462, the 461,
12 and then the 278, which was not one of the original
13 water supply wells, but a well that has produced
14 over a million barrels of water from the San Andres.

15 Would you agree with me that these wells
16 are all located in and around the crestal high that
17 you've identified in your structure map?

18 A. No. I believe that a lot of those are
19 starting to come down off the flank. There are a
20 few, but they're definitely starting to come down
21 off the western flank of the structure.

22 Q. Nevertheless, you agree with me that
23 they're towards the crestal high, towards the
24 structural high within the EMSU?

25 A. No. I mean, they're on the structural --

1 western flank of the structure. I wouldn't say that
2 they're all -- they're starting to go down-dip if
3 you move to the west and southwest.

4 Q. So let's look at the 278, the 457, the
5 458, those would be all towards the center of the
6 structural high, agree?

7 A. They are closer to the structural center,
8 yes.

9 Q. I mean, they're not at the top, but
10 they're around the top of the structural high,
11 agree?

12 A. Or towards the higher elevations of the
13 structure, yes.

14 Q. Okay. Now, these wells produced more than
15 340 million barrels of water from the San Andres in
16 and around that structural high in the San Andres
17 without a single barrel of reported oil, agree?

18 A. Those -- the water wells, yes.

19 Q. Okay.

20 A. But there has been oil tested out of the
21 San Andres wells in that area.

22 Q. Yeah, I think -- I think some of that is
23 all addressed -- I mean, that's all addressed in the
24 testimony, right?

25 A. Correct.

1 Q. Okay. Now -- yeah, so those six original
2 saltwater disposal wells and the one additional well
3 that was operated as a water supply well, no
4 reported oils from those wells, correct?

5 A. Correct.

6 Q. Okay. Now, the -- in your PowerPoint that
7 you provided for the summary, you've identified --
8 you reviewed some of the wells and the oil
9 saturations that were interpreted by NuTech, right?

10 A. Correct.

11 Q. And some of the wells you included in your
12 overview are the EMSU 673, the EMSU 658, the EMSU
13 660, and the EMSU 713, right?

14 A. Yes.

15 Q. And those are also all on and around the
16 crestal high in the San Andres?

17 A. Yes.

18 Q. Okay. And I'm looking at those oil
19 saturations for the 658. This marks -- it's hard to
20 see, but there's a little very thin green line, and
21 this is page -- I guess slide 9 of your overview
22 presentation for the EMSU 658. It's Exhibit G-3(d).
23 There's a little thin green line that marks the top
24 of your San Andres, correct?

25 A. Yes.

1 Q. Okay. And the oil saturations are in
2 the -- one, two, three, four, five -- what is that?
3 I guess we left that one -- fourth tract from the
4 left maybe; is that right?

5 A. Yes.

6 Q. The black -- the black indications
7 represent oil saturations?

8 A. Yes.

9 Q. And I can't tell, is it each of these tic
10 marks, is that a 20 percent?

11 A. I'd have to see the scale down at the
12 bottom.

13 Q. Hard to read. Can you see that?

14 A. Yeah, it's hard to read.

15 Q. I don't remember what the scale was
16 myself, but . . .

17 A. Yeah, I'd have to see the scale on their
18 lot presentation.

19 Q. Okay. Nevertheless, it's a fairly --
20 sorry -- it's a fairly high oil saturation towards
21 the top of that San Andres, correct?

22 A. It -- above the San Andres, yes.

23 Q. Oops. Sensitive.

24 And then towards the top of the San Andres
25 here in the 673 in Exhibit G-3(e), you've got a

1 fairly significant oil saturation interpreted at the
2 top the San Andres in that well, correct?

3 A. Yes.

4 Q. Okay. Do you know what the oil
5 saturations are based off of NuTech's interpretation
6 at that interval?

7 A. I cannot recall right at that interval.

8 Q. And you don't recall what the scale is on
9 your own log interpretation?

10 A. What -- excuse me, can you repeat that
11 question?

12 Q. Yeah. You don't recall what the scale is
13 on your own log interpretation?

14 A. That's -- that is NuTech's log
15 interpretation, their log template. So I can't --
16 I'd have to verify their scale down at the bottom
17 again.

18 Q. But you did the oil -- you did the oil in
19 place calculations, right?

20 A. Correct.

21 Q. But you don't remember what the scale is
22 on the log?

23 A. I've looked at a lot of logs, and a lot of
24 them use a different scale.

25 Q. Okay.

1 A. So I don't want to speak to something
2 without seeing it.

3 Q. Okay. Now, then the 660, also not -- not
4 a substantial towards the top of the San Andres,
5 right, in terms of the oil saturations?

6 A. In the 660, no, but it is present.

7 Q. I'm going to move back over to your
8 revised -- your revised self-affirmed affidavit --
9 or statement.

10 Oh, no, I'm sorry, back to your
11 PowerPoint. This is where I want to be. Apologize.

12 Okay. So in your Exhibit G-3 in your
13 summary that you presented to the Commission
14 yesterday, this is slide, I guess, 6, you included
15 the range that OPS Geologic prepared as part of its
16 rebuttal testimony, correct?

17 A. Yes.

18 Q. And just so I'm clear, the top numbers up
19 here, are these the -- is the high range on a -- on
20 a section basis that OPS Geologic calculated?

21 A. So the top numbers, that's referring to
22 the highlighted bullet point for NuTech's oil in
23 place calculation for the Ryno SWD.

24 Q. Okay.

25 A. So that was OPS Geologic's low side and

1 high side case for that specific well, the Ryno.

2 The one below that is OPS Geologic's range
3 on the 640 basis compared to NuTech's, which is the
4 last bullet point.

5 Q. Okay. Now, you show both high and low for
6 NuTech. And you have the high and low case for OPS
7 Geologic for the -- for the Ryno well, let's say?

8 A. I don't have the -- the Ryno well I only
9 show their low side, NuTech's low side model.

10 Q. Okay.

11 A. And -- but did show OPS Geologic's low
12 side, high side range.

13 Q. So you got two different analyses provided
14 to the Commission here, both using very different
15 methodologies. One was presented on -- as part
16 of your -- as part of Empire's direct case, case in
17 chief, and the other is prepared for rebuttal.
18 Which log analysis does Empire adopt?

19 A. Well, as I said before, when we're talking
20 about evaluating other assets for other operators, I
21 use all the data available to me that we've tasked a
22 third party and the different third parties to use.
23 And at this point in time, I would use both of them
24 because they both indicate a trend of oil in place,
25 even the low side conservative numbers.

1 Q. Okay. So you're looking at the numbers
2 that OPS Geologic -- the final results that OPS
3 Geologic and NuTech have presented, right?

4 A. That's correct.

5 Q. Are you also evaluating the methodology
6 for how they got there?

7 A. To an extent, yes.

8 Q. I mean, doesn't it matter how the
9 analysis -- what the analysis was that gave rise to
10 the numbers, rather than just what they trend
11 similarly?

12 A. Absolutely. And that's why I use both of
13 them --

14 Q. Okay.

15 A. -- in my analysis and recommendations.

16 Q. But they're so -- they're so different --
17 the approaches were so very different. You don't
18 think one -- as you sit here today, you're not --
19 you can't tell me which you think is a more accurate
20 or -- accurate or preferable methodology?

21 A. They're both different methods from third
22 party -- independent third parties, which, from my
23 standpoint as a development appraisal geologist,
24 drilling geologist, is good, because the outcome
25 shows even though there were different methodologies

1 to get to an answer, they're all on trend. There's
2 little variances, but they're all showing oil in
3 place and indicating presence of hydrocarbons. So,
4 therefore, it will educate my recommendation to my
5 management on how to proceed.

6 Q. Now on the NuTech analysis, you heard
7 Mr. Dillewyn testify yesterday. We were asking him
8 about how his methodology was related to the
9 geology, and my interpretation of his answer was
10 that he didn't answer that question because he
11 wasn't -- didn't have any geology background, so he
12 wasn't able to answer the question.

13 So doesn't -- doesn't the connection to
14 the geology matter? And how can you -- as you sit
15 here today, how are you able to adopt the NuTech
16 analysis where there's no clearly tie to or
17 explanation or rationale to the geologic parameters?

18 A. Well, I was speaking to my evaluation. I
19 believe that NuTech and OPS Geologic integrated
20 geology to an extent. They just integrated
21 different techniques.

22 Well log analysis, which is done by
23 NuTech, is a realtime -- you know, a realtime
24 wireline reading of the geology. They're just
25 plugging in those curves into their model. I think

1 what -- you know, now, they didn't do a lithology
2 breakdown, and that was their choice on their model.

3 Q. You're talking about NuTech?

4 A. Correct.

5 Q. Um-hmm. And they didn't do any mineralogy
6 either, did they?

7 A. No, they did not.

8 Q. Okay. So you don't have an opinion, as
9 you sit here, about which of the varied
10 methodologies presented to the Commission on log
11 analysis on behalf of Empire is more correct and
12 more accurate?

13 A. At this point in time, no, I do not.

14 Q. Do you have a background in -- I mean,
15 would you say -- do you have a background in
16 evaluating petrophysical interpretations?

17 A. I have a background in integrating
18 petrophysical interpretations and working with
19 petrophysicists in-house and third party, depending
20 on which operators I work for.

21 Q. Okay. Now, as you sit here, I mean -- I
22 mean, both approaches provide very wide, very
23 disparate end points. As Empire's presented on the
24 low side and high side, there's a huge variation in
25 the numbers, which that gives rise to concern that

1 they may be unreliable, given the spread of
2 uncertainty between the high and low side for both
3 approaches?

4 MS. SHAHEEN: I'm going to object
5 because I believe that Mr. Rankin is basically
6 testifying.

7 MR. RANKIN: They are what they are.
8 I mean --

9 HEARING OFFICER HARWOOD: It's a
10 long -- I haven't heard the end of the question yet.
11 Let's hear the end of the question.

12 Q (By Mr. Rankin) My question is based -- you
13 know, there's some concern, I have concern, we have
14 concern about the range of uncertainty, given the
15 high and low side for both NuTech's results and OPS
16 Geologic's results.

17 MS. SHAHEEN: And I'm going to
18 continue to object to his testifying.

19 HEARING OFFICER HARWOOD: Mr. Rankin,
20 it does need to be a question.

21 MR. RANKIN: I'm getting there.

22 Q (By Mr. Rankin) So the question is: The
23 concern is, Mr. McShane, that both approaches by OPS
24 Geologic and NuTech could be completely invalid and
25 based on independent flawed analysis.

1 My question is: Do you have the expertise
2 to evaluate yourself whether or not either of those
3 approaches is invalid?

4 MS. SHAHEEN: And I'll just -- for
5 the record, continuing objection that Mr. Rankin
6 continues to testify.

7 HEARING OFFICER HARWOOD: All right.
8 Well, Mr. Rankin, you are kind of overstepping it.
9 I mean, that question could have been asked without
10 all the preamble. So just bear it in mind, please.

11 A. So, I'm sorry, can you restate the
12 question, please.

13 Q. Sure. Do you have the expertise to
14 evaluate whether or not either one of the approaches
15 employed by OPS Geologic or NuTech are valid?

16 A. Yes.

17 Q. Okay. And you believe that both
18 approaches are valid?

19 A. Yes.

20 Q. Okay. Before I leave the summary, I
21 wanted to ask you about the structure map again.
22 For this San Andres, the crestal area, is it a
23 four-way closure?

24 A. No. It's more of a three-way, but it's
25 more regional, because there's a double anticline.

1 So you're only -- you're only seeing one part of
2 this in this region.

3 Q. In the other well that I meant to mention,
4 if I go back to Goodnight Exhibit B-8, is Rice's
5 EME 33, which is a disposal well just outside the
6 exterior boundary of the EMSU unit, correct?

7 A. Yes.

8 Q. And when I look at your PowerPoint again,
9 that -- that's -- oops -- that well is just here in
10 the nook, the corner of the EMSU, correct?

11 A. Correct.

12 Q. And that's -- that would be in the crestal
13 high of that structure, as well, correct?

14 A. Yes.

15 Q. And that well has injected more than --
16 approximately 60 million barrels since it commenced
17 injecting around 1960, correct?

18 A. Yes.

19 Q. Okay. And is Empire also seeking to
20 revoke or cancel the injection authority for that
21 well?

22 A. I'm not going to -- I'm not an expert in
23 that. I'm not sure what we're seeking with Rice.

24 Q. But because it's at the crestal high, that
25 also poses a risk to operations or recovery on the

1 San Andres, agree?

2 A. I would be concerned with that well
3 injecting, yes.

4 Q. Okay. Is -- are you -- I think you -- do
5 you know if Empire's currently sending water to that
6 well?

7 A. I do not.

8 Q. Okay. All right. Moving back to your
9 revised testimony. Now, you provided your original
10 testimony in this case back in October 2024, agree?

11 A. Correct.

12 Q. And you came in to Empire around April of
13 2024; is that right?

14 A. Yes.

15 Q. And you had a predecessor at Empire who
16 was a geologist before you, correct?

17 A. Correct.

18 Q. And that was Mr. Nicholas Cestari; is that
19 right?

20 A. Yes.

21 Q. Do you know who he is?

22 A. I know of the name and that he was an
23 employee, but I don't know him personally.

24 Q. And you replaced him after he left the
25 company?

1 A. I'm not sure how far before he left, but I
2 know I came in after, yes.

3 Q. And you are aware that he had previously
4 submitted testimony in these cases when they were in
5 front of the OCD in October of 2023, agree?

6 A. Yes.

7 Q. And Mr. Cestari's testimony calculated
8 estimated oil in place values based on
9 Mr. Dillewyn's original petrophysical analysis and
10 his testimony that was submitted to the Division
11 around October of 2023, correct?

12 A. Yes.

13 Q. Did Empire ask you to adopt Mr. Cestari's
14 testimony as your own when you joined the company?

15 A. They gave me the testimony. They asked me
16 to review it. They asked to -- choose adopting it.
17 I spent a couple of weeks reviewing it at the time
18 that I had. And I agreed with the overall
19 testimony, and I had no problem adopting it.

20 Q. Okay. So during that time when you were
21 reviewing Mr. Cestari's testimony, what did you do
22 to review it?

23 A. I went over -- I had about two or three
24 weeks where I went over the project that had been
25 put in place. I reviewed the -- I did a cursory

1 review of all of the oil logs, oil well picks, what
2 data I could get that he had provided.

3 I reread the maps to make sure that there
4 weren't any blown tops or any issues of concern,
5 that everything matched and was on trend with other
6 data in the area, published data, et cetera. As
7 well as just knowledge and experience in the area.

8 Q. You say "make sure there weren't any blown
9 tops." What do you mean by that?

10 A. Make sure that there wasn't anything that
11 I would disagree with. When you grid, depending on
12 how finite you grid, sometimes the top will stand
13 out as a miss-pack or that there's a fault or a
14 structural issue. I just wanted to make sure that
15 none of that would affect the overall trend mapping
16 of the -- of the San Andres or the Grayburg.

17 Q. Did you make any changes to any of the
18 picks that Mr. Cestari had in his testimony or in
19 his structure maps or cross sections?

20 A. Over time I adjusted a few, but they
21 weren't large adjustments. They were by a few feet.

22 Q. At the time that you submitted your
23 testimony in August of 2024, had you made any
24 changes to any of the tops that Mr. Cestari had
25 picked?

1 A. No.

2 Q. Had you made any other changes to his
3 testimony or any of his exhibits after you adopted
4 your testimony in 2024?

5 A. At the time that I adopted the testimony,
6 no. Again, I just remapped or reviewed, made sure
7 everything matched and that I agreed with it.

8 Q. Okay. After you submitted that original
9 testimony in August of 2024, you submitted revised
10 testimony in December 2024, correct?

11 A. Yes.

12 Q. And those were based on the changes to
13 Mr. Dillewyn's log analysis that he performed for
14 Empire with NuTech, correct?

15 A. Yes.

16 Q. Okay. And I understand those changes were
17 based on his varying 'm' and 'n' values using the
18 National Energy Technology Laboratory's paper that
19 covered a four county area along the northwest
20 shelf, correct?

21 A. Yes, as well as the 679 data.

22 Q. Okay. Now, the decision to redo or update
23 Empire's log analysis model with NuTech and the oil
24 in place analysis was made after reviewing
25 Goodnight's direct testimony filed in August of

1 2024, correct?

2 A. It was made -- the determination was made,
3 yes, after that. But it was not the sole reason for
4 the determination.

5 Q. What was the other reason?

6 A. Just due diligence to bring in additional
7 outside third-party views on the area itself.

8 Q. What additional outside third-party views
9 were you bringing in?

10 A. OPS Geologic.

11 Q. Okay. I was asking you about -- I was
12 asking you about NuTech.

13 A. Oh.

14 Q. So at the time, August 2024, after
15 reviewing Goodnight's direct testimony, the decision
16 was made to redo or update Empire's log analysis
17 through NuTech, correct?

18 A. Yes.

19 Q. Okay. But at that time you also decided
20 to bring in, it sounds like, a third party to redo
21 that analysis, correct?

22 A. Not to redo, but to do their own analysis.

23 Q. Do their own?

24 A. Independent.

25 Q. Okay. So why did you decide to do that in

1 August? Why -- I mean, this case has been pending
2 before the Division for more than a year.

3 Mr. Cestari's testimony and Mr. Dillewyn's testimony
4 was originally filed in August -- or rather,
5 October 2023. Why in August of 2024 did Empire
6 decide to bring in an independent third party to do
7 that work?

8 A. Well, I can -- speaking for myself as part
9 of that decision, it was -- you know, I came in in
10 basically July, August of 2024. And as I was
11 reviewing the data and we started, you know,
12 operationally getting result, I decided that -- my
13 opinion was it was better to bring it an additional
14 third party to get additional data. Because as I've
15 said before, the more data, the better. So the more
16 independent, you know, outcomes are better.

17 Q. You said you started working on this case
18 around -- in the July timeframe? Is that what you
19 said?

20 A. Correct.

21 Q. And you started to see operational
22 results?

23 A. I meant -- I just meant as I started
24 diving into the project more.

25 Q. Okay. But were you referring to specific

1 operational results that you were --

2 A. No, that was a misspeak. I didn't mean
3 operation. I just meant as I was starting to
4 evaluate the project more on my own.

5 Q. Okay. What caused you to -- I mean, was
6 it your decision to seek out an independent
7 third-party consultant to do an additional
8 petrophysical review?

9 A. No, it was not my own decision. It was in
10 consultation with other members of the team.

11 Q. Okay. Did -- what additional data did OPS
12 Geologic bring in at that point, do you know?

13 A. OPS Geologic didn't bring in any
14 additional data. We gave them basically all the
15 data we had in-house to build their own model.

16 Q. Okay. That would include all the core
17 data and well logs that they -- that OPS Geologic
18 used?

19 A. Correct, as well as public data that they
20 got on their own.

21 Q. And do you know when that data was
22 provided to Goodnight, that you gave to OPS
23 Geologic?

24 A. I do not.

25 Q. And you -- and that data was given to OPS

1 Geologic, what, in August or September of 2024?

2 A. Correct. But it was data that -- I
3 believe it was in -- that we had already provided.
4 It wasn't new data that we had acquired.

5 Q. That's your understanding?

6 A. Yes.

7 Q. Now, going back to NuTech. So in
8 August 2024, the decision was made to also ask
9 NuTech to do this additional analysis following the
10 review of Goodnight's direct testimony, correct?

11 A. Yes.

12 Q. Okay. And as to NuTech, was there any
13 other motivation to ask NuTech to do a new analysis
14 other than Goodnight's direct testimony?

15 A. Other than we just wanted their model --
16 another pass at their model making sure that they
17 were using the existing core data that was
18 available.

19 Q. Okay. Because Empire hadn't previously
20 given that to them, correct?

21 A. Correct.

22 Q. But you also didn't give them the
23 R.R. Bell Number 4, right?

24 A. Correct.

25 Q. But you gave that to OPS Geologic,

1 correct?

2 A. I don't think we gave -- I think OPS
3 Geologic got that data publicly or from another
4 client.

5 Q. Okay. But did you ask -- you asked them
6 to do their analysis on that?

7 A. I asked to incorporate all core data that
8 they could get their hands on.

9 Q. But you didn't ask NuTech to do that, did
10 you?

11 A. We asked them, to my knowledge -- I was
12 not there when NuTech was tasked with the original
13 scope or the revised -- when they were asked to do
14 the revision -- to do a second pass at their model.
15 So I just know that we gave them the 679 data and
16 the study to incorporate into their model.

17 Q. Okay. But they -- but to your knowledge,
18 Empire didn't ask them to incorporate the R.R. Bell
19 core data in their analysis, correct?

20 A. Not at that time, no. I don't know if it
21 was done before I came on board.

22 Q. To your knowledge, had NuTech analyzed
23 R.R. Bell Number 4 based on the core data?

24 A. I believe that -- to my understanding,
25 it's in their model, but it was not given to them by

1 us. And that's -- it's part of their big program
2 that they use that they incorporated everything
3 into.

4 Q. How -- as to the Four-County study, how
5 did that -- how did Empire come to the decision to
6 use that as the basis for NuTech's reanalysis of
7 the -- of this log analysis?

8 A. That decision was made by -- some of our
9 engineers gave it to them. I don't know how they
10 came to that determination.

11 Q. Were you involved in that determination?

12 A. Not in that SEG meeting, no.

13 Q. In any meetings?

14 A. Yes. I was involved with meetings, but
15 that data was given to them in a separate --

16 Q. I mean, as the geologist, I mean,
17 overseeing the EMSU for Empire, how did you -- what
18 role did you have to provide input on whether the
19 Four-County study was appropriate geologically for
20 use in the EMSU?

21 A. I mean, when it was brought to my
22 attention, I agreed that, you know, all data that we
23 could be able to create an analog or potential
24 analogs was good. It was sent after -- or I was
25 told after it was sent. But I agreed with the

1 decision.

2 Q. Okay. Did you, yourself, conduct a review
3 or analysis of that Four-County study to determine
4 whether it was appropriate or analogous for use by
5 NuTech?

6 A. A very high level --

7 Q. Okay.

8 A. -- quick pass.

9 Q. Okay. What's your understanding of why
10 that Four-County study was selected?

11 A. Again, I believe it was just a potential
12 analogous data that could help in -- help them dial
13 in their model a little, you know, to the best
14 ability.

15 Q. Specifically for what purpose is your
16 understanding that the Four-County study was used or
17 selected?

18 A. I would have to defer to our engineer for
19 that one.

20 Q. Okay. Now, just at a high level, it's
21 your understanding that the Four-County study was
22 used to get -- select potential 'm' and 'n' values
23 for Empire's revised analysis, correct?

24 A. Yes.

25 Q. Okay. And these numbers, those values

1 were just -- were just pulled from that Four-County
2 study, correct?

3 A. They were compared in the model to create
4 NuTech's scenarios, so they were used as
5 analogies -- or analogous examples of different ways
6 that they could look at varying their 'm' and 'ns'.

7 Q. From a geologic perspective, was NuTech
8 given any other guidance on what zones or types of
9 rocks to apply those 'm' and 'n' values to?

10 A. Other than just that we were evaluating
11 the Grayburg and the San Andres, but primarily the
12 San Andres.

13 Q. Okay. But I'm just saying they applied
14 those 'm' and 'n' values only to the San Andres,
15 right?

16 A. Correct.

17 Q. So other than just having those numbers,
18 no other guidance or analysis or input was provided
19 to NuTech about how or where or what circumstances
20 to apply those 'm' and 'n' values in the EMSU logs,
21 correct?

22 A. Correct.

23 Q. So to your knowledge, you don't know how
24 or whether those 'm' and 'n' values were applied
25 based on any geologic factors or parameters that

1 relate to the EMSU logs?

2 A. Correct. I don't -- you know, you'd have
3 to refer to Galen's testimony.

4 Q. Okay. And so you don't know -- you,
5 yourself didn't do an assessment to determine
6 whether there are any -- whether those 'm' and 'n'
7 values have any geologic relation or correlate to
8 the geologic -- the existing geology in the EMSU
9 wells, correct?

10 A. Correct.

11 Q. Okay. And then just to be clear -- we
12 understand from Mr. Dillewyn, but just to be clear,
13 it's your understanding that Empire instructed
14 NuTech to revise its analysis using that paper,
15 correct?

16 A. We instructed them to run another model.
17 Not revise, but to run another model to give us a
18 range of case.

19 Q. An entirely new model?

20 A. Correct, to make another pass at their
21 model, to do another run.

22 Q. Okay.

23 A. But integrating that data.

24 Q. Okay. And were you part of that -- I
25 mean, are you aware what instructions Empire had

1 given NuTech to do that work?

2 A. We would ask them to run and -- make
3 another pass at running their model integrating the
4 data that we had given them.

5 Q. And that would be the 679 core data and
6 the Four-County paper?

7 A. Yes.

8 Q. Did Empire also instruct them, NuTech, to
9 do its analysis based off the core water
10 saturations?

11 A. No.

12 Q. Who -- how did NuTech come to decide to
13 use the core water saturations?

14 A. I do not know. I was not involved in that
15 decision. I believe that was their internal.

16 Q. Okay. So you weren't involved in that
17 decision, so you don't know whether they were
18 instructed or not to use -- to calibrate to the core
19 water saturations?

20 A. Correct, I do not know.

21 Q. Okay. So, yeah, okay, very good.

22 So now, when did Empire ask NuTech to do
23 this revised analysis?

24 A. I -- I'm having a hard time. I believe it
25 was in October, November of 2024, but I can't

1 remember.

2 Q. Okay. So the direct testimony was all
3 filed by Goodnight in August 2024. Would it have
4 been that following month probably?

5 A. Yeah, that sounds about right.

6 Q. September. Okay. Was this -- was that
7 the first time, to your knowledge, that Empire
8 considered trying to calibrate NuTech's log to core
9 log intervals for the San Andres?

10 A. I do not know if that was the first time.
11 I think there could have been discussion prior to me
12 coming on the project, but it was the first time
13 when I was involved in it on my end, not Empire's.

14 Q. Who -- do you know if that was your
15 decision or -- were you involved in that decision,
16 recommendation to try to calibrate any of NuTech's
17 analysis to core -- cored intervals?

18 A. I was part of the conversation, yes.

19 Q. Okay. Were you surprised that that hadn't
20 been done to that point?

21 A. Not surprised. You know, different
22 vendors run different techniques, and it's -- you
23 know, needs to be instructed sometimes on data that
24 they need to utilize.

25 Q. And just to be clear, Empire had the EMSU

1 679 core and core logs at the time of your original
2 testimony in August 2024, correct?

3 A. Yes.

4 Q. And Empire had the core and core logs for
5 EMSU 679 at the time of Mr. Cestari's testimony in
6 October 2023, correct?

7 A. I don't know. I was not here in 2023.

8 Q. Okay.

9 A. With Empire.

10 Q. And that core and core logs were available
11 for NuTech at the time -- okay, so you were telling
12 me you don't know back in 2023. Okay.

13 A. Correct.

14 Q. Okay. I'm going to pull up -- at the time
15 of your -- or shortly after you submitted your
16 revised testimony, Empire filed a notice -- an
17 amended notice of revised testimony at the end of
18 January where they explained what was changed and
19 why.

20 And on the first page here, I've
21 highlighted some language that explained that: In
22 light of the direct testimony filed by Goodnight
23 Midstream, Empire requested NuTech to rerun its
24 analysis with different 'm' and 'n' values and to
25 review the 679 core.

1 You agree with that statement, correct?

2 A. Yes.

3 Q. But where it says "review the core
4 report," the actual -- what they actually did was to
5 calibrate its log analysis to the water saturations
6 in the core, correct?

7 A. That's what they did, yes.

8 Q. Right. Okay. And then they provided --
9 in this -- in this notice, they -- states that
10 NuTech analyzed -- did this work and then provided
11 Empire with the results in October 2024, correct?

12 A. Yes.

13 Q. And then about a month later, in November,
14 Empire asked NuTech to apply that analysis to the
15 other well logs in the EMSU, correct?

16 A. Yes.

17 Q. And then, oh, two weeks or so later is
18 when you filed your revised testimony, correct?

19 A. Yes.

20 Q. And that was based on Mr. Dillewyn's
21 analysis, correct?

22 A. Yes.

23 Q. Okay. All right. Now, this next section
24 here is an overview of the changes that were made to
25 your testimony with -- and redlined. Do you see

1 that?

2 A. Yes.

3 Q. I can't quite get it all on one page, but
4 I wanted to understand these changes.

5 First, before I get into them, I want to
6 just be clear that the changes that were made --
7 I've highlighted a sentence here that, "Empire filed
8 the revised testimony of Joe McShane as it relates
9 to the revised testimony of Mr. Dillewyn."

10 Do you agree with that sentence?

11 A. Yes.

12 Q. Okay. And then as to your specific
13 testimony, it says that, "The revisions of
14 Mr. McShane's testimony rose from the revisions to
15 Mr. Dillewyn's testimony," and they are made to
16 paragraph 10 of your testimony as reflected in the
17 redline below. In addition, you made some changes
18 to the -- to some of your exhibits, correct?

19 A. Yes.

20 Q. Okay. So I've highlighted here the
21 well -- as I understand it, like there's different
22 sentences that address each of the wells, right,
23 that were analyzed?

24 A. Yes.

25 Q. So just for ease of tracking, I've

1 highlighted them so we can -- our eyes can track
2 easily the different sections. But I'm going to
3 start with the 658. Okay?

4 I'd like you to explain to me what was
5 changed based on Mr. Dillewyn's analysis as for the
6 658 well.

7 A. Basically, the -- I mean, we added the net
8 oil interval based on the .1 millidarcy permeability
9 cutoff which contains oil. We then revised the oil
10 in place number down from 60.9 to 30.29 million
11 barrels of oil.

12 Q. So was -- explain to me the .1 millidarcy
13 permeability which contains oil. How did that --
14 how did that play into your -- explain how that
15 revision or change came in based on Mr. Dillewyn's
16 testimony.

17 A. Well, it was just an -- the internal
18 decision to use that as the cutoff.

19 Q. Okay. So .1 millidarcy, so tell me what
20 that -- what that cutoff means. What's the effect
21 of using that cutoff?

22 A. Just -- it establishes in the calculation
23 where we would start considering hydrocarbons or oil
24 in place.

25 Q. So everything above -- with a porosity --

1 or rather permeability above .1 millidarcies would
2 have oil?

3 A. Correct.

4 Q. Okay.

5 A. Well, possibly have oil based on that
6 permeability.

7 Q. Based on that permeability?

8 A. But there are multiple things that come
9 out.

10 Q. But in other words, that's your cutoff --
11 that's your perm cutoff?

12 A. Correct, for NuTech.

13 Q. For the NuTech analysis?

14 A. Correct.

15 Q. Okay. Do you know what cutoff OPS
16 Geologic used?

17 A. OPS Geologic used a -- they didn't do a
18 perm cutoff. They did an oil saturation cutoff.

19 Q. Okay.

20 A. Which explains a little bit of the
21 variance in their numbers.

22 Q. .1 millidarcy isn't that very low for a
23 perm cutoff?

24 A. Relative to? I mean, it depends on the
25 reservoir. Each reservoir is different, the rock

1 the -- you know, that was the perm cutoff that we --
2 that was discussed and went with.

3 Q. What was the justification for using that
4 .1 millidarcy?

5 A. I'd have to -- I can't remember -- recall
6 what was landed on for that with NuTech.

7 Q. Were you part of that discussion with them
8 to make that determination?

9 A. No, I was not.

10 Q. Who was?

11 A. Our reservoir engineers and NuTech.

12 Q. In your work in the -- in the field and in
13 your -- in your experience, have you ever seen or
14 used a .1 millidarcy perm cutoff for oil?

15 A. In fields, I've used less than that, but
16 that's not the -- that's a petrophysical
17 determination, and I'm not a petrophysicist. So I'd
18 lean towards the expertise of our reservoir
19 engineers and petrophysicists.

20 Q. All right. So then -- so that
21 .1 millidarcy cutoff is what influenced the net
22 interval change; is that correct?

23 A. Yes.

24 Q. Okay. And then how -- why did the log run
25 change?

1 A. Well, it's also -- also it has
2 influenced -- the net interval calculations to a lot
3 of these wells is just the length of log through the
4 San Andres. There's not a lot of complete logs
5 there.

6 Q. So on that point, your original testimony
7 said that the well covers approximately 400 feet,
8 and then you changed that to 371. How did that get
9 changed?

10 A. I believe that was a tops correction, a
11 below top.

12 Q. Okay. So if I -- so as -- now, my
13 question to you is: How high were the tops changed
14 at that point, based on Mr. Dillewyn's testimony,
15 revised testimony?

16 A. The top wasn't changed on Mr. Dillewyn's
17 testimony. It was changed on the evaluation
18 realizing that there was possibly a top that was
19 off.

20 Q. Okay.

21 A. Revising it just out of -- you know,
22 looking for additional issues.

23 Q. And that top was the San Andres top pick,
24 correct?

25 A. Correct.

1 Q. How about the EMSU 673, what -- tell me
2 what was changed here.

3 A. The 673, again, it was probably -- it was
4 just revising down the oil in place numbers.

5 Q. But you changed the log intervals as well?

6 A. I believe so, yes.

7 Q. Was that due to a change in the top?

8 A. I can't recall.

9 Q. Why else would you change the log
10 interval?

11 A. Could have just been a miscalculation in
12 the original -- in the original pass that we thought
13 there was larger amount of log, stratigraphy log.
14 But it's possible it is a top correction. Yes, I
15 can't recall on that one.

16 Q. Okay. Again, you modified the oil in
17 place based on NuTech's revised analysis?

18 A. Correct.

19 Q. Downwards, correct?

20 A. Correct.

21 Q. Okay. How about the 713?

22 A. Again, 713, revision down of the net oil
23 pay and the estimated oil in place.

24 Q. Again, you changed the footages that are
25 being covered by the log run in the San Andres,

1 correct, from 200 down to 125 feet?

2 A. Correct. And also -- that also wasn't an
3 internal correction. That could have been a
4 correction that NuTech had, you know, the top wrong
5 on it. We don't know. I can't recall on that well.

6 Q. Why else would you change the log
7 interval? Wouldn't it -- I mean, a change in the
8 top, right?

9 A. I can't speculate why. I mean, that was a
10 good reason to, probably most likely. Yeah, I just
11 don't remember that.

12 Q. So you don't recall why?

13 A. Yeah, I believe it was -- I believe it was
14 an adjustment to NuTech's top on that well.

15 Q. But that was based on Empire's input on
16 the tops change?

17 A. I -- the tops they had were prior to me
18 coming on board, so I don't know if they got those
19 top directly from Nick or if they had internally
20 their own tops. I did not ask them where they got
21 their original tops from.

22 Q. This is your testimony, Mr. McShane. I'm
23 just trying to figure out what the basis was for the
24 change. Is it due to a change in the top or why is
25 the --

1 A. I believe it was due to a change in the
2 top, yes.

3 Q. Okay. How about the 660?

4 A. Again, primarily same type of corrections,
5 revising down.

6 Q. Was it a change in the top that
7 resulted -- was it also a change in the top that
8 caused you to change the log interval for that well?

9 A. Possible -- yes.

10 Q. Okay. For every instance where -- in
11 these wells where you've changed the log interval,
12 is it likely due to a change in the top for the
13 San Andres?

14 A. Yes.

15 Q. Now, in addition to the changes in tops in
16 the reduction in the oil in place calculations that
17 were done for each of those wells, one other factor
18 was changed in here, and it seems like the net pay
19 was going up in these wells; is that true?

20 A. Yes.

21 Q. What was causing the net pay to increase
22 in all of these wells?

23 A. Probably the -- the perm cutoff was one
24 factor in that.

25 Q. Any other parameters changed that you can

1 account for that might account for the change in the
2 net pay going up?

3 A. No.

4 Q. So probably -- more than likely, it's the
5 use of the .1 millidarcies?

6 A. Yes.

7 Q. What about oil saturations?

8 A. What about oil saturations?

9 Q. Would oil saturations also affect the
10 calculation of net pay?

11 A. Yes.

12 Q. Okay. And those changed in this analysis,
13 correct?

14 A. Yes.

15 Q. So the .1 millidarcy and the change in
16 the -- in the oil saturations calculated by --
17 interpreted by NuTech would result in changes in net
18 pay, correct?

19 A. Yes.

20 Q. The San Andres here is a conventional
21 reservoir, correct?

22 A. Historically, yes.

23 Q. In your experience, have you ever used a
24 .1 millidarcy cutoff in a conventional field?

25 A. I can't recall.

1 Q. One other point I just wanted to make. I
2 didn't address this with Mr. Dillewyn, but you also
3 deleted this sentence here where there was a
4 reference to the Simandoux calculation, correct?

5 A. Correct.

6 Q. Do you recall why you deleted the
7 reference to the Simandoux?

8 A. No. That was made because -- I believe it
9 was just cleaning up the language.

10 Q. Okay. Do you recall that Mr. Dillewyn
11 changed -- no longer used the Simandoux, he relied
12 entirely on a basic Archie's equation when he was
13 doing his log analysis?

14 A. I'll defer to his testimony on that.

15 Q. Okay. Now, all of these tops changes that
16 we made as a result of adjustments or blown tops, do
17 you know whether -- have you determined whether
18 these tops, now that you're -- adopted in your
19 revised testimony, matched the tops in Mr. Bailey --
20 and Mr. Birkhead's testimony and exhibits from OPS
21 Geologic?

22 A. Yes.

23 Q. They do?

24 A. Yes.

25 Q. Okay. So as of December 2024, you had --

1 you conferred -- or reviewed Mr. Bailey --
2 Mr. Bailey and Mr. Birkhead's revised tops and used
3 those and adopted those for your own, correct?

4 A. Well, I'll rephrase. We know that they
5 match within a few feet of each other. We did give
6 them the tops that they needed to use, and they did
7 give us their tops. But they're all pretty close as
8 far as picks go, within a few feet.

9 Q. Okay. Now, did you pick these tops or
10 were these based off of Mr. Bailey's picks?

11 A. No. These were my picks.

12 Q. Okay. So -- okay. I guess you're telling
13 me that between your picks and OPS Geologic picks,
14 picks for this top of the San Andres are within a
15 few feet. So they're more or less the same? I
16 guess, that's what you're telling me?

17 A. Correct. Mine, OPS Geologic, and Dr. Bob
18 Lindsay's tops are all within a few feet of each
19 other.

20 Q. But your structure maps of the San Andres
21 now are the same as OPS Geologic?

22 A. Within reason. I mean, they're the same.
23 They trend the same. They look -- they show pretty
24 much the same thing. Their maps are gridded on a
25 different grid scale or different structural

1 interval, but they show -- they show the same story
2 and the same -- geologic story.

3 Q. But you -- have you -- have you reviewed
4 and confirmed that -- all the tops that were used by
5 OPS Geologic, you compared them to your tops?

6 A. Yes.

7 Q. You have?

8 A. Yes.

9 Q. Okay.

10 A. Yes.

11 Q. Okay. Now, going back to your
12 self-affirmed statement, I'm going to turn down to
13 Exhibit G-3(d).

14 At the bottom here -- I'm going to use
15 this as a sample, but explain to me, then, how you
16 came to -- did you calculate this table in your
17 exhibit?

18 A. Yes.

19 Q. Okay. At the bottom left-hand corner --
20 and this Exhibit G-3(d) of your revised testimony.
21 Explain to me, just going from left to right, how
22 you calculated each of these entries for your
23 tables.

24 A. Gross interval feet is just, you know,
25 number of feet logged on the San Andres. The net

1 pay, net interval feet using the .1 millidarcy
2 cutoff. And then average porosity is averaged over
3 the San Andres.

4 These are all numbers just specifically in
5 the San Andres. Average oil saturation averaged
6 over the San Andres interval based on NuTech's
7 analysis. And then average permeability of
8 2.19 millidarcies.

9 Q. So all of these numbers are derived from
10 NuTech's log analysis, correct?

11 A. That's correct.

12 Q. What's the difference between net interval
13 and net oil interval?

14 A. Net interval is just -- basically that
15 there were hydrocarbons placed -- net oil interval
16 is within the perm cutoff.

17 Q. Okay. So I didn't quite get that. What's
18 the difference --

19 A. So 184 feet would be hydrocarbons present.
20 The net oil interval would be 182 feet within the
21 perm cutoff.

22 Q. So as --

23 A. .1 millidarcies or greater.

24 Q. As I understand, because you're using the
25 very low cutoff of .1 millidarcies, you're only

1 excluding two feet of oil from the -- from the
2 San Andres, correct?

3 A. Because we're using .1 millidarcies,
4 that's -- as a cutoff, that's what has come out,
5 yeah.

6 Q. Okay. But each of the other entries -- so
7 average oil saturation at 39 percent is an average
8 over the entire San Andres interval, correct?

9 A. Correct.

10 Q. And there's no cutoff applied to that
11 saturation rate? That's just average saturation
12 across the whole interval?

13 A. Correct.

14 Q. And the oil in place calculation that you
15 did, is there any cutoff applied to that oil in
16 place calculation?

17 A. No, other than the .1 millidarcy.

18 Q. That .1 --

19 A. For permeability, you know, in the initial
20 review. But no, no saturation cutoff.

21 Q. Why did -- why did you not use a
22 saturation cutoff when you did your oil in place
23 calculation?

24 A. That was determined by the reservoir
25 engineers.

1 Q. Okay. That wasn't your decision?

2 A. Correct.

3 Q. Okay. Now, when you do your oil in place
4 calculation, you're measuring on a section,
5 basically you're calculating on a section basis of
6 640 acres. But that is -- that value there that you
7 got in that box is based on log data from a single
8 well -- interpreted well, right?

9 A. Correct.

10 Q. And it's extrapolated out on the
11 assumption that what you have interpreted on the log
12 data can be uniformly extrapolated out across one
13 section, correct?

14 A. Correct.

15 Q. Okay. Now, looking through -- the same
16 calculations, same approach was used for each of the
17 well log interpretations represented in your
18 testimony, correct?

19 A. Yes.

20 Q. Okay. Did you calculate -- when you were
21 reviewing the log interpretations that NuTech
22 prepared, did you calculate -- or is there an oil
23 saturation of 30 percent for any continuous interval
24 of 400 feet within the San Andres well that --
25 within the San Andres in any well that was analyzed?

1 A. I cannot recall if there was.

2 Q. Okay. If I -- would it help if I walked
3 through each of these slides?

4 A. Sure.

5 Q. Okay. So if I look over here, I see a net
6 oil -- I guess I'd be looking for the net oil
7 interval, right?

8 A. Um-hmm.

9 Q. I'd be looking for net oil interval and
10 then the oil saturation, correct?

11 A. Yes.

12 Q. Okay. So here for the EMSU 658, the net
13 oil interval is 182 feet, correct?

14 A. Yes.

15 Q. And the average oil saturation is
16 39 percent for that interval, correct?

17 A. Correct.

18 Q. Okay. So that -- how about the 673?

19 A. Correct, 153 and 40 percent.

20 Q. Okay. So that one, there's not -- now, is
21 this -- going back up here to this 658, that 182 net
22 feet is spread out over that gross interval,
23 correct?

24 A. Yes.

25 Q. Okay. So that wouldn't be continuous -- a

1 continuous 182 feet, correct?

2 A. Correct.

3 Q. Okay. And in the 673, that's 153 net over
4 362 feet, correct?

5 A. Correct.

6 Q. And that's a 40 percent oil saturation, so
7 that that 153 feet is not continuous, correct?

8 A. Correct.

9 Q. Okay. And the 713, again, you got a net
10 interval of 40 feet out of a gross of 125 with an
11 average saturation of 48.4 percent, but that 40 feet
12 net is not continuous, correct?

13 A. Correct. But I'll also remind that not
14 all of these logs went through the entire San Andres
15 interval as well. So this does not account for any
16 hydrocarbons below the logging interval on wells.
17 While the 713 did, some of those other wells did not
18 go all the way through.

19 Q. Right. And then the 660, again, you got a
20 net oil interval of 313 feet out of a gross of 431
21 with an average saturation of 34.4. But that net
22 interval of 313 is not continuous, agree?

23 A. Correct.

24 Q. Okay. And the 746, you've got a gross
25 interval of 1223 feet with a net oil interval of

1 508 feet, an average oil saturation of 25.1. But
2 that net interval of 508 feet is not continuous,
3 agree?

4 A. Correct.

5 Q. Is there any -- is there any section of
6 that 746 well where you have 400 feet continuous oil
7 saturations above 30 percent?

8 A. I do not recall if there is, no.

9 Q. Okay. Sitting here today, have you -- can
10 you -- I mean, you got the log right here. Can you
11 tell me whether or not there's any interval that's
12 beyond -- that's 400 feet that has 30 percent oil
13 saturation?

14 A. Not continuous, no. But intermittent,
15 yes.

16 Q. Intermittent above 30 percent?

17 A. Well, I'm saying there's a possibility you
18 see spikes in hydrocarbons, you know, maybe 100 feet
19 apart or 50 feet apart based on that log. I can't
20 without zooming in, but where you may see some --
21 some wells, the continuous -- either -- there is no
22 400-foot continuous interval. That's what I'm
23 saying.

24 Q. Right. And -- but I'm also asking about
25 the average oil saturation. It doesn't exceed -- it

1 doesn't exceed 30 percent, does it?

2 A. Correct.

3 Q. Okay. When you have calculated oil --
4 you've calculated oil in place before in your
5 career, correct?

6 A. Yes.

7 Q. Have you ever not used an oil saturation
8 cutoff when calculating oil in place?

9 A. Yes. We've done -- I've done it many
10 different ways.

11 Q. So you -- in your prior experience, you've
12 had occasion not to use an oil cutoff for your oil
13 in place?

14 A. It's dependent on the situation, and
15 sometimes we'll run -- I've run multiple, you know,
16 methods of calculating. But, you know, this was
17 determined for this one out here. But like, for
18 instance -- but like the OPS Geologic, we used an
19 oil saturation -- they used an oil saturation cutoff
20 on there. So we wanted to see both -- compare both
21 numbers.

22 Q. Okay. And if you used an oil saturation
23 cutoff, it would be -- it would be -- depending on
24 what you used, it would be a different calculation,
25 wouldn't it?

1 A. Correct.

2 Q. Yeah. Now, the oil saturations that are
3 calculated here, is the oil saturation across the
4 entire San Andres or is it just across the net oil
5 interval?

6 A. It's the average over -- average oil
7 saturation over the entire.

8 Q. Over the gross interval, correct?

9 A. Yes.

10 Q. Okay. All right. And that's true for all
11 of these -- all of these logs?

12 A. Correct.

13 Q. Okay. All right. Now, next exhibit here,
14 G -- that I want to talk about is G-4. I think this
15 slide was presented as part of your summary. Now,
16 this is for the 660 well, correct?

17 A. Yes.

18 Q. And you include the mud log here on the
19 left side of the exhibit for the same interval that
20 you snipped the log analysis for, correct?

21 A. Yes.

22 Q. Okay. But -- so the intent here was to
23 indicate that there were potential shows sitting in
24 the mud log that correspond with the log analysis,
25 right?

1 A. The intent, yes. The intent was to show
2 that you saw the same shows and fluorescing and gas
3 shows during this -- in the same interval because
4 multiple wells throughout the -- throughout the
5 EMSU, whereas just mud logs have the same type of
6 response in the San Andres.

7 But here we had the benefit of -- wireline
8 that was analyzed by NuTech showed hydrocarbons in
9 place at the same time as the gas response.

10 Q. And the portion here that aligns with the
11 mud log, you've got high oil saturations. What are
12 those oil saturations?

13 A. You see oil saturations ranging from --
14 between probably, you know, 20 percent upwards of
15 55 percent, maybe a little higher in certain zones.

16 Q. Yeah. So each of these tic marks is,
17 what, 10 percent? 10, 20, 30, 40, 50, 60 --

18 A. Yeah.

19 Q. -- 70 -- maybe even above 70 percent?

20 A. I'd say 70, 75 percent. I believe there
21 are one or two spikes we saw.

22 Q. So you included mud log in here indicating
23 that there are -- there's indications of shows, and
24 you included the -- and this is NuTech's revised
25 analysis, correct?

1 A. Correct.

2 Q. And the revised analysis would have a
3 lower oil saturation than their original analysis,
4 correct?

5 A. Yes.

6 Q. Okay. Now -- but what you didn't tell the
7 Commission during your analysis -- or your summary
8 or in your testimony is that the operator of the
9 EMSU at the time perforated this exact interval and
10 had six sets of perfs tested from between 4,126 feet
11 to 4,239 feet, correct?

12 A. I know it is perf'ed in the zone. I don't
13 know the exact footages offhand.

14 Q. But you didn't include any of that
15 information in your testimony or in your summary to
16 the Commission yesterday, did you?

17 A. No, I did not.

18 Q. Okay. And you didn't tell them that those
19 six perfs were swabbed multiple times over a
20 four-day period in 2005 and that they tested
21 100 percent water?

22 A. If I remember correctly, 660 did test 12
23 or 20 barrels of oil. But I'll defer to engineers
24 for that, because I'm not a production engineer.

25 Q. So the testing that was done, there was a

1 series of 25 pump tests that were done on those six
2 perfs, right?

3 A. I -- again, I'm aware of it, but I would
4 defer to our engineers on that, production
5 engineers.

6 Q. But you didn't provide those data points
7 as part of your representation here to the
8 Commission on how -- on the performance of the
9 section of the -- of the -- of the log?

10 A. Correct, I didn't talk about the
11 performance of the log.

12 HEARING OFFICER HARWOOD: Mr. Rankin?

13 MR. RANKIN: Yeah. Do you want to
14 take a break?

15 HEARING OFFICER HARWOOD: Yeah. I've
16 been waiting for you to sort of finish this section,
17 but I'm not sure if it's finished.

18 MR. RANKIN: No, I think -- I think
19 I'm -- let me just see real quick if there's a spot.
20 I think -- maybe just let me ask another question or
21 two, and then we can take a break.

22 HEARING OFFICER HARWOOD: All right.

23 MR. RANKIN: I apologize. Just kind
24 of a . . .

25 Q (By Mr. Rankin) So -- but you're familiar

1 generally with the fact that this interval was
2 tested by the prior operator?

3 A. Yes.

4 Q. Okay. But you don't know the specifics
5 about how much -- what was tested, how it was done,
6 or what the test results were?

7 A. Correct, other than that they did test a
8 little bit of oil.

9 Q. But you're familiar -- you're aware that
10 they plugged back this zone and then came up a hole
11 in the Grayburg?

12 A. Yes, it was a test zone. The primary
13 objective was the Grayburg.

14 MR. RANKIN: Let's take a break,
15 Mr. Hearing Officer.

16 HEARING OFFICER HARWOOD: Okay.
17 Thank you. Let's take a 15-minute break and be back
18 at ten of.

19 (Recess was taken from 10:36 a.m. until 10:51 a.m.)

20 HEARING OFFICER HARWOOD: Ms. Apodaca
21 and Ms. Tellez, are you ready?

22 All right. And I see a thumbs up from
23 her.

24 Mr. Rankin.

25 MR. RANKIN: Thank you, Mr. Hearing

1 Officer.

2 Q (By Mr. Rankin) Before I leave these logs,
3 Mr. McShane, I have on my screen -- let me know if
4 you can still see this.

5 A. Yes.

6 Q. The EMSU 746 log interpretation from
7 NuTech, right?

8 A. Yes.

9 Q. One question I had is -- I was just
10 looking at this over the break, and you got an
11 average oil saturation, which we confirmed. It's
12 for the entire gross interval, correct?

13 A. Yes.

14 Q. And here you've calculated it to be -- or
15 rather, I guess the calculation is 25.1 percent
16 average oil saturation for that entire gross
17 interval, correct?

18 A. Yes.

19 Q. But I'm looking at it, just all the blue
20 is interpreted water, correct?

21 A. Yes, and I logged that as interpreted
22 water.

23 Q. And the black is the interpreted oil
24 saturation, correct?

25 A. Yes.

1 Q. Just looking at this, I'm wondering how,
2 do you know -- it seems like how you came to
3 25 percent with the most of the interval is
4 interpreted as being water?

5 A. That was their, you know, display. But
6 the -- when we averaged the curves and the data
7 output, that's what we've calculated.

8 Q. Okay. So it is just what it is?

9 A. Yes.

10 Q. Basically, you're just adding up all of
11 these tiny little black --

12 A. Well, across the interval, yes.

13 Q. Across the interval, it all adds up to
14 25 percent?

15 A. Yes.

16 Q. It just looked like it was not
17 proportionate. But the calculation is what the
18 calculation is, right?

19 A. Correct.

20 Q. Okay. Okay. Here in paragraph 13 of your
21 revised self-affirmed statement, you refer to the
22 EMSU 200H landing zone. Explain to me what this
23 paragraph is all about.

24 A. There was a question about where the
25 EMSU 200H was -- landed and producing from as a

1 horizontal well. And we were just confirming that
2 it was -- indeed landed in the Grayburg reservoir.

3 Q. And that question had come up in a
4 previous contested matter between Empire and
5 Goodnight, correct?

6 A. Yes.

7 Q. And that was in the Piazza case that was
8 between the parties at the Division?

9 A. I believe so, yes.

10 Q. Okay. And at the time of that hearing,
11 Empire's position was that the well was producing
12 from the San Andres; is that correct?

13 A. I do not -- I was not here at that time,
14 so I do not know what the position was.

15 Q. Okay. But at that point --

16 A. I was asked to confirm the landing zone.

17 Q. Okay. But the point here is that it's
18 actually completed in the Grayburg, correct?

19 A. Yes.

20 Q. Okay. So you -- did you review the
21 testimony in evidence in the Piazza case in order to
22 address this issue?

23 A. No. I just based -- re-steered that well
24 with a curve model.

25 Q. And that Piazza case is that -- and one of

1 the matters that's currently pending before the
2 Commission as a de novo matter, correct?

3 A. I believe so, yes.

4 Q. Okay. Okay. So you agree with Goodnight
5 Midstream's rebuttal testimony in evidence in that
6 case that this well was completed and producing only
7 in the Grayburg?

8 A. I agree that this well was landed in the
9 Grayburg.

10 Q. Okay. This next section of your
11 testimony, you address a -- some blue highlighting
12 in this Exhibit G-7(a) and (b), about -- that
13 reflects a dolostone package, right?

14 A. Yes.

15 Q. And I think you address this in your
16 summary of your testimony. Tell me what this
17 dolostone package is. And maybe, if it's easier, if
18 you prefer, I'll go down to the exhibits.

19 A. So the light blue is highlighting a
20 dolostone interval within the San Andres that
21 basically is -- it's brecciated, and there's
22 fractures through it. But it's largely considered
23 below the premier sand, which is just above the top
24 of the San Andres. And, you know, there's
25 discussion over whether or not that is a consistent

1 facies or lateral facies across the field.

2 And so in these exhibits and the testimony
3 we talk about that, because of fractures present as
4 well as collapsed brecciation due to known
5 conformity, it does not serve as a -- a boundary to
6 prevent migration of fluids.

7 Q. So this dolostone package is related to,
8 you said it's just below the top of the San Andres
9 but that's the pick that Empire's picked for the top
10 of the San Andres, correct?

11 A. It's the top that Empire picked, as well
12 as the top that's constantly recorded with the
13 State, as well as in documents that we've provided
14 through the State where they've identified the top
15 of the San Andres as being 150-foot above, you know,
16 or above -- sorry. Totally drawing a blank here.
17 But, just below the premier sandstone, a few feet
18 below the premier sandstone.

19 Q. But you don't show here where Goodnight's
20 identified permeability barrier is, do you?

21 A. No, I do not.

22 Q. And you don't show it on this
23 Exhibit G-7(a) and you also don't show that on your
24 Exhibit G-7(b), do you?

25 A. No, I do not.

1 Q. Okay. And are you saying that Goodnight
2 has selected that dolostone as its permeability
3 barrier?

4 A. Not necessarily. It is referred to a lot
5 as the permeability barrier, but it's -- the
6 Goodnight tops range a lot differently than the
7 accepted tops in the State and unitization. And so
8 some of them refer to that permeability barrier,
9 some don't.

10 But what I'm just trying to show here is
11 that the lateral top facies of the San Andres is not
12 consistent in thickness or -- and the fact that it
13 doesn't -- it's not as massive. It has brecciation
14 and fractures that would serve as secondary
15 permeability pathways.

16 Q. But the point, I guess, I'm trying to make
17 sure I understand is that you're not showing
18 anywhere on this -- these exhibits or your
19 testimony, you don't address Goodnight's
20 permeability barrier that it's picked, have you?

21 A. No, because these were submitted before
22 Goodnight submitted theirs.

23 Q. But as Goodnight -- Goodnight hasn't
24 changed its permeability barrier from any of its
25 cases, including those that were presented to the

1 Division, including the Piazza case, right?

2 MS. SHAHEEN: I'll object to
3 Mr. Rankin testifying again.

4 Q. Mr. McShane, you're aware that Goodnight
5 has had previous contests between Empire before at
6 the Division?

7 A. I am aware, yes.

8 Q. And in those cases, are you aware that
9 Goodnight had picked permeability barriers that
10 isolated its injection?

11 A. I'm aware as in just being discussed, but
12 I have not reviewed the materials --

13 Q. So --

14 A. -- in those cases.

15 Q. So prior to preparing your testimony, you
16 didn't bother to review Goodnight's permeability
17 barrier picks that had been presented to the
18 Division and contested with Empire in advance of
19 this case?

20 A. I did my independent analysis and
21 appraisal of it and did my own mapping.

22 Q. But part of that wouldn't have been to
23 review what actually -- Goodnight actually had
24 picked as a perm barrier?

25 MS. SHAHEEN: Objection,

1 argumentative, lack of foundation.

2 HEARING OFFICER HARWOOD: Overruled.

3 Q. Mr. McShane, you were aware that Goodnight
4 had a case before the Division with Empire and that
5 they had presented a perm barrier in that case?

6 A. I'm aware they presented perm barriers,
7 yes.

8 Q. Okay. But in preparation for this case
9 and this testimony that you submitted in August of
10 2024, you did not review Goodnight's perm barriers?

11 A. As in, other than that they were calling
12 the top the San Andres a perm barrier. But
13 Goodnight's top of the San Andres was not
14 consistent.

15 Q. So -- but basically, you're telling me you
16 didn't look at the Piazza case or Goodnight's
17 testimony in that case, correct?

18 A. Yes.

19 Q. So in preparation for this testimony, you
20 had -- you didn't know where Goodnight's perm
21 barrier was picked, correct?

22 A. Not in the Piazza case, no.

23 Q. Did you know where it was picked in these
24 cases when you prepared your testimony?

25 A. I knew where -- the generality, yes.

1 Q. Why didn't you address it in your
2 testimony?

3 A. Because it's my mapping and my exhibit. I
4 did not want that put in this exhibit.

5 Q. Okay. Let's see. Is this what I'm on?

6 In this same Exhibit G-7(a), you got a
7 bullet over here that -- where you say, "Basal
8 blocks moved post deposition causing fractures to
9 form creating pathways for fluid communication."
10 Did I read that correctly?

11 A. Yes.

12 Q. What evidence of fractures do you have
13 relating to these structural blocks that you allege
14 exist near this crestal high?

15 A. Evidence of fracturing in the 679 core, as
16 well as an outcrop studies throughout New Mexico in
17 the Permian Basin.

18 Q. Okay. So the outcrop studies are how many
19 miles away?

20 A. I could not, off the top of my head, tell
21 you.

22 Q. Dozens of miles?

23 A. Yes.

24 Q. Hundreds of miles?

25 A. Possibly, about 100 miles.

1 Q. Okay. Now, as the 679 well, is that on
2 the crestal high?

3 A. It's slightly off.

4 Q. I'm not going to bother to try to find it
5 right now. But you're telling me that the -- that
6 the 679 is within the crestal high?

7 A. It's in the higher portions of the -- of
8 the structure. It's not on the apex of the
9 structure.

10 Q. So you were arguing with me about whether
11 or not these water supply wells were in the crestal
12 high, and you're telling me that 679 is within the
13 crestal high?

14 A. It's off -- it's within the higher parts
15 of the structure, but it's not on the crestal high
16 or apex, is what I just said.

17 Q. Okay. I may want to take a moment to pull
18 that well up, and I will -- maybe my colleague can
19 help me find the 679 so we have a map of it.

20 So you're relying, then, on the -- when
21 you refer to the 679, you're referring to the
22 fracture study that was conducted by Mr. --
23 Dr. Lindsay, correct?

24 A. Of the physical core, yes.

25 Q. Of the physical core. Okay. And

1 Dr. Lindsay -- so you, yourself -- did you,
2 yourself, review that fracture study?

3 A. Yes.

4 Q. Okay. You don't include any of that
5 analysis in your testimony, do you?

6 A. Correct, I do not.

7 Q. Okay. So in terms of the testimony, are
8 you relying, then, on Dr. Lindsay's analysis of
9 that?

10 A. No. I'm relying on the fact that I'd
11 visually seen the photos of the physical core that
12 there are fractures present.

13 Q. Okay. And in those depths have you
14 identified -- have you correlated those depths with
15 the depths that relate to -- you just told me that
16 you don't know where Goodnight's perm barrier is,
17 right?

18 A. I mean, I know the generality that they're
19 calling the top of the San Andres perm barrier, but
20 I don't have the exact footage. But, again, I'm
21 talking about analyzing independently the reservoir
22 as -- on my own.

23 Q. Okay. But in terms of the fracture study
24 that Dr. Lindsay prepared, have you identified --
25 have you confirmed that there are fractures to what

1 Goodnight has identified as the perm barrier?

2 A. Fractures well throughout the top of the
3 San Andres into the Grayburg. So, yes, I would
4 expect that they would go through the perm barrier
5 that Goodnight has.

6 Q. But the top of the San Andres that Empire
7 has picked as the top of the San Andres, correct?

8 A. Empire, other operators, as well as the
9 State.

10 Q. Okay. But -- okay, very well. But you
11 don't have -- you have nothing -- you're not giving
12 me any specifics about what footages or depths those
13 fractures are located in or where, how they relate
14 to the -- how Goodnight's pick for the perm barrier,
15 that isolates its injection from the overlying
16 production?

17 A. Other than in the cross section where it
18 shows the light blue, it has the core description in
19 cartoon that was done during the initial analysis
20 that indicates brecciation and fracture, the slide
21 before.

22 Q. This one?

23 A. Yes. Where you have the callout box.

24 Q. Yep. And you're not -- you don't show
25 anywhere on here where Goodnight's perm barrier is,

1 right?

2 A. Correct. That's just the interval, the
3 top of the San Andres where it's referred to as the
4 perm barrier.

5 Q. So other than the 679, what other evidence
6 do you have to support your statement that the
7 fractures are more prevalent near the crest of the
8 structure?

9 A. Again, the 679 core fracture studies done
10 regionally by Dr. Lindsay, so the outcrops, as well
11 as analogs. You know, in other fields where -- when
12 you have inclines and uplift and the rock's bent,
13 you expect to see fracturing in this type of rock.
14 And that goes along with what we've identified in
15 the core as well.

16 Q. Okay.

17 A. My . . .

18 Q. Let's see if I have . . .

19 You don't know what section the core --
20 the core 679 ROZ is in, do you, Mr. McShane?

21 A. Not off the top of my head on this map,
22 no.

23 Q. Okay. I'll come back to it.

24 Would you disagree with me, Mr. McShane,
25 if I told you that the EMSU 679 was in Section 8 to

1 the west of the water supply well 460?

2 A. Not necessarily, but I'd need to see it on
3 the map.

4 Q. Yeah. Okay. Assuming that it is west of
5 the 460 well in Section 8 -- God, sorry -- that
6 would put it approximately where my cursor is here;
7 is that correct?

8 A. Yes.

9 Q. That would be off the crestal high,
10 wouldn't it?

11 A. It would be in the higher section, but
12 coming off the crestal high, you're correct, which
13 is all the more reason to believe that there's
14 fracturing even further up on the crestal high when
15 we see a possible down-dipped section of the wells.

16 Q. So within the EMSU, the only direct
17 evidence that you're citing about potential for
18 fracturing is the EMSU 679 well, correct?

19 A. Correct, physical, visual data of
20 fractures in the 679 well --

21 Q. Okay.

22 A. -- is the only physical data that we have.

23 Q. Okay. Empire's expert witness, Steve
24 Melzer, has an exhibit where he refers to some
25 vertical -- potential vertical fractures along these

1 crestal high in this Exhibit C-15 as being
2 conceptual.

3 Is your statement about these basal
4 fractures referring to the same fractures that
5 Mr. Melzer refers to as being conceptual?

6 A. No. I'm referring to physical fractures
7 to the core.

8 Q. And that would just be the 679, right?

9 A. That's what those outcrop -- multiple
10 sections in the San Andres showing fracturing.

11 Q. Okay. Again, those outcrop are dozens, if
12 not hundreds of miles to the west? Southwest?
13 West?

14 A. Yes.

15 Q. Okay. Now, this -- I think this is your
16 last exhibit, Exhibit G-8. You've included a page
17 from -- as I understand, from the -- as you state
18 here, the 2021 sales package for the EMSU, correct?

19 A. Correct.

20 Q. And what's the point of this exhibit?

21 A. The point of this exhibit for my purposes
22 is to show that even in XTO and Exxon, we saw
23 their -- they've identified upside of the potential
24 residual oil zone, their calculated oil in place
25 numbers were on trend with two separate independent

1 analyses done by, you know, OPS Geologic and NuTech.
2 So just, again, showing that we're on trend with
3 what was evaluated in their sales package.

4 Q. Okay. Now, on that point, XTO had put
5 base of the ROZ at minus 700 feet subsea depth,
6 correct?

7 A. Yes.

8 Q. And where -- but that's not where the base
9 of the ROZ is in either NuTech's analysis or in OPS
10 Geologic analysis, is it?

11 A. Correct.

12 Q. And they put the base of the ROZ, what,
13 about the bottom of the San Andres interval?

14 A. Yes.

15 Q. Okay. So how is that on trend?

16 A. Because the bulk of the wells analyzed
17 that go into the oil in place calculations, the logs
18 were a lot shallower than the -- all the way to the
19 base. So, again, Exxon would have probably been
20 using the same logging intervals that we had to do
21 our analysis, and they just -- that's where they
22 called their base. We believe it's much deeper,
23 based on the analysis done by Dr. Lindsay, as well
24 as NuTech and OPS Geologic.

25 Q. Now, Dr. Lindsay -- did Dr. Lindsay do an

1 analysis of -- what analysis are you referring to
2 that Dr. Lindsay did?

3 A. Just in general looking through the
4 stratigraphic column.

5 Q. I don't recall him --

6 A. But he didn't identify an ROZ or anything.

7 Q. He didn't, did he?

8 A. No.

9 Q. So I think I was a little confused by that
10 statement.

11 And you agree that XTO had all the same
12 logs and information that Empire had, correct?

13 A. I do not know, since I did not evaluate
14 this, the data given to us by XTO during the
15 acquisition process.

16 Q. I mean, are there any other logs or wells
17 that have been drilled or core that's been taken
18 since acquired from -- since this property has been
19 acquired from XTO?

20 A. I do not believe so, but I'm unsure. But,
21 again, I can't speak to what they had in-house.

22 Q. But Empire hasn't drilled any new wells,
23 right?

24 A. No.

25 Q. And Empire hasn't taken any new core,

1 right?

2 A. Correct.

3 Q. And Empire hasn't run any new wireline
4 logs, correct?

5 A. Correct.

6 Q. Did -- is -- to your knowledge, did Empire
7 rely on the statements XTO made in its sale package
8 when it acquired the EMSU?

9 A. To my -- not to my knowledge. I don't
10 know what they used.

11 Q. Is Empire now relying on the statements
12 from XTO from the sales package?

13 A. They are not relying on it, no.

14 Q. Okay. One thing I -- I'm going to take
15 you back real quick to the question about fracturing
16 here, these basal blocks and shifts. Do you recall
17 the location of the R.R. Bell Number 4 well?

18 A. Excuse me? I'm sorry?

19 Q. Do you recall the location of the
20 R.R. Bell Number 4 well?

21 A. Yes, vaguely. It's to the north. Yeah,
22 right there.

23 Q. Right in this section, correct?

24 A. Right.

25 Q. That would be higher -- closer to the

1 crestal high than the 670, agree?

2 A. Yes.

3 Q. And are you familiar with whether or not
4 there's any fractures evident in the R.R. Bell
5 Number 4 core?

6 A. No.

7 Q. You're not familiar?

8 A. No, I'm not.

9 Q. Okay. So if you were interested in
10 evaluating whether or not there are fractures
11 associated with crestal high, why wouldn't you have
12 evaluated whether or not there's fractures evident
13 in the R.R. Bell Number 4 well?

14 A. I need to see the R.R. Bell core report.

15 Q. But how many cores are there in the
16 San Andres within the EMSU?

17 A. Two.

18 Q. Okay. And one is 679, correct?

19 A. Yes.

20 Q. And the other is R.R. Bell Number 4,
21 correct?

22 A. Correct.

23 Q. And so -- and that would be -- being that
24 the R.R. Bell Number 4 is closer to the crestal
25 high, why wouldn't you have reviewed that report?

1 A. Well, we reviewed them, but did not have
2 any photos for that core. So I cannot put my
3 physical eyes on the core.

4 Q. Mr. Lindsay -- Dr. Lindsay didn't include
5 photos of the R.R. Bell Number 4 core in his
6 testimony?

7 A. Not at the time -- I had not seen them at
8 the time of his . . .

9 Q. Do you see --

10 A. This testimony, filing this.

11 Q. You've seen them since, correct?

12 A. Yes.

13 Q. And do those photographs evince any
14 evidence of fractures?

15 A. Yes.

16 Q. They do?

17 A. Yes. There's not as much as the 679 well.

18 Q. Okay. So your opinion is that the
19 R.R. Bell Number 4 does include fractures?

20 A. I'd say some evidence of resealing, but,
21 yes.

22 Q. Okay. Did Dr. Lindsay address the
23 R.R. Bell 4 as being fractured in his analysis?

24 A. No. This is my analysis.

25 Q. Okay. And you don't include it in your

1 written testimony, do you?

2 A. Didn't have it at that time.

3 Q. Okay. When did you acquire it?

4 A. Last few months.

5 Q. So you didn't have it when you did your
6 revised testimony?

7 A. No.

8 Q. Dr. Lindsay filed his testimony in August
9 of 2024, correct?

10 A. Yes.

11 Q. So why wouldn't you have had it when you
12 filed your revised testimony in December of 2024?

13 A. I just hadn't had it, didn't look at the
14 photos.

15 Q. Okay. Looking at your revised testimony,
16 I'm going to go back to G-3, I think it's little (b)
17 in your revised testimony. At the bottom here, I've
18 highlighted a statement that you make that,
19 "Disposal of [the] Delaware basin water into the
20 San Andres is damaging the hydrocarbon reserves
21 present at the EMSU."

22 A. Yes.

23 Q. What analysis did you do to establish that
24 there's damage to hydrocarbon reserves in the
25 San Andres at the EMSU? Or let me rephrase that.

1 What analysis did you do to establish that there's
2 damage to hydrocarbon reserves in the EMSU?

3 A. As far as -- as far as me, I did basic
4 geological analysis and modeling, that if you're
5 pumping high volumes of commercial water into the
6 formation that's moving up-dip and there's fractures
7 present, that you would eventually damage the
8 reservoir, if it hasn't been already.

9 Q. Where is -- where is that modeling or
10 analysis or data in your testimony?

11 A. Just experience and knowledge.

12 Q. You and I reviewed some of your background
13 and your history --

14 A. Um-hmm.

15 Q. -- in different fields. Where have you
16 experienced that previously?

17 A. In the Permian Basin. There were
18 operators that were proposing or had drilled
19 saltwater disposal wells, and there was great
20 concern over -- regardless of which formation, that
21 you would be -- if there were a fracture present,
22 that you would see watering out in that formation.

23 Q. Okay. Based on your experience, did that
24 occur?

25 A. I did not -- we did not see that because

1 we did not have any on our acreage in the Permian.

2 Q. Okay. So did you, yourself, do any
3 analysis in your prior experience on potential
4 impacts from offsetting saltwater disposal wells on
5 hydrocarbon reserves?

6 A. No, because I would never approve of a
7 saltwater disposal well on my acreage previously,
8 regardless of the formation.

9 Q. I guess you told me just now that your
10 interpretation and your -- and your conclusions and
11 your testimony were based on your experience. And
12 I'm asking: What experience have you had making
13 such evaluations?

14 A. Basic petroleum geology, that if you have
15 two formations in communication and you're moving
16 up-dip through structure and you have secondary
17 permeability and porosity through fracturing, that
18 you will move fluids between those.

19 Q. And your testimony here was about
20 secondary porosity in dolostone -- brecciated
21 dolostone just below Empire's San Andres pick,
22 correct?

23 A. Correct, with fractures present.

24 Q. And you didn't identify anywhere on here
25 where Goodnight's permeability barrier is located,

1 did you?

2 A. No.

3 Q. Okay. I'll talk a little bit about
4 Empire's purported plans for potential CO2 flood.
5 Have you or anyone else that you're aware from
6 Empire had any preliminarily meetings,
7 communications with the Oil Conservation Division
8 staff to discuss a proposed EMSU CO2 recovery in the
9 San Andres?

10 A. I have not. And I'm not aware if anybody
11 else has or hadn't.

12 Q. Are you aware -- what are the confining
13 zones for the San Andres ROZ if CO2 is permitted to
14 be injected into the San Andres?

15 A. I've not been involved in the CO2 flood
16 modeling.

17 Q. So based on your testimony today, you're
18 telling me that there are fractures in the
19 San Andres that allow for communication into the --
20 into the Grayburg, correct?

21 A. Yes.

22 Q. So what are the combining intervals that
23 you would identify, as the geologist for Empire,
24 that would contain CO2 injection into the targeted
25 interval?

1 A. I cannot speak to that right now. I have
2 not done that analysis.

3 Q. Okay. Has anybody at Empire done that
4 analysis?

5 A. I've not been a part of that discussion.
6 I do not know.

7 Q. Okay. So you -- as you sit here today,
8 are you aware of anybody doing any analysis about
9 potential for injection of CO2 and making sure that
10 it's contained within the target intervals?

11 A. I do not know.

12 Q. You're the -- is there anybody else in
13 charge of geology at the EMSU other than you?

14 A. They have not been brought in on the
15 geologic side, just on the -- just on the modeling
16 side for the reservoir. But, no, I do not know of
17 anybody who has done that.

18 Q. Okay.

19 A. I've not been a part of those
20 conversations.

21 Q. Is there anybody else at Empire who would
22 be -- who would do the geologic evaluation of the
23 containing zones for CO2 injection?

24 A. Not a -- no.

25 Q. It would just be you, right?

1 A. Yes. And I believe that -- I'm not sure
2 how far along they are on that, like that they've
3 gotten to that phase.

4 Q. Okay. Is Empire considering CO2 injection
5 in both the Grayburg and San Andres intervals?

6 A. I'd have to defer to our engineering group
7 on that.

8 Q. Have you evaluated whether the Grayburg
9 serves as a barrier to upper migration of CO2
10 injection?

11 A. No, I have not.

12 Q. Do you know if anybody at Empire has done
13 that?

14 A. I do not know.

15 Q. In terms of the Grayburg or overall, has
16 anybody done an analysis of whether CO2 would be
17 contained within the injection zones between the
18 Grayburg and/or San Andres?

19 A. I do not know if they have done that yet.

20 Q. I'm interested in sort of generally,
21 Mr. McShane, a question about reserves. Part of the
22 dispute or debate in this case is whether or not
23 there are any hydrocarbon reserves in the
24 San Andres. How do you, as a -- as a petroleum
25 geologist, find reserves?

1 A. Presence of hydrocarbons that are
2 recoverable within a formation.

3 Q. As part of your analysis in this hearing,
4 have you undertaken any determinations of whether
5 any hydrocarbon was identified in the San Andres are
6 recoverable?

7 A. Other than just being a part of helping to
8 identify that there's an ROZ in place, no. Not in
9 the reserve calculation side.

10 Q. So you haven't calculated a recovery
11 factor?

12 A. No, I have not.

13 Q. Have you been involved with any
14 preparation of any reserve reports?

15 A. No, I have not.

16 Q. Okay. So you've never done a -- you've
17 never done -- signed or signed off on any reserve
18 reports in your experience or history?

19 A. No.

20 Q. Okay.

21 MR. RANKIN: Mr. Hearing Officer, I
22 have no -- I believe I have no further questions of
23 this witness.

24 HEARING OFFICER HARWOOD: Okay.

25 Thank you, Mr. Rankin.

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1 So, Mr. Moander, you'd be next.

2 MR. MOANDER: Thank you, Mr. Hearing
3 Officer.

4 CROSS-EXAMINATION

5 BY MR. MOANDER:

6 Q. Good morning, Mr. McShane.

7 A. Good morning.

8 Q. I'll scoot this way so I can see around
9 counsel.

10 So I just have a few questions for you.
11 Again, my name is Chris Moander. I'm counsel for
12 the Oil Conservation Division. Just want to confirm
13 a few things with you.

14 Based on my review of the records -- and
15 correct me if I'm wrong here -- it looks like that
16 your testimony was submitted as direct testimony and
17 then revised; is that right?

18 A. Yes.

19 Q. And you weren't deposed in this matter,
20 correct?

21 A. Correct.

22 Q. And you did not submit any rebuttal
23 testimony; is that right?

24 A. Correct.

25 Q. Okay. It's my understanding, based on

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1 reviewing your file direct testimony and then
2 revised testimony, that you didn't review any OCD
3 filings for the cases before the Commission; is that
4 right?

5 A. That's correct.

6 Q. And then because you didn't review any of
7 those, it would be a reasonable assumption you
8 didn't analyze those pleadings?

9 A. Yes.

10 Q. And then, therefore, you have no opinions
11 on OCD's case in this matter?

12 A. Correct.

13 MR. MOANDER: All right. Thank you.
14 I will pass the witness.

15 HEARING OFFICER HARWOOD: All right.
16 Mr. Beck for Rice?

17 MR. BECK: No questions.

18 HEARING OFFICER HARWOOD: And thank
19 you.

20 Okay. Pilot?

21 MR. SUAZO: No questions for this
22 witness.

23 HEARING OFFICER HARWOOD: All right.
24 Then we're back to the Commission.

25 Chairman Razatos, I'll start with you. Do

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1 you have questions for Mr. McShane?

2 CHAIRMAN RAZATOS: No questions from
3 me. Thank you.

4 HEARING OFFICER HARWOOD: All right.
5 Mr. Lamkin, questions for Mr. McShane?

6 COMMISSIONER LAMKIN: I don't have
7 any questions either.

8 HEARING OFFICER HARWOOD: Dr.
9 Ampomah, then, to you.

10 COMMISSIONER AMPOMAH: Thank you,
11 sir.

12 EXAMINATION

13 BY COMMISSIONER AMPOMAH:

14 Q. Okay. Thank you, sir, for your testimony
15 today. We do appreciate that.

16 COMMISSIONER AMPOMAH: And if we can
17 keep the PowerPoint on, that would be really
18 wonderful. I'd appreciate that.

19 Q. Mr. McShane, you know, I'll start by
20 saying that -- so if we can go to the slide where we
21 do have the, I think, Exhibit G-3(a), so you
22 answered one of my questions, right there, when
23 asked about the comparison of the -- that has been
24 done by OPS Geologic and then also NuTech.

25 So there was one slide where you showed

1 the values. Would it be this slide, but probably on
2 your --

3 A. Yes, it's in the Power -- that was in the
4 testimony. This is in the PowerPoint, right there.

5 Q. Okay. Thank you.

6 A. Yes.

7 Q. So can you tell the Commission how much of
8 these -- let me say that I do appreciate you putting
9 it there because it solved one of my puzzles. But
10 my question on this one would be: Can you tell the
11 Commission how much of this estimate is for the
12 upper San Andres and for the lower San Andres?

13 A. I cannot quantify because it's -- the
14 calculation was over the entire San Andres interval
15 that each individual log covered. And, again, only
16 one or two of the logs cover the complete San Andres
17 interval.

18 So it was more based on the -- the
19 calculations were more based on total feet of logged
20 interval than it was complete interval. So I
21 would -- by that, I would expect that if we had full
22 logs, we would, then, be able to break it down like
23 you were asking.

24 Q. So would it be fair to say that most of
25 the estimation will probably be in the upper

1 position of the San Andres?

2 A. I do not believe that. I believe that the
3 analysis shows hydrocarbons present through both
4 intervals, but what people are referring to as the
5 upper and lower. It may not be continuous, but it's
6 pretty robust throughout in a lot of the wells. So
7 I'm not sure that would be the best generalization
8 for it.

9 Q. So from geological point of view -- and I
10 do know that there is an engineer who will be
11 coming.

12 A. Yes.

13 Q. So there's some questions that I will ask
14 in general, but I'm just -- I just want you to speak
15 to it from a geological point of view. So from all
16 the analysis that Empire has conducted through via
17 consultants and also the geologist, can you tell the
18 Commission how much of this oil that has been
19 estimated is recoverable?

20 A. Not to date, no, I cannot speak to that
21 how much is recoverable.

22 Q. And from all the geology team that you've
23 worked with on this case, meaning the consultants
24 from, let's say, petrophysics, geology, you cannot
25 comment on how much of these oil that has been

1 estimated will be recoverable?

2 A. Correct. The -- there's -- it is believed
3 that a large amount would be able to, but we do not
4 have enough data yet or far enough in the process to
5 be able to do that on a geologic standpoint.
6 Engineering may have a better opinion on that.

7 Q. So from geology point of view, do you
8 believe that how much can be recoverable is also a
9 central part of this case?

10 A. From a geologic standpoint, my first goal
11 was to provide enough information and analysis that
12 there were amount -- large amounts of hydrocarbons
13 present, even if they were not movable hydrocarbons,
14 in order to identify an ROZ in place.

15 Q. So in your PowerPoint, you know, I saw you
16 talked about consistent barrier, not consistent
17 barrier.

18 A. Um-hmm.

19 Q. So, you know, and I see more, let's say,
20 the expert combining all of the geology work that
21 has been done and presented to the Commission. Is
22 that fair?

23 A. Yes.

24 Q. Okay. So from all the analysis, any
25 comment -- or tell the Commission whether Empire has

1 identified any barriers within the San Andres -- or,
2 let's say, between the Grayburg and the San Andres.

3 A. No, we do not believe there is any barrier
4 that would -- between the Grayburg and the
5 San Andres due to, again, the inconsistent nature of
6 the top of the San Andres, as layered on with the
7 potential fracturing and fractures identified, as
8 well as the collapsed breccia environment of that
9 zone, that there is a pathway between the two.

10 Q. So -- and you have the EMSU 679 well, that
11 was drilled in 1990?

12 A. Um-hmm.

13 Q. And then also you asked NuTech to analyze
14 multiple online 79 wells?

15 A. Correct.

16 Q. Was there any analysis done to look at the
17 time series of those wells -- you know, let's say,
18 1990 and then the next year that the other wells
19 were drilled -- to more or less establish some trend
20 of the saturations change over time?

21 A. No, we did not ask them that. Because of
22 the nature that the data that we have currently,
23 regardless of when it was drilled -- like they were
24 all drilled fairly early within the Grayburg flood,
25 waterflood zone, so your log analysis is pretty, for

1 lack of better terms, clean or virgin at that point.
2 And we haven't had any new wells after many years of
3 injection or injection by saltwater disposal wells
4 to be able to offset and drill another well and do
5 additional petrophysical work and log analysis,
6 which would be great. But we haven't had the time
7 to do that or the money right now, when we're not
8 sure where the project is going.

9 Q. So reckoning in some of your testimony,
10 especially the revision to your testimony, you are
11 referencing 2005, open hole log run in 2005. Now,
12 what injection has been going on -- so I've been
13 given some of the examples probably in the '60s, so
14 that is where my question was coming from.

15 Did you compare or has there been any
16 analysis where you compare the saturation or -- in
17 the oil in place calculations from the earlier years
18 to any of these 2005 references that you're making
19 in your revision -- revised testimony?

20 A. Not within the Geology Department,
21 Commissioner. Again, if I wanted to, I would argue
22 that internally within our group, that even those
23 wells drilled were basically point A type data
24 points, that I would want another well very close,
25 if not directly offsetting, to see how that rock

1 changes over time. It would -- you know, we're not
2 as densely infill as I felt you would be comfortable
3 just going by 2005 wells.

4 But, again, that's from a geologic team
5 perspective. I'm not sure on the engineering team.

6 Q. Okay. So from the geology team from
7 Empire, do you guys have any experience in ROZ
8 operations?

9 A. I do not, no.

10 Q. And your team, because you are more or
11 less the geologist?

12 A. Correct. We do not.

13 Q. Okay. Now, are you familiar with other
14 ROZ in place in the Permian?

15 A. Yes, to the extent of, you know, aware of
16 them and know their locations and zones that they're
17 in.

18 Q. Do you know the tip recovery factor for
19 these fields?

20 A. I do not know the recovery factor, sir.

21 Q. Now, can you tell the Commission -- and
22 this has been something that we really want to have
23 some answers to -- you know, from geological point
24 of view, how the high volume of the water injection
25 impacts your development of the ROZ from a

1 geological standpoint?

2 A. Basically, if you're -- we feel that if
3 you're injecting the commercial volumes, you know,
4 tens of thousands of barrels per well a day being
5 injected into the system, that it -- eventually
6 you're going to basically prohibit the ability of
7 CO2 to potentially move the hydrocarbons that are in
8 place -- that are unmovable right now that would
9 only be removed with CO2. It would affect the
10 ability for that to occur, not to mention that you
11 would potentially affect the Grayburg because of the
12 lack of barrier, our current waterflood in Grayburg
13 production as well.

14 Q. So essentially, continuous injection of
15 the water can inhibit the development of the ROZ?

16 A. Correct.

17 Q. And is Empire considering in their
18 volumetric calculation and then also their
19 development plan, how much can be recovered, you
20 know, considering the excessive amount of water
21 that's been injected?

22 A. I cannot speak to what the engineering
23 group has considered, but I would assume they
24 have -- I know that they'll be testifying to that
25 later this week.

1 Q. Okay. How many saltwater injection wells
2 at Empire do you have within the EMSU, that you are
3 aware of?

4 A. We have no commercial saltwater wells.
5 Ours are all for makeup water. So there's only
6 been, I think, five or six, but they're -- they're
7 very low volume, couple hundred barrels a day in
8 their history. They're not the high volume wells
9 that we see being proposed and have been drilled.

10 Q. So is Empire planning to continue
11 utilizing those wells?

12 A. I would have to defer to our production
13 team on that.

14 Q. Okay. So Empire is proposing -- or asking
15 the Commission to revoke some saltwater injection
16 wells as part of the application. Can you comment
17 from a geology point of view on each of these
18 proposed wells, or existing wells, their impact on
19 the Grayburg based on the evidence presented to the
20 Commission from the geology point of view?

21 A. From the geology point of view, the impact
22 would be the same across all of them, which is
23 you're, again, either injecting or proposing to
24 inject high volumes of outside water that is -- into
25 a formation that has no barrier, and it's moving

1 into our waterflood. And it's replacing water
2 that's already been pumped out, and eventually going
3 to exceed that. And that's going to basically
4 affect how our waterflood is set up. The
5 recoverability of it, I have not done that as a
6 geologist. The recovery factor but from a geologic
7 standpoint, that's how it would affect.

8 And then, obviously, you would also start
9 to move fluids up-dip, which, again, you know, would
10 affect the recoverability, depending on each well
11 and each injection well put in place for the
12 Grayburg. It's a complex question. But from a
13 geologic standpoint, those would be the things I
14 would be on watch for or concerned about.

15 Q. Thank you for that.

16 Now, let me ask: With regards to -- let's
17 say, when you say that there's no barrier between
18 the Grayburg and then the San Andres, you know, and
19 as we all know, the water injection started way back
20 in 1966 or 1920s, or whenever it is, has there been
21 any evidence, you know, presented to -- let me put
22 it this way -- integrated evidence presented to the
23 Commission establishing that the water injection in
24 the Grayburg or in the San Andres is adversely
25 impacting the Grayburg?

1 A. I'm not going to speak to production
2 numbers and information, so I'll leave that to
3 upcoming testimony.

4 Q. So from geological point of view,
5 integrated geological point of view?

6 A. At this point in time, we do not have an
7 integrated because we do not have the type of data
8 that we would need to see if it's affected the
9 formation or not, additional wells, again,
10 offsetting with logs. And if it's change -- in the
11 core, if we've changed saturations or anything that
12 we're previously seeing within the formation.

13 Q. So are you going to adopt Mr. Buchwalter's
14 geological model that he used for his modeling?

15 A. I know that -- I'm not going to speak to
16 Dr. Buchwalter's model, per se, other than knowing
17 it was a material balance model and that the -- you
18 know, just aware of what perm -- vertical perm
19 values he was using. But I know that -- it seemed
20 to be in line with what our team was seeing, as far
21 as the behavior of the "Graywater" -- Grayburg
22 wells.

23 Q. So what role did your team play in that
24 geological modeling development?

25 A. I'm not -- when the model was being

1 developed, it was prior to me coming on board. So
2 the model started to be run -- developed and run
3 prior to August 2024. I mean, it took a long time
4 for that model to run. It was quite a robust model.

5 Q. So you cannot speak to how the geology --
6 you know, so more or less -- okay. Let me -- let me
7 start this way.

8 Did you more or less -- so were you
9 overseeing the work that NuTech and OPS Geologic
10 did?

11 A. I was -- I was overseeing the OPS Geologic
12 and the NuTech work, correct. Engineering was
13 overseeing the modeling from Dr. Buchwalter.

14 Q. So how -- talk to the -- tell the
15 Commission the integration of all that great work
16 that was done by these two great institutions and
17 presented it to the Commission, how that was
18 integrated into that geological model that
19 Dr. Buchwalter utilized.

20 A. I mean, the data that was given by OPS
21 Geologic and NuTech -- primarily NuTech because OPS
22 Geologic's data had not been -- we did not have that
23 yet when Dr. Buchwalter's model was being produced.
24 It was primarily NuTech that would have been given
25 to the engineers that were overseeing

1 Dr. Buchwalter's work with the model.

2 But I would leave it to them. I don't
3 want to speak directly to that. I can't.

4 Q. Okay.

5 A. It was before I was there.

6 Q. Okay. But let me put on the record that
7 the hydrocarbon in place calculation that
8 Dr. Buchwalter provided to the Commission is nowhere
9 close to that of NuTech.

10 A. Okay. I'm not sure which hydrocarbon
11 place calculation he utilized. I would refer that
12 back to the engineers.

13 Q. So you said that his -- Dr. Buchwalter's
14 analysis was more or less in line with what your
15 team was leaning towards. Is that -- did you --

16 A. That's what I've been told, yes. As far
17 as the water, what the -- like the communication
18 between the zones is where -- what I'm referring to,
19 between the Grayburg and the San Andres.

20 Q. So, you know, when you experience, you
21 know, working in this type of fields -- I mean, when
22 Dr. Buchwalter presented the results to the Empire
23 team from a geological point of view, you know, were
24 you okay with, let's say, utilizing the high perm
25 values to establish to the Commission that there is

1 a communication between the San Andres and the
2 Grayburg?

3 A. I was. And that's the -- that's a great
4 point to touch on, which is -- I know yesterday it
5 was discussed. You had asked Galen with NuTech that
6 question. The high perm values that Dr. Buchwalter
7 used, the 500 millidarcies and up, those were not --
8 those were not in the San Andres. That was -- he
9 was using those for Zone 1 and 2 of the Grayburg,
10 which there's core in the Grayburg that show perm in
11 the thousands of millidarcies in the upper two
12 zones. And so he was confused.

13 The vertical perm that Dr. Buchwalter used
14 between the San Andres and the Grayburg was, I
15 believe, .1 millidarcies. So that was a mistake on
16 their testimony.

17 Q. Can there be any evidence to prove that?
18 I mean -- and, you know, I went back and forth with
19 him on that. I mean, this is new to me, actually,
20 because I remember Mr. Rankin showed the layers that
21 were utilized, and that is where I picked that from.
22 It was right in the layers.

23 The first model was run assuming there is
24 no vertical -- let's say, I'm assuming that there's
25 no barrier between them, right?

1 A. Um-hmm.

2 Q. And then the subsequent scenarios, you
3 know, I saw that. I mean, we all saw that, right?
4 So in that I saw that the layer between the Grayburg
5 and then the San Andres, the interface, that is
6 where he adjusted the kv. I don't remember he
7 saying or even from the results that I saw here
8 showing their .1 millidarcy. I didn't see that.

9 A. I would -- I would have to defer to the
10 engineers coming up on that question. Like I said,
11 that was the minimal amount that I was involved in
12 that.

13 But like I said, I know -- I know the
14 higher millidarcy -- the higher permeability
15 calculations we've seen were in the core in the
16 upper Grayburg in the thousands -- you know, 500 to
17 thousands. So I suspect that's where Dr. Buchwalter
18 got that data.

19 Q. So I -- are you going to be on record to
20 say that Dr. Buchwalter probably made a mistake in
21 his presentation?

22 A. No. No, sir.

23 Q. You said that.

24 A. I meant Galen when you -- not Galen --
25 Mr. -- sorry, the previous witness prior to that. I

1 believe he was confused of the zone that he was
2 talking to, not Dr. Buchwalter.

3 Q. So you are not speaking to my discussion
4 with Dr. Buchwalter --

5 A. I misunderstood.

6 Q. -- having utilized those high perm for
7 the -- let's say for the San Andres top layer?

8 A. Correct. I apologize, I misunderstood
9 your question.

10 What I was just referring to is -- was
11 yesterday's testimony that I believe was answering
12 that. They kept referring to the highest perm in
13 the San Andres, and I'm just saying that was up --
14 to my knowledge, the highest perm in his model was
15 in the Grayburg, the upper two zones of the
16 Grayburg. But, again, I know it will be addressed.

17 Q. So we do have a transcript, so it will
18 show that -- you know, and that was a concern to me.
19 And I wanted to know from a geological point of
20 view, what did you make of that? You know --

21 A. Correct.

22 Q. -- and remember he talked about: I needed
23 to do that to take care of the fractures.

24 So it's a little bit -- you know, it's a
25 little surprising to me when you're saying he used

1 0.1, how -- then how do you use 0.1 to really
2 address a fracture?

3 A. Yeah, I do not know how Dr. Buchwalter
4 came up with those numbers, and I don't want to
5 speak to them.

6 Q. And I'm sure you understand why I'm asking
7 you these questions, because --

8 A. Correct.

9 Q. -- I see you more as the lead geologist --

10 A. Yes.

11 Q. -- you know, that would solve all the
12 geological aspects of the work. So, you know,
13 you're more or less on the hook for geological --

14 A. Absolutely.

15 Q. -- that are presented to the Commission.
16 Okay. And not to cut more on a side way, but let me
17 get back on track here.

18 Can you tell the Commission -- at least
19 just take the well 679 logs and model log data and
20 confirm the presence of ROZ in the upper and then in
21 the lower San Andres?

22 A. We can confirm the presence of
23 hydrocarbons in those zones. And because we do not
24 believe that they are movable, we can identify that
25 those are an -- that there is a potential ROZ in

1 place.

2 Q. And now it's confirmed with the model logs
3 as well?

4 A. Correct.

5 Q. Okay. So Mr. Rankin touched on one of my
6 important questions. So from a geological point of
7 view, you know -- and, honestly, I did not
8 appreciate when you said that it was the engineering
9 team that picked 0.1 millidarcy. I mean, how did
10 they do that without the geology input --

11 A. Correct.

12 Q. -- in that?

13 A. Well, they were doing that in consultation
14 with Dr. Lindsay, with OPS Geologic, with NuTech. I
15 mean, it just wasn't a singular voice in that
16 decision. There were probably -- were multiple
17 people involved.

18 Q. So definitely, it was geological input?

19 A. There was geological, but my geological
20 input at that time.

21 Q. Okay. Okay. Thanks for clarifying that.
22 Yeah, I was a little bit like -- okay.

23 A. Correct.

24 Q. Okay. So Mr. Rankin was asking you, as
25 the lead geologist, can you tell the Commission how

1 that CO2 that is going to be injected into the
2 San Andres is going to be contained and not impede
3 the correlative rights in the Grayburg?

4 A. I, at this point in time, cannot speak to
5 that, no, sir.

6 Q. So do you believe that -- or as -- an
7 engineering team can respond to that?

8 A. Yes. Yes.

9 Q. Okay. Okay. Okay. Now, with regards to
10 the revision to your testimony, you know, where
11 there was changes in the net pay estimation that
12 impacted the oil in place calculation, I was a
13 little bit surprised, though, that there wasn't --
14 there wasn't a geological analysis done, but there
15 was substantial changes. Can you comment on that?

16 A. Well, I believe it was a matter of timing
17 to get them complete, as well as just the nature of
18 the analysis done by NuTech versus OPS Geologic and
19 their petrophysicist and just the amount of time we
20 have to be able to integrate, you know, the core
21 data and the mineralogical breakdowns. And
22 obviously, that's additional steps that would be
23 taken in the future, absolutely.

24 But, no, we felt that the -- that their
25 model integrating the sampling set that they had was

1 enough for what their output was producing for us.
2 And I believe that mineralogically, they have well
3 responses. They have -- you know, the curves are
4 going to respond mineralogically. And I believe
5 that's -- I feel confident in what they were -- how
6 they were varying in their different scenarios their
7 'm' and 'n'. I believe that OPS Geologic took a
8 little more -- their petrophysicist took in more of
9 the mineralogical model and the -- and the data into
10 their calculations.

11 Q. There has been a lot of questions about
12 'm' and 'n'. I mean, so from a geological point of
13 view, is it in the industry, you know, acceptable to
14 just more or less be changing 'm' and 'n' without
15 any geological context?

16 A. Traditionally, like in a lot of different
17 plays, yes. But I believe that they had -- that the
18 knowledge of the analog fields and seeing San Andres
19 wells and production and cores in other areas, and,
20 you know that there's -- you may want to vary your
21 'm' and 'n' in certain models based on your
22 depositional environment, but it does come back to
23 the geology when you start to really tie those in.

24 But once we got there, their outputs that
25 we looked at, the oil in place numbers we saw that

1 they were in line or similar with kind of the same
2 ranges that we were seeing with OPS Geologic as
3 well. I mean, there were differences, absolutely,
4 because of cutoffs used, but that where you had one
5 model that used a little more of the -- of the
6 mineralogical data versus the other but you saw
7 similar, we felt comfortable at that time using --
8 utilizing that.

9 But that's why I personally -- that's why
10 I revised my testimony to use the lower case from
11 the range that -- the two models that NuTech used.

12 Q. Okay. So I had to dig about outcrops,
13 fracture from outcrops. Has there been any evidence
14 presented to the Commission to that effect?

15 A. Other than just Dr. Lindsay's fracture
16 study, he refers to it in his testimony.

17 Q. Dr. Lindsay talked about outcrops?

18 A. Yes. He talked about his outcrop studies
19 that he did prior to doing the fracture study that
20 he conducted for Chevron, but I'm not sure what he
21 submitted for evidence, but . . .

22 Q. Okay. So NuTech analysis -- I mean, so
23 yesterday we heard about, let's say, a petrophysical
24 log analysis saying that he doesn't even always have
25 big faith in the core data. I mean, can you speak

1 to that?

2 A. I disagree with him.

3 Q. I was hope --

4 A. Rock is rock. And you're not going to get
5 a better reading than that, so . . .

6 Q. Yeah. So then why are you not really
7 utilizing that to prove the understanding of
8 saturation, oil saturation in -- let's say in the
9 EMSU?

10 A. That was his -- their company's choice in
11 the matter. And while we were just -- the initial
12 scope was to see if there was hydrocarbons present.
13 It was a great first look model, and that's why I
14 changed my -- revised my testimony to, again, very
15 low side case, because it was utilizing and
16 calibrating back to the core data. I believe that
17 was important.

18 Q. Okay. And my last question to you will
19 be: When you look through some of the figures that
20 you were showing, let's say G-3(d) -- G-3(d) --
21 let's just use the well names. EMSU 658. And I do
22 appreciate you showing that and then also on the
23 map. Then 673, EMSU 713.

24 Now, EMSU 660 -- EMSU 660 and then EMSU
25 76 -- 746, I mean, those two wells in particular,

1 particularly 7 -- EMSU 746 shows a lot of water,
2 high volume of water saturation in there. So do you
3 believe that these are a representation -- it's a
4 representative of the entire EMSU?

5 A. I believe that they're estimates within
6 the 640 box that they're calculating. And you will
7 see the trends vary, you know, water saturations.
8 You're definitely going to see, you know, zones
9 within it of high water saturations based on those
10 wells. But you're also going to see the oil
11 saturations needed in place.

12 Q. Yeah. So if you can give me the EMSU 746,
13 that will be Exhibit G-3.

14 No. 746.

15 A. Oh, I believe it's in the revised
16 testimony, not the -- not the original presentation.

17 Q. If you are familiar with that one, you see
18 that one has a lot of water in there. Would that be
19 an outlier well?

20 A. I'd need to see, I'm sorry, the map. Just
21 want to make sure I'm speaking to the right thing.

22 Q. So that would be page 23 of Table 1,
23 NuTech analysis of San Andres. It's in the
24 Exhibit G-3(h).

25 COMMISSIONER AMPOMAH: And I promise

1 that is my last question.

2 HEARING OFFICER HARWOOD: That's
3 okay.

4 Q. Yeah. So if you look at this one, at
5 least the top portion, you can see -- you can see
6 some of the black. But, you know, if you look at
7 that entire section, it is mostly a water bearing
8 zone.

9 So would that be more or less an outlier
10 compared to some of the other ones that you've shown
11 earlier?

12 A. I believe that it could be an outlier
13 compared to some of the other ones we've shown.
14 Obviously, we'd like a bigger sample, but when
15 you -- when you look at the average porosity and
16 water -- if you scroll down just a little bit,
17 please --

18 Q. Down.

19 A. -- so I can see the -- yeah.

20 So what you see is your average porosity
21 test to be, if I remember correctly, a little higher
22 than some of the other wells, but still pretty much
23 on trend. Your oil saturation's 25 percent. So I
24 believe there's one or two other wells that you see
25 for the logged interval for those type of oil

1 saturations.

2 So, yes, I believe the water saturation
3 number would be on -- you know, probably an outlier
4 for that area.

5 Q. And these ones, are they hand calculated
6 or software generated oil in place, as you see the
7 bottom there?

8 A. Well, those calculations are made off of
9 NuTech's model, by their curve outputs.

10 Q. So it's based on the software output, not
11 on necessarily hand --

12 A. We internally calculated them based on
13 their values from the curve outputs.

14 COMMISSIONER AMPOMAH: Thank you,
15 sir. I do appreciate your time talking to us.

16 JOSEPH McSHANE: Yes.

17 COMMISSIONER AMPOMAH: Thank you.

18 HEARING OFFICER HARWOOD: Okay.

19 Thank you, Dr. Ampomah.

20 Ms. Shaheen, I assume you'll have
21 redirect?

22 MS. SHAHEEN: I will have some
23 redirect, but not a whole lot.

24 HEARING OFFICER HARWOOD: Oh, okay.

25 Well, I don't want to cut you short, because it just

1 flipped over to noon. So we'll pick back up at 1:30
2 with your redirect.

3 MR. SHANDLER: Let me do some quick
4 mechanics. At 1:15 the Commission is going to
5 discuss the oral -- closing request. And so they're
6 going to be meeting in quorum. And so it will be a
7 closed session.

8 So if I can get a commissioner to
9 approve -- a motion to go into closed session from
10 1:15 to 1:30 under the Open Meetings Act,
11 10-15-1(H)(2). Again, so move.

12 COMMISSIONER AMPOMAH: I do so move.

13 MR. SHANDLER: Can I have a second?

14 COMMISSIONER LAMKIN: I second.

15 MR. SHANDLER: Okay. And does all
16 approve of that?

17 Okay. So that's where we'll be from 1:15
18 to 1:30.

19 (Recess was taken from 12:01 p.m. until 1:31 p.m.)

20 HEARING OFFICER HARWOOD: Ms.
21 Apodaca, I probably don't need to ask, but are you
22 ready in the back?

23 MS. APOCACA: Yes, we're ready.

24 HEARING OFFICER HARWOOD: All right.
25 Ms. Tellez, are your fingers rested?

1 All right. Let's go back on the record
2 then.

3 MR. SHANDLER: Right. So,
4 Mr. Hearing Officer, just quick mechanics, just need
5 a motion to return to open session.

6 COMMISSIONER AMPOMAH: I so move.

7 MR. SHANDLER: Can I have a second?

8 COMMISSIONER LAMKIN: I second.

9 MR. SHANDLER: So we have approval
10 there. Just stated for the record, the only matters
11 discussed in the closed session were those listed in
12 the motion regarding post hearing scheduling.

13 Thank you, Mr. Hearing Officer.

14 HEARING OFFICER HARWOOD: Thank you,
15 Mr. Shandler.

16 So before you get rolling on your
17 redirect, Ms. Shaheen, we discussed that parties'
18 interest -- apparently mutual interest in presenting
19 oral closing arguments. And I guess the idea is if
20 you-all allow enough time at the end of this for
21 that to be practical, there would be no objection to
22 it. We wouldn't want to be in a situation where
23 we're at the end, for example, of -- not this week
24 but two weeks from now at the end of the case and
25 it's Friday at 4:30 and you-all want to come back

1 again in May just to do closing arguments.

2 But if you leave time to permit that at
3 the end of this case so that it's not inconvenient,
4 the thinking was we would allow each side one hour
5 for oral. Each side, I guess that would include
6 OCD, Rice, and Pilot, you know, an hour for closing
7 arguments.

8 And, of course, with that said, we'd
9 prefer that we not hear the same thing over and over
10 again from interested parties, like Rice and Pilot.
11 And I will suspect you guys have been around long
12 enough that I don't even need to say that.

13 But -- so that was the thinking, that we
14 would allow oral closing arguments, and if -- of an
15 hour each. And if each of the principal parties
16 wants to reserve, say, 15 minutes of that time, or
17 however much, ten minutes of that time to rebut the
18 other side's presentation, you can do that as well.

19 The thinking was we're more interested --
20 I mean, you-all know the jury instructions, right?
21 What lawyers say is not evidence. It can be
22 helpful. But what I think the Commission would find
23 far more helpful and will need in this case is
24 written findings of fact and conclusions of law with
25 specific references to the record supporting the

1 contention.

2 And also, I think someone mentioned
3 submitting a post hearing legal briefing on the
4 legal issues, what the Commission can and cannot do.
5 So if you want to both submit those, you know, those
6 would likely be helpful to the deliberations.

7 Any questions? I'll start with Empire.

8 MS. SHAHEEN: No questions from
9 Empire. Thank you.

10 HEARING OFFICER HARWOOD: Okay. And
11 we've got, you know, plenty more time to discuss
12 this. I just wanted to give you guys an answer now
13 since you raised the question yesterday.

14 Mr. Rankin, thoughts? Questions?

15 MR. RANKIN: No questions at this
16 time. I think we can confer about the instructions
17 from -- or requests from the Commission and about
18 timing and so forth.

19 HEARING OFFICER HARWOOD: Perfect.

20 All right. Mr. McShane, I'll remind you
21 you're under oath.

22 And, Ms. Shaheen, take it away.
23
24
25

1 REDIRECT EXAMINATION

2 BY MS. SHAHEEN:

3 Q. Mr. McShane, you talked earlier today
4 about reliance on the ExxonMobil sales brochure. Do
5 you recall that testimony?

6 A. Yes.

7 Q. And to clarify, were you saying that
8 Empire was not relying on ExxonMobil or that you did
9 not rely on it?

10 A. I did not rely on it.

11 Q. And can you speak to whether Empire's
12 relying on it?

13 A. No, I can't because I was not employed at
14 the time of the evaluation.

15 Q. Earlier you were asked about Empire's SWD
16 well. Do you recall that exchange?

17 A. Yes.

18 Q. And how many SWDs does Empire have in the
19 EMSU?

20 A. They have one. I mistakenly said six
21 because I was confused thinking about injection
22 wells.

23 Q. And it's five to six water supply wells
24 that Empire has; is that right?

25 A. Correct. As far as -- I mean, I'm sorry.

1 Q. And to be clear, the Empire SWD, is that
2 the Chevron well that was converted to an SWD in
3 1995?

4 A. Correct, and is used for emergency use
5 only.

6 Q. And current usage is for emergencies; is
7 that right?

8 A. Yes.

9 Q. And historically, how much water has been
10 injected in Empire's SWD?

11 A. A couple hundred barrels.

12 Q. That's an average?

13 A. That's an average.

14 Q. And how does that compare to the
15 commercial injection by third parties occurring
16 today?

17 A. Within a mile radius of the EMSU, you're
18 looking at hundreds of thousands of barrels being
19 disposed of commercially versus the couple hundred
20 when we use it.

21 Q. And that's -- did you say a couple hundred
22 thousand barrels of water per day?

23 A. Correct.

24 Q. You were asked by Mr. Rankin earlier what
25 physical evidence you reviewed in support of your

1 conclusion about vertical fractures. Do you
2 remember that exchange?

3 A. Yes.

4 Q. Was there any evidence in addition to the
5 core that you considered?

6 A. In addition to the core, it was just well
7 logs, regional studies, as well as Dr. Lindsay's,
8 Ph.D., study of outcrops, correlating fractures in
9 the outcrops to the fractures present in the 679
10 well.

11 Q. And you applied generally accepted
12 standards from geological science when you
13 considered those factors; is that right?

14 A. That's correct.

15 Q. And it's common accepted practice in your
16 field and in the industry to rely on those
17 considerations?

18 A. That's correct.

19 MS. SHAHEEN: That's all the redirect
20 I have. Thank you.

21 HEARING OFFICER HARWOOD: Thank you.
22 Technology always overwhelms me, no matter how
23 insignificant.

24 Thank you, Ms. Shaheen. May this witness
25 be excused?

Direct Examination by Ms. Shaheen

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1 MS. SHAHEEN: Yes. Thank you.

2 HEARING OFFICER HARWOOD: All right.

3 My notes show that Empire has two more witnesses, a
4 Jack Wheeler and a William West. Is that accurate?

5 MS. SHAHEEN: That's correct. And
6 Mr. Wheeler is here in person.

7 HEARING OFFICER HARWOOD: I see him
8 approaching.

9 Good afternoon, sir. Is it Mr. or Dr.?

10 JACK WHEELER: Mr.

11 HEARING OFFICER HARWOOD: Pardon?

12 JACK WHEELER: Mr.

13 HEARING OFFICER HARWOOD: All right.

14 Mr. Wheeler, if you'll raise your right hand.

15 JACK WHEELER
16 having been first duly sworn, testified as follows:

17 HEARING OFFICER HARWOOD: All right.

18 Ms. Shaheen, I guess.

19 MS. SHAHEEN: Yes, it is. It's
20 taking me a minute just to get back on the platform
21 here.

22 DIRECT EXAMINATION

23 BY MS. SHAHEEN:

24 Q. Good afternoon, Mr. Wheeler.

25 A. Good afternoon.

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1 Q. Would you please state your name for the
2 record.

3 A. Yes. Jack Wheeler.

4 Q. Who are you employed with and in what
5 capacity?

6 A. Senior vice president of the Land and
7 Legal Departments at Empire Petroleum Corporation.

8 Q. And are you testifying today as an expert
9 in petroleum land matters?

10 A. Yes, ma'am.

11 Q. Have you testified before the Commission
12 or the Division before?

13 A. Yes, ma'am.

14 Q. And you've -- nonetheless, you've attached
15 your credentials to your written testimony in this
16 matter; is that right?

17 A. Yes, ma'am.

18 MS. SHAHEEN: I move now that
19 Mr. Wheeler be qualified as an expert witness in
20 petroleum land matters.

21 HEARING OFFICER HARWOOD: Any
22 objection from Goodnight?

23 MR. RANKIN: No objection.

24 HEARING OFFICER HARWOOD: OCD?

25 MR. MOANDER: No objection.

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1 HEARING OFFICER HARWOOD: Rice?

2 MR. BECK: No objection.

3 HEARING OFFICER HARWOOD: Pilot?

4 MR. SUAZO: No objection.

5 HEARING OFFICER HARWOOD: Mr. Wheeler
6 will be recognized as an expert in petroleum land
7 matters.

8 JACK WHEELER: Thank you.

9 Q (By Ms. Shaheen) You've offered direct
10 testimony in this matter as Empire's Exhibit A; is
11 that right?

12 A. Yes, ma'am.

13 Q. Do you have any corrections to that
14 testimony today?

15 A. No, ma'am.

16 Q. Do you affirm that the statements made
17 therein are correct and adopt Exhibit A as your
18 sworn testimony here today?

19 A. Yes, ma'am.

20 MS. SHAHEEN: I would move for
21 admission of Empire's Exhibit A and all of the
22 exhibits attached thereto.

23 HEARING OFFICER HARWOOD: Goodnight's
24 position?

25 MR. RANKIN: No objection.

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1 HEARING OFFICER HARWOOD: OCD?

2 MR. MOANDER: No objection.

3 HEARING OFFICER HARWOOD: Rice?

4 MR. BECK: No objection.

5 HEARING OFFICER HARWOOD: Pilot?

6 MR. SUAZO: No objection.

7 HEARING OFFICER HARWOOD: It will be
8 admitted.

9 (Exhibit A admitted into evidence.)

10 Q (By Ms. Shaheen) Mr. Wheeler, can you tell
11 us some important facts about the EMSU?

12 A. Yes, ma'am. The field was discovered in
13 1929, and within ten years, it had already produced
14 over a million barrels of oil.

15 And in 1984, in December of '84, the EMSU
16 waterflood was approved. And with that approval, it
17 was represented that it was estimated that there was
18 64 million barrels of oil in that -- or to be
19 recovered.

20 Q. How large is the unit?

21 A. Yes, ma'am, it's 14,199 acres, the
22 majority of which are State and Federal lands. The
23 State has 58 percent of the lands, and the BLM had
24 19 percent. So together, within the EMSU is
25 78 percent that is owned by the State and the BLM.

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1 So that's why it's so important that we protect the
2 correlative rights of those parties.

3 Q. Turning to the next slide. Can you tell
4 the commissioners the significant of this order?

5 A. Yes, ma'am. This is the order Number
6 R-7765. And this is the cover page of the order
7 showing that it was approved on December the 27th of
8 1984.

9 Q. And does this -- what is the significance
10 of page 9 of the order here? Does it define the
11 unitized interval?

12 A. Yes, ma'am. It defines vertical limits of
13 the unit, which are from the top of the Grayburg to
14 the lower limit at the base of the San Andres
15 formation.

16 Q. And did BLM and the New Mexico State Land
17 Office approve the unit and its unitized interval?

18 A. Yes, ma'am.

19 Q. What is the significance of this order?

20 A. Well, at the same time that order number
21 7765 was issued and approved, they also issued an
22 order, the Commission, for R-7767.

23 Q. And does this Section 2 from page 2 of the
24 order define the vertical limits of the Eunice
25 Monument Oil Pool?

1 A. Yes, ma'am. What they did is, they
2 amended the vertical limits of the pool that had
3 previously been admitted. And the new limits are
4 from the upper level of the top of the Grayburg to
5 the lower limit of the San Andres formation.

6 Q. So it's the same as the unitized interval
7 in the unit?

8 A. Yes, ma'am. And this is for both Eunice
9 Monument Oil Pool and also for the Eunice Monument
10 Gas Pool.

11 Q. Can you tell us a little bit about the
12 acquisition of EMSU by Empire?

13 A. Yes, ma'am. In 2021, Empire acquired the
14 EMSU, the EMSU-B, and the AG unit and some outlying
15 properties from X- -- XTO, which is a subsidiary of
16 ExxonMobil, for \$89,800,000.

17 Q. And how is that 89 million calculated?

18 A. Yes, ma'am. There was a \$17,800,000 cash
19 payment. Also there was the assumption of the P&A
20 liability, which is estimated at the current cost of
21 being 56 million. And then also there was the
22 assumption of the liability for remediation of 288
23 surface locations on New Mexico State land. As
24 Chevron or XTO had not carried out, that's an
25 estimated \$16 million.

1 Q. And those last two numbers, the 16 million
2 and the 56 million, that's at current cost; is that
3 right?

4 A. Yes, ma'am.

5 Q. And did ExxonMobil make any
6 representations when they were marketing the EMSU?

7 A. Yes, ma'am. In their sales brochure, they
8 showed that there was a residual oil zone in the
9 San Andres as 350 feet thick, there was
10 912 million barrels original oil in place, and an
11 average oil saturation of 25 percent.

12 Q. Why did Empire acquire the EMSU?

13 A. Well, if you look previously when the EMSU
14 unit was formed, it was estimated that there was
15 64 million barrels of oil that were recoverable.
16 With the residual oil zone, you see that ExxonMobil
17 represents that it's 912 million barrels. So it's
18 15, 20-fold more than they had for the waterflood
19 unit.

20 So for the ROZ interval, which was going
21 to be a tertiary recovery using CO2, there was a
22 significant value there that equated to the value of
23 us paying \$90 million for the property.

24 Q. Is this a document in which ExxonMobil
25 makes those representations?

1 A. Yes, ma'am.

2 Q. What does this first slide depict?

3 A. Well, the first slide shows ExxonMobil
4 representing the incentive for buying the
5 properties. And here they represent that there's a
6 ROZ interval of approximately 350 feet thick with an
7 average oil saturation of 25 percent.

8 Q. What is the significance of this next
9 slide?

10 A. Yes, ma'am. Here they show the structure
11 map and the type log. And if you look there, they
12 show the oil-water contact from the top of the
13 residual oil zone to the base of 400 feet to
14 700 feet, which would mean that the interval was
15 300 feet thick.

16 But also, there is a residual oil zone.
17 If you look above, the oil-water contact up to
18 where, on the right you see where the top of the
19 San Andres is, which would equate to 350 feet. But
20 then also here they show that the original oil in
21 place was 912 million barrels of oil.

22 Q. What does this slide show us?

23 A. Yes, ma'am. This is a type log showing
24 the EMSU-B, the EMSU, and the AGU. And for
25 reference, we've talked about the EMSU being the

1 Eunice Monument South Unit, and the AGU down here is
2 the Arrowhead Grayburg Unit.

3 But here they show once again that the top
4 of the ROZ is 400 feet, 700 feet. So it's a
5 300-foot interval. But once again, you have 50 feet
6 of a transition zone up to the top of the
7 San Andres, which would make it 350 feet. And
8 there, once again, they represent that there's
9 912 million barrels of oil in place.

10 Q. Is this the cover page to the purchase and
11 sale agreement between XTO and Empire?

12 A. Yes, ma'am.

13 Q. Does this agreement have any provisions
14 relating to CO2 recovery?

15 A. Yes, ma'am. In Section 12.8 of the
16 purchase and sale agreement, it provides a CO2
17 purchase obligation. And basically what it is, is
18 it provides that if Empire or any of its affiliates
19 elect to do a CO2 flood, then ExxonMobil has the
20 first right of refusal to purchase the CO2. And
21 it's the first right. It's not an obligation.
22 They've got the right to pass on it.

23 But it provides that if we do buy CO2,
24 then we'll notify them within 60 days prior to the
25 initiation of the CO2 flood. And then if ExxonMobil

1 elects to sell us the CO2 at the current market
2 rate, then we're obligated to purchase from them.
3 If we find another CO2 source that's cheaper, then
4 we have to give ExxonMobil, once again, 30 days'
5 notice in which they have the right to go in and
6 match that.

7 Q. And if ExxonMobil doesn't match that
8 price, then Empire's free to purchase carbon dioxide
9 from another party with the lower price; is that
10 right?

11 A. Yes, ma'am. But then it provides that if
12 at any time we change the seller of the CO2 to
13 another party, that anytime within those 50 years,
14 ExxonMobil has the right to come back, match that
15 price and sell us the CO2.

16 Q. How does Goodnight's conduct affect
17 Empire's acquisition of the EMSU?

18 A. Yes, ma'am. There's some significant
19 problems with Goodnight's applications. Basically,
20 first of all, for the existing wells, the four
21 existing wells, they did not form the -- inform the
22 Division that the proposed injection formation was
23 the unitized formation. Nor did they advise the
24 Division that the injection would be in the Eunice
25 Monument Oil Pool or the Eunice Monument Gas Pool.

1 What they did is, instead of using orders
2 7765 and 7767, they used an order called 96121,
3 which was an order for a San Andres water injection.

4 Q. And the reference to 91621, that's a pool
5 code; is that right?

6 A. Yes, ma'am.

7 Q. And that's a pool code that was specially
8 created for reporting of saltwater disposal?

9 A. Yes, ma'am.

10 Q. And that is within the San Andres --
11 excuse me -- within the unitized interval of the
12 EMSU, correct?

13 A. Yes, ma'am. Covers a broader area, but
14 the EMSU is included.

15 Q. How much water has Goodnight injected into
16 the EMSU's unitized interval?

17 A. As of March 1, 2025, which is the last
18 record they had, they'd injected over
19 65 million barrels of wastewater into the San Andres
20 formation.

21 Q. How is Goodnight's conduct and injection
22 affecting the prospect of production through the use
23 of CO2 that was anticipated by both ExxonMobil and
24 Empire?

25 A. Yes, ma'am. First of all, the injection

1 is impairing the correlative rights of all of the
2 interest owners. And this is significant since
3 this -- as I stated previously, 78 percent of the
4 lands are owned by the State of New Mexico and the
5 Bureau of Land Management.

6 So not only are we protecting our right to
7 go in and do tertiary recovery, but it's also
8 destroying the correlative rights of the State and
9 the BLM, which is significant.

10 They're also causing waste by pressuring
11 up the San Andres and injecting this foreign
12 wastewater into the unitized formation.

13 Q. Turning to your last slide here, can you
14 describe -- does this slide illustrate the location
15 of Goodnight's existing wells?

16 A. Yes, ma'am. If you look in the blue, that
17 identifies the four existing permitted wells that
18 Empire's seeking to have the permits revoked. And
19 then there's five wells here where they're proposing
20 for new injection at a location that we're opposing.

21 Q. And is it correct to say that the four
22 existing wells are all located in one 640-acre
23 section within the EMSU?

24 A. Yes, ma'am, Section 17.

25 Q. Does that conclude the summary of your

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1 direct testimony today?

2 A. Yes, ma'am.

3 MS. SHAHEEN: Thank you, Mr. Wheeler.

4 I pass the witness.

5 HEARING OFFICER HARWOOD: Okay.

6 Thank you, Ms. Shaheen.

7 Mr. Rankin?

8 MR. RANKIN: Thank you. I would -- I
9 do have questions for Mr. Wheeler. I wonder -- I'd
10 like -- I wouldn't mind having that presentation so
11 I could drive him through it, Mr. Hearing Officer.

12 I wonder if I might just take a short break so
13 Ms. Shaheen can share with me that presentation so I
14 can use it as part of my cross against Mr. Wheeler.

15 HEARING OFFICER HARWOOD: Sure. How
16 much time do you need?

17 MR. RANKIN: Just five minutes.

18 HEARING OFFICER HARWOOD: Sure.

19 MR. RANKIN: Five minutes.

20 HEARING OFFICER HARWOOD: All right.

21 MR. RANKIN: Thank you.

22 HEARING OFFICER HARWOOD: Be off the
23 record for five minutes.

24 (Recess was taken from 1:59 p.m. until 2:05 p.m.)

25 HEARING OFFICER HARWOOD: Are you

1 ready to proceed?

2 MR. RANKIN: I am.

3 HEARING OFFICER HARWOOD: All right.

4 Are we back on the record, Ms. Tellez?

5 All right. I hear -- see affirmative head
6 nod there.

7 Go ahead, Mr. Rankin.

8 MR. RANKIN: Thank you.

9 CROSS-EXAMINATION

10 BY MR. RANKIN:

11 Q. Mr. Wheeler, how are you this afternoon?

12 A. Just fine, sir.

13 Q. Good. Before I get into the summary
14 presentation slides that you reviewed with us this
15 afternoon, I want to explore a little bit more your
16 background and experience in the oil and gas
17 industry. As part of your attachment -- or as part
18 of your Exhibit A direct testimony that you filed,
19 you also included your resume, as well, correct?

20 A. Yes, sir.

21 Q. And you also summarized in your testimony
22 your experience as a -- in the oil and gas industry,
23 correct?

24 A. Yes, sir.

25 Q. And I guess it's -- I went past it here.

1 It's -- pdf page 12 of your exhibit packet
2 is your resume, correct?

3 I'm not sharing it on your screen yet. I
4 apologize. Let me make life easier for you and
5 everybody. Sorry.

6 Let me know when you can see my screen,
7 Mr. Wheeler.

8 A. Yes, sir.

9 Q. Okay. Is this a copy of the resume that
10 you attached to your sworn statement?

11 A. Yes, sir.

12 Q. In reviewing your resume and your sworn
13 testimony, you're not an expert in petroleum
14 geology, agree?

15 A. Absolutely.

16 Q. Absolutely what?

17 A. No.

18 Q. Okay. And you're not an expert in
19 petroleum engineering, correct?

20 A. Correct.

21 Q. And you're not an expert in reservoir
22 engineering, correct?

23 A. Correct.

24 Q. And you're not providing any opinions on
25 those subject matters, correct?

1 A. Correct.

2 Q. And you're not seeking to be qualified as
3 an expert in petroleum geology, correct?

4 A. No, sir.

5 Q. Nor are you seeking to be qualified as an
6 expert in petroleum engineering, correct?

7 A. No, sir.

8 Q. Correct?

9 A. Correct.

10 Q. Okay. So going back through your history
11 here, I guess I'll start with -- you previously were
12 with -- I think going back in time, you were
13 previously with El Paso Natural Gas Company,
14 correct?

15 A. Yes, sir.

16 Q. And at the time, you were responsible for
17 handling all due diligence analysis of land and
18 title and ensuring the timely delivery of
19 information required?

20 A. Yes, sir.

21 Q. What did -- what did those
22 responsibilities include on the oil and gas context?

23 A. During that time, we made about 120
24 acquisitions of other companies and properties. And
25 I was responsible for overseeing the due diligence

1 of all of the assets that were being purchased. And
2 then also negotiating the purchase and sale
3 agreements with the other company. And then doing
4 the final closing of those acquisitions. And then
5 the integration of those properties into the land
6 system at El Paso.

7 Q. Okay. As part of -- so you did a lot --
8 you were a -- you were also -- as part of that
9 responsibility, did you oversee the due diligence
10 that was done?

11 A. Yes, sir.

12 Q. And was it common when you were acquiring
13 properties to evaluate what other operations or
14 operators were being -- operated on those
15 properties?

16 A. Yes, sir.

17 Q. And those would include not just oil and
18 gas exploration operations, but also saltwater
19 disposal operations as well?

20 A. Yes.

21 Q. Because you would want to know before
22 buying a property what other operations might be
23 occurring on that property, correct?

24 A. I'm sorry, I didn't hear you.

25 Q. As part of your due diligence in acquiring

1 a property, you would want to know what other
2 operations are occurring on that property, correct?

3 A. Yes, sir.

4 Q. Because it's often the case when you're
5 buying a property or lease, a lease interest may
6 have been segregated, right? There may be other
7 working interest owners that have operations on
8 those -- on those properties --

9 A. Yes, sir.

10 Q. -- that you're not acquiring, correct?

11 A. Yes, sir.

12 Q. So as part of your due diligence, you want
13 to know what other operations are occurring,
14 correct?

15 A. Yes, sir.

16 Q. And surface owners sometimes also have
17 operations below the surface that may impact oil and
18 gas operations, correct?

19 A. No, sir.

20 Q. No?

21 A. No.

22 Q. That's not the case, where a surface owner
23 may have some operations that are occurring down --
24 in deeper zones?

25 A. No, sir.

1 Q. You've never experienced that before?

2 A. Never.

3 Q. Oh, interesting. So -- well -- now, when
4 you worked for Cotton Valley Resources, that was
5 your next employment; is that correct?

6 A. Yes, sir.

7 Q. And at the time when you worked for Cotton
8 Valley, you were responsible for timely and accurate
9 preparation of filing of SEC documents, including
10 10-Qs and 10-Ks, correct?

11 A. Yes, sir.

12 Q. The 10-Q, is that a quarterly report; is
13 that right?

14 A. Quarterly and then annual.

15 Q. And the 10-K is annual?

16 A. Yes.

17 Q. Okay. And what were your responsibilities
18 in terms of preparing those filings?

19 A. I was the chairman of the corporation, so
20 I was responsible for signing off on the 10-K and
21 10-Qs. So in that capacity, I had to oversee the
22 reservoir engineering that was being done for the
23 notification to the Securities and Exchange
24 Commission of what the reserves were for the
25 properties.

1 Q. Okay. So you did that for a number of
2 years. You were there for at least eight years,
3 correct?

4 A. Yes, sir.

5 Q. So you were responsible for overseeing the
6 submission and filings of each of the quarterly
7 reports and every annual report while there?

8 A. Yes, sir.

9 Q. Okay. What -- where were Cotton Valley
10 Resources' assets located?

11 A. They were in about seven states, including
12 Canada. So they are primarily in Texas,
13 Mississippi, Oklahoma, Louisiana, and New Mexico.

14 Q. Where in New Mexico?

15 A. We leased some acreage that we were
16 developing. We had leased it from Robert O.
17 Anderson, who is the former chairman of Atlantic
18 Ridgefield. And he had a large ranch outside of
19 Santa Rosa, New Mexico. And that's where we
20 operated and drilled our wells.

21 Q. Following your time with Cotton Valley,
22 then you were -- joined Tuscany Oil and Gas in
23 Oklahoma City?

24 A. Yes, sir. We sold Cotton Valley to
25 Chesapeake, which -- and Cotton Valley was a public

1 company. And then I took the money that I had and
2 formed Tuscany, which was a private company.

3 Q. Where were those operations?

4 A. They were primarily in Oklahoma, but also
5 in Texas and New Mexico.

6 Q. Where in New Mexico?

7 A. We went in and took farmouts from
8 Chesapeake on the acreage that we had from
9 Mr. Anderson. We also had operations in Eddy
10 County, which was the Yates Oil & Gas Company. And
11 we purchased some acreage from them outside of
12 Artesia, New Mexico, and drilled wells there.

13 Q. And then you became -- it looks like after
14 another interlude at another company, you became an
15 independent oil and gas consultant and attorney; is
16 that correct?

17 A. Yes, sir. I tried to retire after
18 Tuscany, but I didn't -- that didn't last very long,
19 so . . .

20 Q. So what did you do in that role? What
21 were your -- what did you do during that period of
22 time?

23 A. Basically, I did evaluations to render
24 title opinions, handle purchase and sale agreements
25 as a consultant for companies that were selling.

1 And then I also acted as an expert witness in
2 Commission hearings.

3 Q. And you also helped prepare and file 10-Qs
4 and 10-Ks, correct?

5 A. Yes, sir.

6 Q. In addition -- what role did you have in
7 assisting with filing -- making those filings?

8 A. I was just a consulting attorney, so I
9 would draft the 10-Ks and 10-Qs and present it to
10 the company that I was consulting for. And then
11 have them review and sign off on them. And I'd
12 furnish them to the SEC.

13 Q. So you mentioned in your previous role, I
14 think, at Cotton Valley that the 10-Ks and 10-Qs
15 would be reporting the reserves for the company; is
16 that right?

17 A. Yes, sir.

18 Q. But that's not the only thing that you
19 report in those, right?

20 A. No, sir.

21 Q. What other -- what other information gets
22 included in the 10-Ks and 10-Qs?

23 A. For example, you have to disclose any
24 lawsuits or legal matters that were affecting the
25 company, which would affect the company from having

1 lawsuits that they might lose that would affect the
2 value of the company and stuff, for example, some
3 matters like that.

4 Q. You also report the financial status of
5 the company?

6 A. Yes, sir.

7 Q. Any profit, losses, debts, that sort of
8 thing?

9 A. Yes, sir.

10 Q. So you did that for -- are you continuing
11 that role, continuing to do that work for other --
12 other clients? Or no longer, now that you're
13 engaged with Empire?

14 A. Yes, sir, up until I went to work for
15 Empire.

16 Q. So when did you join Empire?

17 A. In September of 2023. I worked five
18 months for PIE Operating, which is a company
19 associated with Empire. And I did that from May of
20 '23 to September of '23, where I rendered title
21 opinions on all of the assets and the minerals that
22 they had acquired in Louisiana.

23 Q. Just Louisiana?

24 A. Yes, sir.

25 Q. I understand Louisiana's a little

1 different when it comes to oil and gas law --

2 A. Yes, sir.

3 Q. -- than anywhere else.

4 A. Quite a bit.

5 Q. So tell me, you mentioned that PIE is
6 associated with or related to Empire. Tell me, how
7 is PIE Operating related to Empire?

8 A. Well, Phil Mulacek, who is the chairman of
9 Empire, has several companies that he owns that his
10 son operates. And PIE Operating is one of those
11 companies.

12 Q. How is it related to Empire?

13 A. I would just say because of the ownership
14 of Mr. Mulacek of both companies.

15 Q. Is there any ownership relationship or
16 does PIE operate and own any stake in Empire?

17 A. No, sir.

18 Q. So it's just by virtue of the -- of the
19 controlling entities or the folks that have an
20 interest in these companies that there's a
21 relationship?

22 A. Yes.

23 Q. Okay. So you were with PIE Operating, and
24 then they asked you -- how did you come to be
25 employed by Empire?

1 A. Empire had the need for an attorney to
2 lead the rebuttal and response to the applications
3 that Goodnight Midstream Permian had filed with the
4 Commission. So he transferred me over to Empire to
5 handle all of the legal matters and stuff related to
6 the Goodnight applications for authority to inject.

7 Q. And what do your duties as VP of land and
8 legal include at Empire?

9 A. Well, I've been primarily focused on
10 Goodnight, but also there's some litigation in
11 North Dakota, Texas, and I handle that litigation.
12 I also oversee the Land Department. There's another
13 attorney on my staff that reports to me, so I handle
14 all of those management matters.

15 Q. Got it. And do your duties include
16 overseeing outside counsel, as well, then?

17 A. Yes, sir, outside counsel and expert
18 witnesses.

19 Q. Do you prepare all legal documents
20 required for operations for Empire?

21 A. I don't -- we have an outside firm that
22 does the 10-Ks and 10-Qs, but I'm responsible for
23 supporting the Engineering and Geology Department
24 for the land matters for our operations.

25 Q. As head of the Legal Department, do you

1 oversee the 10-Ks and 10-Qs that Empire submits to
2 SEC?

3 A. No, sir. We have outside counsel that
4 prepares those. But then when they're prepared and
5 furnished to Empire for execution by Mr. Morrisett,
6 who is the president of Empire, he furnishes certain
7 portions of that for me to review and comment on.

8 Q. Which portions does he give you to review
9 and comment on?

10 A. Primarily, for example, the litigation and
11 the furnishing of information about operations and
12 the issues that we have with Goodnight that we
13 report to the SEC.

14 Q. Okay. So information on operations,
15 including any issues that come up in Texas or
16 North Dakota as well?

17 A. Yes, sir.

18 Q. Okay. But you don't review the 10-Qs or
19 10-Ks as a whole?

20 A. No, sir.

21 Q. Okay. Are you also -- as part of your job
22 responsibilities, do you oversee relations and
23 communications with OCD?

24 A. Yes, sir.

25 Q. Including the company's obligations with

1 its inactive wells?

2 A. We negotiated an order with Jesse Tremaine
3 with the OCD where we went in and had to have 96
4 wells that the OCD had notified us that needed to be
5 repaired, put back into production, or plugged and
6 abandoned. So I oversaw that with communication of
7 the field operations in the Engineering Department
8 for all of those wells.

9 Q. You said that that order required you to
10 put wells back into production or to plug and
11 abandon them. There's a third option, wasn't there?

12 A. Which was to temporarily abandon.

13 Q. Right. Okay. And you're -- did you
14 help -- did you oversee the coordination and
15 response to that agreed compliance order as part of
16 your responsibilities?

17 A. Yes, sir. I had to furnish a monthly
18 report to the OCD as to the wells that we had taken
19 care of under the order. And when we were giving --
20 given the right for up to a year to get those wells
21 back in operation, plugged, or temporarily
22 abandoned, we were required to put up \$1 million.

23 So as we prepared those wells, then I
24 would communicate with Mr. Tremaine to have that
25 portion of the \$1 million refunded to Empire, with

1 the authority of the signature of the director of
2 the Commission.

3 Q. In addition to coordinating the response
4 and compliance of that, the compliance order, are
5 you also -- also in your responsibility, does that
6 include filing monthly reports on the operations at
7 the EMSU that are required under the Piazza order?

8 A. No, sir. I didn't -- I didn't file those.
9 There's a reservoir engineer that works for Empire,
10 and he handled those.

11 Q. Who's that?

12 A. Mr. Darrell Davis.

13 Q. Okay. Anything else that falls within
14 your responsibility that we didn't cover as -- in
15 your role as VP of land and legal?

16 A. No, nothing that is significant that I can
17 think of.

18 Q. Turning to your overview slides. You
19 stated that in 1984 when the EMSU was approved, it
20 was estimated that there would be 64.2 million
21 barrels to be recovered. Do you recall that in
22 your --

23 A. Yes, sir.

24 Q. Where did you get that number from, do you
25 know?

1 A. From the Commission testimony that Gulf
2 gave to the Commission back in December of 1984.

3 Q. You would agree with me that when Gulf
4 made its presentation to the Commission, that they
5 gave both a high end and a low end estimate for what
6 the waterflood was expected to recover? Do you
7 agree?

8 A. I recall that there was, but I don't
9 specifically remember a low number.

10 Q. So this was the high number, correct?

11 A. Yes, sir, that's my understanding.

12 Q. Right. And you pointed out in your third
13 bullet here that the EMSU consists of over
14 14,000 acres, the majority of being State and Fed,
15 correct?

16 A. Yes, sir.

17 Q. Nearly 60 percent is State, correct?

18 A. Yes, sir.

19 Q. And you reviewed the -- you reviewed the
20 testimony that Gulf presented to the Commission back
21 in 1984?

22 A. Yes, sir.

23 Q. Do you recall the testimony that Gulf gave
24 about what the San Andres would be utilized for as
25 part of unit operations?

1 A. Yes, sir.

2 Q. And what did they say?

3 A. That that was to furnish water for the
4 waterflood operation of the EMSU.

5 Q. Right. In your written testimony, when
6 you discussed the purchase price for the EMSU, you
7 stated that it was for \$17.8 million, correct?

8 A. Yes, sir. That was the cash payment that
9 we made.

10 Q. And in the SEC report that was filed
11 notifying that -- giving public notice of the
12 purchase, that's the value that was reported as the
13 closing value on the purchase and sale agreement,
14 correct?

15 A. Yes, sir. That was the cash purchase
16 price that we paid there in March of '21.

17 Q. So the \$89.8 million value, that was not
18 part of a public reporting, was it?

19 A. No, sir, not that I was aware of.

20 Q. Okay. Nor was the allocated liability of
21 \$56 million for P&A liability, correct?

22 A. No, sir, that wasn't included nor was the
23 State Land Office remediation issues that these --
24 Land Office notified us of.

25 Q. Was -- so that Land Office notification

1 was part of the closing agreement with XTO?

2 A. It provided that we were responsible for
3 all the wells on the property, all the remediation
4 that was required. But it wasn't until after the
5 closing that we discovered and got notification from
6 the State Land Office for the 288 remediation sites.
7 And that included the 96 wells that were under the
8 order with the Commission for us to operate the
9 remediation or plugging of those 96 wells.

10 Q. Do you recall, as you sit here today,
11 Mr. Wheeler, how many of those wells were actually
12 plugged?

13 A. I know we got a lot that were in the
14 classification of temporarily abandoned, but we got
15 enough wells done so that we reduced the -- the cash
16 payment to the State Land Office from \$1 million
17 down to \$200,000. And the Commission has not
18 approved the release of the \$200,000 because of the
19 other wells that came on that needed to be
20 remediated or plugged since we managed those 96
21 wells.

22 Q. So the \$56 million that was allocated to
23 plugging and the abandoning liability, that was for
24 all three units, correct?

25 A. Yes, sir.

1 Q. Okay. Did that \$56 million -- let me
2 think about this. I may come back to that value in
3 a moment at some point.

4 Of the \$16 million liability with the
5 State Land Office, have any of those sites or issues
6 been remediated to this point?

7 A. Well, that's a sore spot. We are required
8 to get the State Land Office consent and do a
9 cultural survey and then plan for remediation and
10 furnish that to the State Land Office to get
11 approval prior to us going in and getting the
12 remediation. And the lady that's responsible for
13 managing -- handling that for us has not approved
14 one single application for remediation since we got
15 the notice from the State Land Office. So we have
16 not been able to do a single remediation, although
17 we've sent in over 30 applications for approval.

18 Q. Do some of those remediation sites also
19 require OCD approval for remediation?

20 A. All of them require approval.

21 Q. Separate from the State Land Office, do
22 some of them also require OCD approval for
23 remediation?

24 A. Not that I'm aware of.

25 Q. Now in the next bullet, you state that

1 Exxon rep -- or reps in the sales brochure. Are you
2 telling me that Exxon, XTO, or ExxonMobil made a
3 representation to Empire that there was a ROZ?

4 A. Yes, sir, that's totally correct.

5 Q. Okay. And are you telling me that Empire
6 purchased the EMSU based on that representation?

7 A. Yes, sir. You've asked several of our
8 expert witnesses and employees about the due
9 diligence, and stuff. In a response to that, I can
10 tell you that when the brochure came out and the
11 offering, when Empire was looking to acquire it, we
12 did not have the staff of geologists, and stuff, to
13 evaluate it. And we didn't have a staff of
14 engineers to do the due diligence.

15 So we worked with a company called Mesa
16 Elk in Denver, and we furnished all of the data that
17 ExxonMobil had furnished us. And we furnished it
18 all to this gentleman by the name of Mr. Robert
19 Gardner, and he did the due diligence. And if you
20 look and see, the responses to Goodnight's subpoena
21 for anything related to due diligence, we furnished
22 those emails and information to Goodnight.

23 And then when Mr. Mulacek came in and had
24 an opportunity to finance the acquisition and take
25 an interest in Empire, we stopped that due

1 diligence.

2 But the thing is, though, that's so
3 significant is that ExxonMobil is a company that's
4 the largest oil and gas company in the world.
5 They're the seventh largest corporation in the
6 United States. They're the 13th largest company in
7 the entire world. And they are subject, when they
8 sell any asset -- that if you go back and research
9 the security laws that govern the sale of a
10 security, you'll see that under the Texas Securities
11 Act from 1933 and the Federal Securities Act of
12 1934, it defines what a security interest is. And
13 included in that definition is oil, gas, and
14 minerals.

15 So when ExxonMobil sold that to Empire,
16 they sold a security. Now, under those definitions
17 of the security, there is a provision that they
18 cannot make any false or misleading statements.

19 So with that is a very strong evidence to
20 Empire that the representations by ExxonMobil are
21 something that we could definitely rely on and that
22 they were probably going to be conservative because
23 of any concern about violations of the Securities
24 and Exchange Commission. So if they did miss --
25 make a mistake, misstatement, they would be liable

1 for hundreds of millions of dollars of penalties
2 that the Texas Securities Act and the Federal
3 Securities Act would regulate.

4 So if you recognize that ExxonMobil had
5 the most information about the EMSU after operating
6 the unit, so except, say, for Chevron, they would be
7 the ones with the most information, the largest
8 staff, the most consultants to do all the research
9 and valuation so that they could make that
10 representation. Goodnight -- I mean Empire totally
11 relied upon those representations.

12 Q. Mr. Wheeler, were you -- you joined Empire
13 in spring of '23; is that right?

14 A. September of 2023.

15 Q. September of 2023. And the property was
16 acquired by Empire in the spring of 2021, correct?

17 A. Yes, sir, March the 12th of 1921 (sic).

18 Q. Were you involved at the time with the
19 acquisition at all?

20 A. No, sir.

21 Q. Okay. So this is all based on your
22 research and discussions following the acquisition?

23 A. Yes, sir. It was discussion with our
24 chairman, our president, and the chief operating
25 officer at the time that it was acquired.

1 Q. Okay. So when did -- when did Empire
2 disengage with Mr. Robert Gardner or Mesa Elk? When
3 did it stop the due diligence efforts?

4 A. In December of 2020.

5 Q. Okay. And wasn't the property first put
6 on the -- on the market in December of 2020?

7 A. I don't believe so. I think it was
8 earlier than that.

9 Q. Do you know when the data room was made
10 available for review?

11 A. The only thing that I can find in our
12 files, and stuff, made it appear that the first
13 communication that Empire had with ExxonMobil was
14 around September.

15 Q. I'll come back to that.

16 So in December 2020, Empire discontinued
17 its independent due diligence with Mr. Robert
18 Gardner, correct?

19 A. Yes, sir.

20 Q. And did it undertake any additional due
21 diligence at that point?

22 A. It's my understanding that there was
23 when -- when we tried to answer the subpoena from
24 Goodnight, we only found a few emails with Mr. Tommy
25 Pritchard, who's the CEO at the time of the

1 acquisition. But we couldn't find any due diligence
2 files.

3 And I tried to contact Mr. Gardner. I
4 wasn't able to speak to him. But I spoke to an
5 administrative assistant in the office of Elk Mesa
6 (sic), and she said that they didn't have any files
7 for the due diligence from five years previous to my
8 request.

9 Q. So I'm sharing on my screen what -- let me
10 know when you can see it.

11 Do you recognize this document,
12 Mr. Wheeler?

13 A. Yes, sir.

14 Q. This is -- this was Exhibit E, Empire's
15 Exhibit E in the Piazza case. Okay?

16 A. Okay.

17 Q. In which both Empire and Goodnight were
18 contesting the authority to approve the Piazza well,
19 which is currently now one of the cases on de novo
20 review before the Commission. Do you agree?

21 A. No, sir.

22 Q. You don't agree that the Piazza case is
23 now on de novo review before the Commission?

24 A. In November of 2020, I wasn't aware that
25 there was any dispute because those properties at

1 that time were being operated by XTO. But the
2 problem is, is that when they put the sales package
3 together, they transferred all of the properties and
4 management of those properties over to ExxonMobil.
5 So XTO at the time didn't have anything to do with
6 any of the saltwater disposal application that
7 Goodnight might have presented.

8 Q. Mr. Wheeler, I apologize, I think I was
9 asking a different question than you asked (sic).

10 This exhibit I have up here right now was
11 marked as Exhibit E by Empire in a dispute between
12 Empire and Goodnight Midstream over the approval for
13 the Piazza case -- the Piazza disposal well. Are
14 you familiar with that case?

15 A. Yes, sir.

16 Q. Okay. And this was an exhibit that Empire
17 presented as part of its case in chief in that
18 hearing. Okay? Have you seen this document before?

19 A. No, sir.

20 Q. You have not? Okay. This is the
21 executive summary of XTO energy for the sale of its
22 Eunice assets. It's dated November 2020.

23 The second page here is some of the same
24 information that you were presenting in your summary
25 report -- or your summary of your testimony. If I

1 scroll to the last page here -- let's see where is
2 that? -- sorry, second-to-last page here in this
3 exhibit, page number 3 of the document, it says that
4 the virtual data room opens on November 5th. And,
5 again, this would be 2020. Okay? The very
6 beginning here, it says it's November 2020.

7 So the data room was on November 5, 2020.
8 And you're telling me that Empire discontinued its
9 due diligence the next month in December of 2020?

10 A. With Mr. Gardner. But they were still
11 doing evaluations within Empire. And at the time
12 when Mr. Mulacek came in, we used some engineers,
13 geologists over with the PIE Operating who helped
14 evaluate the property at that time.

15 Q. Okay. So I was asking you that question
16 before, and you told me that you were trying to find
17 if they did any more due diligence. And you said
18 that you couldn't determine whether they had. But
19 you're telling me now that they were doing internal
20 due diligence, correct?

21 A. I'm sorry, you talk too fast. I don't
22 understand you.

23 Q. You're telling me that while they
24 disengaged with Mr. Gardner for outside due
25 diligence help, Empire and PIE took that due

1 diligence work in-house?

2 A. Yes, sir.

3 Q. Okay. So while they -- so while this
4 property was initially marketed in November of 2020
5 and they disengaged with Mr. Robert Gardner to do
6 due diligence in December of 2020, they took that
7 due diligence work in-house, correct?

8 A. Yes, sir. I think it was effective -- the
9 termination was effective on December the 19th of
10 2020 with Mr. Gardner.

11 Q. But Empire and PIE Operating did not
12 maintain any internal files of the due diligence
13 work that they did subsequent to that?

14 A. None of the -- none of the people within
15 Empire that had done any of the work were no longer
16 with Empire when I came in September of '23. And it
17 wasn't until Goodnight gave us a subpoena for all of
18 the due diligence did I go and research and try to
19 find those due diligence documents and was unable
20 to.

21 MR. RANKIN: Mr. Hearing Officer, I
22 move the admission of this document titled
23 "Executive Summary-Eunice Assets." It's an XTO
24 document. I would move it as Goodnight's Cross
25 Exhibit Number -- I think Number 13.

Cross-Examination by Mr. Rankin

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1 HEARING OFFICER HARWOOD: Any
2 objection?

3 MS. SHAHEEN: No objection from
4 Empire.

5 HEARING OFFICER HARWOOD: Any
6 objection from OCD?

7 MR. MOANDER: No objection,
8 Mr. Hearing Officer.

9 HEARING OFFICER HARWOOD: Rice?

10 MR. BECK: No objection.

11 HEARING OFFICER HARWOOD: Pilot?

12 MR. SUAZO: No objections.

13 HEARING OFFICER HARWOOD: It will be
14 admitted.

15 (Exhibit 13 admitted into evidence.)

16 Q (By Mr. Rankin) So if -- Mr. Wheeler, I'm
17 not going to get into the legal argument with you
18 about the affect of the Texas security law or
19 Federal securities law, but there is this disclaimer
20 at the end of this document that indicates that: By
21 reviewing the information provided, that the
22 reviewer agrees and that no express or implied
23 representation of warranty as to expressly
24 disclaimed any and all liability for the quality,
25 accuracy and completeness of the information, data,

1 or other materials set forth in the presentation in
2 the data or established by XTO in connection with
3 its opportunity or otherwise provided by you -- to
4 you by XTO or its representatives.

5 So are you telling me this disclaimer has
6 no force or effect against any reliance that Empire
7 may put actually provided by XTO?

8 A. No, sir.

9 Q. You agree -- you're telling me it doesn't
10 have any force or effect against Empire?

11 A. Yes, sir.

12 Q. Okay. That's your view?

13 A. Yes, sir. Because ExxonMobil was the one
14 that put the sales brochure together, then made the
15 representations. And this is a client disclaimer
16 from a subsidiary of theirs, but there's no
17 disclaimer here for ExxonMobil.

18 Q. Okay. So in the -- in the reliance on the
19 documents and information provided by XTO, you told
20 me that XTO, being the largest oil and gas company
21 in the world and one of the largest companies in the
22 world, and having the most information available to
23 it, they indicated the base of the ROZ at minus
24 700 feet subsea, agree?

25 A. No, sir.

1 Q. That's not what it says on the screen
2 right here?

3 A. No, sir. But this document is from
4 ExxonMobil, not XTO. So XTO wasn't making any
5 representations.

6 Q. Okay. ExxonMobil was making the
7 representations. Is that what you're saying?

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

9 Q. Did you rely on that representation?

10 A. Yes, sir.

11 Q. Okay. So when you purchased -- when
12 Empire purchased this asset, they understood that
13 the base of the ROZ to be minus 700 feet subsea?

14 A. Yes, sir.

15 Q. I'll ask you some questions about the
16 purchase and sale agreement in a little bit.

17 Now, in this slide here, you tell the
18 Commission that the applications that Goodnight
19 filed did not inform the Division of proposed
20 injection into a unitized interval, right?

21 A. That's correct. The four wells that they
22 got permits on, which would have never been approved
23 had Goodnight notified the Commission that they were
24 injecting into a unitized interval or the Eunice
25 Monument Oil Pool, they -- in my opinion, they

1 fraudulently furnished these documents to the
2 Division and concealed the fact that this was being
3 disposed into a unitized interval.

4 And then after the Piazza case was denied
5 because they were doing -- making the injection
6 application into the unitized interval, Goodnight
7 Midstream then furnished four new applications to
8 inject, and in none of those did they disclose,
9 again, that they were going to inject into a
10 unitized interval or the Eunice Monument Oil Pool.

11 Q. Are you telling me that the Piazza order
12 was issued before Goodnight Midstream filed the
13 other four applications?

14 A. My recall is that they furnished the new
15 applications after the Piazza, because they also
16 applied for the case to be appealed to the
17 Commission on the Piazza along with those four new
18 injection applications.

19 Q. Would it change your opinion at all if the
20 Piazza issue was -- the order was issued after
21 Goodnight had filed those four applications?

22 A. I think it would be important to know that
23 in terms of how they had applied. But I think that
24 the concern and issue is still there that in their
25 new applications, they did not disclose the interval

1 that they were injecting in, in the formation that
2 the Commission or Division would want to know in
3 relation to injecting into a unitized interval.

4 Q. And is that your opinion with respect to
5 all saltwater disposal operators who have obtained
6 approval from the Division for their saltwater
7 injection into the unitized interval of the EMSU
8 within the EMSU boundaries?

9 A. I did not see the application for Permian
10 to drill a well in 2020, nor the wells that were
11 drilled in '78. And it wasn't applicable in '66
12 when the wells -- the disposal well was drilled. So
13 I did not see those applications. I just saw the
14 applications of Goodnight Midstream.

15 Q. I'm going to share my screen here. I'm
16 going to show -- I did a search while I was waiting
17 for Ms. Shaheen to send me your slide presentation,
18 and I pulled the EMSU Number 1 saltwater disposal
19 well from the Division's website. And when I go to
20 the Division's information page for that well, it
21 indicates not that it's being injected into the
22 unitized interval or that Eunice Monument pool or
23 the pool in the unit, but the same exact pool code
24 that was assigned to it by the Division for disposal
25 wells. Do you see that?

1 A. Yes, sir. And that's what I'm saying.
2 They filed it under that 96121 order for saltwater
3 disposal San Andres. They did not disclose that it
4 was going into the San Andres unitized interval.

5 Q. Did Chevron or Empire or the previous
6 operator of this well make that disclosure to the
7 Division when it sought the approval for this EMSU
8 saltwater disposal Number 1 well?

9 A. I did not see the Chevron application, so
10 I can't speak to that.

11 Q. Okay. So you don't -- you don't know
12 whether Goodnight spoke to anybody -- or their
13 consultant spoke to anybody at the Division to
14 determine what oil code to use? So you don't know
15 whether they were instructed to use that pool code,
16 do you?

17 A. No, sir. I think it's very clear that
18 what Goodnight did, is they went in and used that
19 code, which was in violation of the requirement to
20 notify the Commission of the formation or interval
21 that they were disposing in.

22 Q. Where did -- two things. Number one,
23 where is the requirement to disclose what formation
24 they were disposing in?

25 A. In the application, it requires the

1 notification. And that's where Goodnight used this
2 order number.

3 Q. And, Mr. Wheeler, are you aware that the
4 application, the C-108 application that was filed
5 and the subsequent hearing applications that were
6 filed in those cases specifically identified the
7 San Andres as the formation that they were
8 injecting -- proposing to inject into?

9 A. No, sir.

10 Q. Okay. And are you aware that as part of
11 the requirement for filing a C-108 application for
12 injection is that they have to identify the specific
13 acreage, the location of the well, and the
14 bottomhole location, as well as the intervals for
15 disposal?

16 A. Yes, sir.

17 Q. And you're telling me that they didn't do
18 that?

19 A. I could not find anything in the
20 applications that Mr. Alleman prepared and
21 Mr. McGuire or Mr. Steven Drake had approved that --
22 disclosed that.

23 Q. Okay. The record -- I mean, those
24 documents would speak for themselves, agree?

25 A. I'm sorry?

1 Q. Those documents would speak for
2 themselves?

3 A. Yes, sir.

4 Q. Okay. Now, you told me that you were not
5 testifying as an expert in petroleum geology, and
6 you're not testifying as an expert in engineering or
7 reservoir engineering. So -- and you're not
8 offering any opinions on those topics, correct?

9 A. Correct.

10 Q. So how is it that you've come to the
11 determination that this injection is impairing
12 correlative rights?

13 A. Well, my position as a senior vice
14 president -- me and Mr. West are the only senior
15 vice presidents below the president and chairman.
16 So I was actively involved in all of the meetings
17 and discussions and evaluations that were made by
18 Empire's geological and engineering staff and the
19 expert witnesses that did the research and analysis
20 for testimony. So that's where I acquired that
21 knowledge.

22 Q. So, Mr. Wheeler, I guess I'm asking you,
23 but that's an opinion that requires subject matter
24 expertise, and you're telling me that you're just
25 repeating what experts in those areas -- the

1 opinions of those other experts in those areas. Is
2 that -- is that true?

3 MS. SHAHEEN: Objection. Mr. Rankin
4 is argumentative and testifying in the record again.

5 HEARING OFFICER HARWOOD: Overruled.

6 Q (By Mr. Rankin) Mr. Wheeler, I'm asking
7 you: Are you adopting opinions of experts in other
8 subject matters for that statement?

9 A. Well, my reading and understanding of the
10 rules of the OCD related to the administrative
11 hearing allows hearsay testimony to be admitted. So
12 I'm under the hearsay testimony ability and
13 representing to the Commission that both of these
14 issues are affecting our operations.

15 And then also internally, we have been
16 ordered not to invest any additional money into the
17 operations for drilling of any additional wells
18 until the Goodnight matter is resolved because of
19 the issue of the thousands and hundreds of thousands
20 of barrels of wastewater that Goodnight is injecting
21 daily.

22 And, in fact, if you look at it, they've
23 got applications to do five more wells that could
24 inject 20 -- 200 -- I mean 40,000 barrels a day. So
25 that's an additional 200,000 barrels that they're

1 requesting that the Commission approve, which would
2 virtually destroy Empire's asset.

3 Q. And the opinions --

4 HEARING OFFICER HARWOOD: Mr. Rankin?

5 MR. RANKIN: Yeah.

6 HEARING OFFICER HARWOOD: It's --
7 when you're at a stopping point, it's -- why don't
8 we take an afternoon break.

9 MR. RANKIN: That's -- why don't
10 we -- well, maybe I'll just get through this line of
11 questions and then we'll take a break, if that's
12 okay.

13 HEARING OFFICER HARWOOD: Yeah.

14 MR. RANKIN: Since we're in the
15 midst.

16 HEARING OFFICER HARWOOD: Let us
17 know.

18 Q (By Mr. Rankin) The determination about
19 whether Empire -- rather, Goodnight's injection is
20 causing or impairing the ability to recover
21 hydrocarbons or impairing future reserves -- or
22 reserves in the EMSU, those are technical issues
23 that are being opined on by Empire's experts in
24 those subject matter areas, agree?

25 A. Yes, sir.

1 Q. And that's not your area of expertise,
2 agree?

3 A. As a senior manager of Empire, it's
4 necessary for me to know that information and,
5 therefore, allow me to represent that information.
6 And that's what you do. You have a staff that
7 prepares all of your work, and everything, reports
8 that back to me and Mr. West. And, therefore, we
9 have knowledge and expertise on those matters.

10 Q. You, yourself, have not done any
11 evaluation or assessment or study and you've not
12 presented any data establishing that there is
13 impacts -- or impairment of Empire's correlative
14 rights, have you?

15 A. No, sir.

16 Q. And you've not done any study, evaluation,
17 or assessment to determine whether or not waste is
18 occurring as a result of Goodnight's injections,
19 have you?

20 A. No, sir.

21 Q. And you don't present any testimony on
22 that in your testimony, do you?

23 A. Once again, as a manager, I know from our
24 staff that that's what they're representing, and,
25 therefore, I trust and believe them and can

1 represent that that's the analysis and study that's
2 been done in their representations.

3 MR. RANKIN: Mr. Hearing Officer,
4 rather than to move to strike Mr. Wheeler's
5 testimony on those topics, I'll let the Commission
6 weigh -- give the weight appropriate for those
7 statements given in Mr. Wheeler's testimony.

8 I can take a break now.

9 HEARING OFFICER HARWOOD: Okay.
10 Before we go off the record, I believe it does go to
11 weight, not admissibility. So the testimony will
12 not be stricken.

13 MR. RANKIN: Thank you.

14 HEARING OFFICER HARWOOD: All right.
15 Let's see. Let's call it five after. Let's be back
16 at 20 after.

17 (Recess was taken from 3:07 p.m. until 3:21 p.m.)

18 HEARING OFFICER HARWOOD: Okay.
19 Ready to go? Are we back on the record, Ms. Tellez?

20 I see an affirmative head nod.

21 All right. Mr. Rankin, go ahead.

22 MR. RANKIN: Thank you, Mr. Hearing
23 Officer.

24 Q (By Mr. Rankin) Mr. Wheeler, I want to
25 transition to a different topic now. In your -- in

1 your direct testimony, you state that you got
2 personal knowledge and you reviewed the applications
3 to revoke that were filed by Empire; is that
4 correct?

5 A. Yes. By Empire or by Goodnight?

6 Q. By Empire. Empire filed applications to
7 revoke the injection authority of Goodnight. Did
8 you review those applications?

9 A. Yes, sir.

10 Q. Okay. And were they filed on your
11 approval?

12 A. Yes, sir.

13 Q. I'm going to pull up one of those
14 applications to revoke, as part of this case, and
15 it's the case number 24018. And it's the
16 application of Empire to revoke the injection
17 authority for the Andre Dawson SWD Number 1 well.
18 Do you see that?

19 Oh, I'm not sharing my screen yet. I'm
20 sorry. One moment.

21 Let me know when you can see my screen.

22 A. Yes, sir, I can see it.

23 Q. Okay. So I've got up here on the screen a
24 document that's a record with the Division
25 already -- or Commission in this case. It's

1 Empire's application to revoke the injection
2 authority of Goodnight Midstream for the Andre
3 Dawson SWD Number 1 well. And it's been assigned
4 case number 24018 because part of the case is
5 currently pending before the Commission. Do you see
6 that on the screen, Mr. Wheeler?

7 A. Yes.

8 Q. Okay. Did you review the basis for the
9 claims in this application to revoke?

10 A. Yes, sir.

11 Q. And for each of the applications to revoke
12 that were filed by Empire?

13 A. Yes, sir.

14 Q. And the first claim here in paragraph 2 is
15 that the well here in question, Andre Dawson, is
16 injecting into the unitized interval of the EMSU
17 unit, correct?

18 A. Correct.

19 Q. Again, you described the unitized interval
20 from the Grayburg down to the base of the
21 San Andres, correct?

22 A. Correct.

23 Q. And that there is a pool that has been
24 assigned to correspond to that unitized interval,
25 correct?

1 A. Yes, sir, two pools.

2 Q. Two pools?

3 A. Yes, sir.

4 Q. Okay. And you're saying the other pool is
5 the -- is what?

6 A. The Eunice Monument Oil Pool and the
7 Eunice Monument Gas Pool.

8 Q. Mr. Wheeler, is it not your understanding
9 that by issuance of the order that you reviewed by
10 the Commission, that those two pools were revised to
11 be a single oil pool in the unit?

12 A. No, sir.

13 Q. That's not your understanding?

14 A. No, sir.

15 Q. Is it your understanding that there's
16 still two pools existing within the unitized
17 interval?

18 A. Yes, sir.

19 Q. Okay. You identify the injection interval
20 for the San Andres -- for the Andre Dawson well here
21 in paragraph 4, correct?

22 A. Yes, sir.

23 Q. And then, in paragraph 5, the application
24 states that, "At the time of the application,
25 Goodnight misrepresented that the San Andres is a

1 non-productive zone," correct?

2 A. Yes, sir.

3 Q. Now, in Mr. West's testimony that was
4 filed as part of these cases, Mr. West testifies in
5 paragraph 6 of his Exhibit I that's been filed with
6 the Commission, quote, "That no wells have produced
7 from the San Andres at the EMSU." Did I read that
8 correctly?

9 A. Yes, sir. I don't know how he specifies
10 wells, because I know that there has been production
11 out of the San Andres in some wells that have been
12 drilled down in the San Andres. There was one well
13 that had seven barrels, one well had four, which,
14 you know, represents that there has been some
15 production from those wells inside the EMSU unit.

16 Q. Production or well tests? Or what is the
17 basis for your statement?

18 A. At the time the wells were drilled, that
19 was the production that was received.

20 Q. Okay. And -- I mean, I don't see any of
21 that information in your -- in your testimony. Are
22 you relying on the testimony of your other Empire
23 witnesses for those statements?

24 A. No, sir. I've seen those reports.
25 Mr. Davis has worked and pulled them up, and he

1 furnished them. And I read and saw where those
2 barrels had actually been produced.

3 And, in fact, if you go and look at
4 Mr. Knights' testimony, he states in there that
5 those productions had occurred.

6 Q. Are you aware of whether all the
7 information that Empire had available to it was
8 public at the time Goodnight filed its applications?

9 A. That's my understanding.

10 Q. You understand that it was all public?

11 A. Yes, sir.

12 Q. You don't -- you can't say with
13 confidence?

14 Do you have personal knowledge of that?

15 A. Person knowledge of what?

16 Q. Of whether those documents were public
17 that you're relying on for the barrels of oil
18 generated from certain wells.

19 A. I don't think so, because Mr. Knights
20 reports that in his testimony. So if it wasn't
21 public, I don't know how he would have acquired it,
22 for example.

23 Q. Through production --

24 A. Yes, sir.

25 Q. -- from Empire?

1 A. Um-hmm. Yes, sir, that's my
2 understanding.

3 Q. Okay. So Mr. West testifies that no wells
4 have produced from the San Andres at the EMSU, but
5 you're asserting that at the time Goodnight filed
6 its application -- applications for these wells,
7 that it misrepresented that there was -- that the
8 San Andres was a nonproductive zone, correct?

9 A. Correct.

10 Q. Okay. One of the basis -- bases for
11 Empire's effort to revoke Goodnight's authority to
12 inject is because the injection is occurring within
13 a unitized -- portion of the unitized interval; is
14 that correct?

15 A. Correct.

16 Q. Okay. And you allege here that all the
17 San Andres is part of the unitized interval,
18 correct?

19 A. Yes, sir, because it's the base of the
20 San Andres.

21 Q. Okay. And you're alleging -- Empire
22 alleges in this application that -- in paragraph 9,
23 that disposal into the San Andres affects --
24 adversely affects the correlative rights of Empire
25 and other interest owners in the unit, correct?

1 A. Correct.

2 Q. Has Empire conferred with any of the
3 interest owners of those three operating units?

4 A. Yes, sir.

5 Q. Which ones?

6 A. We've had discussions with the BLM, State
7 Land Office, DASCO Cattle, Millard Deck Estate,
8 and -- those are the ones I can recall off the top
9 of my head.

10 Q. Is DASCO Cattle a working interest owner
11 in the units?

12 A. No, sir.

13 Q. Is Millard Deck a working interest owner
14 in any of the units?

15 A. No, sir. They are the ones that Goodnight
16 acquired the surface use leases from. And we also
17 are aware that DASCO Cattle is suing Goodnight over
18 their operations for violations that -- that surface
19 use agreement.

20 Q. Mr. Wheeler, I asked you if Empire had
21 had -- has had any discussions with its working
22 interest owners in any of the three units.

23 A. We had discussions with
24 Apache, El Aquatain. And I can't recall the others
25 that we talked to.

1 Q. Or -- and you've had discussions with them
2 regarding your efforts to revoke injection
3 authority?

4 A. Yes, sir.

5 Q. Okay. Not just of Goodnight, but of the
6 other operators as well?

7 A. Yes, sir.

8 Q. Why did you -- why did Empire reach out to
9 DASC0 Cattle Company?

10 A. They contacted us, and then we had
11 conversations.

12 Q. Okay. In paragraph 10 of this
13 application, you state that, "Empire has requested
14 that Goodnight volunteer cease disposal of produced
15 water in this particular well, the Andre Dawson
16 well. But as of the date of the filing of this
17 application, the well remains an active saltwater
18 disposal well."

19 Who did Empire contact at Goodnight to
20 make that request?

21 A. I didn't handle that, so I'm not sure.
22 But I know that at the Piazza hearing, for example,
23 Eugene Sweeney had requested that.

24 Q. So the request you're referring to is
25 based on Mr. Sweeney's testimony at the Piazza

1 hearing?

2 A. Not his testimony, but in telephone
3 conversations I've had with him since he left
4 Empire.

5 Q. So he told you that he told Goodnight --
6 or asked Goodnight to voluntarily cease injection
7 operations?

8 A. Yes, sir. And, you know, objecting to
9 their applications should also put them on notice
10 that we're wanting them to cease the injection.

11 Q. So to your knowledge, have there been any
12 discussions between Goodnight and Empire about the
13 injection operations? I mean, is it solely based on
14 your telephone calls with Mr. Sweeney?

15 A. Also, I know that Goodnight has reached
16 out to Empire to try to get Empire to settle the
17 case and allow us to terminate all of these
18 proceedings that are costing each company several
19 millions of dollars just for this one hearing. So
20 that's significant money just to spend and take the
21 hearing commissioner's time of a month to have this
22 issue.

23 Q. And did Empire respond?

24 A. Yes, sir. We responded that we wanted
25 them to cease all of their injections within the

1 unit, move two miles outside the unit, and move all
2 of their operations there, and we wouldn't protest
3 any of those applications.

4 Q. Who did you -- who did Empire contact at
5 Goodnight to make those statements?

6 A. I'm trying to think which of our counsels
7 they contacted. But one of our attorneys that we
8 have working on the case for us.

9 Q. Who did they contact?

10 A. My guess is that they contacted
11 Mr. Padilla, but . . .

12 Q. Who contacted Mr. Padilla?

13 A. I cannot -- I'm not aware of the names of
14 the people.

15 Q. Let me rephrase my question, Mr. Wheeler.
16 My understanding is you just told me that Empire
17 made a list of demands about moving wells back --
18 stopping injection, moving wells back to outside two
19 miles. I'm asking you: Who from Empire contacted
20 who at Goodnight to make that request?

21 A. Empire contacted nobody. Goodnight
22 contacted Empire, and that's -- in response to that
23 was when these discussions were held.

24 Q. Mr. Wheeler, I'm asking you: With whom
25 did Empire have those discussions? I'm not aware,

1 but I'm asking: Who did Empire speak to to make
2 those requests?

3 A. I don't know.

4 Q. Are you aware that those discussions took
5 place?

6 A. Yes, sir. I've been told that they did,
7 yes, sir.

8 Q. Okay. Well, but you don't have personal
9 knowledge of those discussions having taken place,
10 and they weren't between Empire and Goodnight,
11 correct?

12 A. No, sir. They were between Empire and
13 Goodnight. Empire responded to Goodnight's request
14 with our response.

15 Q. How do you know that those discussions
16 took place, Mr. Wheeler?

17 A. Because Mr. Mike Morrisett, who had been
18 contacted at Empire, who's the president of Empire,
19 had requested the determination of what we wanted to
20 do. And I was involved in those discussions as to
21 how to respond to Goodnight, along with several
22 officers within the company.

23 Q. So in short, I'm just trying to figure
24 out -- because I understand you're representing here
25 that there was a response, and I'm trying to find

1 out who the response was given to, who did Empire
2 respond to. And as you sit here, you don't know,
3 correct?

4 A. Yes, sir, I don't know if it was with
5 Goodnight themselves or Goodnight's attorneys.

6 Q. But you understand that there was a
7 response made by Empire to Goodnight, correct?

8 A. Yes, sir.

9 Q. Okay. But as to this statement in
10 paragraph 10 -- going back to that just to be clear;
11 I want to make sure I understand -- you can't tell
12 me a specific request that was made by Empire to
13 Goodnight to voluntarily cease their injection
14 operations?

15 A. No, sir, I don't have the name of Empire's
16 representative that did that. But I've been told
17 that they did.

18 Q. And you don't know who they spoke to at
19 Goodnight to make that request, correct?

20 A. No, sir, I -- I'm thinking that it was
21 yourself, Mr. Rankin, but I'm not sure.

22 Q. Okay. Interesting. Okay.

23 All right. Back to your testimony then.
24 In your summary, you -- this goes back to the
25 valuation of the property. Let's see, where is it

1 in here? Slide 7. You told us that the property
2 was acquired for \$17.8 million cash, right?

3 A. Yes, sir.

4 Q. But in the SEC filing with the -- with the
5 SEC, the reported valuation on the Form 10-K was
6 for -- not for \$89 million but for \$17.8 million,
7 correct?

8 A. Yes.

9 Q. Why didn't they report \$89 million as
10 the -- as the sale price?

11 A. I wasn't with Empire at the time they
12 filed that, so I don't know why they stated that.

13 Q. Okay. And the actual adjusted price that
14 Empire paid after closing on May 14, 2021, was
15 actually \$16,089,000, correct?

16 A. Yes, sir. What happens when you do an
17 acquisition, you enter into the sales agreement, and
18 all -- it's got an effective date, and all the
19 revenues that had accrued prior to that effective
20 date are offset against your purchase price. So
21 your purchase price is reduced by the money that
22 ExxonMobil had already received and didn't turn over
23 to Empire.

24 Q. In your testimony when you talk about --
25 your written testimony, when you address the

1 valuation of the purchase in paragraph 10 of
2 Exhibit A, you stated that Empire acquired the EMSU
3 from XTO Holdings, LLC, for a purchase price of
4 \$17,800,000, correct?

5 A. Yes, sir. I think it's a matter of
6 semantics. But what I'm saying here is the purchase
7 price was the 17-8. And then the assumed
8 responsibilities for the plugging and remediation,
9 and everything, was not a purchase price, but it's
10 an assumption of those liabilities.

11 Q. So then in the -- in the notification -- I
12 mean in your statement here, you're saying that that
13 value was just for the EMSU. In paragraph 10, are
14 you saying to \$17.8 million was just for the EMSU?

15 A. Yes, sir. I state there that's acquired
16 the Monument South Unit and that also included would
17 be in the AGU.

18 Q. So EMSU is 14,000-plus some change gross
19 acres, but, in fact, as part of that transaction for
20 the nominal price of 17,800,000 included a total of
21 47,200 gross acres with those three other units and
22 some other offsetting properties, correct?

23 A. Yes.

24 Q. But that's not what you said in your
25 testimony, right?

1 A. I'm sorry, what?

2 Q. That's not what you said in your
3 testimony, right?

4 A. Well, I didn't expand it. I just spoke
5 about that the EMSU, Eunice Monument South Unit, is
6 the 14,000 acres. We're not having a hearing over
7 the EMSU-B or the AGU or the outside wells which
8 incorporate the 40,000 net acres.

9 Q. And as part of that transaction, according
10 to this filing, Empire acquired a little over 700
11 wells from XTO, correct?

12 A. Yes, sir. And it's the plugging and
13 abandoning cost of those 700 wells that equate to
14 the \$56 million liability that we have for plugging
15 and abandoning at current cost.

16 Q. In discovery I received a document from
17 Empire that's titled, "Memo to File." It's prepared
18 by Mr. Darrell Davis. It was prepared on
19 January 15, 2024, and it's got an OCD Bates label.

20 And in this document, Mr. Davis, who's
21 your engineer at the company, identified, as part of
22 his analysis for costs, that plugging and abandoning
23 wells in the EMSU are about \$100,000 each. Do you
24 see that?

25 A. Yes, sir.

1 Q. So with \$100,000 each, at 700 wells,
2 wouldn't that be more like \$70 million plugging
3 liability?

4 A. I can't do the math in my head, but it's a
5 significant cost.

6 Q. Yeah.

7 MR. RANKIN: Before I forget,
8 Mr. Hearing Officer, I'm going to -- I'm going to
9 move the admission of this document, which is titled
10 "Memo to File." It's dated January 15, 2024, as
11 produced to us in discovery by Empire. And I move
12 it into the record as Goodnight Cross Exhibit
13 Number 15.

14 JACK WHEELER: 16.

15 MR. RANKIN: Oh.

16 HEARING OFFICER HARWOOD: Ms.
17 Shaheen, any objection?

18 MS. SHAHEEN: No objection from
19 Empire.

20 HEARING OFFICER HARWOOD: OCD?

21 MR. MOANDER: No objection,
22 Mr. Hearing Officer.

23 HEARING OFFICER HARWOOD: And
24 Mr. Beck?

25 MR. BECK: No objection.

1 HEARING OFFICER HARWOOD: Mr. Suazo?

2 MR. SUAZO: No. Sorry, no objection,
3 Mr. Examiner.

4 HEARING OFFICER HARWOOD: Okay.
5 Thank you. It will be admitted.

6 MR. RANKIN: Mr. Hearing, I changed
7 it to Exhibit 16.

8 HEARING OFFICER HARWOOD: It will be
9 admitted as Exhibit Number 16.

10 (Exhibit 16 admitted into evidence.)

11 MR. RANKIN: And as to the other
12 document I would like to admit, it would be the SEC
13 report 10 -- 8-K that reflects the purchase sale
14 agreement and details that I referred to as
15 Exhibit -- as Goodnight cross Exhibit 14.

16 HEARING OFFICER HARWOOD: Empire?

17 MS. SHAHEEN: No objection, but I
18 would like to know the Bates numbers for the record
19 on both of those documents.

20 MR. RANKIN: Sure. The Exhibit 16
21 beginning Bates is OCD 23614-1703482.

22 The 10-K (sic) is not a Bates-labeled
23 document. It was pulled off the SEC website.

24 HEARING OFFICER HARWOOD: OCD, any
25 objection?

1 MR. MOANDER: Not at all, Mr. Hearing
2 Officer.

3 MR. BECK: No objection from Rice.

4 HEARING OFFICER HARWOOD: Okay. And
5 Pilot?

6 MR. SUAZO: No objection.

7 HEARING OFFICER HARWOOD: It will be
8 admitted as Exhibit 14.

9 (Exhibit 14 admitted into evidence.)

10 Q (By Mr. Rankin) Mr. Wheeler, during your
11 testimony and summary of your testimony, you
12 discussed the fact that there is a provision in the
13 purchase and sale agreement regarding a first
14 priority requirement to confer with XTO on CO2
15 purchases, correct?

16 A. Yes, sir.

17 Q. Have you -- has Empire had any discussions
18 with XTO on the potential purchase of CO2?

19 A. I've had discussions with a Mr. Walker,
20 who's the division geology manager for XTO at the
21 time that the applications from Goodnight were
22 filed. And I also discussed with him the potential
23 for the ROZ and had significant information
24 furnished to me to get me very comfortable with the
25 CO2 potential within the residual oil zone in the

1 San Andres.

2 Q. Has Empire provided 60-day notice to XTO
3 under the terms of that provision?

4 A. Have we furnished what?

5 Q. Has Empire provided 60-day notice to XTO
6 under the terms of that provision?

7 A. No, sir. We haven't entered into
8 negotiations with anybody to do the CO2 because if
9 Goodnight continues this injection and the
10 Commission does not revoke those existing permits,
11 in three years, the wells will be so pressured up
12 that it would totally destroy all the residual oil
13 zone that we have, at which point we'll have to
14 continue our lawsuit against Goodnight for
15 destroying those reserves, just like the case that
16 Goodnight settled in Texas where they went in,
17 injected, destroyed all the reserves of an existing
18 operator, and then Goodnight settled out of court to
19 pay them for those damages.

20 Q. So you're relying -- and you're relying on
21 the testimony -- on the opinions of your experts
22 about the impact of Goodnight's injection, correct?

23 A. Well, you know, when you asked me about
24 whether or not I was testifying as an expert
25 engineer, or something, for my statement about them

1 violating our correlative rights and the waste,
2 really, that's a legal question. And I have taken
3 all of the information furnished me from our experts
4 and managers and employees of Empire to make that
5 legal determination.

6 Q. Paragraph 21 of your statement, you state
7 that "XTO Holdings was in the process of selling the
8 Eunice Monument South unit, so they did not spend
9 time or money to protest the applications."

10 Is that based on personal knowledge?

11 A. Yes. When I spoke to Mr. Walker, he told
12 me that he had never received any of the
13 applications from Goodnight to receive the authority
14 to inject. And he thought -- he told me that at the
15 time that Goodnight was making those applications,
16 all of the management of those properties had been
17 transferred over to ExxonMobil to their divesture
18 team. And it is his position that XTO never
19 received notice of any of those applications.

20 Q. The records of notification would be
21 included in the case file for those cases, agree?

22 A. No, sir.

23 Q. Why not?

24 A. Because what it is, is when you send out
25 something on certified mail, you attach the number

1 of the certified mail to the envelope, and then you
2 tear off the top and retain that. So you can go
3 ahead, prepare all of the notifications, take the
4 certificates, tear off the top portion, attach it to
5 the application, and there's no proof that those
6 application notices were ever sent out.

7 And we, for example, have never got the
8 green cards that are attached to the certified mail
9 that the recipient would sign off and would have
10 been returned to XTO. So we have no proof or
11 knowledge that those certifications were even mailed
12 out.

13 Q. Certified mail has a record of receipt,
14 does it not?

15 A. Yes, sir, and we never seen any of those
16 receipts.

17 Q. Now, Mr. Wheeler, you testified about
18 another lawsuit involving Goodnight. What lawsuit
19 was that?

20 A. I don't have -- I don't have the name in
21 front of me. I furnished that to -- a document that
22 I have given Ms. Hardy. If it's real important for
23 you to know the name of that, I could ask for us to
24 recess for a few minutes so I could consult with her
25 and get the name.

1 Q. Was it the Marscon (phonetic) case?

2 A. Do what?

3 Q. Was it the Marscon case?

4 A. I don't -- I don't recall the name. I
5 thought it was -- I'm not sure of the name.

6 Q. Do you have evidence of a settlement out
7 of court that you're referring to, that you're
8 telling me?

9 A. I've never seen the settlement, but that's
10 the information that we received from our attorney.

11 Q. Okay. Now, as to XTO, in your statement
12 here in paragraph 21, you're saying that they
13 didn't -- you don't say that they didn't receive
14 notice. You're saying they didn't -- they didn't
15 spend the time or money to protest the applications,
16 agree?

17 A. Yes, sir.

18 Q. Okay. Now, it's Empire's position that
19 all wells within a two-mile radius should --
20 disposal wells within a two-mile radius should be
21 shut in; is that correct?

22 A. Yes, sir, that would be our preference.

23 Q. Okay. And are you asking the Commission
24 to effect that request?

25 A. Not in this application. We had requested

1 it previous, and when the Commission made a
2 determination and Mr. Rubin established the
3 parameters of this hearing, he did not include those
4 applications. So we'll have to come back for an
5 additional hearing to request the Commission to
6 revoke those applications.

7 Q. So looking at this exhibit, which is
8 Goodnight Exhibit B-47, which shows all SWDs active
9 and inactive within a five-mile radius of your
10 units -- of Empire's units, you're telling me that
11 Empire will come back to the Commission and request
12 the Commission revoke the authority to inject all
13 SWDs within two miles of any of these units?

14 A. Yes, sir.

15 Q. Okay. And you're going to do that in
16 separate applications in separate hearings?

17 A. Yes, sir.

18 Q. Now, you filed -- Empire has filed suit
19 against Goodnight and Midstream in district court in
20 New Mexico, correct?

21 A. Yes, sir, in the Fifth District Court in
22 Hobbs, New Mexico.

23 Q. And Empire has also filed a lawsuit
24 against Pilot, as well, correct?

25 A. No, sir.

1 Q. Not correct?

2 A. No, sir. We prepared the lawsuit, but
3 then we never served it on Pilot or Permian yet.

4 Q. Okay. But it's been filed, correct?

5 A. Has a lawsuit been filed?

6 Q. Yeah, it's been filed in district court,
7 correct?

8 A. The suit against Goodnight has been filed.
9 The suit against Pilot and Permian has not.

10 Q. Let me -- let me clarify the distinction.
11 You're telling me that it hasn't been served on
12 those parties, but it has been filed in district
13 court?

14 A. That's my understanding, yeah.

15 Q. So it has been filed? The lawsuits
16 against Pilot and Permian Line Service and Rice have
17 been filed in district court. They just haven't
18 been served, correct?

19 A. I don't -- I don't believe that our
20 attorney filed against Permian or Pilot. We only
21 filed it against Goodnight.

22 Q. Okay. Now, you haven't filed lawsuits
23 against all operators within a one-mile radius of
24 your units, have you?

25 A. Not yet.

1 Q. Are you -- are you intending to?

2 A. Yes, sir.

3 Q. And that would include Apache?

4 A. Yes, sir. Well, Apache sold the
5 properties to Hilcorp. So it would be a suit
6 against Hilcorp at the present time.

7 Q. So this well down here within a mile of
8 the AGU that I'm highlighting here -- I'm sorry,
9 the -- yeah, the Arrowhead Grayburg Unit that's a
10 well, that you would seek to revoke the authority
11 for injection on?

12 A. Right now our focus is on the EMSU. So we
13 haven't made a corporate decision to litigate for
14 the AGU or the EMSU-B as of yet.

15 Q. Okay. So with respect to any operators
16 within those two-mile distances, you haven't made a
17 determination on how to proceed with those?

18 A. No, sir, not yet.

19 Q. Okay. In paragraph 22 of your statement
20 and in your prior testimony on the stand today, you
21 made some comments that I want to investigate.

22 Paragraph 22 you state that "Empire
23 acquired the EMSU from XTO due to its significant
24 CO2 EOR potential in the San Andres ROZ in Grayburg
25 main pay zone intervals." We discussed that.

1 Then you go on to say in the following
2 sentence -- and I'm going quote a part of the next
3 sentence here. "Empire -- Empire's operational
4 focus during 2023 and 2024 has been suspended while
5 we seek support from the New Mexico Oil Conservation
6 Commission to revoke existing SWD permits and to
7 deny new applications." Did I read that correctly?

8 A. Yes, sir.

9 Q. And during today's testimony, you also
10 testified that Empire's ceased its planned
11 operations as a result of -- or as a consequence or
12 because of Goodnight's current injection activities,
13 correct?

14 A. That's correct.

15 Q. And that started -- Empire made that
16 determination not to proceed with its operations
17 beginning in 2023, correct?

18 A. Yes, sir. That's when Empire discovered
19 the existence of the saltwater wells that we were
20 not aware of.

21 Q. So prior to 2023, Empire was not aware of
22 the saltwater disposal wells operated by others?

23 A. The management of Empire was not aware of
24 that, no, sir.

25 Q. At the time that Empire suspended its

1 operational focus in 2023, did it have a plan for
2 what it was going to do?

3 A. Yes, sir. What we were going to do is
4 focus on the waterflood first, go in and improve the
5 production there, change up some of the wells that
6 were injecting the water into the Grayburg, go in
7 the different zones. As I recall, there are six or
8 seven zones, and right now the flood is primarily in
9 zone 1 and 2. And they were going to move down into
10 like the 5 -- zone 5 and 6 or maybe 4, 5, and 6 to
11 store injection patterns in there to improve the
12 production on the Grayburg unit, saltwater
13 waterflood.

14 Q. So the operations that you're referring to
15 here in your testimony, the -- Empire's operational
16 focus during 2023 and 2024, are you telling me that
17 the -- that focus was going to be -- it was limited
18 to waterflood operations?

19 A. Yes, sir.

20 Q. Yes?

21 A. And at that period of time, yes, sir.

22 Q. Okay. Did Empire have a written plan or a
23 plan of operations that it was going to implement
24 that was suspended?

25 A. I don't know about the definition of a

1 written plan, but I do know that there were studies
2 prepared and presented to management, including
3 Mr. West, Mr. Morrisett, and our chairman about the
4 plans and the investment and a budget to do that
5 work.

6 Q. Okay. So there was -- there was
7 actually -- I mean, I guess in terms of a plan,
8 there was actually some written documents laying out
9 what the company was intending or proposing to do
10 during that timeframe, correct?

11 A. Yes, sir.

12 Q. And there was a budget for that work,
13 correct?

14 A. Well, the budget was denied because the
15 determination was made that Empire did not want to
16 expend any money on the operations within the Eunice
17 Monument South Unit until we got all of the water
18 injection stopped so we could make that investment.

19 Q. But I guess that wasn't my question. My
20 question was: There was a budget, correct?

21 A. No, sir. There wasn't ever a budget
22 approved.

23 Q. Not approved. There was a budget
24 proposed, correct?

25 A. Yes, sir.

1 Q. Okay. And was that budget -- that
2 proposed budget prepared by Mr. West?

3 A. No, sir.

4 Q. Who was it prepared by?

5 A. I don't know.

6 Q. You don't know?

7 A. I think it was -- I'm thinking the
8 information was furnished by Mr. Davis and
9 Mr. Araya, who's the other reservoir engineer that
10 we hired at the time that restored it to try to work
11 on the -- on the Goodnight applications. And they
12 were the ones that were working on doing all of the
13 evaluations and recommendations.

14 And I'm not sure if they presented it to
15 senior management, but Mr. West would have been the
16 one receiving the information rather than preparing
17 the budget, is my understanding.

18 Q. Okay. And that proposal to management on
19 what steps would be taken, it laid out, I guess,
20 what -- did you see that plan?

21 A. I saw the written evaluations and
22 recommendations for working on the waterflood.

23 Q. Okay. Did Empire prepare any AFEs related
24 to that proposed -- those proposed operations?

25 A. I'm not -- I'm not -- I wasn't part of the

1 notification, so I'm not sure if they did or didn't.

2 Q. And who -- who was the -- who made the
3 decision to suspended the operational focus?

4 A. Our senior management.

5 Q. Okay. And when was that decision made?

6 A. To what, sir?

7 Q. When was that decision made?

8 A. Probably August of 2023.

9 Q. Okay. Was it done through a meeting? How
10 was it done? Through an email?

11 A. Yes, sir, we have presentations to
12 Mr. West, Mr. Morrisett and our chairman when
13 they're in town. And in preparation for board
14 meetings, and stuff, that are held quarterly,
15 there's information that's presented to the members
16 of the board.

17 Q. And the reason that it was denied, the
18 proposed project was denied was because of
19 Goodnight's operations in the EMSU, correct?

20 A. Yes, sir.

21 Q. Mr. Wheeler, I've got in front of you here
22 the annual report, the Form 10-K for Empire
23 Petroleum for 2023. Do you see that in front of
24 you?

25 A. Yes, sir.

1 Q. Okay. And it's a long document, 75 pages.
2 And it's part of the Empire's reporting to the SEC
3 here. And at the end of 2023, it reported a net
4 income loss of \$12.4 million. Do you see that?

5 A. Yes, sir.

6 Q. And at the time, at the end of 2023, as
7 part of its disclosures as a public company, it
8 reported through this filing that, quote, "We have
9 indebtedness and may incur substantially more debt.
10 Higher levels of indebtedness make us more
11 vulnerable to economic downturns in adverse business
12 developments." Did I read that correctly?

13 A. Yes, sir.

14 Q. It goes on to say, "As a result of
15 indebtedness, we use a portion of our cash flow to
16 pay interest, which reduces the amount of
17 available -- amount available to fund operations and
18 other business activities and could limit
19 flexibility in planning for or reacting to changes
20 in the business and the industry in which we
21 operate. Indebtedness under the credit facility,
22 which is their debt, is at a variable interest rate.
23 And so a rise in interest rates will generate
24 greater interest expense." Did I read that
25 correctly?

1 A. Yes, sir.

2 Q. Okay. And as part of this disclosure, the
3 company was disclosing that a portion of its cash
4 flows to pay interest, which reduces money for
5 operations and business activities, that's basically
6 what this disclosure is doing, correct?

7 A. Yes, sir.

8 Q. Okay. It's true -- isn't it true that
9 some of the interest referred to here goes to pay
10 interest on bridge loans that were issued to Empire
11 by its board chair, Mr. Phil Mulacek?

12 A. Yes, sir.

13 Q. Okay. And here is -- in the same
14 disclosure, Empire's disclosing that in 2023, Empire
15 received \$10 million in bridge loans from
16 Mr. Mulacek and Energy Evolution Master Fund, which
17 is a related party to Mr. Mulacek, correct?

18 A. Yes, sir.

19 Q. Which were substantially converted to
20 common shares. "In addition, Empire sold additional
21 shares to both parties generating about \$5 million
22 in proceeds from each party." Correct?

23 A. Yes, sir.

24 Q. And in addition to that, Empire was
25 disclosing that Empire may not be able to obtain

1 needed capital for financing on satisfactory terms
2 or at all, which could lead to a decline in its oil
3 and gas reserves, as part of this disclosure,
4 correct?

5 A. Yes, sir.

6 Q. So beginning in -- at least as early as
7 2023, Empire has been dependent on Mr. Mulacek and
8 his Energy Evolution Master Fund as a source for
9 capital, correct?

10 A. Yes, sir.

11 Q. And if they're unwilling or unable to
12 provide additional capital, it would have a material
13 adverse effect on Empire's business, especially its
14 growth plans, agree?

15 A. Yes, sir.

16 Q. And that's what is disclosed in this 2023
17 annual report, correct?

18 A. Yes, sir.

19 Q. Okay. Also disclosed at the end of 2023
20 was the status of the company liquidity. In that
21 same disclosure, Empire disclosed that its working
22 capital is negative due to high level payables
23 related to capital spending in its -- as a result of
24 its North Dakota operations; is that correct?

25 A. Yes, sir.

1 Q. And that caused Empire to be out of
2 compliance with its current ratio covenant under its
3 credit facility with its debtors, correct?

4 A. Yes, sir.

5 Q. That occurred at the end of 2023, correct?

6 A. Yes, sir.

7 Q. And -- but, however, the bank gave a
8 waiver to Empire keeping it in compliance with its
9 debt obligations, correct?

10 A. Yes, sir.

11 Q. Okay. But at the end of 2023, and as a
12 result, Empire didn't -- was unable to project that
13 it had enough cash flow to satisfy its existing
14 payables for the next 12 months, agree?

15 A. Yes, sir. I mean, all of this information
16 is what you are required to furnish the SEC relative
17 to your company and your operations. And the
18 question about the liquidity is all related to the
19 fact that Mr. Mulacek has invested a tremendous
20 amount of money and has always been prepared to
21 furnish us additional money personally from his
22 funds that he has that he's accrued over the years
23 of his development and drilling of wells and
24 companies that he's owned.

25 Q. And he's been doing that every year since

1 at least 2023, correct?

2 A. To what?

3 Q. He's been doing that every year since at
4 least 2023, correct?

5 A. Yes, sir.

6 Q. Okay. So here, as part of that required
7 disclosure, the company disclosed that it had plans
8 to raise additional funds through a rights offering
9 and Empire's board chair, Phil Mulacek, and his
10 Energy Evolution Funds. They indicated that they
11 intended to participate in the rights offering and
12 fully subscribe those shares to raise that money,
13 correct?

14 A. Yes, sir.

15 Q. Okay. So essentially, Mr. -- as you
16 stated, Mr. Mulacek was going to continue to invest
17 and back the company, correct?

18 A. Yes, sir.

19 Q. Okay. And at the end of 2023 as part of
20 its disclosure, Empire disclosed that its working
21 capital at the end of that year was negative
22 6.3 million, correct?

23 A. Yes, sir.

24 Q. Whereas in the previous year, it was
25 plus -- it was at a positive \$5 million, correct?

1 A. Yes, sir. We did a very large drilling
2 project in our North Dakota asset, and that was a
3 very expensive operation. And that's why we've got
4 a negative working capital there in 2023. And the
5 same thing occurred in 2024.

6 Q. Right. As a consequence of this debt and
7 the financing and uncertainty about being able to
8 make its payables, Empire was required to issue a
9 disclosure about whether it could maintain itself as
10 a going concern, correct?

11 A. Yes, sir.

12 Q. And that's what this disclosure is here as
13 part of this SEC filing, correct?

14 A. Correct.

15 Q. Okay. And it was required to disclose
16 that Empire needs additional funds to satisfy its
17 outstanding payables related to its capital spending
18 program, as you said, in North Dakota, which were
19 more than the estimated cash flow that it had
20 available for the following -- for the following 12
21 months, agree?

22 MS. SHAHEEN: Mr. Examiner, I'm going
23 to object to this continued questioning. It
24 doesn't -- it's not relevant to the proceeding.

25 HEARING OFFICER HARWOOD: What is the

1 relevance?

2 MR. RANKIN: Mr. Hearing Officer,
3 Mr. Wheeler has testified that the reason they
4 discontinued -- or suspended the operations at the
5 EMSU was because of Goodnight's injection into the
6 unit. In fact, as this evidence is going to show
7 and continue -- will show, is that they have no
8 money to pay for it. And they have no money to pay
9 for the existing debt as a result of the drilling
10 operations in North Dakota. And as the 2024
11 disclosures will show, they also -- and undertook
12 additional debt in Texas.

13 So Mr. Wheeler testified previously that
14 he was responsible for reviewing and contributing
15 portions of these disclosures relating to the
16 operations of Empire in those other states that show
17 that, in fact, the problems that they're having with
18 finances are not due to anything that's occurring in
19 New Mexico or at the EMSU, but have everything to do
20 with their expenses that they've incurred in
21 North Dakota and Texas and the fact that they're not
22 cashing a cash flow sufficient to support those
23 operations.

24 So as a consequence, they're in violation
25 of their credit facility, and they're requiring

1 financial support from their -- the chair of their
2 board.

3 And the reason that they didn't pursue any
4 of those operations in New Mexico was not because of
5 Goodnight's activities or operations, but simply
6 because they had no money to do it.

7 HEARING OFFICER HARWOOD: Okay. The
8 objection is overruled.

9 Q (By Mr. Rankin) So, again, as I understand
10 it, the end of the -- at the end of 2023, Empire was
11 required to disclose that it was -- there was doubt
12 about whether it could maintain itself as a going
13 concern, correct?

14 A. Yes, we're required to notify the SEC of
15 that.

16 Q. As part of the SEC's requirements, you
17 needed to -- Empire was required to disclose what
18 its plans were in order to maintain itself as a
19 going concern, correct?

20 A. Yes, sir. And basically if you look here,
21 you'll see that Empire had a very low credit
22 facility of only \$10 million. We did not go out and
23 try to increase that credit facility and take on
24 additional debt.

25 Since then, we've gone and increased that

1 with the same bank for \$20 million. And if you look
2 at our operations, you'll see that we've done
3 significant drilling and work within our areas of
4 ownership in North Dakota. And now we're doing it
5 in Texas, but we're not spending any money on the
6 EMSU.

7 And if you look at the expenditures and
8 the drilling and the work that we've -- the money
9 we've expended on the North Dakota operations and
10 the Texas, you'll see that Empire had plenty of
11 money to have worked over the EMSU properties.

12 Q. At the end of 2023, Mr. Examiner -- I mean
13 Mr. Wheeler, Empire was required to disclose how it
14 intended to proceed to raise the funds that it
15 needed to continue to make its payables, correct?

16 A. Yes, sir.

17 Q. And the plan that it had was to raise
18 money from Mr. Mulacek and his Energy Evolution
19 Master Fund, correct?

20 A. Yes, sir.

21 Q. Okay. And it disclosed as a result of
22 those plans and the understanding that Mr. Mulacek
23 and his fund would fulfill those obligations to
24 supply the needed capital, Empire was able to
25 disclose that it believed it would be able to meet

1 its required -- its financing requirements, correct?

2 A. Yes, sir. If you look, you'll see that
3 we've done two rights offerings for \$5 million
4 apiece. And both of those were oversubscribed by
5 the shareholders, and there alone, we got
6 \$10 million in capital, which more than covers the
7 \$6 million represented in the '23 10-K that you're
8 presenting to me and the Commission.

9 Q. So at the end of '23 -- 2023, as required,
10 because Empire faced conditions giving rise to
11 uncertainties about its liability and ability to
12 continue to operate due to recurring financial
13 losses, it was required to make these disclosures
14 about its status as a going concern, correct?

15 A. Yes, sir. But it was totally different
16 between the actual operation of the company and what
17 you have to report to the SEC as far as going
18 concern. The fact that you have -- that you include
19 these comments does not mean that the company is
20 going to go bankrupt or close its doors.

21 Q. That's in large part because of the
22 funding from Mr. Mulacek, correct?

23 A. That's correct.

24 Q. Right. Now, the same thing occurred in
25 2024. And, in fact, Mr. Wheeler, each annual

1 reporting period, each quarter since 2023, Empire
2 has had to make a report on the status -- on its
3 status as a going concern, correct?

4 A. Yes, sir.

5 Q. Okay. And it made a similar annual filing
6 for the annual report for 2024, correct?

7 A. Yes, sir.

8 MR. RANKIN: Mr. Hearing Officer,
9 before I move off this exhibit, I'm going to move
10 this 2023 10-K as Goodnight Exhibit Number 15,
11 Goodnight Cross Exhibit Number 15.

12 HEARING OFFICER HARWOOD: Empire?

13 MS. SHAHEEN: No objection.

14 HEARING OFFICER HARWOOD: Okay. It
15 will be admitted.

16 OCD?

17 MR. MOANDER: No objection.

18 HEARING OFFICER HARWOOD: Rice?

19 MR. BECK: No objection.

20 HEARING OFFICER HARWOOD: And Pilot?

21 MR. SUAZO: No objection.

22 HEARING OFFICER HARWOOD: All right.

23 It will be admitted as Exhibit 15.

24 (Exhibit 15 admitted into evidence.)

25 MR. RANKIN: Thank you.

1 Q (By Mr. Rankin) I got on my screen here,
2 Mr. Wheeler, the -- Empire's 10-K for 2024. And you
3 alluded to some of the comments I was going to raise
4 with you. But in this annual filing, the cash flows
5 report a net loss for 2024 of \$16 million; is that
6 correct?

7 A. That's correct.

8 Q. Okay. And as for the annual report in
9 2023, Empire was also required to report its
10 financial status as a going concern, correct?

11 A. Yes. You know, we reported that every
12 year and every quarter, but you see we're still
13 here. We spent \$500,000 in attorneys' fees and
14 expert witnesses at the last hearing. So we're
15 spending millions of dollars just for this hearing,
16 and if we were not a going concern, we would be
17 unable to do that.

18 Q. It's largely thanks to Mr. Mulacek; is
19 that correct?

20 A. To what, sir?

21 Q. Mr. Mulacek, correct?

22 A. I'm sorry, what are you asking?

23 Q. I'm saying that's largely due to
24 Mr. Mulacek, correct?

25 A. Oh, yes, sir. Yeah.

1 Q. So, again, in 2024, Empire was required to
2 notify its lender and request a waiver regarding its
3 credit facility in 2024, correct?

4 A. Right. We still hadn't made the decision
5 to increase our line of credit. So we still had the
6 \$10 million line, and that's where we reported
7 because of our loss.

8 Q. Okay. And at the end of 2024 -- sorry, I
9 thought I had this.

10 At the end of 2024, Empire was still
11 carrying a negative working capital of \$8.9 million,
12 correct?

13 A. Yes, sir.

14 Q. And it still had to report that the future
15 expected operating cash flows would not sufficiently
16 meet the company's obligations for the next 12
17 months, correct?

18 A. Correct.

19 Q. And it had to report as part of the 2024
20 annual report that, given the negative working
21 capital and insufficient expected operating cash
22 flow, that there was substantial doubt about the
23 company's ability to continue as a going concern,
24 correct?

25 A. Yes, sir.

1 Q. Okay. But nevertheless, as you alluded
2 to, Mr. Mulacek and his Energy Evolution Master Fund
3 indicated they were willing to provide additional
4 funds, if required, to meet the company's
5 obligations over the following 12 months, correct?

6 A. Yes, sir. I mean, if you read it, it
7 basically says that they're willing and they're able
8 to. So we have no concern here that the company's
9 not going to be able to continue to fund its
10 operations.

11 Q. And as expressed in this disclosure, as
12 of -- the portion I'm highlighting here, the company
13 disclosed that the overall decline in working
14 capital and cash is primarily driven by its Starbuck
15 drilling program in North Dakota, correct?

16 A. Yes, sir.

17 Q. In addition, there was some additional
18 costs increased in Texas, correct?

19 A. Yes, sir. I mean, basically the
20 operations of the North Dakota properties were
21 unsuccessful and did not -- were not profitable
22 until Mr. West was hired.

23 And when Mr. West was hired, he went in
24 and changed all of that. And now those operations
25 are successful, and they've even formulated a

1 methodology to increase the production of oil that
2 they filed a patent on. And it's totally turned
3 around the North Dakota operations.

4 Q. In your previous testimony, Mr. Wheeler,
5 you described for me how -- that while you were no
6 longer responsible for filing -- or receiving the
7 filing of Empire's 10-Ks or 10-Qs, that you
8 nevertheless are asked to confer with management
9 over aspects of those documents that relate to the
10 company's operations in Texas, North Dakota, and New
11 Mexico, correct?

12 A. Yes, sir.

13 Q. And that would include the statement that
14 I just read in the 2024 annual report, correct?

15 A. Yes, sir.

16 Q. Okay. And in that disclosure, the company
17 disclosed that it was having issues with costs in
18 North Dakota and Texas, correct?

19 A. Yes, sir.

20 Q. But you made no disclosures about any
21 issues in New Mexico, correct?

22 A. Yes, sir.

23 Q. Okay. So --

24 A. Spending any money in New Mexico, so there
25 was nothing to report because we're not going to

1 expend any money until we get the four existing
2 wells revoked and then get all of the new
3 applications denied.

4 Q. Mr. Wheeler, is it still your testimony
5 that Empire's decision to suspend its operational
6 focus in 2023 and 2024 was due to Goodnight's
7 operations and not because the company didn't have a
8 cash flow or financial resources to do that work?

9 A. That's clearly correct, yes, sir.

10 Q. So it's your opinion -- it's your belief
11 and your testimony that the company did not pursue
12 operations in New Mexico because of -- Goodnight's
13 operations and not because it didn't have any money?

14 MS. SHAHEEN: Asked and answered.

15 HEARING OFFICER HARWOOD: It has been
16 asked and answered.

17 MR. RANKIN: Okay. I just want to
18 make sure the record is clear.

19 HEARING OFFICER HARWOOD: I think we
20 got --

21 MR. RANKIN: If that's what it is,
22 that's great.

23 HEARING OFFICER HARWOOD: I think we
24 got the point.

25 MR. RANKIN: All right.

1 A. Now, we absolutely had the money to be
2 able to fund operations in New Mexico as a very
3 valuable asset. So the fact that we couldn't do
4 anything internally was very disappointing to all of
5 the people working at Empire in the management.

6 MR. RANKIN: Mr. Hearing Officer, I
7 move the admission of this 2024 10-K as Goodnight
8 Exhibit Number 7 -- or Goodnight Cross Exhibit 17.

9 HEARING OFFICER HARWOOD: Empire?

10 MS. SHAHEEN: No objection.

11 HEARING OFFICER HARWOOD: OCD?

12 MR. MOANDER: No objection,

13 Mr. Hearing Officer.

14 HEARING OFFICER HARWOOD: Rice?

15 MR. BECK: No objection.

16 HEARING OFFICER HARWOOD: Pilot?

17 MR. SUAZO: No objection.

18 HEARING OFFICER HARWOOD: Thank you.

19 It will be admitted.

20 (Exhibit 17 admitted into evidence.)

21 Q (By Mr. Rankin) Mr. Wheeler, in this next
22 section of your Exhibit A, your testimony, in
23 paragraph 22, you address some technical issues
24 about pressures in the EMSU. Do you recall that?

25 A. Yes, sir.

1 Q. You, yourself, did not conduct a technical
2 analysis of any pressures in the San Andres within
3 the EMSU, did you?

4 A. You know, lawyers always want to do
5 everything, but I didn't do this.

6 Q. Okay. And you didn't, yourself, evaluate
7 the effect of Goodnight's injection on pressures in
8 the San Andres, did you?

9 A. No, sir.

10 Q. And you didn't analyze, yourself, the
11 effect of Goodnight's disposal on projected CO2
12 injection, did you?

13 A. No, sir.

14 Q. And you didn't conduct an assessment of
15 what the minimum miscibility pressure would be or is
16 in the San Andres, did you?

17 A. No, sir.

18 Q. And you're relying on somebody else for
19 these statements in your testimony?

20 A. Yes, sir.

21 Q. Similarly, in the same paragraph, you
22 refer to some fractures occurring. Did you,
23 yourself, conduct an analysis to determine if there
24 are fractures between the San Andres and Grayburg?

25 A. I've seen the cores that show the

1 fractures and stuff, but I was not the one that
2 originally became aware of that. That was
3 information from meetings and discussions with
4 Dr. Lindsay.

5 Q. And you did not, yourself, evaluate and
6 make a determination or an opinion or issue an
7 opinion regarding whether those fractures extend
8 into Goodnight's disposal zone, did you?

9 A. No, sir.

10 Q. And you did not, yourself, conduct an
11 analysis to determine whether Goodnight's injections
12 prematurely watering out any of Empire's operations
13 currently?

14 A. No.

15 Q. I think in this statement, also you're
16 referring to some modeling work in paragraph 22,
17 correct?

18 A. Yes, sir.

19 Q. That's -- is that referencing
20 Dr. Buchwalter's analysis as part of this case?

21 A. Yes, sir.

22 Q. Okay. And for the statements there
23 regarding those values and the modeling, you're
24 relying entirely on Dr. Buchwalter's opinions?

25 A. Dr. Buchwalter, but also some reservoir

1 engineers, production engineers that are on our
2 staff at Empire that validated that.

3 Q. As part of your testimony, you attached
4 the purchase and sale agreement between XTO and
5 Empire, correct?

6 A. Yes, sir.

7 Q. And in Section 4.9 of that agreement, it
8 states under the Environment Assessment Provision
9 that, quote, "Purchaser shall have the right to
10 enter upon the assets, inspect the same, and conduct
11 such tests, examinations, investigations, and
12 studies as may be necessary or appropriate to
13 determine the environmental condition of the
14 assets." Did I read that correctly?

15 A. Correct.

16 Q. Did Empire do that work?

17 A. No.

18 MS. SHAHEEN: Mr. Examiner, I would
19 like to object again on the basis of relevance. I
20 don't believe Mr. Wheeler testified at all about
21 this section of the purchase and sale agreement, and
22 I don't believe it's an issue that's before the
23 Commission in this proceeding.

24 MR. RANKIN: He testified that -- I
25 can respond if you want me to.

1 HEARING OFFICER HARWOOD: Well, no.
2 Well, what's the relevance?

3 MR. RANKIN: Mr. Wheeler testified
4 that Empire was not aware of the presence of the
5 saltwater disposal wells until 2023. I'm asking
6 whether they went onto the location to do any due
7 diligence work as authorized under the purchase and
8 sale agreement.

9 HEARING OFFICER HARWOOD: Okay. All
10 right. I'll -- it's overruled.

11 Q (By Mr. Rankin) Mr. Wheeler, did Empire
12 conduct any of its work authorized under Section 6.8
13 of the PSA?

14 A. No, sir. That was an issue, and that's
15 just one of the reasons that the management team at
16 Empire at that time were terminated.

17 Q. Because they didn't -- they didn't
18 actually go out and look at the site, did they?

19 A. No, sir, they did not.

20 Q. Under the PSA, there's a provision
21 addressing representations and warranties of the
22 purchaser. That would be Empire, correct?

23 A. Yes, sir.

24 Q. And under 6.8 of that provision, it goes
25 to say under the Knowledge and Experience, that,

1 quote, "Purchaser is sophisticated in the
2 evaluation, purchase, ownership, and operation of
3 oil and gas properties and related facilities. In
4 making its decision to enter into this agreement and
5 to consummate the transaction contemplated hereby,
6 purchaser as solely relied" -- and I'll skip over
7 subpart A, to subpart B, "on its own independent
8 investigation and evaluation of the assets and the
9 advice of its own legal, tax, economic, and
10 environmental engineering, geological and
11 geophysical advisers and not on my comments,
12 statements, projections, or other material made or
13 given by any representative, consultant, or adviser
14 of seller." Did I read that correctly?

15 A. That's correct.

16 Q. Okay. Do you agree that Empire agreed, as
17 part of this purchase, that it relied on its own
18 independent analyses?

19 A. Yes, sir.

20 Q. Under Section 14.2, which is titled,
21 "Other Disclaimers by Seller," and this would be
22 XTO, correct?

23 A. Yes, sir.

24 Q. Under the provisions I've highlighted, it
25 states that, "Empire acknowledges and agrees that

1 the seller disclaims and negates any representation
2 of a warranty as to contents or character or nature
3 of any report, interpretation relating to the asset,
4 quantity or quality of recoverability of
5 hydrocarbons, or future revenues generated." Did I
6 read that portion correctly?

7 A. Yes, sir. What we're basically reading is
8 that any good lawyer always includes this legalese
9 in a purchase and sale agreement. I'm sure that any
10 that you've ever done included this same language.

11 Q. And as part of this transaction, Empire
12 acknowledged and agreed to that provision, agreed?

13 A. Yes, sir.

14 Q. And that's why they made it bold, correct?

15 A. That's what?

16 Q. That's why they made it bold, correct?

17 A. Yes, sir.

18 Q. Now, following -- for post closing this --
19 this is in Section 11.1 of the agreement under
20 Assumed Obligations. It goes on to identify as part
21 of the obligations that Empire was assuming was the
22 obligation to plug and abandon all the wells that it
23 was acquiring, correct?

24 A. Yes, sir. This is -- this is a provision
25 that a good lawyer would never approve because

1 rather than having an effective date of when those
2 liabilities accrue, here you don't have an effective
3 date after. If you read it, it says "on or after."
4 So that's the reason why we got the additional
5 liabilities that I included in the disclosure for
6 the purchase price.

7 Q. Okay. And are these liabilities, these
8 plugging liabilities, these would fall under the
9 asset requirement obligation that Empire is required
10 to disclose in its SEC reporting?

11 A. Yes, sir.

12 Q. Okay.

13 MR. RANKIN: Mr. Hearing Officer, I
14 believe I just -- if I could just take a two-minute
15 break, three-minute break, I want to make sure I
16 have no further questions of Mr. Wheeler before I
17 make him available for cross-examination.

18 HEARING OFFICER HARWOOD: Okay.
19 Let's come back at 4:45.

20 MR. RANKIN: Thank you.

21 (Recess was taken from 4:41 p.m. until 4:47 p.m.)

22 HEARING OFFICER HARWOOD: Ms. Tellez,
23 are you ready to go?

24 THE REPORTER: Yes.

25 HEARING OFFICER HARWOOD: Okay.

1 Great. All right. Mr. Rankin.

2 MR. RANKIN: Mr. Hearing Officer, I
3 have no further questions for this witness and make
4 him available for other examination.

5 HEARING OFFICER HARWOOD: Okay. OCD,
6 do you have questions for this witness?

7 MR. MOANDER: I do not. I will pass
8 the witness.

9 HEARING OFFICER HARWOOD: All right.
10 Mr. Beck of Rice Operating?

11 MR. BECK: Yeah, I've got a couple of
12 questions.

13 CHAIRMAN RAZATOS: Mr. Hearing
14 Officer, we have 13 more minutes.

15 Mr. Rice, I'm sorry to interrupt you. How
16 long do you think that you are going to need?

17 MR. BECK: It could be 13 minutes.

18 CHAIRMAN RAZATOS: Mr. Beck, I called
19 you Mr. Rice again.

20 MR. BECK: That's all right.

21 CHAIRMAN RAZATOS: I apologize.

22 MR. BECK: I think I've told you
23 before, Chair, that people have called me much
24 worse.

25 CHAIRMAN RAZATOS: Okay. My

1 apologies again. My sincerest apologies.

2 HEARING OFFICER HARWOOD: It's a
3 four-letter word, right?

4 MR. BECK: Exactly.

5 It could be longer depending on what kind
6 of responses I get. I'm happy to break and come
7 back in the morning and do it. I'm happy to see how
8 far we go. I'll leave it up to you.

9 CHAIRMAN RAZATOS: I think to be fair
10 to you to, Mr. Beck, and to Mr. Suazo, as well,
11 later, I think it would behoove us to maybe call it
12 now, Mr. Hearing Officer, and we can reconvene on --
13 tomorrow morning.

14 HEARING OFFICER HARWOOD: Sure. That
15 makes sense, not to mention Mr. Wheeler has been on
16 the stand for hours.

17 CHAIRMAN RAZATOS: He has, and we
18 want to be cognizant of Mr. Wheeler as well.

19 Thank you, Mr. Wheeler. We appreciate it.

20 JACK WHEELER: Yeah, thank you for
21 giving me these 13 minutes I don't have to testify.

22 CHAIRMAN RAZATOS: It's not a lot,
23 sir, I apologize. But, hey, it's part of the
24 process.

25 HEARING OFFICER HARWOOD: All right.

1 Then we'll break for the day, and we'll come back
2 and reconvene tomorrow morning promptly at 9:00 with
3 Rice's cross-examination of Mr. Wheeler. Thank you,
4 everybody. We'll be off the record.

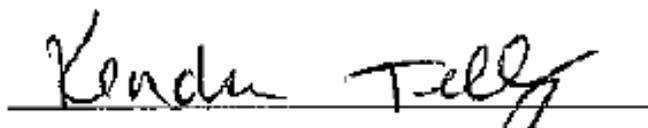
5 (The proceedings recessed at 4:52 p.m.)

6 AFFIRMATION OF COMPLETION OF TRANSCRIPT

7
8 I, Kendra D. Tellez, DO HEREBY CERTIFY that on
9 the 7th day of April, 2025, a hearing of the New
10 Mexico Oil Conservation Commission was taken before
11 me via video conference.

12 I FURTHER AFFIRM that I did report in
13 stenographic shorthand the proceedings as set forth
14 herein, and the foregoing is a true and correct
15 transcript of the proceedings to the best of my
16 ability.

17 I FURTHER affirm that I am neither employed by
18 nor related to any of the parties or attorneys in
19 this case, and that I have no interest in the final
20 disposition of this case in any court.

21
22 
23

24 KENDRA D. TELLEZ

Veritext Legal Solutions

25

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[agree - andres]

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[andres - appropriate]

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