

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 9, 2025
9:00 a.m.

HEARD BEFORE: HEARING OFFICER RIPLEY HARWOOD
COMMISSION MEMBERS:

GERASIMOS ROZATOS, Chair
BAYLEN LAMKIN, Member
DR. WILLIAM AMPOMAH, Member

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1 CHAIRMAN RAZATOS: Good morning to
2 everyone. It is 9:00. Can you hear me in Pecos
3 Hall?

4 MS. APODACA: We can hear you.

5 CHAIRMAN RAZATOS: Awesome. Thank
6 you. Today is Wednesday, April 9, 2025. This is a
7 continuation of the Oil Conservation Division
8 hearing that we have had scheduled for April 7th
9 through the 11th. This is an evidentiary hearing
10 that we're having today. We're continuing it. It's
11 the consolidated cases by Goodnight, Midstream, and
12 Empire New Mexico. The case is, again for the
13 record, are Case Numbers 24123, 23614 through 17,
14 23775, 24018, 2 -- through 24020 and 24025.

15 Before we start the actual case and
16 transfer it over to our hearings officer, I just
17 have a preliminary issue that I'd like to discuss
18 regarding tomorrow.

19 Commissioner Dr. Ampomah tomorrow does
20 have a scheduling conflict in the morning. So we do
21 need to start on a delay, if at all possible. So
22 the request is to potentially start at 10:30
23 tomorrow morning. Starting -- now it's glitching on
24 my side, so I don't know if you guys heard that, so
25 I'll repeat it. Starting at 10:30 tomorrow morning.

1 Are there any issues with the
2 commissioner -- other commissioners?

3 Mr. Lamkin, do you have an issue with
4 that?

5 COMMISSIONER LAMKIN: I don't have an
6 issue with that.

7 CHAIRMAN RAZATOS: Excellent. And
8 then as parties that are in the room, as well, I
9 always start on my right-hand side. Mr. Rankin?

10 MR. RANKIN: Good morning, Mr. Chair,
11 commissioners. No problem accommodating Dr.
12 Ampomah's schedule.

13 CHAIRMAN RAZATOS: Excellent. Thank
14 you.

15 Ms. Hardy?

16 MS. HARDY: Good morning, Mr. Chair
17 Commissioner. That's fine with Empire. Thank you.

18 CHAIRMAN RAZATOS: Okay. Mr. Beck?

19 MR. BECK: That's fine with Rice.
20 Thank you.

21 CHAIRMAN RAZATOS: Mr. Moander?

22 MR. MOANDER: No issue from OCD,
23 Mr. Chair.

24 CHAIRMAN RAZATOS: Excellent. And on
25 the platform, Mr. Suazo?

1 MR. SUAZO: No issues for Pilot.

2 CHAIRMAN RAZATOS: Okay. So we will
3 be starting tomorrow at 10:30. So that is going to
4 be a slight shift to our normal schedule, but thank
5 you for everybody's willingness to accommodate.

6 That was the only thing that I needed to
7 talk about. So, Mr. Hearing Officer, I transfer the
8 hearing over to you again. Thank you.

9 HEARING OFFICER HARWOOD: Thank you,
10 Mr. Chairman. You're sounding better. I hope
11 that's the case.

12 CHAIRMAN RAZATOS: Thank you. I
13 appreciate it. I'm trying.

14 HEARING OFFICER HARWOOD: All right.
15 With the Commission's permission, since the weather
16 is warming up nicely this week, if it's okay with
17 you, Chairman Razatos, I'm inclined to relax the
18 dress code. If folks want to take off their
19 jackets, you know, feel free to be comfortable.
20 We've been here long enough to indulge that sort of
21 informality.

22 CHAIRMAN RAZATOS: I see -- I'm
23 totally okay with that. Commissioner Ampomah
24 already has his jacket off, so make yourselves
25 comfortable.

Cross-Examination by Mr. Beck

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1 HEARING OFFICER HARWOOD: Okay,
2 great. Thank you.

3 All right. Well, I see we have a witness
4 back on the stand, and we have a court reporter
5 who's rested and raring to go.

6 So, Mr. Wheeler, I'll -- you're a lawyer,
7 but -- so it's probably pointless, but I'll remind
8 you you're under oath as well as an expert, and
9 so -- let's see.

10 JACK WHEELER: Well, thank you for
11 reminding me.

12 HEARING OFFICER HARWOOD: Let's go on
13 the record, if we aren't already. And I believe if
14 I'm not mistaken, Mr. Beck, it's your
15 cross-examination of Mr. Wheeler.

16 CROSS-EXAMINATION

17 BY MR. BECK:

18 Q. Good morning, Mr. Wheeler.

19 A. Morning, sir.

20 Q. My name is Matt Beck, and I represent Rice
21 and Permian.

22 A. Yes, sir.

23 Q. In your testimony yesterday, you said that
24 Empire became aware of injection of saltwater into
25 the San Andres in 2023; is that right?

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1 A. Just a minute, I -- something is ringing,
2 but I don't have my phone. Sorry.

3 Q. That's all right.

4 A. It's ringing in my new hearing aids, so --

5 Q. No problem.

6 A. -- I'm searching all my pockets and can't
7 find anything. I'm thinking this is a terrible way
8 to start, so hopefully, it will improve now.

9 Q. Great. So how did Empire become aware of
10 the saltwater injection into the San Andres and the
11 EMSU in 2023?

12 A. Our chairman and Mr. West went up to
13 review the properties and talk to the field foreman,
14 and stuff, about the process to go in to rework the
15 field and improve the production stuff, and the
16 story I heard, which is really a great story, but
17 turned out to be false because they were flying over
18 in a helicopter and saw the operations. But I was
19 correct and told they were just driving around in a
20 car.

21 But anyway, that's when they saw the
22 Wrigley surface facility there at EMSU.

23 Q. The Wrigley surface facility, you said?

24 A. Yes, sir.

25 Q. And is that a Goodnight injection

1 facility?

2 A. Yes, sir.

3 Q. Now, I assume you're aware of what the
4 Eunice Monument saltwater disposal system is?

5 A. Yes, sir.

6 Q. And you understand that to be a saltwater
7 disposal system operated by Rice --

8 A. Yes, sir.

9 Q. -- is that right?

10 MR. BECK: Adam, can I ask you to
11 bring up Rice Exhibit 4.

12 Q. This is Rice's Exhibit 4, Mr. Wheeler.
13 Have you seen this document before?

14 A. No, sir.

15 Q. Okay. Do you know who Thomas Pritchard
16 is?

17 A. Yes, sir. He was the former chairman.

18 Q. And so this is a Joinder and Ratification
19 of Articles of Agreement of the Eunice Monument
20 EUMONT Saltwater Disposal System?

21 A. Yes, sir.

22 Q. And it says that, "In exchange for the
23 mutual promises and covenants contained in the
24 foregoing Articles of Agreement for the Eunice
25 Monument EUMONT Saltwater Disposal System, and other

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1 good and valuable consideration, including
2 acceptance of Empire New Mexico, LLC, as an
3 additional and new system partner with the right to
4 dispose of saltwater by use of the system, the
5 receipt and sufficiency of which is hereby
6 acknowledged. Empire New Mexico, LLC, as an
7 additional and new system partner in the Eunice
8 Monument EUMONT Saltwater Disposal System does
9 hereby adopt, accept, ratify, and agree to be bound
10 by all of the terms and conditions, including the
11 assumption of system liabilities of its assignor,
12 all as set forth and contained in the Articles of
13 Agreement." Did I read that correctly?

14 A. Yes, sir.

15 Q. And this was executed by Thomas Pritchard
16 as CEO of Empire New Mexico on November 29, 2021; is
17 that right?

18 A. Yes, sir.

19 Q. Do you know where the -- and I'm going to
20 call it the EME instead of Eunice Monument EUMONT.
21 Do you know where the EME saltwater disposal wells
22 are within the EMSU?

23 A. Yes, sir.

24 Q. And so this would indicate that in
25 November of 2021, that Empire was aware of ongoing

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1 saltwater disposal into the San Andres within the
2 EMSU and around the EMSU; is that right?

3 A. Yes, sir, it should.

4 Q. And are you aware that --

5 MR. BECK: Well, can you bring up
6 Rice Exhibit 1?

7 And before I leave this one, Mr. Hearing
8 Officer, Rice and Permian move to admit Exhibit --
9 Rice Exhibit 4 for admission.

10 HEARING OFFICER HARWOOD: Empire?

11 MS. SHEEHAN: No objection.

12 HEARING OFFICER HARWOOD: Goodnight?

13 MR. RANKIN: No objection.

14 HEARING OFFICER HARWOOD: OCD?

15 MR. MOANDER: No objections.

16 HEARING OFFICER HARWOOD: Pilot?

17 MR. SUAZO: No objections.

18 HEARING OFFICER HARWOOD: It will be
19 admitted.

20 (Exhibit 4 admitted into evidence.)

21 Q (By Mr. Beck) Now, Mr. Wheeler, I'm showing
22 you what's been marked as Rice Exhibit 1. If
23 you'll -- do you recognize this -- well, first let
24 me ask you: Have you seen this Articles of
25 Agreement for the Eunice Monument EUMONT Saltwater

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1 Disposal System before?

2 A. Yes, sir.

3 Q. And these are the Articles of Agreement
4 that Empire joined in November of 2021, right?

5 A. Yes, sir. We were successor interest in
6 Gulf, which later retained Chevron and then was
7 transferred to XTO, which we succeeded in.

8 Q. And so on page 1 of this document, this
9 agreement was made between the system parties on
10 June 10, 1958, right?

11 A. Yes, sir.

12 Q. And those founding parties in the system
13 included Gulf Oil Corporation?

14 A. Yes, sir.

15 Q. And that was the successor interest --
16 successor in interest, as you just said, to Empire
17 via XTO and before that, Chevron?

18 A. Yes, sir.

19 MR. BECK: Mr. Hearing Officer, I'll
20 admit -- I'll move to admit Rice Exhibit 1 into
21 evidence.

22 HEARING OFFICER HARWOOD: Empire?
23 Empire?

24 MS. SHEEHAN: I'm assuming -- I'm
25 sorry, I checked out there for a sec. I'm assuming

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1 you're admitting this last exhibit?

2 MR. BECK: Yes.

3 MS. SHEEHAN: No objection.

4 HEARING OFFICER HARWOOD: Goodnight?

5 MR. RANKIN: No objection.

6 HEARING OFFICER HARWOOD: OCD?

7 MR. MOANDER: No objection.

8 HEARING OFFICER HARWOOD: Pilot?

9 MR. SUAZO: No objections.

10 HEARING OFFICER HARWOOD: It will be
11 admitted.

12 (Exhibit 1 admitted into evidence.)

13 MR. BECK: Thank you.

14 Mr. Rankin, if you go to page 2, paragraph
15 2 of that.

16 Q (By Mr. Beck) This provides that, "It being
17 desirable that a unified effort be made to control
18 the disposition of the water produced from the wells
19 listed on Exhibit D, it is the purpose of this
20 agreement to prescribe the manner in which a unified
21 disposal control system for the water so produced is
22 to be constructed, operated, and maintained." Did I
23 read that portion of it correctly?

24 A. Yes, sir, you did.

25 Q. So the purpose of this was so that the

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1 parties could dispose of wastewater produced in
2 their wells in the EME system, right?

3 A. Yes, sir. It's only the parties that are
4 related and listed in the first paragraph. And it
5 was not a commercial disposal. And the disposals
6 were not at hundreds of thousands of barrels a day
7 for that E -- operation.

8 Q. Okay. So I didn't pick up on that when
9 you were talking yesterday about commercial
10 disposals. This is not included in those commercial
11 disposals in the system?

12 A. No.

13 Q. And talking about production, you're aware
14 that the EME system operates on vacuum?

15 A. Yes, sir.

16 Q. And it's operated on vacuums since --
17 well, the late 1950s until today?

18 A. Yes, sir.

19 HEARING OFFICER HARWOOD: Mr.
20 Wheeler, I'm going to ask you to pull that mic a
21 little closer to you, if you don't mind.

22 JACK WHEELER: Closer.

23 HEARING OFFICER HARWOOD: Thanks.
24 You're not the only one here with hearing issues,
25 so -- and by the way, we have these if you think

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1 that would be helpful to you. There are more in the
2 back.

3 JACK WHEELER: I've never done
4 anything with that, so I'd probably really be in bad
5 territory.

6 MR. BECK: Mr. Rankin, if you'll go
7 to page 33 of Exhibit 1, please.

8 Q (By Mr. Beck) Mr. Wheeler, this is
9 Exhibit D of Exhibit 1, which is the EME Articles of
10 Agreement from 1958. Do you see Gulf Oil
11 Corporation's wells --

12 A. Yes, sir.

13 Q. -- listed there? And that includes the
14 Bell A through G and then the Ramsay A, right?

15 A. I can see the Bell, but I don't see the
16 Ramsay.

17 Q. That's fine. Underneath Bell.

18 A. No, I trust you what you're saying is
19 correct.

20 Q. All right. And then Gulf Oil Corp.'s
21 wells listed in Exhibit D then continue onto the
22 next page, almost the entire next page of Exhibit D,
23 right, the Bell -- the wells that are part of the
24 EME system?

25 A. Yes, sir. I don't recognize the names

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1 because after the unitization, all of those names
2 were changed. But I see the list.

3 Q. Okay. I want to go to the second slide in
4 your testimony from yesterday.

5 So yesterday when you talked about the
6 Commission's 1984 approval of the EMSU waterflood
7 and definition of the unit to include the San Andres
8 1984 -- at that point, the EME system had been
9 operating for over 20 years, right?

10 A. Yes, sir.

11 Q. Disposing of saltwater -- produced
12 saltwater into the San Andres for over 20 years?

13 A. Correct.

14 Q. The next thing I want to talk to you about
15 is slide 7. You talked about the first bullet point
16 on slide 7 here a little bit yesterday. And I think
17 I, like Mr. Rankin, noticed this was different than
18 what I read in your direct testimony. And so last
19 night I went and looked for --

20 A. I'm sorry, I can't see the slide.

21 Q. Is it not in front of you on your computer
22 screen there?

23 A. Oh. The acquisition? Oh, okay. I'm
24 sorry, I see it.

25 Q. That's all right. So I went yesterday and

1 looked through the purchase agreement for a document
2 or exhibit called Assumption of Minimum Estimated
3 E&A Liability or something like that, but I didn't
4 see that. Is that part of the purchase agreement or
5 was there a separate agreement for that?

6 A. In the XTO agreement, it's stated in there
7 that as part of the agreement, there's an assumption
8 of all plugging and abandonment liabilities for the
9 wells that were assigned.

10 JACK WHEELER: Sharon, we have that
11 highlighted in the purchase and sale agreement. So
12 maybe you can help Mr. Beck locate that.

13 Q. Was that Article 11 that you talked about
14 with Mr. Rankin yesterday, the post closing
15 obligations?

16 A. Yes, sir.

17 Q. Okay. And when did -- when did Empire
18 become aware of the \$56 million in plugging
19 liability?

20 A. Well --

21 Q. If you -- if you know. I recognize you
22 weren't there in 2020 when this was all going on.

23 A. What transpired was that Mr. Pritchard had
24 done the purchase and sale agreement and executed it
25 and then executed all the additional documents. And

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1 he put them into a file that was not a share file.

2 And right after the acquisition, he left
3 the company. And it wasn't until we were doing the
4 due diligence for responding to the subpoenas that
5 Goodnight had tendered to us did we go through and
6 have an outside firm come in and try to locate all
7 of his emails and share our files and everything.
8 And that's when we really focused on how large the
9 liability was.

10 And about the same time is when we got the
11 order of compliance from the OCD, from Mr. Jesse
12 Tremaine, where he listed the wells that we were out
13 of compliance on and needed immediate action on.

14 Q. So it was in responding to Goodnight's
15 subpoenas that Empire became aware of this plugging
16 liability that was now 56 million?

17 A. Yes. We had wells that we knew had gone
18 offline and needed plugging or recompletion,
19 whatever, about the time -- I would say in May or
20 June of 2023 when Mr. West came aboard. And he went
21 out to the field, and stuff, and everything with
22 Mr. Mulacek in August of 2023 and recognized the
23 number of wells and the fact that many of them
24 needed plugging and action taken to correct.

25 Q. And recognizing that in August 2023 is

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1 when you-all engaged, I think you said, like an
2 outside firm to look at the extent of that
3 liability; is that right?

4 A. Yes, sir.

5 Q. And that August 2023 time period, that's
6 about the same time that you got the notice of -- or
7 order of compliance from the OCD?

8 A. Yes, sir.

9 Q. And that's how came to recognize the --
10 what you now estimate is \$16 million of surface
11 remediation?

12 A. Yes, sir. There were over 6-, 700 wells
13 that -- not that date, but in the future, as long as
14 Empire owned the property, that we would ultimately
15 have to plug and remediate the sites.

16 Q. Now, if we look at -- and I think we
17 looked at this yesterday with Mr. Rankin. If you
18 look at paragraph 10 of your direct testimony from
19 2024, that's where it was a little bit different --
20 well, it was really different. In your August 2024
21 testimony, you said Empire acquired basically the
22 properties from XTO for 17,800,000, right?

23 A. Yes, sir. I went back and looked last
24 night at my notes, and stuff. When I had given it
25 to my paralegal to type, it was -- in my notes to

Cross-Examination by Mr. Beck

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1 her, it said "for cash purchase price." And when
2 she typed and I reviewed it and executed it, I
3 didn't notice that the word "cash" had been
4 excluded.

5 Q. And you looked at those notes last night,
6 you said?

7 A. Yes, sir.

8 Q. So those would be available to provide to
9 all of us here?

10 A. Yes, sir.

11 Q. All right. You'd be willing to do that?

12 A. Subject to my counsel's guidance.

13 Q. Okay. You would be willing to provide us
14 at least the portion of your notes that said a "cash
15 purchase price"?

16 A. Yes, sir.

17 Q. I'd like to see that.

18 Now, the next sentence you didn't talk
19 about, the next sentence at paragraph 10 says,
20 "Because of this substantial investment, it is
21 imperative that Empire be allowed to conduct
22 primary, secondary, and tertiary recovery of all
23 hydrocarbons present in the Eunice Monument South
24 Unit"; is that right?

25 A. Yes, sir.

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1 Q. Is that what was written in your notes
2 that you reviewed last night?

3 A. I didn't look at that sentence, and stuff,
4 but that is proper and correct, to the best of my
5 knowledge.

6 Q. And so what this sentence is saying is,
7 "Look, we spent almost \$18 million on this property.
8 And so because of that substantial investment, it's
9 imperative"?

10 JACK WHEELER: Sharon, can you turn
11 off my phone or something?

12 I going to try to take my hearing aids
13 off.

14 Q. That's fine. No worries. I think -- I
15 think she turned them off.

16 Can you hear me now?

17 A. Yes, sir.

18 Q. All right. So what I was getting to is,
19 that second sentence is telling the Commission that
20 because of this, quote, "substantial investment,"
21 it's, quote, "imperative that Empire be allowed to
22 conduct primary, secondary, and tertiary recovery,"
23 right?

24 A. Yes, sir.

25 Q. And now, come to today, as you represented

1 to the Commission for the first time yesterday,
2 you're now saying that it wasn't \$17.8 million. It
3 was \$89.8 million, right?

4 A. Yes, sir.

5 Q. Because now, in 2023, you recognize that
6 this property you bought for \$17.8 million came
7 along with, well, at least an additional -- over
8 \$70 million in liabilities?

9 A. We did, in terms of estimating the cost of
10 the P&A liabilities, which was 56 million. And then
11 following my preparation and execution of this
12 self-affirmed statement, we received a notice from
13 the State Land Office that there were 288 sites that
14 we needed to remediate that we were not aware of
15 either.

16 If you go back to the purchase and sale
17 agreement, instead of -- what I always try to
18 negotiate in a purchase and sale agreement is that
19 you'd have an effective date and you would assume
20 all the liabilities after the effective date, and
21 the seller would still be responsible for all the
22 activities prior to the effective date.

23 But if you look at this purchase and sale
24 agreement, it provides that we're responsible for
25 all the costs associated with any operations or work

1 or anything prior to own or after.

2 Q. So I think the answer to my question was
3 yes?

4 A. Um-hmm.

5 Q. That after that date, where you wrote
6 17.8, you found Empire in 2023, now had an
7 additional \$72 million of liability, at least, with
8 these properties?

9 A. In 2024 would be the date that we were
10 totally aware of all of the costs.

11 Q. And going back to that second sentence of
12 paragraph 10, there's nothing preventing Empire
13 today from conducting primary, secondary, and
14 tertiary recovery of those hydrocarbons, is there?

15 A. Yes, sir.

16 Q. What is that?

17 A. The injection of the commercial wells that
18 are within the EMSU unit and the high volumes of
19 water that they're injecting, which is detrimental
20 to a tertiary recovery operation.

21 Q. Well, just looking at what you say in
22 paragraph 10, there's nothing -- I mean, Empire
23 right now is allowed to conduct primary, secondary,
24 and tertiary recovery, right?

25 A. Well, we would have to go to the

1 Commission and get approval for a CO2 flood
2 operation. And at that point if they approve it, we
3 would be able to conduct tertiary recovery.

4 Q. And that hasn't happened yet?

5 A. No, sir, it hasn't.

6 Q. Empire hadn't applied for that?

7 A. No, sir, we haven't.

8 Q. When you talk about -- and I wrote this
9 down yesterday. You said that you were ordered to
10 stop doing anything with the EMSU; is that right?

11 A. We had an executive meeting as to the
12 operations. And a determination was made that we
13 were not going to expend any more money until we
14 were able to cease the injection in the commercial
15 wells. And if you talk to Mr. Curtis, you'll see
16 that we also have gone in and terminated all of our
17 interest in any of the Rice and Permian saltwater
18 disposal agreements that Mr. Pritchard had executed.

19 Q. Do you remember my question?

20 A. Would you repeat it?

21 Q. Yeah. It was -- yesterday you said that
22 you were ordered to stop doing anything with the
23 EMSU, right?

24 A. Yes, sir.

25 Q. And you sort of got ahead of me there, but

1 I was going to say that order came from Empire, not
2 from anyone else outside of Empire, right?

3 A. That's correct.

4 Q. And you've adhered to that? You haven't
5 done anything else with the EMSU in terms of further
6 development here, right?

7 A. Yes, sir.

8 Q. You haven't taken any cores of any wells?

9 A. No, sir.

10 Q. You haven't taken any mud logs of any
11 wells?

12 A. No, sir.

13 Q. You haven't taken any logs of any wells?

14 A. No, sir.

15 Q. You haven't drilled any new wells in the
16 San Andres to test for new oil?

17 A. We -- for the lawsuit, we had proposals to
18 drill three new wells that would go down into the
19 base of the San Andres and would give us information
20 and validation of our position. We started in
21 January.

22 We filed, I think, two permits with the
23 State. We've acquired surface agreements for
24 damages to go in and conduct the operation, but we
25 haven't drilled any of those three wells as of this

1 date.

2 Q. When did you file those applications for
3 those three new test wells? You don't have to give
4 me the exact date. Just -- any idea of the timing?
5 Was it this year? Was it last year?

6 A. No, sir. It was, I'm thinking, in
7 February or March.

8 Q. February or March of this year?

9 A. Yes, sir. I could consult with Mr. West
10 or Mr. Davis to find out, but that's what my
11 recollection is.

12 Q. That's fine. So February and March of
13 this year is the first time that you took any step
14 to get -- to drill a new test well, right?

15 A. Yes, sir.

16 Q. And you haven't taken any other step to
17 get new logs?

18 A. No, sir.

19 Q. Mud logs?

20 A. Just what's -- what was available that we
21 were able to locate.

22 Q. What was available, meaning what was
23 available in what you provided to the experts you've
24 testified for Empire so far?

25 A. Yes, sir.

1 Q. And I think I've seen you -- there's been
2 a lot of people in and out, but you've been here for
3 all of the testimony of Empire's witnesses so far
4 over this week-and-a-half?

5 A. Yes, sir.

6 Q. And you've heard each one of those
7 witnesses say -- your consulting expert witnesses
8 say that they would have benefited from more data
9 available?

10 A. Yes, sir.

11 Q. Including Mr. McShane yesterday about more
12 recent logs, mud logs, cores?

13 A. Yes, sir.

14 Q. Now, also in February of 2025, this
15 hearing started in front of the commission, right?

16 A. Yes, sir.

17 Q. On February 20, 2025?

18 A. I said the last week of February.

19 Q. You talked about a letter sent to
20 Mr. Curtis. That's Scott Curtis, the president of
21 Rice Operating Company, right?

22 A. Yes, sir.

23 Q. And that letter was intended to get Empire
24 out of the three saltwater disposal systems it was a
25 party to for Rice, right?

Examination by Commissioner Ampomah

29

1 A. Yes, sir.

2 Q. And that letter was sent on February 21st
3 of 2025, right?

4 A. Yes, sir.

5 Q. The day after this hearing started?

6 A. Yes, sir.

7 MR. BECK: That's all I have.

8 HEARING OFFICER HARWOOD: Thank you,
9 Mr. Beck.

10 All right. Cross-examination by Pilot?

11 MR. SUAZO: No questions from Pilot.

12 HEARING OFFICER HARWOOD: Then we're
13 back to the Commission.

14 Dr. Ampomah, I will start with you.

15 COMMISSIONER AMPOMAH: Thank you,
16 sir.

17 EXAMINATION

18 BY COMMISSIONER AMPOMAH:

19 Q. Good morning, Mr. Wheeler.

20 A. Good morning, sir.

21 Q. Thank you for your testimony today. So
22 earlier on, you were saying that Empire was not
23 aware of any saltwater injection going on, let's
24 say, within the EMSU prior to execution of the
25 purchase agreement. Do you still stand by that?

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1 A. Yes, sir.

2 Q. So do you agree with the statement that
3 the San Andres has only been agreed to be as an
4 aquifer within the EMSU?

5 A. No, sir, I don't believe it's an aquifer.
6 I see it as a unitized interval within the EMSU.

7 Q. So --

8 A. Maybe I didn't understand your question
9 right if you wanted a different answer, so . . .

10 Q. Yeah. So as part of the opening
11 statement, you know, Goodnight was saying that the
12 San Andres was more or less erroneously included in
13 the unitization. So it has normally been classified
14 as an aquifer.

15 A. Okay.

16 Q. So I was asking: Do you believe that
17 statement?

18 A. Yes.

19 Q. Do you believe that --

20 A. As you stated, I think that that could be
21 a correct position.

22 Q. Okay. Now, let me ask: So if Empire knew
23 about this saltwater injection that was going on
24 within the EMS (sic) area, would that have impacted
25 the sale agreement between XTO, Chevron, and Empire?

1 A. To my knowledge, there wasn't any
2 agreement with Empire and any other party other than
3 Rice Operating.

4 Q. Let me repeat my question one more time.
5 So I'm just following up from my previous question
6 where you said that Empire did not know about the
7 ongoing saltwater injection in the EMSU.

8 A. Not till August of 2023, yes, sir.

9 Q. Okay. So my question to you is: If
10 Empire knew about the ongoing saltwater injection
11 within the EMSU specifically to the San Andres,
12 would that have impacted your purchase agreement?

13 A. If we had known it prior to making an
14 offer to purchase the properties, we would have
15 never done it if we couldn't cure the issue with the
16 commercial disposal wells that were injecting into
17 the San Andres, that's correct, sir.

18 Q. Then is it not that probably Empire did
19 not do a due diligence?

20 A. No, sir. Like I stated previously, we
21 engaged a company called Elk Mesa Energy in Denver
22 that was doing -- that took the dump file from
23 ExxonMobil, and they were analyzing all of the data,
24 and everything. But there was no information in
25 there that disclosed that there were any saltwater

1 disposal wells they were injecting into at
2 San Andres.

3 Q. I mean, that one is a little bit difficult
4 for me to understand, because it being -- let's say,
5 you know, you're going to put that over \$17 million
6 to make a purchase of a property. I mean, even if
7 we are buying a rental property -- if we were buying
8 a rental property, we do have the right to go out
9 there, scout the area, you know, even enter the
10 building to go -- what we are really signing up for.

11 So it's a little bit surprising that you
12 are saying that Empire got to know about it probably
13 two -- two years after the purchase?

14 A. If you read in the purchase and sale
15 agreement, it provides explicitly that we would have
16 the right to go out on-site and investigate the
17 assets and everything. But at that time Empire was
18 a very, very small company with less than five or
19 six employees.

20 And we engaged Elk Mesa to go in and do
21 the analysis. And when I talked to the lady at Elk
22 Mesa, she said that they had not done an on-site
23 visit. And when I talked to Mr. Morrisett, who's
24 the only individual that's still with Empire from
25 the date that we acquired the property, he had no

1 knowledge that an analysis had been done of going
2 on-site and reviewing the properties.

3 Q. You know, then, it sounds to me that
4 you're trying to utilize the Commission and also in
5 the cost to more or less right some wrongs that
6 Empire should have probably known better?

7 A. Yes, sir. When I've done -- and I've
8 probably done 6- to 700 acquisitions in my career,
9 and every single time my approach to the due
10 diligence was significantly different than what I've
11 been able to determine that Empire did back in 2021.

12 Q. So you talked about in your direct
13 testimony and in our back and forth -- so you're
14 talking about -- I'm just going with whatever -- on
15 the I-10, number 10, where you are saying that you
16 do have 7 -- you've already spent \$17.8 million, and
17 the Commission should -- with a substantial
18 investment, it is imperative that Empire be allowed
19 to conduct primary, secondary, tertiary recovery of
20 all hydrocarbons present in the EMSU unit.

21 Now, my question to you is: Do you have
22 any knowledge of the saltwater injection investments
23 that has occurred in those areas since, let's say,
24 1955 or so? So if you're asking the Commission to
25 grant fully what Empire is asking for, do you have

1 knowledge on how much investment we'll be wiping
2 out?

3 A. No, sir. I do know that they have a
4 pipeline that I think is about 7 -- 67 miles long
5 that goes up into Lea County and the area of the
6 EMSU.

7 I also know that they drilled four wells,
8 of which the first well, the Ryno well, was drilled
9 down into the Devonian, which would be a very
10 expensive well. So my estimate would be that the
11 wells that they drilled, plus the facilities and
12 stuff, could be in a range of 8 to \$10 million.

13 Q. 8 to \$10 million?

14 A. Yes, sir.

15 Q. I mean, to drill to Devonian, Devonian is
16 about 18,000 -- now, are we talking about, say,
17 18,000, 20,000 feet of Devonian?

18 A. Yes, I don't know.

19 Q. Yeah, I mean, the Devonian, as I know, is
20 over like 18,000. I don't know -- let's say in this
21 particular area, 18,000 to like, yeah, 20,000 feet.
22 And even if you are drilling thousand a foot, I
23 mean, that's close to, what, \$18 million with that
24 Devonian well.

25 A. Okay. Thank you for the information.

1 Q. Yeah, okay. And, you know, it was a
2 little bit concerning yesterday. You talked about,
3 this is not the only case that you are bringing up
4 to the Commission. You're going to go after the
5 other units in that area.

6 I'm just thinking about all the totality
7 investment, you know, that is going to be wiped out
8 if the Commission more or less is to proceed to
9 grant Empire fully what you are asking for.

10 Now -- so when you got to know about --
11 and with that, he can stop me from repeating my
12 reach here.

13 So when Empire got to know about the
14 saltwater injection that is going on in the EMSU,
15 was there any discussion with the seller?

16 A. Yes, sir. We spoke to several people at
17 XTO in the Land Department, the Geology Department
18 and inquired about the knowledge and information
19 they had. And their response from each of those was
20 that they did not have any knowledge of the wells
21 being drilled inside the unit.

22 Q. So this is specifically to the Goodnight
23 wells?

24 A. Yes, sir, the Goodnight wells. They were
25 not aware of them or the wells that Permian had

1 drilled in 2020.

2 Q. Okay. Now, you talked about Goodnight's
3 conduct. You talked about Goodnight's conduct on
4 your -- on one of your slides.

5 A. Yes, sir.

6 Q. It sounds to me that your case is much
7 bigger, you know -- you know, from what you said
8 yesterday, that you are not just going after
9 Goodnight. You aren't just going after the EMSU.
10 You're going after all the other wells, and the
11 Commission, you are putting us on notice that it's
12 coming, right?

13 So is it only Goodnight that has damage to
14 inject into the San Andres in all these areas?

15 A. I don't have the list in front of me, but
16 I think it's a total maybe of six wells, four of
17 which are the Goodnight wells, that are currently
18 injecting that we're going to try to go before the
19 Commission and be able to get orders to allow us to
20 do our tertiary recovery operation and save some
21 minerals that are existing in the residual oil zone
22 in the San Andres.

23 Q. So when you say that XTO did not -- let's
24 just say they were not aware that these wells were
25 drilled in 2020, I mean, were they not provided

1 notices or are you not aware of that?

2 A. In talking to the people at XTO, none of
3 them acknowledged receipt of those notifications.
4 What they told me was their thought process was that
5 if they had been sent, because the property and the
6 asset had been transferred from XTO over to the
7 ExxonMobil divestiture team, that anything that
8 would have come in related to the EMSU unit in the
9 mail, or whatever, would not have gone to XTO, but
10 would have been forwarded to the divestiture group
11 at ExxonMobil, whose sole purpose was to sell the
12 asset, not to do any additional expenditures or
13 anything in response to, for example, saltwater
14 disposal application.

15 Q. So, sir, is it your testimony that -- so
16 you purchased the asset around March of 2021, and
17 these wells were drilled in 2020. So are you saying
18 that within that period, XTO more or less shut down
19 all the operations in the area?

20 A. Is that what I'm requesting?

21 Q. Yeah. So are you saying that they were
22 not operating? The entire area was shut down?
23 Nobody was on-site?

24 A. There were field people that were with
25 pumpers and operators that are in the Eunice field

1 office that handled the property, but none of them
2 were in-house. They were all just field people and
3 pumpers that were working.

4 Q. You know, the reason why I'm saying that
5 is that, you know, in a normal oil and gas
6 operation, you know, when we are drilling a well --
7 so I've drilled one well in the San Juan Basin. And
8 as we're drilling the well, we had to bring in
9 oilers operating in the area, third corporations, I
10 came around to check out what's going on, you know,
11 in our backyard.

12 You know, so -- it's surprising when you
13 say that four wells have been drilled in your
14 backyard without anybody knowing about it. I mean,
15 that's --

16 A. Well, the pumpers and the field hands did,
17 but I'm just as curious as you are. I would go out
18 and check and see what's going on and how and why,
19 and everything. So to drill those wells, it would
20 be very impossible to conceal that.

21 Q. Yeah. Anyway, I'm going to ask you. So
22 let me ask you this: So there has been talk about
23 it has never happened where operators who do not
24 have an interest in the unitized unit be allowed to
25 inject into, let's say, any structure within that.

1 Is it legal?

2 A. Never in my career have I done that,
3 because what the issue is, is that you have -- first
4 week of law school in oil in gas, you learn that
5 there's air rights, surface rights, and the mineral
6 rights. And you learn that the mineral rights are
7 the dominant estate. And, therefore, no activity
8 can take place which infringes upon the mineral
9 rights ownership. So the surface owner does not
10 have any authority or right or privilege to execute
11 a surface lease or a saltwater disposal lease down
12 into unitized formation.

13 So all -- so Empire's position is that
14 Goodnight has no rights whatsoever to drill their
15 wells in the first place. And they never came to
16 the Commission and disclosed to the Commission that
17 they had no rights to drill those wells. So that's
18 why its trespass on our property.

19 Q. So did you permit all the four wells at
20 the same time, do you know?

21 A. Yes, sir.

22 Q. All at the same time? I mean, all the
23 wells that have been drilled now, did Goodnight --
24 permitted all of those wells at once?

25 A. No, sir, I don't believe so. If my

1 information is correct, they drilled the Ryno well
2 first down into the Devonian. They operated that
3 for a period of time. Came back to the Commission
4 requesting an administrative order to allow them to
5 go and drill and complete into the San Andres. And
6 then the next three wells were drilled into the
7 San Andres.

8 So my thinking is it took a year,
9 year-and-a-half, maybe even two years for them to do
10 all of their operations of installing the Wrigley
11 disposal facility and the four wells.

12 Q. So are you also implying that the NM OCD
13 did not do the proper checks before approving those
14 permits?

15 A. No, sir. My understanding of the law and
16 reading all the OCD regulations and everything, it's
17 not the responsibility of the OCD to go out and
18 investigate if they have a proper surface lease or
19 the rights to dispose. That's not the OCD's
20 obligation. Under penalty of law, the operator or
21 the party that's making the application has the
22 burden to disclose all of those facts to the OCD so
23 they can make their proper valuation.

24 And in this case, those notifications were
25 not done properly. There was no notification to the

1 Commission that they were drilling into the Eunice
2 Monument Oil Pool, because it requires you to list
3 the pools that you're injecting into.

4 And what Goodnight elected to do is,
5 rather than list the three pools that they're
6 injecting into, they only reported that they're
7 injected into the water number 961221, which was for
8 the San Andres water, saltwater disposal. But they
9 didn't report that they were drilling into the
10 Eunice Monument Oil Pool or the Eunice Monument Gas
11 Pool.

12 So they should have listed all three of
13 them so that the Commission could be aware of what
14 their proposal was.

15 Q. So when Empire got to know about this, was
16 there any discussion with OCD?

17 A. No, sir. We received -- we received,
18 after the acquisition, an email of notifying Empire
19 that Goodnight had proposed the Piazza well. And
20 that was when we started doing all the due diligence
21 and work to oppose that.

22 Q. So can you -- I know the Piazza case, you
23 know, has been brought up a lot between -- the
24 discussion between you and Mr. Rankin. Was that
25 application denied by the OCD?

1 A. Yes, sir.

2 Q. Why?

3 A. Because they were proposing to drill into
4 a unitized formation, and the Division believed that
5 there was a residual oil zone that was recoverable
6 in the Eunice Monument South Unit. Therefore, they
7 denied the application on the basis of those two
8 maps.

9 Q. So are you saying that OCD --

10 HEARING OFFICER HARWOOD: I have no
11 clue what that is. Is it something -- somebody on a
12 platform that's not muted?

13 UNIDENTIFIED SPEAKER: Or the
14 witness. Or the witness.

15 HEARING OFFICER HARWOOD: Oh.

16 Q (By Commissioner Ampomah) So are you saying
17 that OCD agreed that there is an existing ROZ in the
18 San Andres where Goodnight was planning the
19 injection?

20 A. Yes, sir.

21 Q. And is that listed in the -- in their
22 conclusion? Was that listed?

23 A. Yes, sir. I don't know -- recalling the
24 order, I don't know if they used the term ROZ, but
25 they did define that there were recoverable reserves

1 in the San Andres, that the injection would violate
2 the rights to recover those.

3 Q. Is that order -- is that order in evidence
4 for this case?

5 A. This is a de novo case.

6 Q. So it is all gone? Okay, okay.

7 A. So --

8 Q. Okay.

9 A. But we have that. If the Commission would
10 like it, we can furnish it to you.

11 Q. So is it the concern of Empire -- so that
12 you're claiming that there is an existence of ROZ.
13 But still going back to the conduct of Goodnight, is
14 it the volume that they are injecting that is really
15 a problem for you that can impede, let's say, any
16 recovery of ROZ? Or is it mostly they breached the
17 volume of the permit?

18 A. It's affecting the ROZ. I mean, if you
19 look in those four wells, in the surrounding wells
20 that they have within half a mile, a mile of the
21 unit, they're injecting up to 200,000 barrels of
22 wastewater per day. If you approve their five new
23 applications for permits, they're requesting
24 40,000 barrels of daily injection in those.

25 So you're talking about, if the Commission

1 approves Goodnight's applications and decide not to
2 revoke the existing wells, you're talking about in
3 excess of 400,000 barrels a day of injection. And
4 it could be even higher because of the Sosa well
5 that Goodnight has permitted, there's no limitation
6 whatsoever as to the number of barrels they could
7 inject.

8 So they could be injecting 100-,
9 150,000 barrels a day just in that one well, if
10 it's -- if it -- contingent upon their facility and
11 the pipe and everything, and stuff. But that's
12 totally unlimited.

13 Q. But you are an attorney, so have you seen
14 any order from OCD where there would be no limits on
15 injection or pressure?

16 A. There's a pressure -- as I recall without
17 it in front of me, there's a pressure requirement,
18 but there's not a limitation on the barrels a day
19 that can be disposed. Whereas their other two
20 wells, both at 40,000 allowable, and the Dawson is
21 25,000. And they have an application for the
22 Commission right now to also increase that to
23 40,000 barrels a day.

24 Q. So, you know, after Empire knowing that
25 there is ongoing saltwater injection and there's

1 been numerous volumes of water already been injected
2 into the San Andres, how risky is your CO2 project,
3 even if the Commission grants your petition?

4 A. We strongly believe that there is a
5 phenomenal opportunity to go in there and recover
6 the ROZ through the use of a CO2 project.

7 Now, I'm going to speak to this, and I'm
8 not an expert engineer or geologist, but if you
9 believe Exxon's representations that there's
10 912 million barrels of oil in the residual oil
11 zone -- and historically, the CO2 projects that have
12 been on the eastern shelf and also, for example, in
13 the Hobbs that is on the western shelf as the CO2
14 project and recover up to 40 percent of that
15 residual oil zone.

16 So you're talking about 350,
17 375 million barrels that's recoverable today. And
18 depending on the new technology and everything that
19 should be discovered every day in CO2 floods in
20 operation, it could be even greater than that.

21 Q. So now I've heard about -- so is it
22 Empire's position that your recovery factor is going
23 to be about 40 percent?

24 A. That's the lawyer speaking. I'd have
25 to -- I'd have to decline my decision to the

1 engineers.

2 Q. Okay. Okay. And I'm sure Mr. West will
3 testify to all of that, right?

4 A. Yeah, probably when I finish my testimony,
5 I'll be in very bad trouble with Mr. West because I
6 have passed the buck so many times to him.

7 Q. Then I have other questions for you. So
8 it is the Commission's responsibility to also
9 prevent waste, correct?

10 A. Yes, sir, to prevent waste and preserve
11 our correlative rights. And even more important is
12 the fact that 58, 59 percent of the unit is owned by
13 the New Mexico State Land Office.

14 So it's imperative that the Commission
15 protect the rights of the State Land Office lands
16 and the BLM as the major owners of those lands that
17 they're attempting to destroy.

18 Q. Yeah, so I'll finish my question here. So
19 what is Empire's strategy to prevent waste as in
20 relation to the high volume of water that needs to
21 be produced even first seen -- the first oil
22 production from the ROZ?

23 A. I would have to respond once again, that's
24 probably something you could ask Mr. West that I'm
25 not an expert on.

1 Q. Okay. So Empire's relying on existing
2 information to prove to the Commission that the
3 existence of ROZ, but based on all the testimony
4 that we see in here -- or we're hearing, Empire has
5 not done their own extensive site authorization to
6 really solidify the claims here.

7 So don't you believe that -- you talked
8 about three wells that you're planning to drill.
9 Don't you believe that those wells need to be
10 drilled to really get more definitive information to
11 be able to solidify your case?

12 A. We believe there's enough evidence to
13 date, but I think Mr. Beck was very succinct in his
14 questioning. In that each of the witnesses -- and I
15 don't know if this is just geologists and engineers,
16 but they never seem satisfied with enough data, and
17 they always want more and more data.

18 So it was sort of like when Dr. Buchwalter
19 was testifying, he had done all of this entry of
20 data into his database. And then it came up, "Well,
21 did you include perforations? Well, no."

22 You know, so, I mean, his whole testimony
23 was falling apart because he hadn't done enough,
24 whereas, he spent eight, ten months working on it
25 and done hundreds of wells, and stuff, and it still

1 wasn't enough for it, so . . .

2 Q. Interesting. So you talk about the
3 interest of BLM and then also State Land Office.
4 Has any of these agencies provided interest or
5 support for your application?

6 A. The application to the Commission or --

7 Q. Yes.

8 A. -- application to drill new wells?

9 Q. Yeah, to revoke all the existing injection
10 into the EMSU.

11 A. Yes. We furnished the documentations to
12 the Commission with our motions to revoke.

13 Q. So are you saying BLM and State Land
14 Office have furnished supporting letters to support
15 the application?

16 A. Yes, sir, I believe so.

17 Q. Oh. So is that in evidence?

18 A. I would have to defer to my counsel.

19 Q. Okay. Okay. Do you have -- we were going
20 back and forth to Mr. Beck. It sounds like there
21 was some documentation in establishing, let's say,
22 injection authority in some of these areas around
23 the area that we are talking about. Do you have any
24 knowledge if such documentation exists for the EMSU
25 to allow the injection into the San Andres?

1 A. No, sir. Those -- the Eunice Monument
2 saltwater agreement that he was speaking of, that
3 was from 1958. And I haven't been able to have --
4 I'm not an expert in technology with all the new
5 things that young people can do. But I wasn't able
6 to locate anything within the OCD that related back
7 to the Commission hearing and the applications and
8 formations way back in 1958, so I don't have
9 knowledge on that.

10 Q. So the documentation that Mr. Beck was
11 showing to you, is that in relation to the EMSU or
12 is it a different area within that area -- within
13 that premises?

14 A. It was within the EMSU.

15 Q. So even if within the EMSU, Empire also
16 signed off to that -- immediately after signing --
17 closing your deal. So why would Empire do that if
18 they had the thoughts of probably pursuing the ROZ?

19 A. Mr. Pritchard just signed a lot of
20 documents, and stuff, after the acquisition. And I
21 have no knowledge why he had done that or anything
22 about the well.

23 Once again, that was a consortium of oil
24 and gas companies that were in the area. And the
25 disposal was just for those wells and those

1 operators. It was not a commercial operation.

2 So I don't have historic information of
3 the volume that's been injected since 1958. But I
4 would suggest to the Commission that it was not a
5 tremendously high volume that would have affected.

6 But the other thing is, is recognize that
7 this was from 1958, and the unit was not formed from
8 1984. And here, I would defer to you as an expert
9 that I -- I had never heard of CO2 or residual oil
10 zone, or anything, till late '90s. So that was 15
11 years after the unit was formed and stuff.

12 So there was no recognition of the
13 problems that the saltwater disposal into the unit
14 ties formation would occur.

15 Q. You know, so I've been on the Commission,
16 probably in my fourth year now, and I've seen how
17 the Commission do value industry partners coming
18 together to really find solution. And in this case,
19 it is preventing waste. You know, in this case,
20 preventing waste.

21 So that 1955 document you are referring
22 to, don't you believe that that solidifies -- or
23 that, more or less, sheds light on the fact that the
24 San Andres at that time was erroneously included in
25 the unitization?

1 A. Yes, sir, I would believe so.

2 Q. Okay. So then in that case, NM OCD has
3 not done anything wrong if, let's say, they approve
4 saltwater injection in the San Andres from 1955 up
5 until now. Would you agree with that?

6 A. Well, I don't think that the Commission
7 was responsible. I think it was the Division, and
8 because there were no protests at the time, they
9 were administratively approved without a hearing.
10 So there was never any discovery or determination as
11 to the unitized interval that they were injecting
12 into or the invalidity of their rights to drill from
13 the surface for any agreement with the surface
14 owners or any disclosure that it would be into the
15 Eunice Monument Oil Pool.

16 So none of those matters came before the
17 Division for them to hear the testimony. So this is
18 the first time that I believe that the Commission is
19 being put on notice of that.

20 So the Commission Division didn't do
21 anything improperly, but now with the new evidence,
22 I think that the Commission can take the appropriate
23 action. And if the Commission determines that
24 they're not going to revoke the four existing wells,
25 for example, I would urge the Commission to -- at a

1 minimum, to suspend the injection at the current
2 time until Goodnight can furnish the Commission
3 irrefutable proof from a board-certified oil and gas
4 lawyer who could prove to the Commission that
5 Goodnight had the right to drill those wells in the
6 first place.

7 Q. So if I flip that and then ask you -- and
8 let's say if Empire will be willing to say that,
9 okay, Commission should suspend, like you said, all
10 the saltwater injection that is going on in the EMSU
11 right now, give Empire time to prove that the oil,
12 the ROZ, if it is there, is recoverable, will you be
13 open to that?

14 A. That is the most fabulous suggestion I've
15 heard this whole ten days of hearing.

16 Q. And how many years will Empire be open to
17 that?

18 A. You know, you're getting me in more and
19 more trouble with Mr. West. But I would think we
20 could do it within a couple of years.

21 Q. So within that couple of years, Empire
22 will have the opportunity to drill the other wells?

23 A. Yes, sir.

24 Q. And prove to see that if any of these
25 claims -- you know, real evidence that the ROZ

1 indeed exists and it's recoverable?

2 A. Yes, sir.

3 COMMISSIONER AMPOMAH: Thank you,
4 sir. I do not have any further questions for you.
5 Thank you for your time.

6 JACK WHEELER: Thank you.

7 HEARING OFFICER HARWOOD: Thank you,
8 Doctor.

9 Mr. Lamkin?

10 EXAMINATION

11 BY COMMISSIONER LAMKIN:

12 Q. Good morning, Mr. Wheeler. Thank you for
13 your testimony the past day. I have a couple of
14 questions for clarification.

15 Do you know where the newly permitted
16 wells are located within the EMSU?

17 A. Yes, sir. They're in Section 17, down in
18 the lower southern portion.

19 Q. I don't mean the Goodnight wells. I mean
20 the Empire permitted well, the test wells.

21 A. Oh. There's one down within -- or in the
22 middle of the four Goodnight wells. There's one up
23 on the crest of the unit, which would be on the
24 right side of the existing unit.

25 And then the other one, I think, is

1 further north. So it would cover a significant area
2 of the EMSU to give you the determination if it's
3 limited to one area or if we can prove up throughout
4 the entire EMSU unit.

5 Q. Would Empire core all three wells?

6 A. Oh, yes, sir. We talked about
7 Mr. McShane -- didn't speak to it, but when we're
8 doing the AFEs for those, they talked about all the
9 different -- three different types of coring, and
10 stuff, and went out and tried to receive some bids,
11 and stuff, and everything on that. And some of the
12 figures that came back would be that -- all the cost
13 of the coring and everything would be approximately
14 \$800,000.

15 Q. So did you say that your timeline for
16 Empire to affect a CO2 EOR project in the EMSU would
17 be two years post approval from the Division and
18 assignment of capital from your investors?

19 A. No, sir. In X's -- I mean, New Mexico did
20 not start approving the waterflood operations till
21 the late '70s, 1980s. In Texas, the waterflood
22 operation were approved back in the '40s.

23 So if you do a timeline from the time
24 period where you get the primary production, then do
25 a secondary recovery waterflood is -- could be 30 to

1 50 years. So right now in Texas, the secondary
2 recovery has been concluded, and now there's
3 tertiary recovery. So that's why in the last 10 or
4 15 years, there's been approvals for the CO2.

5 In the state of New Mexico, I'm not aware
6 of the timeframe that it would take, but when I
7 prepared the request for authorization for a CO2
8 project on some properties that I worked up in
9 western Colorado and down along the Louisiana coast,
10 then those consents took up to two years, just to
11 get the consents after the order was requested.

12 So I don't know the Commission's response
13 to how long they would think that it would take, but
14 it's significant due diligence. One of the key
15 things is, is Mr. Moander has raised the issue about
16 how our operations, and stuff, would affect some
17 water aquifers, and stuff, and the Hobbs channel,
18 for example, or the Capitan Reef.

19 So there would have to be a significant
20 amount of research, due diligence. And I would
21 probably suggest to the Commission that it's my
22 belief that three wells won't be adequate, that they
23 could require us to drill another three or four more
24 wells to give them the proof that they need to be
25 comfortable to approve the CO2 project.

1 So I don't believe that we could get the
2 approval and get prepared to do the CO2 operations
3 in two years.

4 Q. So then -- you're talking about the
5 timeline to drill the additional three wells, or
6 whatever the Commission would require, is to --
7 mainly for delineation of the ROZ and confirmation
8 of the claims that you guys have made in your
9 testimony thus far?

10 A. Yeah.

11 Q. I'm mainly speaking about if you -- if you
12 guys had consent from the Commission to establish an
13 EOR project and you had committed capital from your
14 company, what do you think the timeline is in
15 reference to Commissioner Ampomah's question about
16 performing a pilot to verify that the ROZ is there
17 and it's producible?

18 A. If you just do a small, small pilot
19 project and the Commission requests it, I believe
20 that we can get it and do it within that two-year
21 period, where we're talking about drilling the wells
22 and coring and then the analysis and everything of
23 that to present to the Commission.

24 Q. Okay. And then I guess my last question
25 is: Do you know of any discussions internally at

Examination by Chairman Razatos

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1 Empire about the possibility of running any
2 experiments to determine whether or not you're
3 seeing fluid migration from the San Andres into the
4 Grayburg, or anything like that, that you could
5 present to the Commission that would give us, you
6 know, more data to backstop our decision on?

7 A. Yes, sir. Mr. West's testimony. I think
8 he'll present some of that information and data.
9 And if -- as we spoke previously, if you-all did
10 suspend their operations of injection during this
11 period of time that we're doing the research and
12 stuff, we can do additional research and get
13 documentation that would satisfy the Commission of
14 that information request.

15 COMMISSIONER LAMKIN: Thank you.
16 Those are all of my questions.

17 HEARING OFFICER HARWOOD: Thank you,
18 Mr. Lamkin.

19 Chairman Razatos, do you have questions?

20 CHAIRMAN RAZATOS: Thank you.

21 EXAMINATION

22 BY CHAIRMAN RAZATOS:

23 Q. And thank you, Mr. Wheeler, for your
24 testimony. We appreciate it.

25 Commissioner Ampomah asked the majority of

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1 my questions, but I just wanted to follow up on what
2 the commissioner asked you. Mr. Wheeler, I stated
3 you have support from the State Land Office, written
4 support for this action. Did I understand that
5 correctly?

6 A. We've communicated with the State Land
7 Office. I don't know the degree of approval that
8 they've given us. But it's my understanding that
9 they have stated that their responsibility is for
10 the State lands, and if what Goodnight is doing and
11 is proposing to do would have negative effects on
12 the State lands, then they would be opposed to those
13 continued operations.

14 Q. And was this something that was submitted
15 into evidence, that you know of?

16 A. No, sir. As my understanding, it was just
17 telephone conversations or maybe even face-to-face
18 discussions, but I'm not -- I don't recall exactly
19 how that transpired.

20 Q. Okay. Because that's a pretty heavy duty
21 statement that is made. And this Commission would
22 definitely be interested in seeing any
23 communications that were with the State Land Office
24 and their support of Empire's action in this
25 particular case.

Cross-Examination by Mr. Shandler

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1 So I find it interesting that we -- you
2 know, that's kind of thrown out there, but the
3 information wasn't retained or no communication was
4 maintained from State Land Office on the said
5 matter.

6 CHAIRMAN RAZATOS: So I think that's
7 my only question as well. Thank you.

8 JACK WHEELER: Yes, sir.

9 MR. SHANDLER: I have some questions.

10 HEARING OFFICER HARWOOD: I was going
11 to say, Mr. Shandler.

12 CROSS-EXAMINATION

13 BY MR. SHANDLER:

14 Q. Good morning. I'm going to be looking at
15 the Order Partially Amending the Commission's
16 July 2, 2024, order with respect to the scope of
17 hearing because I view that as the jury
18 instructions.

19 So as we come to the close of your case in
20 chief, I want to go through some points. And I will
21 give you this document in just a second.

22 But point number 2 says, "The granting of
23 applications by Empire would prevent the impairment
24 of correlative rights or waste in the EMSU."

25 I'll give you that. So just to lay it out

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Cross-Examination by Mr. Shandler

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1 what the jury will -- can look at, according to you,
2 number 2, what is -- what is Empire's applications?
3 What are you asking for?

4 A. We're asking for the revoking of the four
5 existing permits where disposal is taking place. We
6 are asking that the four new applications be denied.
7 And then the third matter would be moot if they
8 revoke the four permits that are existing, then the
9 request to increase the saltwater disposal from
10 25,000 to 40,000 barrels in the Dawson well would be
11 moot and wouldn't have to be addressed.

12 Q. Okay. And you believe there's enough
13 evidence of oil in place in the San Andres, correct?

14 A. Yes, sir, I think it's compelling
15 evidence.

16 Q. Okay. And it would be wasteful to leave
17 that oil in place in the San Andres, correct?

18 A. Well, our belief is that you don't -- it
19 won't leave it in the San Andres, that the
20 pressuring up and the volumes of water going in are
21 going to cause the ROZ to migrate off of the lease
22 and into adjoining lands and stuff, which would
23 destroy the ROZ potential for us to do a CO2
24 project.

25 Q. Okay. So does it matter in the jury's

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1 calculation or the Commission's calculation whether
2 there's been a well since 1955 into the San Andres?
3 Should they weigh that at all in their calculations?

4 A. Well, recognizing that the unit wasn't
5 formed until 1984 and that well was approved in
6 1958, I think it's going to be a stronger burden on
7 us to try to get a decision from the Commission on
8 that operation. But the current disposal operations
9 by Goodnight are the most significant impairing of
10 our rights and creating the waste and violating the
11 correlative rights is why we separated the hearing
12 proposal to the Commission to first have the hearing
13 for Goodnight's operations and then at a later date
14 evaluate and determine what proposal we would give
15 the Commission on the other existing wells within
16 the unit.

17 Q. Can the Commission provide any weight to
18 the fact that after the unit was formed, I think in
19 1984, this use still went on? Can they provide any
20 weight to that in their deliberations?

21 A. Yes, sir. The ROZ concept wasn't
22 something that existed in '84, and, therefore, there
23 was no issue or concern about the injection. The
24 fracture study by Dr. Lindsay had not been done
25 until the late '90s, 2000s, and stuff. So the

1 operators were not aware of the fracturing and the
2 migration of the water up from the San Andres into
3 the Grayburg.

4 So I'm sure from your experience, you
5 recognize the tremendous changes in technology
6 during the last 45 years that I've been an oil and
7 gas attorney. And things are ever changing, and
8 when they change, you have to respond to that and
9 accommodate that.

10 So to have done that in 1958 or not being
11 an issue in 1984, I think is reflective of just the
12 fact that the technology and the science had not
13 evolved to where there was a residual oil zone for
14 pressure recovery potential.

15 Q. Assuming the Commission determines that
16 the permits issued to Goodnight were valid, can the
17 Commission provide any weight to Goodnight's
18 reliance on the government's issuance of permits to
19 that? Can they provide any weight to that in their
20 deliberation?

21 A. No, sir, I don't believe that they can
22 because those permits were acquired fraudulently.
23 The correct information relating to the pool,
24 relating to their right to drill with surface leases
25 and saltwater agreement leases are all invalid.

1 So I would suggest to you that the
2 Commission under no circumstances would have
3 approved those permits had they been aware of it
4 being injected into the saltwater interval within
5 the San Andres. And I think that that is something
6 that you-all can go back and look at the Division
7 order at the point where that information was
8 disclosed through the Division, at which point the
9 permit was denied.

10 Q. If the Commission does determine the
11 permits were validly granted, do you think they can
12 weigh whether Goodnight relied on the government in
13 issuance of the permits?

14 A. No, sir.

15 Q. Can the Commission weigh some of the
16 history about whether your organization and your
17 predecessor organization should have known that
18 Goodnight was there, can there be any weight
19 assigned to that?

20 A. I really can't speak to that because we --
21 we've had an issue finding evidence that they did
22 know and could have objected. So that's an area
23 that I can't respond to, sir.

24 Q. Can the Commission assign any weight to
25 Goodnight's economic value in their company

1 production? Can that be part of weighing
2 calculation?

3 A. Well, we've requested that they move the
4 wells outside of the unit. And I don't want to put
5 myself in a bind, but our chairman has mentioned at
6 times that if Goodnight would do that, that Empire
7 might even contribute to them drilling the new wells
8 and moving them outside of our unit.

9 Q. My question was: Can the Commission
10 assign any weight to Goodnight's economic value and
11 rights as a company in their production of these
12 wells?

13 A. I'm not an expert in that, so I can't
14 speak to it.

15 Q. Can the Commission assign any weight to
16 the fact that Empire does not have a current
17 application for the recovery of the ROZ at this
18 time? Can they assign that any weight?

19 A. No, sir. I mean, the time that it takes
20 for you to do primary and then secondary recovery
21 and then move to tertiary recovery, it's not a one
22 to two-year span. It could take up to ten years to
23 get the approval, get a pipeline for CO2
24 transportation, go in, remediate all of the wells so
25 that you can do a CO2 project, drill the new wells

Cross-Examination by Mr. Shandler

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1 that have to be drilled to do a CO2 project would
2 conservatively probably take eight to ten years. So
3 the fact that we haven't made an application, it's
4 just the fact that it's premature.

5 Q. Can the Commission assign any weight to
6 the fact that your own consulting experts said
7 there's fractures between the Grayburg and the
8 San Andres? Can the Commission assign any weight to
9 that evidence?

10 A. Yes, sir.

11 Q. Can the Commission assign any weight to a
12 discussion about whether the ROZ is actually
13 recoverable? Can they assign any weight to that
14 deliberation?

15 A. Yes, sir.

16 Q. Okay.

17 MR. SHANDLER: Thank you very much
18 for helping us figure out what that jury instruction
19 may look like.

20 JACK WHEELER: Thank you.

21 HEARING OFFICER HARWOOD: Okay.
22 Thank you, Mr. Shandler.

23 Let's see, it's 10:41. Why don't we go
24 ahead and take our midmorning break, and we'll come
25 back for redirect at -- let's be back at 11:00.

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Examination by Dr. Ampomah

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1 Oh, I'm sorry, Dr. Ampomah has more
2 questions.

3 EXAMINATION

4 BY DR. AMPOMAH:

5 Q. I do have one more question for you, and I
6 forgot about that. So --

7 A. I thought I was finished.

8 Q. No, just a quick one. So you talked about
9 there was a discussion between Empire and Goodnight
10 to move the operations to a particular distance
11 where Empire would not protest. And even just now
12 you said Empire was willing to support the drilling
13 of those wells.

14 Can you state to the Commission what
15 distance are we talking about here?

16 A. What zone?

17 Q. No, what distance.

18 A. Oh. Outside of two miles of the EMSU unit
19 boundaries.

20 Q. And still injecting into the San Andres?

21 A. Yes, sir.

22 Q. Okay, thank you.

23 COMMISSIONER AMPOMAH: No further
24 questions.

25 HEARING OFFICER HARWOOD: Okay.

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Redirect Examination by Ms. Shaheen

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1 Midmorning break. Let's recommence at 11:00.

2 (Recess was taken from 10:42 a.m. until 11:00 a.m.)

3 HEARING OFFICER HARWOOD: All right.

4 Let's go back on the record. All right. So over
5 the break, we decided, given the statements that
6 have been made since cross-examination commenced,
7 that we're going to give the parties another round
8 at cross-examination. I expect that -- I'm
9 anticipating a request that would be made anyway.

10 So here's the -- here are the options.
11 You could redirect the witness now, Ms. Shaheen, or
12 you can wait and redirect the witness later after a
13 recross-examination. And let me also add, if you
14 elect to redirect the witness now, it doesn't mean
15 you wouldn't get to redirect him again after
16 recross, just so it's clear.

17 MS. SHEEHAN: I will do a redirect
18 now and then again after recross.

19 HEARING OFFICER HARWOOD: Okay,
20 perfect.

21 REDIRECT EXAMINATION

22 BY MS. SHAHEEN:

23 Q. Mr. Wheeler, do you recall talking
24 yesterday, I believe it was with -- with Mr. Rankin,
25 about the purchase and sale agreement?

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1 A. Yes, ma'am.

2 Q. And that purchase and sale agreement is
3 with XTO; is that right?

4 A. Yes, ma'am.

5 Q. And it's not with ExxonMobil?

6 A. Correct.

7 Q. So the representations that you reviewed
8 with Mr. Rankin, those were with respect to XTO,
9 right?

10 A. Correct.

11 Q. And not any -- you made no representations
12 to Exxon -- you made no representations to
13 ExxonMobil about not relying on their opinions,
14 correct?

15 A. Correct.

16 Q. You relied on the representations of
17 ExxonMobil with respect to the ROZ -- the existence
18 of the ROZ in the San Andres; is that right?

19 A. Yes, ma'am.

20 Q. Not XTO?

21 A. Yes, ma'am.

22 Q. Do you remember -- you know what, I might
23 have some issues here making sure I'm able to share.
24 Let me just double check.

25 Okay. You remember Mr. Rankin --

1 Mr. Rankin asking you about some language in the
2 testimony of Mr. West?

3 A. Yes, ma'am.

4 Q. And he characterized that language as
5 Mr. West's testimony that there hasn't been any
6 production from the San Andres; is that right?

7 A. Yes, ma'am.

8 Q. Is Mr. Rankin's characterization of
9 Mr. West's testimony accurate when reviewed in
10 context? And I'm going to share that with everyone
11 now.

12 Is this the paragraph that you discussed
13 with Mr. Rankin?

14 A. Yes, ma'am.

15 Q. And Mr. Rankin referred to this last
16 sentence in the paragraph, correct, where it states
17 that, "No wells have produced from the San Andres at
18 EMSU"?

19 A. Yes, ma'am.

20 Q. And in context of the entire paragraph,
21 including this first highlighted section, is
22 Mr. Rankin's characterization of Mr. West's
23 testimony accurate?

24 A. No, ma'am.

25 Q. And why is that?

1 A. If you look at the first sentence there on
2 paragraph 6, it states that that relates to 1986,
3 not to the life of the history of the operation of
4 the EMSU.

5 Q. And there have been wells that were
6 drilled into the San Andres after 1986, correct?

7 A. Yeah.

8 Q. And two of those wells have produced oil
9 from the San Andres; is that right?

10 A. Yes, ma'am.

11 Q. Do you recall which wells those are?

12 A. I think the 660 and 658.

13 Q. You were also asked by Dr. Ampomah about
14 the San Andres classification as an aquifer. Do you
15 recall that discussion this morning?

16 A. Partially. I just -- problem with my
17 hearing aids so I took them off. So it was
18 difficult to totally understand what he was asking
19 all the time. And in consideration of him, I tried
20 to answer them to the best of my ability, but I
21 discovered since, that he asked questions that I
22 didn't understand and I answered them incorrect.

23 Q. Can you clarify Empire's position in
24 respect to the San Andres classification as an
25 aquifer?

1 A. Yes, ma'am. We believe that it's within
2 the unitized formation and is a productive residual
3 oil zone.

4 Q. And you were also asked by Dr. Ampomah
5 whether you believed that the San Andres was
6 erroneously included in the unitized interval. Do
7 you remember that question?

8 A. I didn't understand it, no, ma'am.

9 Q. Well, can you please clarify Empire's
10 position with respect to whether the San Andres was
11 erroneously included in the unitized interval?

12 A. Yes, ma'am. It is our position that it
13 was not.

14 Q. You also spoke earlier about this position
15 of the State Land Office with respect to the
16 applications at issue in this proceeding. Do you
17 recall that discussion?

18 A. Yes, ma'am.

19 Q. And have you refreshed your memory now at
20 this time with respect to the State Land Office and
21 its position?

22 A. Yes, ma'am. When I spoke to counsel who
23 had had those conversations, and stuff, I apologized
24 to Mr. Chairman, in that I was incorrect, that there
25 have been discussions. But there hadn't been an

Redirect Examination by Ms. Shaheen

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1 affirmative written or a verbal approval of that by
2 the State Land Office.

3 Q. You testified yesterday about a recent
4 Texas case involving Goodnight. Do you recall that?

5 A. Yes, ma'am.

6 Q. Is this the case that you were referring
7 to?

8 A. Yes, ma'am, it's Basic Energy.

9 Q. Basic Energy Services versus PPC Energy;
10 is that right?

11 A. Yes, ma'am.

12 Q. And when was this -- this is an appellate
13 opinion, is it not, from Texas?

14 MR. RANKIN: Mr. Hearing Officer, I
15 object to this line of questioning. I didn't ask --
16 I don't know where -- I mean, this was -- this is
17 being elicited on top of -- I'm not sure why -- what
18 gives her the right now to present this testimony or
19 this evidence. I -- this was not something I asked
20 him about. I don't understand where this is coming
21 from.

22 MR. MOANDER: OCD would join that
23 objection.

24 HEARING OFFICER HARWOOD: All right.
25 Well, let's see where it's going first. I don't --

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1 MR. RANKIN: Can I ask -- I mean, I
2 don't understand what the basis is for Ms. Shaheen
3 to present this testimony based on the questions
4 that were asked by myself or any other counsel or
5 the Commission.

6 HEARING OFFICER HARWOOD: Where are
7 you going with this, Ms. Shaheen?

8 MS. SHEEHAN: Mr. Wheeler testified
9 about this case yesterday, and the commissioners
10 seem to take an interest in it. We thought it would
11 be helpful for the commissioners to see what
12 Mr. Wheeler was testifying about. And counsel for
13 Goodnight and for the Division can cross-examine
14 Mr. Wheeler on it in their recross.

15 HEARING OFFICER HARWOOD: What's the
16 point to be made from the case?

17 MS. SHEEHAN: The point to be made is
18 that the injection that Goodnight is doing here is
19 occurring elsewhere and causing the same issues that
20 Empire has raised in this matter.

21 HEARING OFFICER HARWOOD: Okay.
22 Well, it's getting close to not being factual
23 testimony and, you know, being offered in support of
24 a legal opinion or conclusion which, I think, is up
25 to Mr. Shandler to advise the Commission on.

Redirect Examination by Ms. Shaheen

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1 So unless you can lay more of a foundation
2 for it, I'm inclined to exclude it.

3 MS. SHEEHAN: Actually, the points
4 that we would bring up would be factual issues that
5 are similar to the factual issues here.

6 MR. RANKIN: Mr. Examiner, I strongly
7 object to this. I did not question Mr. Wheeler on
8 any of these issues. It was totally outside the
9 scope of my cross. There's no factual foundation by
10 anybody with subject matter expertise to establish
11 any basis for Mr. Wheeler, who is a lawyer, to
12 discuss any of these issues before the Commission.

13 This is in a different state, different --
14 I mean, completely unrelated issues that have not
15 been established. And there's no basis for
16 Ms. Shaheen now to attempt to bring in additional
17 direct testimony that is not part of his written
18 testimony, wasn't part of the cross, and it's
19 completely outside the scope of what she should be
20 permitted to do.

21 MS. SHEEHAN: Mr. Rankin specifically
22 asked Mr. Wheeler the name of the case that he was
23 referring to and then offered the name of a
24 different case to ask him if that was the case that
25 he was discussing.

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Redirect Examination by Ms. Shaheen

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1 So it was the subject of Mr. Rankin's
2 cross-examination, and I think it comes within the
3 scope of redirect at this time.

4 HEARING OFFICER HARWOOD: Yeah, I
5 don't think it does. I mean, and the fact that a
6 witness -- a lawyer witness referred to an
7 out-of-state precedent doesn't mean that Mr. Rankin
8 brought it up and made it an issue in the case.

9 If you guys think that it's relevant,
10 again, as we stated, if at the end of this case you
11 want to submit legal briefing and Mr. Wheeler thinks
12 this supports Empire's position, it seems to me
13 that's an appropriate place to, you know, bring up
14 extraterritorial legal precedence.

15 So I'm going to agree and will exclude
16 this at this time. And if you will please move on.

17 Q (By Ms. Sheehan) Mr. Wheeler, you testified
18 earlier about Goodnight's representations in its
19 applications for the -- its existing wells and its
20 disclosure of only one pool code. What is Empire's
21 position about what should have been disclosed by
22 Goodnight to the Division when it filed its
23 applications?

24 A. That they should have included all three
25 pools, the Eunice Monument Oil Pool, the Eunice

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1 Monument Gas Pool, and that would be under the order
2 7767 and then the 96121 San Andres saltwater
3 disposal.

4 Q. Were there any other concerns about
5 Goodnight's applications?

6 A. Yes, ma'am. They failed to disclose to
7 the Commission or the Division that they had no
8 rights to dispose into our mineral leased . . .

9 Q. And does that relate to their surface
10 agreement or their -- surface agreements or their
11 lack of sufficient surface agreements?

12 A. Yes, ma'am.

13 Q. Earlier you talked about the plugging and
14 abandonment and remediation liabilities that Empire
15 assumed. Do you recall talking about that earlier?

16 A. Yes, ma'am.

17 Q. And there was some discussion about
18 specific numbers as to how Empire has recently
19 determined a specific number with respect to that
20 P&A liability. Do you recall that discussion?

21 A. Yes, ma'am.

22 Q. And isn't it true that Empire knew when it
23 entered into the purchase and sale agreement that it
24 would have plugging and abandonment liabilities,
25 right?

1 A. Yes, ma'am.

2 Q. And that it was assuming all of the
3 requirements to remediate, if required, or reclaim
4 sites and plug all of the wells; is that right?

5 A. Yes, ma'am.

6 Q. It was just in recent times that you've
7 put a specific number on that in current costs; is
8 that right?

9 A. Yes, ma'am.

10 Q. You were asked earlier about the status of
11 filing the complaint against Rice and OWL. Do you
12 recall that yesterday?

13 A. Yes, ma'am.

14 Q. And has your memory been refreshed in
15 regard to the procedural status of that case?

16 A. Yes, ma'am.

17 Q. And can you tell the commissioners what
18 the status of the complaint is? Has it been filed?

19 A. Yes, ma'am, it has been filed.

20 Q. But it has not been served; is that right?

21 A. Yes, ma'am.

22 MS. SHEEHAN: I pass the witness.

23 HEARING OFFICER HARWOOD: Okay.

24 Thank you, Ms. Shaheen.

25 And I would just ask that the parties not

Recross-Examination by Mr. Rankin

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1 go over territory that's already covered. It's a
2 limited right to recross the witness on, you know,
3 new statements that have been made since you've last
4 cross-examined the witness, of which there were
5 many.

6 MR. RANKIN: Let me -- I apologize,
7 I'm just kind of -- there's a lot of statements, and
8 I'm working my way to ascertain to your points,
9 Mr. Hearing Officer, that I don't unnecessarily
10 retread ground. And I apologize, but I'm just going
11 to do my best to do it in a timely way.

12 RECROSS-EXAMINATION

13 BY MR. RANKIN:

14 Q. Mr. Wheeler, during your testimony
15 subsequent to my cross-examination of you,
16 Dr. Ampomah was asking you about Empire's knowledge
17 of the existence of commercial disposal wells in the
18 EMSU. And you had a discourse with him about who
19 was on-site, whether anybody was there, who would
20 know about it, and you stated that it would be, you
21 know, impossible not to recognize that there were
22 these wells being drilled if you were on-site. You
23 testified that the employees or -- were contractors
24 for XTO at the time; is that correct? Who were
25 on-site?

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Recross-Examination by Mr. Rankin

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1 A. I don't know if they were contractors or
2 employees at the time.

3 Q. Okay. When I deposed Mr. West, I
4 specifically asked him about the employees who were
5 with XTO and who -- if any of those employees came
6 over to Empire after the acquisition. And Mr. West
7 testified that, in fact, there were numerous
8 employees of XTO, including the regional manager of
9 EMSU, who was officed in the EMSU on-site and that
10 the field members -- and I'm going to share with you
11 on my screen the deposition of Mr. William West.
12 And I asked him specifically, "So some of the field
13 members" -- do you see that on your screen?

14 A. Yes, sir.

15 Q. "So some of the field members are still
16 there who previously worked with ExxonMobil?"

17 "Yes."

18 "Would that include Toby Holland?"

19 "Yes."

20 And Mr. Holland previously -- as I
21 previously inquired of Mr. West, was the regional
22 manager. Mr. West he testified was on-site in New
23 Mexico, and his duties and responsibilities included
24 managing on-site at the EMSU.

25 Do you see that line of questioning with

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1 Mr. West?

2 A. Yes, sir.

3 Q. Okay. Were you -- are you familiar with
4 Mr. Holland?

5 A. I've met him.

6 Q. Okay. So Mr. Holland was on-site and was
7 the regional manager for the EMSU for XTO and
8 continues in that role with Empire, correct?

9 A. I'll have to defer to Mr. West. I
10 don't -- I'm not responsible for any of the
11 employees in the field, so I can't speak to who is
12 or is not and what their current titles are.

13 Q. Okay.

14 MR. RANKIN: Mr. Hearing Officer, I
15 would ask to move the admission of the deposition of
16 Mr. William West in this case. It was taken on
17 December 4, 2024. I would move it as Goodnight
18 cross Exhibit Number 18.

19 HEARING OFFICER HARWOOD: Are you
20 asking to move into evidence the entire deposition
21 or just the reference pages?

22 MR. RANKIN: Okay. Let me -- well,
23 I -- I'm afraid -- yes, let me -- the pages that I
24 would ask to be included into the record, then,
25 would be pages on either side of page 40, so 39, 40,

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1 41, and then 53, 54, and 55.

2 MS. SHEEHAN: Empire objects to
3 admitting any deposition testimony into the record.
4 Mr. West is next up as a witness, and Mr. Rankin can
5 cross-examine him about these statements.

6 HEARING OFFICER HARWOOD: Why
7 don't -- why don't we wait until -- I expect you'll
8 go there with Mr. West. Why don't we wait until
9 then.

10 MR. RANKIN: Okay.

11 Q (By Mr. Rankin) Mr. Wheeler, yesterday when
12 I was crossing you, you told me that the managers
13 who were responsible for the acquisition and
14 management of the EMSU and the properties in New
15 Mexico were fired, correct?

16 A. I'm not sure if that's the correct
17 terminology. They were either terminated or left,
18 but they're all gone.

19 Q. And why were they -- why was it that they
20 were either terminated or left?

21 A. Who left or who terminated them?

22 Q. Well, my question is: Why did they -- why
23 were they terminated or why did they leave?

24 A. I wasn't here at the time and wasn't
25 involved in those actions, so I can't speak to that.

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1 Q. When were they -- when did they leave,
2 Mr. Wheeler?

3 A. They had all left prior to me coming to
4 work for Empire in September of 2023.

5 Q. And I think you testified that Empire
6 found out about the SWDs in August of 2023; is that
7 correct?

8 A. Yes, sir.

9 Q. Or at least Empire's management. And you
10 referred to that as Mr. Mulacek; is that right?

11 A. Yes, sir.

12 Q. But Mr. Morrisett was there continuously
13 from the time of the acquisition and continues to be
14 there, correct?

15 A. Yes, sir.

16 Q. I mean, he's the president of the company,
17 correct?

18 A. Yes, sir.

19 Q. Okay. So you don't know -- I mean, if it
20 was discovered in August of 2023 and they had been
21 gone by the time you joined in September of 2023,
22 they would have been separated from the company
23 prior to Empire discovering that there was SWDs
24 on-site, correct?

25 A. With the current management of Empire,

1 yes, sir.

2 Q. Okay. You discussed with Mr. Ampomah --
3 or Dr. Ampomah the fact that you are aware that
4 Goodnight Midstream has a pipeline that's used,
5 about 67 miles, correct?

6 A. Yes, sir.

7 Q. And that pipeline services produced water
8 from the Delaware Basin, correct?

9 A. That's my understanding.

10 Q. And if -- and if that pipeline is -- if
11 Goodnight's wells are shut in, then those operators
12 in the basin who are supplying produced water for
13 disposal through Goodnight's wells would either have
14 to shut in their production or find alternative
15 disposal sources, correct?

16 A. Correct.

17 Q. And that could have an impact on their
18 ability to continue to produce and generate revenue
19 and oil and gas reserves in the basin, correct?

20 A. Correct.

21 Q. And that would be true for any of the
22 other wells in and around your units within two
23 miles that are servicing production in the -- in the
24 Delaware Basin, correct?

25 A. Probably, yes, sir.

1 Q. And not just the Delaware Basin, but
2 production in any offsetting tracks that are relying
3 on those disposal wells for their production,
4 correct?

5 A. Correct.

6 Q. Who did you speak with at XTO about
7 whether or not XTO was aware of Goodnight
8 Midstream's disposal operations in the EMSU?

9 A. I spoke to Mr. Walker, who's the Division
10 geological manager at XTO. And then I spoke with a
11 Ms. Pearce at ExxonMobil. And I don't remember the
12 names of the other couple of people that I spoke to.

13 Q. As part of your information gathering with
14 XTO, do you keep records?

15 A. Do I keep records?

16 Q. Did you do -- did you communicate with
17 these folks through emails?

18 A. I'm sorry, could you repeat that?

19 Q. Did you communicate with these folks at
20 XTO through email?

21 A. No, sir.

22 Q. By phone?

23 A. Yes, sir.

24 Q. And what time did you talk to those -- to
25 those folks at XTO?

Recross-Examination by Mr. Rankin

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1 A. Probably May or June of 2024.

2 Q. Was Mr. Walker -- do you know if
3 Mr. Walker was the manager of whatever division you
4 referred to at the time the Goodnight applications
5 were filed?

6 A. Yes, sir.

7 Q. And was he?

8 A. Yes, sir, he was.

9 Q. Mr. Wheeler, you had a discussion with
10 Mr. -- or Dr. Ampomah, apologies, about your
11 understanding of Empire -- rather Goodnight's legal
12 rights to inject into its disposal zone. Do you
13 recall that discussion with Dr. Ampomah?

14 A. Yes, sir.

15 Q. And it's your position that the agreements
16 that Goodnight Midstream has to inject into the
17 San Andres disposal zone are not legally valid,
18 correct?

19 A. Are not what?

20 Q. Are not legally valid for their purposes,
21 correct?

22 A. Yes, sir.

23 Q. Okay. But you're not saying that
24 Goodnight Midstream doesn't have agreements,
25 correct?

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1 A. In response to a subpoena that we served
2 Goodnight, the saltwater disposal and surface lease
3 agreements that we received and what we've been able
4 to discover checking the County records in Lea
5 County, none of those are proper and correct.

6 So I'm not aware if there's other surface
7 leases in saltwater disposal agreements, but if they
8 are, if you could furnish them to me, I could
9 respond.

10 Q. So my point, though, Mr. Wheeler, is that
11 you have a legal position that those agreements that
12 Goodnight has in place are, in your opinion, not
13 valid, correct?

14 A. Correct.

15 Q. Okay. And it's not your -- you're not
16 saying that they don't have agreements. You're
17 saying that you don't -- you believe that they're
18 not valid, correct?

19 A. Correct.

20 Q. Now, you reviewed the Piazza case
21 transcript and testimony, correct?

22 A. Correct.

23 Q. And you're aware that, as part of that
24 case, Goodnight Midstream did present to the
25 Division evidence of what it, in good faith,

1 believed was a valid right to inject, correct?

2 A. I saw the testimony of Goodnight's
3 position, but I didn't see anything where the
4 Commission concurred with that.

5 Q. I'm sorry, I couldn't hear the last bit
6 you said.

7 A. I didn't see anything from the
8 Commission's order that they concurred with that.

9 Q. But you did -- you reviewed the entire
10 Piazza record that was presented to the Division?

11 A. Yes, sir, I did.

12 Q. But you're stating here now to the
13 Commission that you just didn't see anything where
14 the Division addressed that issue, correct?
15 Addressed the issue of whether or not there was any
16 dispute over the right of Goodnight to inject into
17 the disposal zone.

18 A. That's right, I don't recall.

19 Q. Okay. But you agree with me that the
20 Division and the Commission don't have authority to
21 adjudicate private property rights?

22 A. Yes, sir.

23 Q. Okay. And all the statements that you've
24 made subsequent to my cross-examination of you about
25 Empire's positions regarding the technical issues

1 around the dispute in this case were all based on
2 your understanding of your -- of the company's
3 position and the experts that Empire is presenting
4 in this case, correct?

5 A. Yes, sir.

6 Q. And it's not that you have the expertise
7 to make those separate and independent assessments
8 yourself, correct?

9 A. Correct.

10 Q. For example, I mean, you -- I think you
11 started -- you told Dr. Ampomah that you believe
12 that there would -- could be a 40 percent recovery
13 of hydrocarbons from the ROZ in the EMSU; is that
14 correct?

15 A. That's what I've heard in meetings.

16 Q. Who have you heard that from?

17 A. I don't recall exactly.

18 Q. Okay. Is Mr. West going to testify that
19 there's going to be a 40 percent recovery of
20 hydrocarbons from the San Andres ROZ?

21 A. I have no idea.

22 Q. Okay. But you gave a number that you
23 believe Empire -- Empire believes that it can
24 recover between 350 and 375 million barrels from the
25 San Andres ROZ; is that correct?

Recross-Examination by Mr. Rankin

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1 A. You said 200?

2 MS. SHEEHAN: Yeah.

3 Q. 300 --

4 MS. SHEEHAN: Excuse me.

5 Q. -- 350 to 375 million.

6 MS. SHEEHAN: I object. I object. I
7 believe Mr. Rankin is mis --

8 HEARING OFFICER HARWOOD: I'm sorry,
9 what was the number again?

10 MR. RANKIN: I had written down --
11 and I'm asking for clarification. I had written
12 down the numbers 350 to 375 million barrels of
13 recoverable hydrocarbons.

14 HEARING OFFICER HARWOOD: That's what
15 my notes reflect.

16 MS. SHEEHAN: That's correct, but
17 Mr. Wheeler also stated that that was his opinion,
18 if you will, as a lawyer. But he has not done any
19 work on whether that factor is appropriate here.
20 And I believe he testified that that recovery factor
21 is one that was used in other ROZ fields in Texas.

22 HEARING OFFICER HARWOOD: Mr. Rankin,
23 why don't you rephrase the question.

24 MR. RANKIN: Well, I just want to
25 make sure my notes are correct, so I was asking

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Recross-Examination by Mr. Rankin

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1 Mr. Wheeler just to confirm whether or not it's
2 Empire's position that this project will recover
3 between 350 and 375 million barrels of hydrocarbons
4 from the San Andres ROZ. I just wanted to make sure
5 I understood that. And he can qualify it.

6 HEARING OFFICER HARWOOD: Any
7 objection to that rephrased question?

8 MS. SHEEHAN: I don't believe
9 Mr. Rankin's recognizing the fact that Mr. Wheeler
10 was talking about that number as a result of it
11 being used or applied to other fields in Texas. He
12 was not referring to the EMSU.

13 He merely stated that if that recovery
14 factor applied to the EMSU, then his calculations
15 would be that there would be approximately
16 350 million barrels of oil recoverable from the
17 EMSU.

18 HEARING OFFICER HARWOOD: I'm --
19 overrule the objection.

20 Why don't you state the question again.

21 Q (By Mr. Rankin) Mr. Wheeler, I'm just
22 asking for clarification on the company's position,
23 because I wrote down in my notes what I understood
24 you to say was Empire's position on what it thought
25 would be recovered from the San Andres ROZ. And I

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Recross-Examination by Mr. Rankin

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1 just want to make sure I understood. Because I
2 think I've also seen similar numbers in the briefing
3 and filings that Empire has filed before the
4 Commission. And I just am trying to make sure I
5 understand it.

6 I thought I heard you say that Empire
7 believes, in response to a question from
8 Dr. Ampomah, that they can recover between 350 and
9 375 million barrels of hydrocarbons from the
10 San Andres ROZ?

11 A. No, sir.

12 Q. What was it that you said?

13 A. I said my opinion.

14 Q. Okay.

15 A. So I can't -- I'm not a reservoir engineer
16 or production engineer. I don't have the expertise
17 to state what Empire's position would be.

18 Q. Empire acquired this property in March of
19 2021, correct?

20 A. Correct.

21 Q. And it bought the property with the intent
22 of pursuing a residual oil zone development across
23 the EMSU and the other two units?

24 A. Correct.

25 Q. And from the time it bought the property

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1 until this date in April of 2025, has it undertaken
2 any efforts to identify or further define or
3 delineate the potential ROZ across any of those
4 three units?

5 A. No, sir. Like I stated yesterday, we've
6 suspended all operations until we get a
7 determination if Goodnight's going to be able to
8 continue to inject water and destroy our productive
9 interval.

10 Q. So from March of 2021, when it acquired
11 the property, until it suspended operations late in
12 the summer of 2023, Empire did nothing to evaluate
13 or further delineate its plans to pursue an ROZ
14 development in these three units, agree?

15 A. I wasn't with Empire at that time, so I
16 can't speak to that.

17 Q. Are you aware of anything that Empire has
18 done in that period of time to undertake any efforts
19 to delineate the potential ROZ in any of those three
20 units?

21 A. I don't know what the predecessors at the
22 company did.

23 Q. Well, you spent a lot of time getting
24 yourself familiar with a lot of materials as part of
25 this case. In fact, I understand that you were

1 hired based on your testimony to address this
2 specific issue with Goodnight Midstream, correct?

3 A. Yes, sir.

4 Q. And that -- as part of that effort to get
5 up to speed on the disputes with Goodnight
6 Midstream, you're not aware of anything that the
7 company did prior to suspension of operations in
8 2023 to further delineate the ROZ in either of these
9 three units?

10 A. No, sir, I'm not.

11 Q. You testified in response to a question
12 from Dr. Ampomah that you believe that -- Empire
13 believes or -- this is -- I understood you to say
14 that Empire believes that you have enough evidence
15 to date to determine whether or not there are
16 recoverable hydrocarbons in the San Andres ROZ; is
17 that correct?

18 A. Yes, sir.

19 Q. Okay. Now, when -- Empire now has
20 prepared AFEs for all three of these proposed APDs
21 that it's looking at potentially drilling; is that
22 correct?

23 A. I would have to defer to Mr. West on that.

24 Q. I have in my notes that you looked at AFEs
25 for all three wells; is that correct?

1 A. No, sir, I had not looked at them. I know
2 that preliminary AFEs were being prepared and there
3 are meetings about the coring, all of those kinds of
4 matters, type of pipe in the well, all that kind of
5 stuff. But I would have to defer to Mr. West for
6 the specifics of that.

7 Q. Okay. And you gave an estimate of cost
8 for \$800,000 for all coring. That would be for all
9 three wells, correct?

10 A. No, sir. I was understanding that that
11 was for one well.

12 Q. And that price -- was that including
13 drilling or just for the coring operations?

14 A. It was my understanding that was the cost
15 that -- if they did all the various types of coring,
16 that's how much it could potentially cost.

17 Q. My question is: Did that coring -- did
18 that cost include the drilling of the well or just
19 the coring operation?

20 A. Just the coring.

21 Q. Did you -- do you recall what an estimate
22 of cost was for the drilling of the -- of the well?

23 A. No, sir.

24 Q. Mr. West would know that?

25 A. Yes, sir.

1 Q. Recognizing that the company has concerns
2 about the impacts to the EMSU for Goodnight's
3 injection, has Empire evaluated going forward with
4 any ROZ testing or pilot projects in the, for
5 example, AGU unit to the southeast?

6 A. Not to my knowledge, yet.

7 Q. Why not?

8 A. Because our focus has been on the EMSU
9 primarily.

10 Q. Okay. Is there anything stopping Empire
11 from pursuing and evaluating a potential ROZ in the
12 San Andres in the AGU?

13 A. Not to my knowledge.

14 Q. Okay. You discussed Mr. Moander's -- the
15 Division's concerns about the impacts of the Capitan
16 Reef and through the Hobbs Channel. Has Empire done
17 anything to evaluate those concerns since they were
18 raised by the Division?

19 A. Yes, sir. If you'll recall, in
20 Dr. Lindsay's testimony, he stated that there was no
21 communication with the Hobbs Channel or moving the
22 water into the El Capitan Reef.

23 Q. So to the extent that that remains a
24 concern of the Division, is Empire relying solely on
25 the testimony of Dr. Lindsay?

Recross-Examination by Mr. Rankin

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1 A. Yes, sir.

2 Q. Mr. Wheeler, you and I had a discussion
3 yesterday about your testimony that there were some
4 communications between Empire and Goodnight
5 Midstream. And you, again, raised that discussion
6 again in response to questions from Commission
7 counsel. And then you addressed an additional point
8 about -- I believe it was Mr. Mulacek stating that
9 Empire would be willing to contribute costs to
10 drilling new wells outside of a two-mile radius of
11 Empire's units if Goodnight would agree to withdraw
12 its applications and injection within Empire's
13 units. Do you recall that?

14 MS. SHEEHAN: I -- I'm going to
15 object because I believe Mr. Rankin is, again,
16 misstating Mr. Wheeler's testimony.

17 HEARING OFFICER HARWOOD: I recall
18 the discussion. It sounds fairly close.

19 MS. SHEEHAN: Well, I don't believe
20 there was any discussion about Empire contributing
21 costs to Goodnight moving wells outside of the two
22 miles from the EMSU.

23 HEARING OFFICER HARWOOD: I actually
24 distinctly remember that.

25 So I'm going to overrule the objection.

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Recross-Examination by Mr. Rankin

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1 Q (By Mr. Rankin) Mr. Wheeler, I'm asking for
2 clarification on a couple of points. Okay?

3 Number one, will you clarify what it is
4 that you understood your board chair to be offering?

5 A. In discussions about how to move forward
6 with a resolution, that was one of the matters of
7 a -- multiple matters that were discussed, if there
8 were other issues, and stuff, that had to come into
9 play for evaluation.

10 Q. My question, Mr. Wheeler, first, was:
11 Will you clarify what the -- what was being
12 offered -- or your understanding of what the offer
13 was?

14 A. This was a discussion of which a number of
15 managers, executives, and engineers of Empire were
16 present. There was no offer formally made to
17 Goodnight.

18 Q. And on that point, Mr. Wheeler, have you
19 had a chance to -- I mean, yesterday you testified
20 that there was a response made to Goodnight based
21 on -- of some type. And I'm asking you now, because
22 you brought it up again in your -- in your
23 discussions with Commission counsel: Are you --
24 who -- are you -- who did -- who communicated -- was
25 there any communications directly between Goodnight

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1 Midstream and Empire, to your knowledge?

2 A. No, sir. The discussions were between
3 Mr. Padilla and yourself.

4 Q. Are you aware whether Mr. Padilla provided
5 any response from Empire to me?

6 A. I'm not -- I'm not knowledgeable what
7 those discussions were. I was just told that there
8 were discussions and that they got nowhere with
9 them.

10 Q. Okay. So you're not aware of what
11 Mr. Padilla may have -- or even if he had responded
12 to me in any way, correct?

13 A. No, sir.

14 Q. You're not aware, correct?

15 A. No, sir, I'm not.

16 Q. Mr. Wheeler, you testified about
17 representations -- you understood the
18 representations that were being made during the
19 purchase process between XTO and Empire were being
20 made by ExxonMobil; is that correct?

21 A. Yes, sir.

22 Q. But yesterday I showed you Empire's own
23 exhibit from the Piazza case where it -- the cover
24 page of the data room sheet says, "XTO Energy." Do
25 you see that?

Recross-Examination by Mr. Rankin

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1 A. Yes, sir, I saw that.

2 Q. I'm sorry, I put that on the screen.

3 And, in fact, every single page on this
4 exhibit that was -- that was the open offer for the
5 data room identified an XTO Energy, doesn't it?

6 A. It identifies, but I'm not for sure that
7 the data room was an ExxonMobil level data room, not
8 an XTO.

9 Q. And doesn't the disclaimer directly
10 identify XTO?

11 A. Yes, sir. And that's what we spoke to, it
12 doesn't include ExxonMobil.

13 Q. But the representations being made in this
14 document are from XTO, correct?

15 A. Well, there's another document where
16 representations were made by ExxonMobil.

17 Q. Were you confused -- I mean, you weren't
18 there at the time, but were you confused by who was
19 making what representations?

20 A. Once I came aboard and reviewed the first
21 brochure that I showed you from ExxonMobil, there
22 was never any doubt in my mind that those
23 representations were from ExxonMobil, not from its
24 subsidiary XTO.

25 Q. Mr. -- sorry. Dr. Ampomah had some

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1 dialogue with you about whether you believed it
2 was -- whether you agreed that it was improper at
3 the time that the EMSU was created, that it included
4 the San Andres intervals. Do you recall that?

5 A. No, sir. I had my hearing aids off
6 because it was -- and I didn't understand his
7 question, so I didn't answer it. As to what I
8 thought he was saying and what he was actually
9 saying, I misinterpreted his question.

10 Q. Okay. But during the course of your
11 discussion with Dr. Ampomah, you agreed that at the
12 time, it was recognized as an aquifer, correct?

13 A. No, sir, I didn't.

14 Q. Okay. So when -- so when you were asked
15 by Ms. Shaheen to clarify the proper
16 characterization of Mr. West's testimony, right, I
17 pointed out that in Mr. West's testimony, he had
18 testified that there was no production in the
19 San Andres. And you testified that it was an
20 improper -- it was taken out of context. Do you
21 recall that?

22 A. Yes, sir.

23 Q. And you stated that the proper context is
24 to understand that there was no production from the
25 San Andres in 1986, agree?

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1 A. Agree.

2 Q. Okay. And if there was no production in
3 the San Andres in 1986, then how could the
4 Commission have authorized the inclusion of the
5 San Andres in a unit if one of the requirements of
6 statutory unitization is that any pool or portion of
7 a pool be reasonably defined by a primary
8 production?

9 A. I can't speak to that.

10 Q. But you don't disagree that there was --
11 as of 1986, there was no production, as Mr. West's
12 testifying here, as of 1986?

13 A. Yes, sir.

14 Q. You reviewed -- and, again, you made this
15 statement to the Commission, that your position is
16 that Goodnight Midstream fraudulently filed its
17 applications with the Division, correct?

18 A. Correct.

19 Q. And the basis for that claim is that they
20 failed to accurately and properly represent the
21 formation into which they were proposing to inject,
22 correct?

23 A. Yes, sir.

24 MR. RANKIN: I'm having a hard time
25 pulling up something that I wanted to present to

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1 Mr. --

2 MR. MOANDER: We may be having some
3 connectivity issues. I all of a sudden lost some
4 connection. So I'm unsure what's going on, but I
5 can say that I'm struggling with some --

6 CHAIRMAN RAZATOS: Mr. Hearing
7 Officer, maybe since there are some issues, we call
8 for lunch right now and then reconvene?

9 HEARING OFFICER HARWOOD: That sounds
10 like a -- yeah, that makes sense. Let's -- let's
11 break for lunch.

12 Mr. Razatos, what's the Commission's
13 preference on the lunch break?

14 CHAIRMAN RAZATOS: Yesterday -- you
15 want to do 1:15? 1:30?

16 HEARING OFFICER HARWOOD: Sure. I --
17 as a feet-to-the-fire kind of hearing officer, I
18 would pick 1:15. But if you prefer 1:30?

19 CHAIRMAN RAZATOS: 1:15 is fine.
20 Thank you. We'll meet back at 1:15.

21 HEARING OFFICER HARWOOD: Okay.
22 Thank you, all.

23 (Recess was taken from 11:56 a.m. until 1:15 p.m.)

24 HEARING OFFICER HARWOOD: Mr.
25 Chairman, are you ready to proceed?

Recross-Examination by Mr. Rankin

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1 CHAIRMAN RAZATOS: I sure am. Thank
2 you, Mr. Hearing Officer. Let's transfer it over to
3 you, and you can continue. Thank you.

4 HEARING OFFICER HARWOOD: All right.
5 We're good to go in the back there, Ms. Apodaca?

6 MS. APODACA: Yes, we're ready.

7 HEARING OFFICER HARWOOD: Let's see.
8 Our suffering court reporter is back on the job,
9 smiling even.

10 All right. And we're back on the record.
11 Let's see, we are cross-examining Mr. Wheeler.

12 I'll just remind you, Mr. Wheeler, you're
13 still under oath.

14 JACK WHEELER: Yes, sir.

15 Q. (By Mr. Rankin) Mr. Wheeler, in your
16 response to cross-examination questions from
17 Mr. Beck, I understood you to make a distinction
18 between what you deemed to be commercial injection
19 and the injection that was occurring through the EME
20 agreement, correct?

21 A. Yes, sir.

22 Q. And in your -- in your opinion, the EME
23 injection was not a commercial injection?

24 A. Yes, sir.

25 Q. Was Empire paying for that injection?

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1 A. Under the agreement, you're responsible
2 for the cost of the monthly operations, and that was
3 proportionate to the number of wells that you were
4 taking into the system. But I don't believe that we
5 paid a per-barrel disposal rate.

6 Q. So there's a different mechanism for
7 ascertaining financial obligations, but Empire had,
8 nevertheless, financial obligations with respect to
9 its injection into the system, correct?

10 A. Yes.

11 Q. And the wells that were incorporated or
12 included in that EME system included wells that were
13 producing -- produced water outside of the EMSU,
14 correct?

15 A. I'm not sure where those wells were
16 located. There's so many wells. You would think
17 that they -- but if you look at the map where you,
18 you know, may have seen -- there's a tremendous
19 number of wells inside the unit that are just
20 producing from deeper or shallower arrays in -- that
21 we have done no interference with.

22 Q. Let me ask you -- let me ask it this way:
23 The EME agreement would include wells that were
24 disposing of produced water that were not EMSU unit
25 wells, correct?

1 A. I -- I'm not sure of that.

2 Q. Okay. Now, as I understand Empire's
3 position, it's that any injection into the
4 San Andres ROZ is detrimental to the ROZ. Do you
5 agree?

6 A. I don't think that we're that demanding.
7 I know that there's a well that Rice is injecting in
8 that's included in Preston McGuire's revised
9 supplemental testimony where they're just producing,
10 you know, a couple hundred barrels a day, and stuff.
11 And that's not significant enough for us to fight
12 over that one well, I don't believe.

13 Q. Mr. Wheeler, you testified that Empire's
14 filed a lawsuit against Rice, correct?

15 A. Yes, sir.

16 Q. And the purpose of that lawsuit was to
17 terminate -- in part was to terminate Rice's
18 injection into the EMSU and the other units operated
19 by Empire, correct?

20 A. Yes, sir. But also named in that suit is
21 Permian, and they're the ones who, in 19- -- I mean
22 in 2020, drilled a commercial disposal well within
23 the unit.

24 Q. So in addition to Rice, you're seeking
25 claims against others, as well, correct?

1 A. Yes, sir.

2 Q. Okay.

3 A. Pilot, OWL.

4 Q. And in its assessment, Empire decided that
5 it would discontinue its own injection into the
6 San Andres ROZ that it was operating through its
7 EMSU SWD number 1 well, correct?

8 A. Yes, sir.

9 Q. And it did so because it determined that
10 any injection of produced water into the San Andres
11 ROZ would be detrimental to the San Andres ROZ,
12 agree?

13 A. Yes, sir.

14 Q. Where -- you made some statements to
15 the -- to the Commission today that you believe --
16 going back to the question about fraudulent
17 applications by -- fraudulent applications by
18 Goodnight Midstream and that they were improper for
19 their -- for their existing four SWDs. You stated
20 that if they failed to disclose to the OCD proof
21 that they had a -- I'm paraphrasing -- subsurface
22 rights or rights to inject into the zone that they
23 were proposing to dispose into. Is that a fair
24 characterization of your testimony?

25 A. Yes, sir.

1 Q. Where is it a requirement on OCD -- in
2 OCD's rules that an applicant for a C-108 is
3 required to make -- to establish proof that they
4 have rights to inject?

5 A. I don't see it on the C-108. But I think
6 it's the duty of the party that's requesting a
7 permit to notify the Court -- or the Commission that
8 they have the legal authority to do that.

9 Q. You can't point -- you're not able to
10 point to any statute, regulation, rule, requirement
11 that establishes that as a requirement as part of
12 the initial application, correct?

13 A. I'd have to review that again. It's been
14 quite a while since I reviewed the regulations
15 related to that.

16 Q. But you told the Commission that you
17 believed that they filed improper applications for
18 that reason. What's the basis for your statement
19 that it was improper?

20 A. That the surface owners do not have the
21 right to lease the mineral right leases under a
22 unitized formation. It is not pore space, which is
23 a legal issue that the Commission doesn't have to
24 address, but there's no pore space within the
25 unitized interval that was established back in 1984.

1 Q. Okay. Another statement that you made
2 on -- in response to questioning from the -- from
3 the Commission, it confused me, and I'm going to see
4 if I can understand.

5 You stated -- and, again, I'm paraphrasing
6 here. But essentially that it's Empire's position
7 that it cannot undertake any operations at the -- at
8 this time because of Goodnight's injection -- high
9 rate injection into the San Andres ROZ and that the
10 reason is because the ROZ -- and that is because the
11 ROZ is at risk of being moved off lease as a result
12 of the high rates of injection from Goodnight; is
13 that correct?

14 A. Well, there could be a sweeping mechanism
15 that moved it, but then I was -- got clarity after
16 the hearing that the ROZ itself, all of it, would
17 not be swept out.

18 Q. Would any of it be swept out?

19 A. Some of it potentially, yes, sir.

20 Q. I'm confused by that, because Empire's
21 experts testified that there are oil saturations in
22 excess of 60 percent in the San Andres ROZ and that
23 they're immovable but for the application of CO2.
24 Do you disagree with Empire's experts on that
25 position?

1 A. No, sir.

2 Q. Okay. In fact, the -- any ROZ, to the
3 extent there is any, in the San Andres has not moved
4 after multiple, possibly dozens of pore space
5 volumes of sweep from what Empire's experts have
6 called Mother Nature's waterflood, agree?

7 A. I would have to defer to their testimony.

8 Q. Okay. So you rely on their testimony?

9 A. Yes, sir.

10 Q. And their opinions regarding the extent to
11 which any remaining ROZ might be moved by
12 application of water, agree?

13 A. Agreed.

14 Q. Okay. You testified that -- as I
15 understand, that the four applications -- or four
16 current SWDs that are -- that Empire is seeking to
17 revoke the authority for injection for, did -- were
18 approved administratively. Is that -- is that your
19 understanding?

20 A. I'm sorry, were approved?

21 Q. Administratively without going to hearing.

22 A. That was my understanding.

23 Q. Would it surprise you to know that
24 actually -- three of them actually did go to hearing
25 because the State Land Office protested those

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1 applications before the Commission -- before the
2 Division?

3 A. It was my understanding the State Land
4 Office protested, and there was a resolution between
5 Goodnight and the State Land Office. So their
6 objection was removed, and, therefore, I didn't
7 understand that there was a hearing for those.

8 Q. Are you aware that with respect to some of
9 the objections that the State Land Office raised,
10 they challenged those applications after approval by
11 the Division and sought de novo review before the
12 Commission?

13 A. No, sir, I wasn't.

14 Q. Were you aware that the State Land Office
15 served discovery on Goodnight Midstream through
16 those applications that were being challenged by
17 the -- at the Commission?

18 A. No, sir, I wasn't.

19 Q. Are you aware that Goodnight responded to
20 the discovery requests of the State Land Office as a
21 result of the subpoena that was issued?

22 A. No, sir, I wasn't.

23 Q. Are you aware that as a result of the
24 documents provided, including pressure data that was
25 provided to the State Land Office, that the State

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Recross-Examination by Mr. Rankin

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1 Land Office withdrew its objections?

2 A. That they what?

3 Q. Withdrew their objections.

4 A. Withdrew. Yes, sir, that was my
5 understanding.

6 Q. Okay.

7 A. Not -- I wasn't aware that you-all
8 furnished testimony or written responses.

9 (Talking among counsel.)

10 Q. Apologize for the delay. We're trying to
11 pull up a document.

12 Suffice it to say, you're not aware that
13 the basis for which the State Land Office withdrew
14 its objections and with -- dismissed its
15 applications for de novo review?

16 A. No, sir, I don't know the basis.

17 Q. Okay.

18 MR. RANKIN: Mr. Hearing Officer, I
19 may ask for the Commission to take administrative
20 notice of the -- I'll get you the case numbers in a
21 moment, but of the State Land Office's notification
22 to the Commission that it was withdrawing its de
23 novo --

24 Do you have the case numbers?

25 It's case number 20556, 20557, and 20558.

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Recross-Examination by Mr. Moander

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1 State Land Office filed a withdrawal request for de
2 novo hearing stating the basis for their dismissal
3 of the de novo request.

4 As soon as I have access, I'll circulate
5 that document to all counsel and Commission counsel
6 so you have it.

7 HEARING OFFICER HARWOOD: Accepting
8 that representation is accurate, we'll take
9 administrative notice of that.

10 MR. RANKIN: Mr. Hearing Officer, I
11 have no further questions at this time and pass the
12 witness to -- for any additional recross.

13 HEARING OFFICER HARWOOD: Thank you.

14 Mr. Moander, for OCD?

15 MR. MOANDER: Yes, sir, I've got a
16 series of questions.

17 RECROSS-EXAMINATION

18 BY MR. MOANDER:

19 Q. So, Mr. Wheeler, I want to focus on the
20 discussion with the State Land Office, which I'll
21 refer to as SLO, for shorthand. No implication by
22 using that.

23 My understanding from your testimony is
24 Empire's interaction with SLO about the CO2 issue,
25 that was a phone call?

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1 A. I think it's written communications
2 between Mr. Holland of Empire and a lady with the
3 State Land Office.

4 Q. And it was your understanding that
5 Mr. Holland used presumably Empire's corporate email
6 system to do that?

7 A. I'm not -- I don't -- I don't have that
8 information.

9 Q. Do you have an approximate year when that
10 communication would have occurred?

11 A. Well, we received the notification of the
12 288 remediation violations back in probably November
13 of '24. So it would be from the date that we
14 received those, reviewed them internally, and then
15 Mr. Holland -- I'm thinking in December is when we
16 had hired the cultural consultants to go in and do
17 the cultural review that has to be made first. And
18 we probably got those in January or early February.

19 So that would be the time period that we
20 would start submitting to the State Land Office our
21 remediation plans. So that was probably late
22 February or early March maybe.

23 Q. So it's your understanding the
24 communications between Empire and SLO approximately
25 November/December of 2024 concerned cultural review

1 and remediation; is that right?

2 A. It was my understanding -- or what is
3 reported to me was that a cultural review had to be
4 done on every one of our remediation sites before
5 the State Land Office would approve a plan of
6 remediation.

7 Q. And because your testimony, as I heard
8 it -- and I can always be wrong -- was couched in
9 the framework of the CO2 injection project for the
10 additional secondary recovery, was that part of this
11 discussion with SLO?

12 A. No, sir, not at all.

13 Q. So you don't have -- to the best of your
14 knowledge, did Empire ever communicate with SLO
15 about CO2 injection?

16 A. I don't -- they were never authorized to,
17 so I don't believe that any employee would have done
18 that.

19 MR. MOANDER: All right. At this
20 time, Mr. Hearing Officer, Commissioners, I'm really
21 confused about what this is about, because OCD --
22 speaking only for OCD -- has never seen or heard
23 about this issue until today. CO2 injection tends
24 to tie to these things.

25 So this is -- brand-new issue that's been

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1 revealed. OCD is going to move the Hearing Officer
2 and Commission for leave to potentially recall
3 Mr. Wheeler. I'm in the process of verifying what
4 went on with these communications, because I am
5 concerned. This does seem fairly relevant to the
6 issues before the Commission.

7 If at a time in the future should the
8 Commission hearing officer grant that -- grant that
9 leave, today or later, if I were to conclude or find
10 that there's nothing substantive here -- I'll
11 obviously share any information I acquired with all
12 counsel here -- I will notify the Commission that I
13 don't intend to recall Mr. Wheeler.

14 HEARING OFFICER HARWOOD: Okay. But
15 you're moving to reserve that right at the present
16 time?

17 MR. MOANDER: Yes, I am, Mr. Hearing
18 Officer.

19 HEARING OFFICER HARWOOD: Does Empire
20 have any objection to that?

21 MS. SHEEHAN: Yeah, we don't
22 understand the reason. I don't recall Mr. Wheeler
23 talking about a discussion with the State Land
24 Office about CO2. I -- so I'm not sure what
25 Mr. Moander is referring to.

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1 MR. MOANDER: I'm happy to wait and
2 reinitiate this once I get a copy of the transcript,
3 because I'm pretty certain that actually was
4 testified to.

5 And, you know, I'm going to put this on
6 the record here now as well. We've had a consistent
7 issue with discovery in this case and a lot of
8 three-card monte going on. And this seems to be a
9 continuation of that pattern and practice.

10 And I am concerned, because we're in the
11 middle of a hearing, and we're getting surprises on
12 a level that -- well, administrative law certainly
13 has a lot of play in the joints, and a lawyer should
14 expect some new things to come up.

15 If this percolates -- if I'm able to find
16 information that matches the record here as to the
17 issue of CO2, I will obviously not be a very happy
18 camper, especially under the order that the Hearing
19 Officer issued several months ago about discovery
20 games.

21 So what I can do is reserve this motion
22 for leave to recall Mr. Wheeler until probably -- my
23 guess is probably we resume the next full week. But
24 I will -- regardless, I will apprise the Commission
25 and the Hearing Officer pretty early on, on Monday

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1 as to what my game plan is and what I'm going to
2 request.

3 HEARING OFFICER HARWOOD: Okay.

4 Well, thanks for the heads-up. I mean, this is not
5 a retained expert witness, so Mr. Wheeler is a party
6 opponent. And I suspect that you have mechanisms
7 available to you to compel him to reappear and
8 testify anyway.

9 So, all right. Well, we'll wait to see a
10 formal motion, if any, from you, Mr. Moander.

11 MR. MOANDER: Thank you, Mr. Hearing
12 Officer.

13 MS. SHEEHAN: Mr. Examiner, if I may
14 just briefly respond on the record to Mr. Moander's
15 suggestions that there's been some attempt to
16 manipulate discovery here. We vehemently object and
17 disagree with Mr. Moander's representations. And if
18 he wants to confer with me or any of our attorneys
19 after the hearing, we're happy to discuss any
20 specific discovery requests that he believes we have
21 not fully responded to.

22 HEARING OFFICER HARWOOD: Okay. All
23 right. That would be great. You know, we're not --
24 nobody's making any judgments on those comments at
25 this point, just so the record is clear.

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Recross-Examination by Mr. Beck

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1 Okay. Let's see. Mr. Beck, that would
2 bring that to you, to Rice for cross-examination of
3 Mr. Wheeler.

4 MR. BECK: Thank you, Hearing
5 Examiner.

6 RECROSS-EXAMINATION

7 BY MR. BECK:

8 Q. Mr. Wheeler, looking at your direct
9 testimony, it looks like you got your JD degree in
10 1976; is that right?

11 A. Yes, sir.

12 Q. So you've been a lawyer for almost 51
13 years?

14 A. No, sir.

15 Q. Is it 46 years?

16 A. 45.

17 Q. 45?

18 A. When I got out of law school, I went to
19 work for the CIA. And with the CIA, they didn't
20 want to have any licensed attorneys or anybody with
21 professional credentials that could be discovered as
22 to our role within the CIA. So when I left the CIA
23 and went to Texaco, that's when I passed the bar
24 exam.

25 Q. Well, I appreciate you being precise on

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1 that. I was thinking 46 was almost 51, but 45 is
2 precise, right?

3 A. When you're 76, anything's a long time.

4 Q. Well, I'm just -- I'm just saying I was
5 thinking nearly, but you corrected me and you were
6 precise that it's 45 years you've been practicing
7 law, right?

8 A. Yes, sir.

9 Q. And that's -- 45 years, as you point out,
10 is a long time. Would you agree with me on that?

11 A. Yes, sir.

12 Q. And as a lawyer, I think you'd agree with
13 me that being precise and using precise wording is
14 important, right?

15 A. Yes, sir.

16 Q. Critically important?

17 A. Yes, sir.

18 Q. You pointed that out in relation to the
19 purchase and sale agreement, in relation to the post
20 closing obligations of Empire, right?

21 A. Yes, sir.

22 Q. Talking a little bit about -- Ms. Shaheen
23 talked to you about -- I think, in relation to that
24 purchase and sale agreement, that you were not
25 relying on -- and by "you," I guess we're talking

Recross-Examination by Mr. Beck

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1 about Empire. Empire was not relying on a
2 representation of XTO, but on a representation of
3 ExxonMobil, right?

4 A. A representation as to the ROZ.

5 Q. Okay. And why is that important?

6 A. Well, if the Commission rules that that is
7 not true and correct, then we have a corporate
8 obligation to bring legal action against ExxonMobil
9 for those false representations on the sale of the
10 security. And that's in violation of the Texas
11 Securities Act of 1933 and the Federal Security Act
12 of 1934.

13 Q. Now, it's my understanding that this sale
14 of the assets by XTO to Empire was a sale of working
15 interests, right?

16 A. Was the sale of what?

17 Q. Working interests, that XTO was going to
18 cease being the operator and Empire was going to be
19 the operator?

20 A. Yes, sir.

21 Q. Now, does that -- does that qualify this
22 as a security under the Securities Act of 1934, if
23 you know?

24 A. The sale does. The representation of any
25 document for the sale of security falls under that.

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1 Q. But you're saying and you're representing
2 that you know this, this rescission is important,
3 that the sale of operating a unit for oil and gas
4 interest qualifies as a security under the
5 Securities Act of 1934, the Federal Securities Act?

6 A. It's not the operation. It's the sale of
7 the asset.

8 Q. The asset that -- the asset of Empire --
9 excuse me. The asset that Empire was going to
10 operate, you think that under the Securities Act,
11 the Federal Securities Act, operations, as opposed
12 to passive investment income, qualifies as a
13 security under the Federal Act?

14 A. I'm not a securities lawyer, but it's my
15 understanding it does.

16 Q. Okay. So when I said before "if you
17 know," do you know?

18 A. I'm not positive, no, sir.

19 Q. Do you know whether XTO, as a wholly-owned
20 subsidiary of ExxonMobil, makes any distinction in
21 terms of holding XTO up to their representations or
22 ExxonMobil to their representations?

23 A. We hold ExxonMobil as to the
24 representations.

25 Q. That's not the question that I asked.

1 A. Okay.

2 Q. The question that I asked is: Does it
3 matter whether XTO, as a wholly-owned subsidiary, or
4 ExxonMobil made these representations under the
5 Securities Act?

6 A. I don't believe so.

7 Q. Now, as you talked about, precision is
8 important.

9 And so now I'm sharing your slides, and
10 this is the brochure from ExxonMobil that we've been
11 talking a lot about. Was this part of the offering
12 from XTO or did Empire get this somewhere else?

13 A. We got it from the sales brochure when
14 ExxonMobil was -- placed this asset on the market
15 and was trying to sell it.

16 Q. How do you know that?

17 A. Because all of the communications were
18 with ExxonMobil. The data room was ExxonMobil.
19 The -- after the acquisition -- or during the due
20 diligence, the files that they dumped for a
21 purchaser to review were all from ExxonMobil. None
22 of it was from XTO. The only time that XTO entered
23 into the picture was at the time of the purchase and
24 sale agreement.

25 Q. When the assets were actually transferred

1 and XTO was the entity transferring the assets,
2 right?

3 A. I believe so.

4 Q. Now, when we look at the first page of
5 this brochure that you highlighted in your slides,
6 it says under -- it says under Description that --
7 first bullet point that, "Three existing units;
8 EMSU, EMSU B, AGU all have infill drill well and ROZ
9 potential," right?

10 A. Yes, sir.

11 Q. What does "potential" mean to you?

12 A. Reserve reports, you basically have three
13 categories. You've got proven, probable, and
14 possible. So potential would fall into the category
15 between possible and probable.

16 Q. That's what it means to you?

17 A. Yes, sir.

18 Q. Okay. And so it's not even probable. ROZ
19 potential here saying that there's ROZ potential,
20 right?

21 A. No, sir. That's related to the infill
22 drilling locations. The infill drilling locations
23 are not for a CO2 tertiary recovery. So you have to
24 go to the last bullet.

25 Q. So before you say something that you might

1 change your mind on, you might ask me to zoom in and
2 understand my question.

3 So let me point you to what's in front of
4 you right there, that first bullet point where it
5 says, "Three existing units; EMSU, EMSU B, AGU all
6 have infill drill well and ROZ potential."

7 Are you saying that "potential" there only
8 modifies infill drill well and not ROZ?

9 A. No, sir. I was reading down here under
10 Incentive where it --

11 Q. Okay. We'll get it there.

12 A. So I'm sorry.

13 Q. That's all right.

14 A. I didn't -- I didn't look at the
15 Description.

16 Q. That's why I said that if you had any
17 concerns about my question or wanted me to clarify,
18 you could ask me. I want to make sure we're precise
19 here.

20 A. Okay.

21 Q. So when we were talking about ROZ
22 potential, you're saying it's less than probable and
23 maybe somewhere above possible, right?

24 A. Yes, sir, I'd say in the probable range.

25 Q. Now, it says -- as you're pointing out,

1 getting to that three bullet point that the, "ROZ
2 interval approximately 350 feet thick with average
3 oil saturation of about 25 percent." Did I read
4 that right?

5 A. Yes, sir.

6 Q. And did you hear Mr. McShane yesterday
7 testify that he didn't identify any areas in any of
8 the wells with 350 feet consistent with ROZ?

9 A. No, sir, I don't.

10 Q. You don't remember that?

11 A. I don't remember that.

12 Q. Now, getting to the next portion of this
13 brochure that you highlighted in your slides, this
14 Residual Oil Zone, here it says it's 300 feet thick
15 in this next slide, right?

16 A. Yes, sir.

17 Q. And that's inconsistent with 350 feet
18 thick. Would you agree?

19 A. Right. And like I explained, if you look
20 on the type log, it shows the San Andres top, and
21 then they go down about 50 feet to show the
22 oil-water contact. So if you take that 350 --
23 300 feet plus the 50 feet that's the transition,
24 that goes back to validate the 350-foot that was on
25 the previous slide.

1 Q. My question, if you remember it, was:
2 300 feet thick of the residual oil zone in this
3 slide is different than 350 feet thick in the last
4 slide, right?

5 A. Yes, sir.

6 Q. And do you know -- see where it says,
7 "Base ROZ, minus 700 feet"?

8 A. No, sir.

9 Q. Down here at the bottom of the residual
10 oil zone where it says: Base ROZ, approximately
11 700 feet -- 700 feet. Do you see that?

12 A. No, sir. I'm not a geologist or an
13 engineer. I mean, I just read it, and I'm cognizant
14 of it, but I don't know why they establish the base
15 there and what the relationship that is to the full
16 San Andres formation.

17 Q. Well, I don't either. I was just asking
18 if you see it written on that page where it says:
19 Base of ROZ, approximately 700 feet?

20 A. Yes, sir, it's on that page and the next
21 one too.

22 Q. Okay. And you and I, as nontechnical
23 people, just attorneys, would read that to think
24 that the base of the residual oil zone that
25 ExxonMobil is telling us they have identified,

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1 they've identified that base at -- there at the base
2 of the ROZ at approximately 700 feet, right?

3 A. Yes, sir.

4 MS. SHEEHAN: I'm going to just
5 object, because I believe Mr. Beck's representation
6 is inaccurate. It says minus 700 feet.

7 HEARING OFFICER HARWOOD: Rephrase.

8 MR. BECK: Sure. Thanks for the
9 help.

10 Q. You and I would agree that the base ROZ is
11 minus 700 feet there, right? That's what this
12 document is telling us?

13 A. Yes, sir.

14 Q. Okay. Do you know if Goodnight injects
15 anywhere above minus 700 feet in the San Andres in
16 the EMSU?

17 A. No, sir.

18 Q. You don't know that?

19 A. No, sir, I don't.

20 Q. Now, I think you were talking about you
21 thought this document was important because at least
22 you think that Empire was relying on this not to do
23 any due diligence, right?

24 A. Yes, sir.

25 MS. SHEEHAN: Objection, misstates

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1 his testimony.

2 MR. BECK: I think he just answered
3 my question that he did.

4 HEARING OFFICER HARWOOD: Yeah, he
5 already answered, so . . .

6 JACK WHEELER: Sorry.

7 Q. And after relying on this document, not to
8 do any due diligence, you're aware, at least now,
9 that when ExxonMobil produced this document giving a
10 potential ROZ, that there was ongoing saltwater
11 disposal injections in the EMSU, right?

12 MS. SHEEHAN: I'm going to object
13 again on the basis that I believe Mr. Beck is
14 misstating Mr. Wheeler's previous testimony.

15 MR. BECK: I'm not saying he said
16 anything. I'm just asking him what he knows.

17 HEARING OFFICER HARWOOD: Repeat the
18 question. Let's hear the question again. Or
19 reporter --

20 Q (By Mr. Beck) My question to you was: When
21 you're looking at this brochure from ExxonMobil
22 that, according to you, Empire relied on not to do
23 any due diligence, you know that when it was
24 representing an ROZ potential, there was ongoing
25 disposal saltwater into the ROZ -- or excuse me --

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1 into the San Andres at the time in the EMSU, right?

2 MS. SHEEHAN: Same objection, because
3 I do not believe Mr. Wheeler testified that Empire
4 relied on this document in order to not do any due
5 diligence.

6 MR. BECK: Well, we can go back there
7 and tread that ground, but I don't think that's a
8 reason not -- for him not to answer my question.

9 HEARING OFFICER HARWOOD: And if
10 anything, it goes to weight, yeah.

11 So no, it's overruled, Ms. Sheehan.

12 A. Well, I have to correct your statement
13 that I disagree with what you're saying. Empire did
14 do a tremendous amount of due diligence. We worked
15 with the firm out of Denver called Elk Mesa Energy,
16 who had the engineering and the geological staff to
17 review all of the data that ExxonMobil presented.
18 So to say that we didn't do any due diligence is an
19 incorrect statement.

20 Q. Now, I might not be recalling this
21 correctly, but my understanding from your testimony
22 yesterday was that when this data room opened,
23 you-all engaged a firm -- or excuse me -- Empire
24 engaged a firm out of Denver, right, Mesa Elk or
25 something like that?

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1 A. Yes, sir, Elk Mesa.

2 Q. And you engaged them to do due diligence?

3 A. Yes, sir. We --

4 Q. It's just a yes-or-no question. I
5 appreciate that.

6 A. Yes.

7 Q. And then, in December 2024, or a date
8 earlier than close, you told them to stop doing due
9 diligence, right?

10 A. Yes, sir.

11 MS. SHEEHAN: Objection. Objection.
12 I believe Mr. Beck is misstating the year.

13 HEARING OFFICER HARWOOD: Well, the
14 witness can correct it. The witness can correct any
15 misstatement in his answer.

16 Q. Go ahead, Mr. Wheeler.

17 A. As I stated in the subpoenaed documents
18 that we furnished to Goodnight, there was a --
19 December the 19th of 2020 was the time that they
20 stopped working on the analysis and did, sort of, do
21 nothing December 20th.

22 Q. The data room opened in November of 2020,
23 right?

24 A. Yes, sir.

25 Q. And then according to you, December of

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1 2020, 19th or 20th, Empire informed Mesa Elk to stop
2 doing due diligence, right?

3 A. Yes, sir.

4 Q. You found those documents in response to
5 the -- to try to respond to Goodnight's subpoena?

6 A. Yes, sir.

7 Q. And did you find any due diligence
8 documents that Mesa Elk produced to Empire connected
9 to that due diligence?

10 A. No, sir.

11 Q. I'm sorry, I couldn't hear you.

12 A. No, sir.

13 Q. And the reason I ask about that, my
14 recollection yesterday was that then you went into
15 the reason that Empire did that was because it could
16 rely, according to you, on these representations
17 based on the Securities Act?

18 A. Yes, sir.

19 Q. So did I misunderstand that this
20 ExxonMobil brochure was the representation that was
21 the reason why Empire stopped the due diligence
22 before it received any due diligence?

23 MS. SHEEHAN: Objection. Misstates
24 the testimony and also lacks any foundation.

25 HEARING OFFICER HARWOOD: You're

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1 going to have to rephrase that. I'm not sure that
2 connection was made. My notes don't show anything
3 about it.

4 Q. So I think your last answer to my question
5 was that, yes, it was based on this brochure from
6 ExxonMobil that Empire stopped doing the due
7 diligence, right?

8 MS. SHEEHAN: Again, object because I
9 don't believe that is accurate.

10 MR. BECK: Can we just have the last
11 testimony read back. This is getting kind of long.
12 Can Ms. Tellez read back the last couple of -- of my
13 questions and his answers so we can make clear
14 what's on the record?

15 HEARING OFFICER HARWOOD: Ms. Tellez.

16 (The record was read back as requested.)

17 MR. BECK: You may stop, Ms. Tellez.
18 Thank you.

19 Q (By Mr. Beck) So did I misunderstand
20 yesterday that this brochure was the reason why
21 Empire stopped the due diligence before it received
22 anything from Mesa Elk?

23 A. Counselor, once again, you're misstating
24 what I stated yesterday. If you look at the
25 testimony and get the full testimony, you'll see

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1 that I said that we stopped any due diligence with
2 Elk Mesa. And the reason is, as I understand it,
3 was there was a New York fund company that was a
4 party to Elk Mesa's operations. And what we were
5 seeking to do was to use Elk Mesa's due diligence to
6 go to that New York investment banking firm and get
7 the \$17.8 million that we needed to go in and do the
8 acquisition.

9 Mr. Mulacek came in around that time in
10 December and agreed to fund the entire acquisition
11 cost. At that time we then went to a company called
12 PIE Operating. And if you'll let -- Mr. Rankin
13 asked me numerous questions about who Pilot -- who
14 PIE Operating was and what its affiliation was, and
15 everything. And I said that we used the engineer
16 and geologists for PIE to continue to do the due
17 diligence.

18 Q. And how long did that -- did PIE do the
19 due diligence?

20 A. Probably until the time that our bid was
21 accepted.

22 Q. And did you receive any documents from PIE
23 for this due diligence effort they did? Did Empire
24 receive any of those documents?

25 A. No, sir. I wasn't there at the time, and

1 I don't know what happened to their analysis or
2 anything.

3 Q. You haven't seen them turned over in
4 response to the subpoena request for due diligence
5 that Empire did, right?

6 A. There was never any subpoena to PIE. It
7 was to Empire. But we hadn't -- we had no records
8 of that. There's nothing that we can turn over in
9 discovery that I was ever able to locate.

10 Q. Was the PIE due diligence that you've
11 never seen or were never able to locate, was that
12 the tremendous amount of due diligence you referred
13 to earlier?

14 A. Well, Elk Mesa did a tremendous amount.
15 They had a staff, as I understand it, 10 to 12
16 people that were working on this.

17 Q. Okay. I'll leave that one alone.

18 Now, the reason I asked you about -- oh,
19 before I get there. After we took our morning break
20 this morning, during that morning break, did you
21 review any documents?

22 A. No, sir.

23 Q. So the reason I ask, and talking about
24 precision, is because after you came back from that
25 morning break, your testimony changed quite a bit.

1 So I was wondering if you reviewed any documents,
2 but you said you hadn't.

3 So before that break this morning, it
4 was -- you said it was Empire's position that
5 classification of the San Andres reservoir as an
6 aquifer was accurate, right?

7 A. Sir, I didn't have my hearing aids on, so
8 I didn't understand the question correctly. And I
9 made a misstatement on several things that I was
10 asked about.

11 Q. And we'll get to those.

12 A. Okay.

13 Q. My question was: You said that Empire's
14 position was the classification of San Andres
15 reservoir as an aquifer was correct, right?

16 A. Once again, I didn't have my hearing aids,
17 and I didn't understand the question.

18 Q. We'll get to that. I think you know,
19 because you came back in and changed your testimony,
20 that this morning before you took a break, not
21 reviewing any documents during that break, you said
22 that it was Empire's position that San Andres was
23 not erroneously -- excuse me -- was -- that the
24 classification of the San Andres reservoir as an
25 aquifer was correct. You said that, right?

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1 A. No, sir.

2 Q. The Hearing Officer reminded you this
3 morning that you're under oath. Do you remember
4 that?

5 A. Correct.

6 Q. And that means that you're swearing and
7 affirming to tell the truth, right?

8 A. Absolutely.

9 Q. And so if the truth is, is you can't hear
10 a question because your hearing aids aren't in, then
11 the truthful answer to that is, "I'm sorry, I can't
12 hear your question. I don't have my hearing aids
13 in," right?

14 MS. SHEEHAN: I'm going to object. I
15 believe Mr. Beck is badgering the witness at this
16 point. We properly came in during redirect and
17 asked Mr. Wheeler about his earlier testimony in
18 response to cross-examination questions. He
19 answered under oath. And to continue this line of
20 questioning seems, to me, to be inappropriate.

21 MR. BECK: Mr. Hearing Officer, I
22 think that oath is sacrosanct in here, and I think
23 reminding him of taking that oath and the things
24 that he didn't say, like he couldn't hear or
25 understand questions and the things that he did say

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1 and then came back in and corrected after not
2 reviewing the document is important for this
3 Commission to see.

4 It's painful. I don't envy his position,
5 but I think it's important for you to see. And I
6 won't -- I won't go through every one of the
7 changes, but I will show that he just did the same
8 thing here after lunch, after he came back in. He's
9 changed his testimony two times in questions from
10 me. And so he obviously hasn't learned his lesson.

11 As I said, I'm not going to beat this
12 horse to death, but I think it's important that he
13 acknowledge what he's done today.

14 HEARING OFFICER HARWOOD: All right.
15 I'll give you some leeway on it. I agree with
16 Ms. Shaheen, it's close to badgering at this point.

17 Q (By Mr. Beck) So after -- after that break
18 this morning, you came back in and you told us that
19 you didn't understand or you couldn't hear questions
20 because you had your hearing out, right?

21 A. Yes, sir.

22 Q. And you know, as an attorney, that if you
23 don't understand a question, you can ask the person
24 asking it to rephrase it?

25 A. Yes, sir.

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1 Q. You can say, "I don't understand the
2 question"?

3 A. Yes, sir.

4 Q. You can say, "I didn't hear you because I
5 had my hearing aids out"?

6 A. Yes, sir.

7 Q. And all of those would be truthful answers
8 to that -- to that question, right?

9 A. Yes, sir.

10 Q. And this morning when you were being asked
11 questions by me with your hearing aids out, you
12 never did that?

13 A. Never did what?

14 Q. You never said you couldn't understand a
15 question, did you?

16 A. No, sir, I didn't.

17 Q. You never said you couldn't hear me, did
18 you?

19 A. No, sir, I didn't.

20 Q. Never asked me to rephrase a question you
21 didn't understand, did you?

22 A. I'm sorry, I didn't --

23 Q. You never asked me to rephrase a question
24 because you didn't understand it, did you?

25 A. No, sir.

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1 Q. Dr. Ampomah was asking you those questions
2 that apparently you came back in and said you didn't
3 understand because you didn't have your hearing aids
4 in. You never said you couldn't understand his
5 questions, did you?

6 A. No, sir. With respect to the doctor, I
7 didn't feel that I should ask him over and over to
8 repeat the questions, so I didn't do it.

9 Q. And so you never told him you couldn't
10 understand your questions because you didn't have
11 your hearing aids in?

12 A. No, sir. Once again, I didn't do it. It
13 was a mistake on my part. I should have done it.

14 Q. So in addition to changing Empire's
15 positions on those --

16 MS. SHEEHAN: Objection. I believe
17 that misstates the testimony.

18 HEARING OFFICER HARWOOD: That's an
19 argumentative question. Rephrase it.

20 Q. You came back in and changed the answer of
21 when Empire knew that it had plugging and
22 abandonment liability, right?

23 MS. SHEEHAN: Objection. Again,
24 misstates the testimony.

25 HEARING OFFICER HARWOOD: Overruled.

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1 A. I don't recall changing my testimony.

2 Q. You changed your testimony about whether
3 the complaint against Rice and Pilot had been filed,
4 right?

5 A. Yes, sir. I -- that was asked yesterday,
6 and I just wasn't aware of the -- what the facts
7 were.

8 Q. So what --

9 A. So when I found out the facts, I testified
10 truly to the Commission.

11 Q. But you didn't say yesterday you couldn't
12 recall the facts, did you?

13 A. Yes, sir.

14 Q. You think you did?

15 A. Yes, sir.

16 Q. And you came back in and changed your
17 testimony about Empire's projection that it would
18 recover upwards of 40 percent of the calculated oil
19 in place in the ROZ?

20 MS. SHEEHAN: Objection. Again
21 misstates the testimony.

22 HEARING OFFICER HARWOOD: You'll have
23 to lay more foundation for that.

24 Q. I think we went through this. I think
25 that foundation was laid, but this morning it was

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Recross-Examination by Mr. Beck

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1 asked of you how much -- I think it was by
2 Dr. Ampomah, how much of the oil in place Empire
3 would recover, and you gave a number that was
4 upwards of 40 percent of the oil in place estimated,
5 right?

6 A. Yes, sir.

7 Q. And then you came back in afterwards,
8 after the break, and on redirect with Ms. Shaheen,
9 you said: That's not Empire's position. I'm
10 changing that. That's mine.

11 You didn't say those exact words, but
12 that's what happened, agree?

13 A. Well, the question was: Was that Empire's
14 position? And I stated no, that was my knowledge
15 and information, that I couldn't speak for Empire.
16 And if you look back on the transcript, that's what
17 I said.

18 Q. That's what you said to Mr. Shaheen --
19 excuse me -- to Ms. Shaheen on redirect, right? I
20 heard that.

21 A. I don't think she asked me that question
22 on redirect.

23 MR. BECK: That's all I have,
24 Mr. Hearing Examiner.

25 HEARING OFFICER HARWOOD: Thank you,

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1 Mr. Beck.

2 Cross-examination by Pilot?

3 MR. SUAZO: No questions,
4 Mr. Examiner.

5 HEARING OFFICER HARWOOD: Okay.
6 Thank you, Mr. Suazo.

7 All right. I hate to reopen this again
8 to -- but I opened the door to recross, so I suppose
9 in fairness, I -- based on what's been asked on
10 recross, are there additional questions that are
11 burning in the minds of the Commission?

12 Mr. Razatos, let me start with you this
13 time.

14 All right. We'll come back to
15 Mr. Razatos.

16 How about you, Dr. Ampomah?

17 COMMISSIONER AMPOMAH: I do not.

18 HEARING OFFICER HARWOOD: All right.
19 Thank you.

20 And, Mr. Lamkin, additional questions?

21 COMMISSIONER LAMKIN: I don't have
22 any questions either.

23 HEARING OFFICER HARWOOD: And,
24 Mr. Shandler, do you have any questions?

25 All right. Mr. Razatos, are you there?

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1 Okay. All right. So -- all right, then,
2 I guess --

3 CHAIRMAN RAZATOS: My apologies,
4 Mr. Hearing Officer. I'm having connectivity issues
5 on my end. I did not hear any questions. People
6 are texting me that you asked me something. My
7 apologies.

8 HEARING OFFICER HARWOOD: Did you
9 have any additional questions for Mr. Wheeler?

10 CHAIRMAN RAZATOS: No, I do not.
11 Thank you. My apologies again. I lost connection.

12 HEARING OFFICER HARWOOD: No problem.
13 All right.

14 All right, Ms. Shaheen, then, redirect?

15 MS. SHEEHAN: We have no redirect for
16 Mr. Wheeler.

17 HEARING OFFICER HARWOOD: All right.
18 That's probably pro forma since Mr. Wheeler is a
19 party and is likely to stick around, but may this
20 witness be excused?

21 MS. SHEEHAN: As far as Empire is
22 concerned, yes.

23 MR. MOANDER: As to OCD, we're still
24 going to maintain that reservation and will file
25 pleadings. So OCD would object to a complete

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1 release of this witness at this time.

2 HEARING OFFICER HARWOOD: Okay.

3 Thank you.

4 Anyone else care to chime in on that?

5 MR. RANKIN: No objections at this
6 time to his release. Yeah, we're done with this
7 witness.

8 HEARING OFFICER HARWOOD: All right.

9 And Pilot?

10 MR. SUAZO: No objections.

11 HEARING OFFICER HARWOOD: Okay.

12 Thank you, Mr. Wheeler.

13 So I believe Empire has one more witness,
14 William West; is that correct?

15 MS. HARDY: That's correct,
16 Mr. Examiner.

17 HEARING OFFICER HARWOOD: Are you
18 ready to proceed at this time, Ms. Hardy?

19 MS. HARDY: Yes, we are.

20 HEARING OFFICER HARWOOD: I'm going
21 to presume that you're William West.

22 WILLIAM WEST: Yes, sir.

23 HEARING OFFICER HARWOOD: All right.
24 Would you please raise your right hand.

25

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WILLIAM WEST

having been first duly sworn, testified as follows:

DIRECT EXAMINATION

BY MS. HARDY:

Q. Thank you. And I'm going to share my screen here. At least that's my plan.

Okay. Mr. West, can you please state your full name for the record.

A. William West.

Q. By whom are you employed and in what capacity?

A. I'm the senior vice president of operations at Empire Petroleum Corporation.

Q. Have you previously testified before the Commission?

A. No, I have not.

Q. What is your area of expertise?

A. In petroleum engineering, simply production and operations.

Q. Have you provided a summary of your education, training, and experience as Attachment 1 to your direct testimony, which is marked as Empire Exhibit I?

A. Yes, ma'am.

MS. HARDY: Based on those

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1 qualifications, I request that Mr. West be qualified
2 as an expert in petroleum engineering.

3 HEARING OFFICER HARWOOD: Any
4 objection from Goodnight?

5 MR. RANKIN: Mr. Hearing Officer, I
6 understand Mr. West to have specified that he is a
7 petroleum engineer in production and operations.
8 And as to that qualification, I do not object.

9 HEARING OFFICER HARWOOD: Okay. How
10 about OCD?

11 MR. MOANDER: No objection,
12 Mr. Hearing Officer.

13 HEARING OFFICER HARWOOD: Rice?

14 MR. BECK: No objection.

15 HEARING OFFICER HARWOOD: Pilot?

16 MR. SUAZO: No objection.

17 HEARING OFFICER HARWOOD: He'll be so
18 recognized.

19 MS. HARDY: Thank you. And just to
20 be clear, I'm not sure if that was actually limited
21 by Mr. Rankin or not. I mean, I want to be sure
22 that he is qualified as an expert in petroleum
23 engineering.

24 HEARING OFFICER HARWOOD: I thought
25 it was expanded to petroleum engineering and

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1 operations.

2 MS. HARDY: Okay. I thought
3 Mr. Rankin was trying to narrow it, so -- I just
4 wanted to be sure the record is clear.

5 MR. RANKIN: I was just going off of
6 what the witness himself testified were his
7 qualifications, which was production and operations.
8 And that's -- was my intent.

9 HEARING OFFICER HARWOOD: I didn't
10 hear the word "productions" on that one.

11 Okay. He will be recognized as an expert
12 in petroleum engineering. Okay.

13 MS. HARDY: Thank you.

14 HEARING OFFICER HARWOOD: And if
15 he -- if you decide that needs to be expanded, we'll
16 take it up later.

17 MS. HARDY: Okay. Thank you.

18 Q (By Ms. Hardy) Mr. West, have you provided
19 direct and rebuttal testimony in exhibits?

20 A. Yes, ma'am.

21 Q. Do you affirm today under oath that your
22 testimony is true and correct?

23 A. Yes, ma'am.

24 MS. HARDY: Commissioners, I request
25 that Mr. West's direct and rebuttal testimony

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1 exhibits, which are Empire Exhibits I and I-1
2 through I-30 and then his rebuttal as Exhibit N and
3 Attachments N-1 through N-22 be admitted into the
4 record.

5 HEARING OFFICER HARWOOD: Any
6 objections from Goodnight?

7 MR. RANKIN: No objection.

8 HEARING OFFICER HARWOOD: OCD?

9 MR. MOANDER: No objection,
10 Mr. Hearing Officer.

11 HEARING OFFICER HARWOOD: Rice?

12 MR. BECK: No objection.

13 HEARING OFFICER HARWOOD: And Pilot?

14 MR. SUAZO: No objection.

15 HEARING OFFICER HARWOOD: All right.
16 They'll be admitted.

17 (Exhibits I, I-1 through I-30 and Exhibits N, N-1
18 through N-22 admitted into evidence.)

19 MS. HARDY: Thank you.

20 Q. And, Mr. West, let's go through some of
21 the main points or the highlights from your
22 testimony.

23 A. Yes, ma'am.

24 Q. Okay. And I'm showing a slide that's
25 marked as Exhibit I-2. Can you please tell me what

1 this is and what it shows?

2 A. Yes, ma'am. This is in the overview of
3 the three units that we own in the area. Up at the
4 top the EMSU B, EMSU, and AGU down to the south. It
5 puts on -- blue stars, those are the four current
6 active SWDs by Goodnight. And then the five other
7 stars are the ones that they filed permits for
8 disposal into the San Andres.

9 Q. And then is the blue outline the outline
10 of the EMSU?

11 A. Correct, the blue outline is the outline
12 of the EMSU. And what we're -- you know, these
13 permits, you know, are damaging to the reservoir at
14 the San Andres or the potential recovery of the ROZ.
15 And they're also damaging up into the Grayburg, the
16 communication of the fluid and that there should not
17 be any disposal allowed inside the unit.

18 Q. Anything else you wanted to point out on
19 this slide?

20 A. No, ma'am.

21 Q. Your next slide, let me make this smaller.
22 And this has been marked as Exhibit N-1
23 (sic). Can you please tell me what this is.

24 A. This is a slide from the sales brochure
25 indicating from XTO and ExxonMobil the existence --

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1 you know, kind of outline of what the -- what
2 they're representing that they're selling and the
3 potential in the main oil column and then what --
4 you know, the potential representing of the residual
5 oil zone.

6 Q. And is this -- I think you state here --
7 or what's in your yellow box there? Are those the
8 important takeaways from the slide --

9 A. Yes, that they're -- in this, you know,
10 brochure here that they're representing that ROZ on
11 this page being 300 feet thick and
12 965 million barrels of oil.

13 Q. And according to this slide here, is this
14 a large existing oil and gas EOR reservoir?

15 A. Yes, ma'am, that is a very large EOR
16 potential.

17 Q. The next slide, which is marked N-12, can
18 you tell me what this is?

19 A. This is another slide from their sales
20 brochure. It's been colored in to indicate the
21 different packages of potential -- to kind of set up
22 the picture of the reservoir.

23 So up on top, you know, you have the
24 Grayburg that comes across. And then you have --
25 below that you have the San Andres. And then the

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1 Grayburg is kind of in white. It's your main pay.
2 And then you have -- like you typically do in these
3 areas, you have a transition, the various -- you
4 know, where the structures have been folded in this
5 case to form that trap in the Grayburg.

6 And then down below the transition area,
7 you have the ROZ. And the ROZ by nature is a
8 residual oil zone, so it sticks with the structure.
9 Well, it sticks with the ROZ, right? It doesn't
10 really "re-equivalate" with, you know, gravity, a
11 separated oil and water like you have in the
12 transition zones.

13 One keynote of this is that the top of
14 this structure that -- you know, in the EMSU 660 and
15 the 658, that they both -- you know, they both
16 tested oil in those zones, which you anticipate kind
17 of where you have that transition zone there. So
18 that kind of confirms the ROZ exists and that if you
19 were at the top peak, that you still would have some
20 transition zone barrels of oil that are movable.

21 Q. And did Mr. Knight, Goodnight's witness,
22 confirm that both of those wells tested oil in
23 the -- up to a portion of the San Andres?

24 A. Yes, ma'am, he did.

25 Q. And is that in his testimony?

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1 A. Yes, ma'am.

2 Q. Is there anything else on this slide that
3 you wanted to point out?

4 A. No, ma'am.

5 Q. Let's look at your next slide.

6 And this has been marked as Exhibit I-24.
7 What is this and what does it show?

8 A. This is showing the EMSU down below to the
9 very south. And then it shows the EMSU -- EMSU B in
10 green, and then the purple color up to the north is
11 the North Monument field. And it shows the two
12 cores that's been talked about many times in this
13 down in our blue, the one being to the west being
14 the 679 and the one to the east being the R.R. Bell.
15 And then it shows that -- two other cores that had
16 been taken in the San Andres up in the North
17 Monument field.

18 And there's a cross section that goes
19 across the bottom of it. And as you see in this,
20 that -- they, you know, record a substantial
21 interval. You know, the only one that we had public
22 is the North Monument 22, that they, you know, core
23 it down to the very bottom of the core section,
24 which was about 700 feet subsea, they had oil. We
25 don't know, you know, what was below that. We do

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1 not have the core available to the -- on the 19.

2 And then you get to the R.R. Bell to the
3 bottom of the core, it had oil. And then you get
4 all the way over to the 679 to the bottom of the
5 core on it, which is actually 762 subsea -- which,
6 again, subsea is not really super relevant to ROZ,
7 right, because it sticks to the rock. So that
8 you -- you got to the bottom of the core and there's
9 oil. So you don't really know where the bottom of
10 the potential oil is.

11 Q. And is it your opinion that all of these
12 show oil within the San Andres?

13 A. Yes, ma'am.

14 Q. Okay. And let me pull up this next slide.
15 And this is Exhibit N-15.

16 Can you tell me what this slide is,
17 please.

18 A. Yes, ma'am. So this is -- you know, just
19 kind of backing out a little more regionally, this
20 comes down to the AGU and back to the east and just
21 showing that the San Andres -- in the area we just
22 had the North Monument field up above, which, you
23 know, has produced you oil out of the San Andres.
24 And you've got this over to the east, the San Andres
25 producing oil, establishing that this is, you know,

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1 a reservoir that does contain oil.

2 And in this case, you know -- you know,
3 this goes down into the 800s, 822, 8, you know, 73,
4 875. Deeper again, you know, the oil was in the
5 ROZ. In this case, they produced primary production
6 here about 3 million barrels. So they just didn't
7 have just a ROZ left.

8 Q. And is the chart at the bottom left
9 identifying information regarding the wells on your
10 map?

11 A. Yes, ma'am, that's identifying what those
12 three -- three of those wells and what their tests
13 were in their production. So they were good
14 substantial producers from the San Andres.

15 Q. Anything else on that slide?

16 A. No, ma'am.

17 Q. This is your Exhibit I-29. And can you
18 tell me what this is, please.

19 A. So this is one of the economic models that
20 was ran. It was the 250-pattern, 40-acre pattern
21 wells. So it covers about 10,000 acres. The EMSU
22 is about 14,000 acres.

23 And in this model, you know, it says you
24 recover 141 barrels of oil out of about a total in
25 place of about 750 in this model. And that's about

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1 an 18 percent recovery factor. And, you know, total
2 project here is about \$1.2 billion spent. Cash flow
3 is about \$5.5 billion. And just in royalties to the
4 State, since they own 58 percent, is worth about
5 \$1.1 billion and another half a billion dollars in
6 tax and then to the federal government, since they
7 own 19 percent, it's about .37 billion in royalties.

8 Q. And just to make sure it's clear, so this
9 is your -- this is one of your slides regarding
10 economic evaluation of a CO2 enhanced recovery
11 project; is that right?

12 A. Yes, ma'am.

13 Q. Okay. And what is the name at the top
14 where you say, "No WAG," and then your oil
15 escalation price?

16 A. Yeah, so this is kind of, you know, a
17 little bit of a worst case scenario, where this is a
18 continuous CO2 injection, and it does not take into
19 benefit as if you did a WAG procedure, which would
20 reduce the cost and the need for the amount of CO2
21 by about 20 percent, if I remember right.

22 Q. And for us nontechnical people, what is
23 WAG?

24 A. Water alternating gas. And so what that
25 means, you would put the gas in of the CO2, and then

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1 you would put behind it a slug of water. And then
2 that water kind of fills in the bigger spots and
3 pushes the gas along. And then you would do a slug
4 of gas and a slug of water.

5 Q. And you've estimated that the price of oil
6 would escalate at 1 percent?

7 A. Yeah, you know, relatively conservatively
8 at a 1 percent escalation.

9 Q. And so that's what I was going to ask. In
10 your -- in your opinion, is this a conservative
11 estimate?

12 A. Yes, ma'am. If -- you know, this project
13 spans about 43 years, and so if we went back 43
14 years and took that price of oil at the beginning of
15 the year and the beginning of the year here, which
16 is how you do SEC pricing, that's about -- it's just
17 under 2 percent escalation. So 1 percent is pretty
18 reasonable.

19 Q. This is your slide, Exhibit I-3. Can you
20 tell me what this shows?

21 A. Okay. Now we're kind of migrating on from
22 ROZ into communication between the San Andres and
23 the Grayburg. This is kind of a snapshot in time
24 from some historical paperwork in 1986 to show where
25 the bigger blue circles indicate where there were

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1 higher than normal water produced out of the
2 Grayburg producers. This is before the waterflood
3 started. This is before there was any withdrawals
4 there. But you're seeing these unexplained higher
5 productions of water.

6 And it's not consistent with any
7 structure, or anything. I mean, some of them are
8 right up on top of the structure. Yet some of them
9 are down-dip. But there's no set pattern in where
10 they came to believe that they had these plumes of,
11 you know, fractures or whatever the mechanism would
12 be that water was migrating up from the San Andres
13 into the Grayburg.

14 And so as you look on this map also,
15 you'll see the blue stars down in the south part,
16 that's where the existing Goodnight wells are. So,
17 you know, you already had historical leaks in the
18 reservoir from the San Andres up to the Grayburg.

19 And then you have all the red stars where
20 they're asking for the new permits, again in an area
21 where there's a historical extra water production
22 that's well documented in different papers that
23 goes -- you know, that why our concern is that
24 you're flooding from the San Andres -- you're
25 flooding into the Grayburg and damaging the

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1 Grayburg.

2 And any excessive water in a -- you know,
3 is extra cost. It also wears and tears on any of
4 the equipment that you have and just really drives
5 up the cost to operate a field.

6 Q. And would it drive up the cost of a CO2
7 project?

8 A. Yes, ma'am. It would definitely drive up
9 the cost of a CO2 project by increasing the pressure
10 of the reservoir, which increases the amount of CO2
11 you need because it is a compressible gas. And then
12 it also increases the amount of water that you have
13 to get back out of the reservoir to do that.

14 Q. So to kind of -- for me as a nontechnical
15 person, I want to make sure that this is clear. So
16 is it the case that basically these Grayburg wells
17 produced more than expected water and that your --
18 in your opinion, the explanation is that it was
19 migrated through the San Andres?

20 A. Yes, ma'am.

21 Q. Thank you. I'm doing my best as a
22 nontechnical person.

23 A. Yes. And at any time please stop me. I
24 mean, this -- there's a lot of technical stuff. I'm
25 trying to wrap up a lot of stuff that we talked

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1 about in the case, and I'm trying to bring it
2 together. So we cover a lot.

3 Q. Okay. And this slide is marked as
4 Exhibit I-6. Can you explain what this is?

5 A. Yes. This is a graph out of the Technical
6 Committee Report from April 1983. It represents a
7 1990- -- 1981 water -- you know, volumes that had
8 been produced from wells.

9 And as you see from it, it highlights
10 pretty good that you have these plumes or these
11 little spots or cracks in the reservoir, whatever,
12 where all this water was coming up from the
13 San Andres into the Grayburg. And so they did a
14 good job of documenting it in here, in that it --
15 there was communication between the San Andres and
16 the Grayburg. This is historic information that's
17 been out there for a long time.

18 And this is why, you know, we stand behind
19 it, that you can't have any disposal in the
20 San Andres in the unit because it's going to affect
21 the Grayburg. It doesn't affect the ROZ, but fluids
22 gone -- fluid migrated up before there was any
23 injection down there and pressurized and up -- it's
24 definitely migrating up, you know, actively to the
25 history. If anything, the pressure of the Grayburg

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1 has been pulled down.

2 So, you know, that's why we stand -- you
3 know, you can't have water injection into the
4 San Andres and a buffer around the unit. Otherwise,
5 you're going to cause waste in flooding out of the
6 resource in the Grayburg.

7 Q. And does the water that's in the
8 San Andres have different characteristics from the
9 Grayburg water?

10 A. Yes, ma'am, very different. And we'll
11 have that on a slide down here. But roughly
12 speaking, just from a -- you know, a -- chlorides,
13 the chlorides in the Grayburg right now is about
14 10,000, 10-, 12-, and you're around 100,000 for
15 water that's coming out of the Delaware Basin.

16 There's many other chemical things, and
17 we'll cover that. Definitely not compatible fluid.

18 Q. Is that one way to evaluate whether the
19 water is migrating?

20 A. Say that again.

21 Q. Is that one way to evaluate whether the
22 water is migrating?

23 A. Yes. There's a lot of, you know,
24 depletion that goes -- not depletion, but dilution
25 that goes on whenever you're mixing up fluids. But

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1 there will be scale, and there will be corrosion and
2 different chemical reactions that will happen.

3 And, you know, if the fluids are similar,
4 the reaction is not too bad. But the farther you
5 get apart, then, hey, I got new chemicals that I can
6 mix with. And that's what it does. It causes
7 damage that, in a lot of cases, you can't reverse.

8 Q. This is your Exhibit I-7. Can you tell me
9 what this slide shows?

10 A. Yes, ma'am. Again, we've, you know, got
11 a -- this is starting to go into the chemistry
12 piece, and so this is, you know, post starting the
13 waterflood. This is a paper in 1996, you know,
14 where they started seeing scaling tendencies and
15 things of the mixing of the fluid of the San Andres
16 and the Grayburg.

17 Now, at this point in time, they were
18 pulling -- you know, had water supply wells going
19 and things. But what the sulfate rich waters from
20 the San Andres mixing with the Grayburg, they
21 started finding problems with barium scale and
22 bearing scale deposits.

23 And I'm sure that the doctor knows that
24 barium scale is like a really nasty thing. It
25 just -- it's got to be mechanically removed. You

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1 can't just haul it away or anything. It's really a
2 pain. It's almost like a forever scale. It's just
3 in piping that you can actually remove from the
4 wellbore.

5 So, you know, this is indicating that, you
6 know, chemistry matters, right? And they chose,
7 because of operation issues and whatnot, to use that
8 water, and that was the decision that Chevron used.
9 And that happens and -- you know, in time. But, you
10 know -- let's see.

11 You know, mixing up different waters does
12 cause a problem and do, as mentioned, form a scale.

13 Q. Does it show that the San Andres water was
14 migrating?

15 A. Not necessarily in this case of it,
16 because you were introducing it from the water
17 supply wells and into it -- now, there might have
18 been some wells in some lower formations that they
19 had that's barium scale. But, you know, at this
20 time you're using San Andres water to put up in the
21 Grayburg, and they were experiencing these problems,
22 the barium scale forming.

23 Q. Okay. And this has been marked as
24 Exhibit M-3, Empire's Exhibit M-3. Can you -- and I
25 think this is one of Dr. Buchwalter's exhibits?

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1 A. Yes, ma'am. This was -- this came from
2 one of his exhibits.

3 Q. And can you tell us what this is showing
4 with respect to your analysis?

5 A. So this -- you know, they were doing some
6 analysis here, and they were showing that they
7 believe, because of the -- you know, with the bubble
8 plots that -- to the right, that they still had like
9 extra water coming from the San Andres in different
10 spots. And that was from a limited fracturing that
11 works in these little plume areas, which through the
12 history of the field, these similar little plumes
13 pop up on a regular basis. And that -- you know,
14 there is no other explainable way that that water is
15 getting into the Grayburg than through these plumes
16 or fractures in the San Andres.

17 And as -- you know, Dr. Lindsay has
18 testified, and things, of -- you know, the vertical
19 fractures that they've seen in the cores, you know,
20 confirms this is the problem. And they did fracture
21 studies and that to -- you don't really have a good
22 solid barrier across the field between the
23 San Andres and the Grayburg.

24 Q. Let's move on and discuss pressure,
25 pressure data.

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1 A. Okay.

2 Q. This is marked as Exhibit N-8. Can you
3 tell us what this shows?

4 A. Yes, ma'am. I will make one kind of quick
5 correction to a correction here. So, you know, we
6 had an old document in 1929 that did, you know, pick
7 this pressure of 1450 at a 250 subsea depth.
8 Originally just naturally interpreted that as a
9 negative 250 and then went back and read the
10 document for what it was, and it said 250, without a
11 negative.

12 Now, looking at the evidence and where the
13 pressures make up, I do believe that's more of a
14 negative 250 than a 250. So keep in mind with those
15 original pressures down on the bottom, that would be
16 about 175, 180-psi less. Okay? We didn't update
17 this and bring it. I just didn't want to get
18 confused in a bunch of extra updates.

19 But what this is showing you, you know,
20 the raw data of, you know, establishing the original
21 reservoir pressure, which would be about a .386, you
22 know, psi per foot in gradient, and then an RFT that
23 was taken in 1986 in the 211 that measured pressures
24 at different points in the Grayburg all the way down
25 into the San Andres.

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1 And while there is differences in the
2 zones -- which you would expect, right? It's a --
3 you know, there is a strata in different zones
4 that's been identified, there shows to be depletion
5 throughout the column from what would be established
6 as the original reservoir pressure that -- you know,
7 establishing that -- the fluid from the San Andres
8 had to be kind of going somewhere pre-waterflood or
9 pre-withdrawals from the San Andres -- San Andres.

10 Q. And based on your analysis, does the --
11 this information show that there was communication
12 between the reservoirs?

13 A. Yes, ma'am.

14 Q. Anything else on this slide?

15 A. No. The next slide kind of summarizes
16 this a little bit in a graphical form.

17 Q. This is Exhibit I-4. Can you tell us what
18 this shows?

19 A. Yes. Again, I'll make the correction and
20 just slide in the line over to the right over about
21 175 feet psi.

22 But you can see where there's depletion
23 across all the different zones down into and
24 including the San Andres -- San Andres. The, you
25 know -- you know, this is -- at this point in time,

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1 the Grayburg had produced about 121 million barrels
2 of oil. And at this time, no production had come
3 from the San Andres.

4 So it's indicating that there's some --
5 you know, because of the production from the
6 Grayburg that you withdraw from down the San Andres
7 in this -- in this area.

8 Q. Let's look at your Exhibit N-7. What does
9 this show?

10 A. Okay. So this was a bottomhole pressure
11 survey that we ran on the EMSU 378, which -- to put
12 a reference in here, down at the bottom, if you see
13 like the blue diamonds, those indicate the current
14 SWD wells of Goodnight. And then the little red
15 arrow in the middle, which is an injection well,
16 which is this well here, is the well that this
17 pressure survey was ran into.

18 And so to run that pressure survey -- move
19 over. Right there -- you stop at different gradient
20 points as you're going down in the well and
21 measurements. And so at the bottom of the well,
22 which would be in the Grayburg, they show that that
23 reservoir pressure of, you know, 950 is less than
24 the representative, you know, pressure in the
25 San Andres right now.

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1 So you're -- you know, you're likely
2 moving fluid from the San Andres, because it's a
3 higher pressure reservoir because of the injection
4 that's going on, into the Grayburg right now.

5 Q. Anything else on that one?

6 A. No, ma'am.

7 Q. Okay. Let's look at this -- let's talk
8 about the San Andres SWDs.

9 A. Okay.

10 Q. So is this -- can you tell me what this
11 slide is, please?

12 A. The exhibit over to the left, that is
13 actually one that came from Goodnight. And it
14 shows -- it's a good representation of the current
15 SWDs in the area and then the ones that they had
16 proposed, with one exception to -- one of the far
17 blue dots to the east, it's State Track E -- the one
18 right down below it, that's the number 1 well.
19 There's a second well disposal just to the right of
20 it, to the east. It's a minor note. But anyway
21 there's one more that's not shown on here, on their
22 slide. So -- you know, so this is the -- put in
23 context of the wells in the field where the SWDs
24 are.

25 And then the vertical bar going up and

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1 down, kind of a timeframe of -- depending on
2 historical context, of when disposal started in the
3 field and how it went. Because there's been a lot
4 of talk and things. And so I thought it would be
5 good to set the record straight.

6 The first one was in that 1960 timeframe
7 with the Rice EME, which was just right off the
8 boundary. And then the unit was formed, you know,
9 in 1983, where -- the Technical Committee Report was
10 in 1983 and started -- the waterflood actually
11 started in 1987.

12 And whenever they started the
13 waterflood -- I don't have a note there on the water
14 supply, but the water supply well started to pull
15 water from the San Andres to use for waterflood
16 support in the Grayburg. Okay? And then, you know,
17 kind of bumps along as -- you know, it went from
18 Gulf Oil to Chevron and to X -- XTO acquired the
19 property in 2004. And then, you know, Goodnight,
20 you know, in 2012, they started their first
21 injection in the area, SWD, which is off of the EMSU
22 unit there. It's the Penroc, State E-12, which I
23 believe is just to the south side -- trouble
24 locating that right now, but that's when they
25 started their first.

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1 And then one of the -- the main one that
2 starts in the unit disposal started in 2020, which
3 keep in mind that was kind of in COVID times, or
4 whatnot, but things started happening.

5 And then Empire acquired these properties
6 in 2021. And then now we're in 2025 here at this
7 hearing on it, so just kind of set the picture of,
8 you know, all of a sudden we went from one to -- we
9 got quite a few SWD wells right on top of the EMSU.

10 Q. And the Penroc well here mentioned from
11 2012 is -- it's outside of the unit, right?

12 A. Yes.

13 Q. Okay.

14 A. I'm having trouble . . .

15 Yeah, it looks like pipe number 2, but I
16 can't . . .

17 Q. Okay.

18 A. Yeah.

19 Q. And then the injection inside the EMSU
20 started around 2020?

21 A. Yeah, it started in 2020.

22 Q. The next slide, can you tell me what this
23 is?

24 A. There's been a lot of talk about it. So
25 this is the one and only SWD operated by Empire or

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1 their predecessors, and this started in 1995. It
2 was a, you know, recompletion to an SWD well, but
3 historical records with the OCD, this is the
4 production volumes.

5 As you can see, for the most part,
6 historically, it's 2- to 400 barrels a day from
7 local wells that might not have all been Grayburg or
8 San Andres, but very compatible fluid or -- you
9 know, from a similar area, not from a different
10 basin. This is, you know, from Central Basin
11 Platform and not from the Delaware Basin.

12 But you can see where, you know, there was
13 a descent period of time that there was very minimal
14 or little. And then there was a, you know, little
15 short period. And then currently right now, we do
16 not utilize it.

17 Q. And is this the only SWD operated by --
18 that was operated by Empire within the unit? Or its
19 predecessors?

20 A. Yes. It is operated by us, but we do not
21 put any more volumes into it right now.

22 Q. And you say that this injection is
23 minimal?

24 A. Yes, this is far less than what the
25 commercial volumes that are going on in the area

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1 right now. So it's -- I think you would say it's
2 pretty insignificant to the whole matter.

3 Q. And this is taken directly from the OCD
4 records?

5 A. Yes, ma'am.

6 Q. Okay. And then let's look at your next
7 slide.

8 What does this slide show?

9 A. This, again, is from OCD records. So this
10 is from the wells that was on the plot before but
11 just taken about approximately a one-mile buffer
12 around the EMSU. And you see historical
13 injection -- go back down -- you know, of, you know,
14 others is outside the EMSU.

15 In blue is everyone else that's injected
16 there, whether it's Rice, Permian, OWL, and even us.
17 And then Goodnight is highlighted in the orange.

18 As you see across here, the SWD injection
19 in the area was relatively insignificant until you
20 hit 2020. And then you went from, you know,
21 something that may have been a couple thousand
22 barrels to now in '24 that you're peaking up over
23 200,000 barrels of injection in the area. It's -- I
24 mean, that's orders of magnitude difference and
25 why -- why we're sitting here yelling and screaming

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1 when this came to our attention. It was kind of
2 like, you know, holy smokes, this is going to flood
3 out the resources. It's not only the ROZ resource,
4 it's increasing that pressure quite rapidly. And
5 then it's also flooding up into the Grayburg,
6 contaminating that fluid. You know, realistically,
7 we don't know what-all chemistry problems that it's
8 causing, but it's -- this is a massive amount of
9 fluid.

10 Q. And is this graph showing the -- I know
11 it's a little bit difficult to read the title
12 because for some reason, this says saved to PC. I
13 don't know, like pdf. But is this showing the total
14 disposal volumes within the EMSU and then within one
15 mile?

16 A. Yes, ma'am.

17 Q. Okay. And how many SWDs does Goodnight
18 operate within the unit?

19 A. Within the unit, they operate four. They
20 have a few that are right on the fringe. I'd have
21 to refer back to the other map to give you an exact
22 count. I don't have it off the top of my head.

23 Q. Okay. And then are there four wells
24 within one mile of the unit?

25 A. It sounds about right.

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1 Q. Okay. So within the unit, the Sosa,
2 Dawson, Banks, and Ryno?

3 A. Yes, ma'am.

4 Q. And outside of the unit within one mile is
5 it the Yaz, Ted, Pedro, and Nolan Ryan?

6 A. Yes, ma'am.

7 Q. Okay. And do you know when the four wells
8 outside the unit started injecting?

9 A. I don't have the timeframe exactly
10 memorized, but you can see some of them started in
11 '20. And then there's another bump that kind of
12 started in -- looks like '23 to '24 when the wells
13 came on line.

14 Q. And it looks like Goodnight started
15 injecting here, according to the orange, in 2019?

16 A. Yeah, it looks like it's right there on
17 that line. I mean, the, you know -- yeah. I was
18 just trying to read the legend down at the bottom,
19 and it's January '19 to January '20. Yeah, so it's
20 right there, end of '19, beginning of '20.

21 Q. And does this -- what's the takeaway on
22 this slide?

23 A. Takeaway on this slide that we're talking
24 about historical volumes now that wasn't in the
25 previous history or the field. I mean, this is very

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1 substantially different from whenever the unit was
2 formed and what has gone on historically from the
3 '60s, and whatnot. This is like, whoa, this is big
4 happening.

5 Q. And for that reason, would have more of an
6 impact?

7 A. Yes, ma'am.

8 Q. Okay. Let's look at this slide. Can you
9 tell me what this shows, please. It's your slide
10 number 18.

11 A. Can you bump -- just shrink it.

12 Q. Move up?

13 A. Okay. That's fine. Okay.

14 So what this is, is just if we did an --
15 the most simple reservoir model of water in and out
16 of the San Andres, okay, starting in 1960, so if you
17 took those volumes all the way up to about 1987, and
18 since there's no historical records but you have the
19 cum volume, you know, that's why it's a nice easy
20 slope to that point in time in blue.

21 And then in the green area, that is where
22 the waterflood operations started, and things, and
23 you had the six water supply wells start to pull
24 down the water from the San Andres. And that's
25 where the blue line comes down in this green area.

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1 You can see it gets down to, you know,
2 250, 260 million barrels, you know, drawdown for the
3 balance of what's going on injection. Keep in mind
4 that there was SWD going on during the time, right?
5 The right soils and things from the 1960s were still
6 going on. So it didn't draw all the way down to how
7 much water was pulled out of the reservoir for the
8 water supply wells.

9 And then around, you know, 2004 or so, the
10 water withdrawal kind of got to be a little bit more
11 minimized with the purchase of XTO, it seemed like.
12 And where there is -- you know, current day there is
13 one active water supply well, which we still draw
14 water from. But you can see we kind of went flat on
15 the balance, but your -- you drew down the pressure
16 of the San Andres, which -- you know, that's one of
17 the big things of turning on a ROZ or doing that,
18 you'd have to dewater the reservoir.

19 Well, historically, to make up the water
20 that was produced prior from the Grayburg, you
21 pulled down San Andres water. So you kind of set
22 the San Andres up at a good place where you drew
23 down the pressure. Admissible of CO2 is about 1300,
24 so you're down at a good pressure. So that would be
25 less water that I'd have to dispose, dry out and

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1 those things, and it would have a quicker impact.

2 Move on to more present-day or when
3 commercial disposal started in the area, it's kind
4 of depicted by the yellow. So you see where -- how
5 rapidly all of that withdrawal of the reservoir, you
6 know, happened, and all of a sudden, man, we're
7 spiking up, up into present time, which is the line
8 between the yellow and the red. So that's all the
9 SWD going in.

10 So we withdrew all the water from the --
11 from the water supply wells. And then the SWD is
12 going in. You can see where we're peaking up almost
13 to the original balance of back in 1960.

14 And then the dashed line would be the
15 prediction. If you took the disposal rates of the
16 wells now and say you approved the disposal of the
17 new ones, you would see how rapidly the -- filling
18 up this whole large area of reservoir of the -- you
19 know, the San Andres underneath EMSU. That's a huge
20 impact. I mean, we're talking really, really large
21 volumes of water.

22 Q. And so here, when you're looking at the
23 yellow part of the graph where the injection
24 commenced, is that really showing that the amount of
25 water that's been put in over basically four years

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1 has brought the reservoir -- increased the pressure,
2 the amount of water in the reservoir compared to
3 what had taken years and years to decline,
4 basically?

5 A. Yes, ma'am, it's taken water out. Now,
6 this is just mass in, mass out of water, I mean,
7 will be predictive of pressure, right? The less
8 water that's in the reservoir, the lower the
9 pressure will be. You know, as the water -- as it's
10 filled back up, the pressure will go up with that
11 injection.

12 But, yes, you can see the area in the
13 yellow of how much you've -- you know, of the
14 overall cumulative water how quick, rapidly that's
15 increased versus the time period, let's say, from
16 1960 all the way to 1970 -- 1987.

17 Q. And does increasing the amount of water
18 injected into the reservoir -- well, how does that
19 impact the potential CO2 project?

20 A. So the ROZ, it greatly impacts it.
21 Increases costs straight across the board.

22 Now we've got more water in there I got to
23 get rid of. You know, so let's say, for argument's
24 sake, admissible pressers -- admissible pressure for
25 CO2 is going to be about 1300 in this reservoir.

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1 And let's say you're about 1500, you know, pounds.
2 So that's not bad, right? So you're -- you're not
3 having to overcompress CO2. Let's say if you went
4 to 2,000, it would take more compression to do that.
5 And then also since it's a compressible fluid, it
6 takes more CO2 we'd have to buy.

7 So as the pressure increases, we have to
8 increase the pressure of our equipment. We have to
9 increase compression. We have to increase the
10 amount of CO2 we've got to buy. And then also,
11 we've got to get all that water that's being piled
12 in there right now out of the way to let the CO2 do
13 its job. And so then there's, you know, a cost to
14 get the water back out of the way to be able to do a
15 CO2 ROZ project.

16 Q. Anything else on this slide?

17 A. No. No, ma'am.

18 Q. Okay. Your next side, which is Exhibit
19 I-30, can you tell us what this shows?

20 A. So this is, you know, showing that effect
21 of the pressure. So, you know -- and this is a
22 little bit of a sensitivity that was ran is -- our
23 economic model that we ran above, we only ran at
24 2500-psi because injection going on things and
25 trying to be a little bit conservative.

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1 But realistically, we'd be operating in --
2 a 1500-psi would be the right place. And so you see
3 that the difference between the 1500 and the 2500
4 would be another 20 percent of CO2 volume that would
5 be required to do that flood.

6 So it greatly increases your cost,
7 because, you know, CO2 is a big cost to the project.
8 It's a big project. It's a big cost of the project
9 to compress it. You know, 1500 pounds, you know,
10 from a compression standpoint, you know, you can
11 kind of get there, three stages fairly easy. And
12 it's fairly standard equipment. When you break over
13 that point, you start extra stages and higher
14 pressure equipment as required.

15 So, you know, it not only impacts the cost
16 of the CO2, I mean, the additional volume of the
17 CO2, the additional compression of the CO2, the
18 heavier duty equipment to handle the higher
19 pressures, it just -- everything bad. I mean, it
20 just kills the project, is why it's crucial that you
21 can't allow the -- all this wastewater to continue
22 to go into the San Andres.

23 HEARING OFFICER HARWOOD: Ms. Hardy,
24 would this be an okay time for us to take an
25 afternoon break?

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1 MS. HARDY: Sure.

2 HEARING OFFICER HARWOOD: All right.

3 MS. HARDY: I think that would be
4 fine.

5 HEARING OFFICER HARWOOD: Let's break
6 for 15 minutes. Come back at 3:15.

7 (Recess was taken from 3:00 p.m. until 3:16 p.m.)

8 HEARING OFFICER HARWOOD: You ready
9 to proceed, Ms. Hardy?

10 MS. HARDY: Yes.

11 HEARING OFFICER HARWOOD: Are we good
12 to go in the back, Ms. Apodaca?

13 MS. APODACA: Yes, we are.

14 HEARING OFFICER HARWOOD: I get a
15 thumbs up from Ms. Tellez. So we're back on the
16 record.

17 And go ahead with your examination of
18 Mr. West.

19 MS. HARDY: Thank you, Mr. Examiner.

20 Q (By Ms. Hardy) So let's move on, Mr. West,
21 and talk about chemistry, which we touched on a
22 little bit. This slide is marked as Exhibit N-9.
23 Can you tell me what this slides shows?

24 A. Okay. So orient you down to the
25 right-hand corner of this. Again, the blue diamonds

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1 represent the four active SWDs by Goodnight that are
2 going on. And then the four red circles indicate
3 the four wells indicated on this chart, the EMSU
4 377, the 407, the 440, and the 441.

5 And so this is from water samples taken
6 over time from, you know -- you know, early February
7 '24 into late '24. You can see over time that we
8 are seeing in those wells increases in chlorides,
9 indicating that you have a higher chloride system of
10 fluid that is coming and migrating into the
11 Grayburg.

12 One, you know, good source of this would
13 be the -- you know, the -- what would be the
14 chlorides that's coming from the Delaware Basin
15 water, which is just right at 100,000 parts of
16 chlorides.

17 So if that's -- you know, if you're
18 getting leakage from the San Andres into the
19 Grayburg there, you would start to see increases in
20 these chlorides. And you can see 6 percent all the
21 way up to a 25 percent increase over this timeframe,
22 we're starting to see it.

23 Now we're monitoring it as it goes along,
24 too, but, you know, since you're talking about the
25 whole system of the EMSU and EMSU B, which is all

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1 connected in one fluid system, it takes a
2 significant amount of influx of, you know, high
3 chlorides to start to raise those chlorides. These
4 are big, large systems.

5 Q. And just so it's clear, are these four
6 wells listed here perforated only in the Grayburg?

7 A. Yes, ma'am. These are only in the
8 Grayburg.

9 Q. Okay. So is the takeaway from the slide
10 that the chemistry changes show the water is
11 migrating from the San Andres into the Grayburg?

12 A. Yes, ma'am, where it shows that we are
13 getting a higher source of salinity, chlorides from
14 somewhere. And the San Andres, now with the
15 injection of these SWD wells, is higher salinity.
16 So it's raising the salinity in these oils in the
17 Grayburg.

18 Q. Okay. Let's look at your next slide.
19 This one is pretty hard to read. But can you tell
20 us what this shows?

21 A. Okay. So what this shows here is, it's
22 kind of just comparison of the two fluids with it.
23 And so up at the top, we have what's been, you know,
24 represented by Goodnight of their water analysis of
25 the water that's going into their SWD wells. And

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1 then, you know, representative sample, you know,
2 different wells in the EMSU down below.

3 In between they kind of have a mixing,
4 because the chemistry in the mixing of these two
5 fluids is important.

6 If you can scroll where I can see the
7 headers at the top. There you go. Perfect.

8 And so if we start working our way from
9 left to right, let's say, in the Goodnight's area,
10 you'll see that their -- you know, go down the
11 columns, you go to the pH, you'll see that, you
12 know, their pH runs in the 6s. You know, ours is
13 kind of more around the neutral 7 point, but there's
14 a little variation of pHs, which affect chemistry.

15 We move over to the next column, we see
16 the TDS, or total dissolve solids. You'll see that
17 they're much higher. They're 140, 150, and we end
18 up being in the, you know, 20,000s, you know, as you
19 go down through.

20 Calcium, their fluid that they're
21 injecting there has a much higher calcium content
22 than what we do. You know, that's what a 10-fold,
23 something from -- we're in the 500s. Most of the
24 time they're in the 4- to 500 -- 5,000s. I see some
25 3s in there. So there's -- you know, there's a

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1 fairly big difference on the cat irons.

2 Magnesium higher, which is not normally a
3 really reactive thing. Now, it does -- it helps
4 with chemistry reaction. Barium, while it's fairly
5 small, theirs is, you know, a reading in the 1s, and
6 ours in the -- we have a couple of 1s down there.
7 So . . .

8 So barium is a concerning one. And then
9 strontium is a -- could be a concern. And then
10 barium looks, for the most part, not to be too much
11 sulfur. So these -- you know, strontium is out
12 there. It's kind of known as a forever chemical,
13 and it also creates a very nasty scale. Strontium
14 sulfate, just like the barium sulfate, the only way
15 that you can get rid of it is by mechanic means.

16 So if you have mixing of fluid in the
17 formation that has -- you're introducing a high
18 strontium level with -- you know, what it's going to
19 react with, over on the other side is going to you
20 your sulfates. So we'd have to run over to the
21 sulfates, and you see we got 4-hundredths of
22 thousands in theirs, and we got a mixture of 600s
23 to, you know, couple 2,000 outliers, it looks like.

24 You know, since you're introducing more
25 strontium, you have a good chance of forming this

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1 forever scale. And you -- you know, if it gets in
2 the formation, or whatever, it's good night, it's
3 over, right? I mean, the -- it will form and, you
4 know, block off the ROZ, and you're never going to
5 be able to recover it.

6 So you have a high potential for real
7 damage to be going on that you cannot go back on.
8 It's not like, let's say, over to the side over
9 here, the calcium carbonate, you can dissolve that
10 with acids. You can do some remedial thing. But if
11 you start getting barium sulfate or strontium
12 sulfate forming, there is no good ways to remove it.

13 Now, you know, strontium, you know, it's
14 where the, you know, TDS and things come into play
15 also. It's the other chemicals that -- the higher
16 the TDS, the more likely that strontium will form.
17 Pressure and temperature have an impact too.

18 But you see as we start going across, you
19 see sodium is much higher in the Goodnight water
20 versus the EMSU base water. Potassium is higher.
21 Probably the sodium potassium is probably coming a
22 lot from the frack fluid that's being used there.

23 Another one that kind of jumps out that
24 gets concerning, you know, the same with strontium
25 and lithium is like, when you start introducing

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1 these things, you start introducing NORM into the
2 system. So NORM stands for normally organic
3 recurring materials.

4 And so whenever you get to the end of the
5 life of a project where you have NORM present, it
6 requires a whole -- you know, to remove the
7 equipment, the metals, you know, gather that, and
8 then you've got to go through a more expensive
9 process to get rid of it.

10 So you've got these heavy metals that are,
11 you know, migrating into the system that it's going
12 to cause, you know, your P&A expenses and different
13 things to go up because now the metals are going to,
14 you know, contain NORM. But the high lithium,
15 that's getting pretty high.

16 You migrate over to iron. It can come up
17 a few different ways. You know, one general
18 indication of it would be how healthy your system
19 is, right? So iron, there's a lot of steel that's
20 used in the oilfield. So that's a good source to
21 get iron in. So you can see where their iron levels
22 are much higher than what the iron levels are in the
23 EMSU. We keep our corrossions at a minimum, and
24 things, and keep it pushed down.

25 Jumping over to the anions, you can see

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1 that the chlorides are much higher than what ours
2 are, and that's what the graph was before, was the
3 chloride test between the two.

4 Sulfate may be within the range. There's
5 times that it's higher and times it's lower. It's
6 probably -- depending on where they're getting their
7 fluid from, right, there might be somebody running
8 more fracks, less fracks, whatever. It's hard to
9 really nail down what chemistry they're putting into
10 the formation.

11 CO₂, you know, that's relatively the same.

12 Biocarbs, we bring more biocarbs to the
13 table, which would be -- you know, we're the ones
14 that -- and in the carbonates, the calcium
15 carbonates or the iron carbonates, those ones.

16 H₂O is because of the nature of the
17 waterflood, or whatever, we have a little bit more
18 of that into the system, which is where you have the
19 old sulfates there. And then probably bugs and
20 those type of things over the years contribute to
21 that.

22 And so anyways you can -- I mean, it's
23 pretty easy to see that these fluids don't look the
24 same. We could do a lot of fancy chemistry. We
25 could get samples from them and us and mix them and

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1 see what kind of creatures are created, but they're
2 not similar fluids.

3 Q. And is that because Goodnight is injecting
4 water from outside of this immediate area and
5 formation?

6 A. Yes, ma'am. We're -- you know, so our
7 production is -- you know, in the Central was
8 considered Central Basin Platform. This is deep in
9 the Delaware Basin here, along with a lot of frack
10 fluids. So you're using a lot of chemicals and
11 maybe even tracers or different things that's mixed
12 up in that fluid.

13 So there's a big mix of fluids, and
14 they're coming -- I mean, I don't know, a list of
15 things, what the Bone Springs, the Wolfcamp and
16 those type formations. So they just have a totally
17 different chemistry that -- you know, than what we
18 have in our area.

19 Q. And is the injection of water with
20 different chemistry -- and particularly the
21 chemistry you've talked about here, can it cause
22 permanent damage to the formation?

23 A. Yes. You know, several of these can. You
24 know barium sulfate formed in the formation will
25 cause permanent damage that you will never be able

1 to recover those reserves.

2 Q. And would that impact a CO2 project?

3 A. Yes. If the CO2 cannot contact the
4 molecules of the oil, there's no way for it to
5 penetrate in it to reduce the viscosity, and things,
6 and to allow that to flow out of the rock.

7 Q. Looking at your next slide, which is
8 Exhibit B-21, can you tell us what this shows?

9 A. So this is from Dr. Lindsay's testimony.
10 You can kind of see where you got the folds setting
11 up the reservoir and then how historically you had
12 the edge water that could feed up from the
13 Goat Seep. And then you had the bottom water that
14 came from the San Andres. And then you had up in
15 the old connate waters from the Grayburg prior to
16 the flood, or whatever, did have higher, you know,
17 salinity there.

18 But the sulfate rich water, which, you
19 know, is in the whole system, that sulfate, you
20 know, gets to be real dangerous when it mixes with
21 barium. And now a new chemical that's coming in
22 too, the strontium. And you mix that strontium with
23 this sulfate, you know, rich environment, which now
24 the -- for the most practical purposes, the Grayburg
25 water has been replaced by the San Andres water.

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1 And where you see that the -- the
2 salinities that are around that 11-, 12,000 arch
3 because a lot of production came out of the Grayburg
4 before the start of the waterflood, and then you
5 introduced a lot of water into it to make the
6 waterflood happen.

7 Q. Anything else on this one?

8 A. No. And outside of, you know, whenever
9 you bend, you know, rock, it will break and
10 fracture. And so that's where you kind of get some
11 of those plumes that you can see where, you know,
12 the reservoirs have been bent.

13 Q. This is your Exhibit N-14. What does this
14 show?

15 A. So this was provided to us from Goodnight
16 after we had our guys in the field noticing, you
17 know, work over -- eight over on their well. And so
18 this is where they -- although chemistry that we
19 described above -- and this is even before mixing --
20 they had problems with heavy scale, heavy rust. You
21 can see where it's highlighted there that they
22 couldn't even separate the wellhead and pull the
23 tubing hanger out because of how much scale there
24 was in the tubing and things.

25 And so I -- they don't tell me what type

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1 of scale that was, but it's probably one of those
2 more forever scales. You can see where it's forming
3 on the way down in the reservoir. Imagine you add
4 some pressure and you add some temperature to it,
5 you know, it's just like cooking in your kitchen,
6 all of a sudden those chemicals want to go more.
7 Okay?

8 Day 2. Here's the other piece of the
9 damage, has gone -- we're talking -- you know, so we
10 read here, it's, you know -- it says that this is a,
11 you know -- read it here, yes. It says that unit's
12 got liner damage, one over to the right. Which
13 liner damage would be indicating that it's lined to
14 the -- in it. So they're putting plastic on the
15 inside, plastic like compound inside of the tubing
16 that they're injecting down to try to prevent it
17 from being affected from corrosion.

18 So you see here they indicate that they
19 found several damaged, corroded -- corrosion pins.
20 So this is a corrosive fluid that they're putting
21 down in the reservoir, right? I mean, there's -- we
22 don't need, you know, to do any chemistry experiment
23 when you have real results on a well that started
24 in -- I don't know the exact date on the Ryno, but
25 2020, right around there, plus or minus years.

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1 So it hadn't been in service that long.
2 And you've got substantial damage and substantial
3 scale that had formed here, according to this
4 report.

5 Q. Let's look at your Exhibit N-6. What is
6 this, please.

7 A. So this is a cross section. I can't
8 remember who created this one. I think it was Ops
9 Geologic. But you can see in it the Ryno SWD wells
10 on the far left. And you can see where they have
11 perfs, you know, that are indicated in the red that
12 do exist in the top part of the San Andres, which is
13 right there, you know, into the Grayburg. And even
14 across from, you know, areas that show that there's
15 oil there.

16 And then, you know, you hit -- looks like
17 maybe they avoided on purpose some intervals that
18 had some, you know, oil down below, but they kind of
19 mix and get kind of close. You can see where, even
20 though it's a down-dip oil, they also -- and even
21 though it has ROZ in it, that that water is going to
22 flow up-dip and impact the other pieces of the
23 reservoir in the San Andres and also, you know,
24 migrate -- whenever it hits a crack, migrate up into
25 the Grayburg.

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1 Now, note on the two logs in the middle of
2 that, they didn't have sufficient data to calculate
3 the oil saturations down deep.

4 Q. And so with respect to the chemistry that
5 you've been talking about, does this slide indicate
6 that the locations where Goodnight is injecting or
7 the intervals would cause damage in the San Andres?

8 A. Yes, ma'am.

9 Q. Okay. Thank you.

10 A. And I think -- I don't know if there's a
11 location tab down on the right-hand corner or not
12 just to show them. This is a west to east line
13 going across. No, there's not, but the R.R. Bell is
14 on the right. So it's kind of a -- just to give you
15 a frame of reference, you're going from down-dip to
16 up-dip.

17 Q. Okay. Let's talk about the SWD impacts.

18 A. Okay.

19 Q. Okay. And this is your Exhibit I-16. Can
20 you tell us what this shows?

21 A. Several things going on here. First, it
22 shows -- this image shows the four current SWDs
23 that's going on. And up in the middle legend, you
24 can kind of see it depicts who, you know, has the
25 minerals into it.

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1 Fee, being that it's a regular non-State
2 landowner. You know, the State leases depicted in
3 green. And then the Federal lease is depicted in
4 blue. And the total unit boundary is about 14,000.

5 And then, you know, it's, you know,
6 approximately -- you know, the red squares are the
7 surface locations for each of those wells and about
8 a five-acre surface lease representative of what
9 that would indicate.

10 And then on here, you see how much water's
11 been injected in each well. And the circles of blue
12 indicate about the -- the impact radius that they've
13 impacted already. If you just take the perfs, you
14 know, 50 percent net to gross, and then you're --
15 you know, what water you're pushing, you can see how
16 much, you know, impact you've had from those
17 injections, roughly, if it at all stayed within the
18 San Andres.

19 You can see where they're -- in present
20 time, this is present time in -- I think maybe the
21 date was up at the top of when this was. Okay. But
22 this is to date. I don't . . .

23 Q. It says August 1, 2024 on the bottom.

24 A. Okay. Yeah, I couldn't remember which --
25 you know, which time it was. So it's progressed a

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1 little bit since then.

2 Q. And then your next slide is Exhibit I-19.
3 What does this show?

4 A. So this is, you know, after one more year,
5 which we're almost there, June 1, to represent to
6 grow the circles after another year of disposal, of
7 how the circles start to grow. And they're starting
8 to overlap and starting to flood out the ROZ
9 potential in that area.

10 And then it has indicated the, you know,
11 five stars to where their proposed SWD permits would
12 come in.

13 Q. And this is after one year of injection?

14 A. Yes, this is, you know, after one year of
15 injection, June 1, 2025.

16 Q. And then what's shown on your
17 Exhibit I-20, the next slide?

18 A. Okay. This is assuming that the SWD
19 permits are granted, and this is to June 1, 2029, so
20 four years down the road from now, five total. You
21 can see where the blue circles continue to grow.
22 And then the additional ones of, you know, the five
23 there start to commingle, and you really are
24 flooding out the resource in the area.

25 You can see how quickly the impact is.

1 It's kind from that cumulative water graph before.
2 You can see how rapidly this is. And that's why,
3 you know -- you know, time is of the essence here,
4 that this is very impactful.

5 Q. Then what is shown on your next slide,
6 which is Exhibit I-21?

7 A. Okay. Now we go, you know, to the
8 ten-year mark. Well, all the circles have kind of
9 jumped on top of each other, and you can see they've
10 formed one big circle to where in ten years, you've
11 almost flooded out the ROZ potential for all of
12 EMSU. There's a little bit left up to the north,
13 but you've had a huge impact of the area.

14 Q. And what's shown on Exhibit I-22, which is
15 your next slide?

16 A. This is after 20 years. You can see, you
17 know, the EMSU depicted in the blue outlined that
18 you pretty much have reached every last outside
19 extent of the -- of the -- you know, the ROZ
20 potential. It's, you know, flooded, and you're
21 pushing water continually outside the bounds. And
22 it's damage -- there's no potential for ROZ or
23 anything left. I mean, you've flooded all of it.

24 Q. Then what's shown on your next slide,
25 which is Exhibit I-23?

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1 A. So this is just, you know, doing a little
2 bit of -- you know, of what -- you know, to do a
3 reference of a five-acre tract, right? And then say
4 if we had a permit at 40,000 barrels a day, you
5 know, of what that impact would be. If you injected
6 into at 40,000 barrels a day, you can see in 13
7 days, that you start getting outside the bounds of a
8 five-acre tract, which is, you know, a lot of times
9 what the surface leases agree to for an SWD permit.

10 And so you're starting to get onto other
11 bounds of land.

12 Q. Within 13 days?

13 A. Within 13 days at 40,000 barrels a day.

14 Q. Okay. What is shown on this next slide?

15 A. So shrink it just a smidge.

16 Q. Shrink it?

17 A. Yeah, just a smidge so we can catch the
18 bottom of it.

19 So this is showing you the tracts of the
20 EMSU, you know, in red -- now, they're both in
21 red -- and EMSU B to the north. So what I want to
22 point out here is that all of this is one big
23 system.

24 So no matter how fluid gets into the
25 system, you affect all the Grayburg production.

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1 So -- you know, so whether that's coming up through
2 existing wellbores, fractures, or -- one real direct
3 way would be on the active water supply well that we
4 have going on because it's part of the unit.

5 So all that chemistry that we went over,
6 because it's part of our waterflood. And to produce
7 it and to make up water, you know, you're getting
8 water from the San Andres. So if you're polluting
9 that water, now you're effectively not only
10 polluting EMSU, but you're effectively polluting up
11 into EMSU B also.

12 So this is representative of all the
13 pipelines and all the, you know, the facilities.
14 You can see kind of in the middle of the EMSU there,
15 you see the EMSU's CTB.

16 And so all of the water and fluid comes to
17 there, and it's distributed out across the whole
18 entire unit. That's why I was saying if you're
19 damaging our water supply, then you're damaging all
20 of the Grayburg.

21 Q. Okay. And then here's a summary of your
22 conclusions. Can you tell us what they are?

23 A. From our different looks at it to your,
24 you know, EMSU has a great ROZ potential of over
25 900 million barrels in the San Andres, which is

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1 currently being impacted by Goodnight's SWD
2 operations.

3 You know, since you're injecting these
4 large amounts of water, that -- by nature, that
5 pressure in the San Andres is increasing. And
6 this -- and it's promoting increase of water influx,
7 which has been known from historical papers and very
8 well publicized, into the Grayburg intervals.

9 And then, you know, we are seeing, you
10 know, proof of it. Is that water chlorides are
11 starting to increase and it provides an indication
12 that, yes, near the wellbore that we're getting, you
13 know, influx of water that is, you know, changing
14 the salinity of our fluid.

15 All the three units that we have out
16 there, the EMSU, the EMSU B and the AGU, all have a
17 history of bottom water production from the
18 San Andres, which plumes have been well documented
19 in, you know, public papers. And so it's -- it
20 just, you know, can't be allowed to go on.

21 Q. And kind of just to sum up, is the gist of
22 this that Goodnight's injection is damaging the
23 reservoir?

24 A. Yes, it's damaging the potential ROZ in
25 the San Andres, and it's damaging the current

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Cross-Examination by Mr. Rankin

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1 existing, you know, Grayburg, which is all part of
2 the EMSU unit. Both of those are, you know, part of
3 the unitized interval.

4 MS. HARDY: I have no further
5 questions for Mr. West. He's available for
6 cross-examination. Thank you.

7 HEARING OFFICER HARWOOD: All right.
8 Then Mr. Rankin?

9 MR. RANKIN: Sorry, one moment. I'm
10 trying to find the presentation slides that
11 Ms. Hardy sent to me yesterday.

12 HEARING OFFICER HARWOOD: I thought
13 you were about to say no questions.

14 CROSS-EXAMINATION

15 BY MR. RANKIN:

16 Q. Mr. West, I'm going to share on the screen
17 the PowerPoint presentation that you just walked
18 through with Ms. Hardy. Okay? Let me know when you
19 can see it.

20 A. Yes, sir, I can see it.

21 Q. Great. Maybe before I -- before I do, I
22 think actually, I might just want to get into a
23 little bit more about your background. We qualified
24 you as an expert in petroleum engineering, and I
25 did -- since we're on the topic -- and I wasn't

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Cross-Examination by Mr. Rankin

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1 trying to be rude, but I did understand you to say
2 that you were simply an expert in petroleum
3 engineering but with respect to production,
4 engineering, and operating -- operations; is that
5 correct?

6 A. I said petroleum engineering and
7 specializing in -- especially within the area --
8 spent a lot more time in production and operations.

9 Q. Production and operations?

10 A. It's just saying it's specialized.

11 Q. Okay. I didn't mean to be rude. I
12 just -- I thought I heard you qualifying yourself as
13 an expert in those areas, and I --

14 A. It's okay.

15 Q. I was going along with what I thought you
16 were saying.

17 All right. So we got your -- your resume
18 or CV was attached as part of your direct testimony
19 as Exhibit I, correct?

20 A. Yes, sir.

21 Q. Okay. And you came on to Empire Petroleum
22 in June of 2023, correct?

23 A. Yes, sir.

24 Q. Okay. But initially, you got your
25 undergrad in petroleum engineering back in 1999,

1 correct?

2 A. Yes, sir, from Marietta College.

3 Q. And then when you joined Empire in June of
4 2023, you came on as senior vice president of
5 operations, correct?

6 A. Yes, sir.

7 Q. And what do your -- what do your duties
8 include as senior vice president of operations?

9 A. I'm overseeing the day-to-day logistics,
10 field operations, reporting the activities,
11 overseeing the engineers and geologists and
12 technical staff in the office.

13 Q. And what areas do you oversee in that
14 role?

15 A. Engineering, geology, and the technical --
16 like the technicians that work for them.

17 Q. And in that role, you're overseeing all
18 of -- all of Empire's operations, not just in New
19 Mexico, correct?

20 A. Correct.

21 Q. Okay. And where would those be?

22 A. We have operations in New Mexico, Texas,
23 North Dakota, and Louisiana.

24 Q. And prior to coming on to work with
25 Empire, did you have any experience with CO2

1 enhanced oil recovery projects?

2 A. Not CO2, but enhanced oil recoveries, yes,
3 several waterfloods.

4 Q. Have any experience evaluating, assessing,
5 or operating in a residual oil zone?

6 A. No, sir.

7 Q. Any experience characterizing a potential
8 residual oil zone?

9 A. No, sir.

10 Q. Any experience operating in a residual oil
11 zone?

12 A. No, sir.

13 Q. Any experience designing or implementing a
14 carbon dioxide tertiary flood?

15 A. No, sir.

16 Q. Any experience designing or implementing a
17 CO2 water alternating gas flood?

18 A. No, sir.

19 Q. And in your role as senior vice president
20 of operations, you're in charge of not just the
21 folks in the office, but the folks in the field in
22 all the locations where Empire has operations,
23 correct?

24 A. Yes, sir.

25 Q. And that would include in New Mexico,

1 correct?

2 A. Yes, sir.

3 Q. So you have -- do you have -- you have
4 contact with folks in the field in New Mexico?

5 A. Yes, sir.

6 Q. How frequently do you have contact with
7 operate -- operators or your folks in the field in
8 New Mexico?

9 A. Typically, I'll talk to Toby, you know,
10 once a week or so.

11 Q. Is that true -- been true since the time
12 you came on to work with Empire?

13 A. Yeah, sometimes more, sometimes less. It
14 just depends what activity is going on.

15 Q. Now -- oh, switch over to your summary
16 slides. I may spend some time on some of these, and
17 I may skip over some only because they're in your
18 testimony. It makes sense for me to talk through
19 them in the context of your testimony. Okay? So I
20 may skip over some of these slides, but don't worry,
21 not because I don't want to ask you questions about
22 them. It's just because I'm going to come back to
23 them in a different context. Okay?

24 A. I'm sure you'll have a few.

25 Q. In your slide 2 here, you present your

1 Rebuttal Exhibit N -- N-1, and as I understood, the
2 main takeaway is that -- from your testimony, is
3 that there's -- in your opinion, there's a very
4 large EOR potential as represented by XTO, correct?

5 A. This is XTO's representation that there is
6 a large ROZ potential.

7 Q. And XTO -- XTO's representation was
8 limited to -- was limited to approximately minus 700
9 subsea in this document, correct?

10 A. In this document, that is what they
11 represented here.

12 Q. Are you aware of any other documents that
13 reflect that XTO was representing a potential ROZ
14 any deeper than minus 700 subsea?

15 A. I think you've seen a lot of things.

16 Q. I'm asking you. I mean, are you aware of
17 any documents in which XTO is representing a
18 potential ROZ deeper than minus 700 subsea?

19 A. No, sir.

20 Q. Are you -- are you personally relying on
21 XTO's representations in this slide or any of the
22 other documents that you reviewed from XTO?

23 A. It's a point -- it's a data point that you
24 take into consideration.

25 Q. Okay. And are you taking this into

1 consideration?

2 A. I'm taking this into consideration that
3 XTO/Exxon believed in the ROZ enough to put it in a
4 sales package. So it's, you know, a bunch of other
5 experts outside the ones that I have in my office or
6 third parties that have worked on this.

7 Q. But let me ask you this question: Are
8 you -- are you relying on this information?

9 A. It's a data point.

10 Q. Is -- it's a data point. Are you looking
11 to acquire additional data points?

12 A. As -- you know, as an engineer, you
13 continually take what data points you can find and
14 do an engineering analysis on it. And this is one
15 data point that another company who previously
16 operated the asset felt pretty strongly that there's
17 an ROZ here to indicate it on a sales package, being
18 one of the largest companies, oil and gas companies.
19 So I would have to say they believed in it pretty
20 good.

21 Q. Now, this sales package, this document
22 we're looking at wasn't limited to the EMSU,
23 correct?

24 A. No, sir.

25 Q. And it's referring to all three units,

1 correct?

2 A. Yes, sir.

3 Q. And that type log doesn't identify a
4 specific well, does it?

5 A. It just says tech well.

6 Q. So we don't know what unit it's intended
7 to represent, correct?

8 A. That is correct.

9 Q. And so in any of the documents that you
10 have seen from ExxonMobil or XTO, have you
11 identified any documents that reflect a specific --
12 let me -- let me think about this, how to rephrase
13 that question.

14 Okay. So based on this document here,
15 that type log could be from any one of the three
16 units, correct?

17 A. You said type log representative of the
18 area.

19 Q. Okay. And that's your understanding,
20 right?

21 A. Yeah, that's what I can see from the log
22 and from the -- from the slide. There's no header
23 saying what exact well it is.

24 Q. As a part -- as a senior vice president of
25 operations for Empire, when you came onto the

1 company, how did you familiarize yourself with
2 the -- with the three units that you're -- you were
3 charged with overseeing?

4 A. When I came onto the company, it was an
5 operating asset that we had. You kind of come on,
6 you -- I just -- you know, talking with staff in the
7 office and talking with field staff and just
8 familiarize myself that way.

9 Q. Did you review any of the historical
10 unitization documents for either of these three
11 statutory units?

12 A. No, sir.

13 Q. No?

14 A. Not at that time, when I came on board.

15 Q. Have you since?

16 A. I've seen parts of them since --

17 Q. Okay.

18 A. -- in this case.

19 Q. Since your understanding that XTO believed
20 strongly enough in the potential for an ROZ in these
21 three units and represented that it was -- had a
22 potential of producing more than 900 -- or
23 containing more than 900 million barrels of oil, but
24 they sold it for less than \$18 million to Empire?

25 A. Yes, they sold it to Empire. I don't

1 know -- I don't understand your question.

2 Q. Well, let me -- let me ask -- let me
3 rephrase it. If you believe that XTO believed
4 strongly in the potential for -- that the ROZ that
5 they represented in this document -- that they
6 believed strongly that there was an ROZ across these
7 units containing upwards of 900 million barrels of
8 oil, why did they sell it for -- to Empire for less
9 than \$18 million?

10 A. I have no speculation on Exxon's business
11 practices.

12 Q. Are you relying on XTO's representations
13 in this document to make any determinations about
14 whether there is a potential ROZ below minus
15 700 feet subsea?

16 A. Repeat the question just to make sure I
17 understand it.

18 Q. Sure. Are you relying on any of the
19 representations made by XTO in this document or any
20 of the others that you reviewed to conclude that
21 there is a potential ROZ deeper than minus 700 feet
22 subsea?

23 A. Not from Exxon.

24 Q. Not from Exxon?

25 A. Correct.

1 Q. And not from XTO?

2 A. Correct.

3 Q. Okay. This was -- this was one of the
4 other documents I think that was prepared or
5 presented as part of the sales package by XTO,
6 correct?

7 A. That is correct. It does have a little
8 shading on it that wasn't in the sales package.

9 Q. That was something you added, right? That
10 was something you added?

11 A. Yes.

12 Q. I think I heard you say that there's a --
13 there's a structure here, right? And in the EMSU
14 actually, it's -- Dr. Lindsay referred to it as
15 double, double humped structure, right?

16 A. That is correct.

17 Q. What's the mechanism? This is a
18 conventional -- I mean, the EMSU is a conventional
19 reservoir, correct?

20 A. That is correct.

21 Q. Okay. And what is the trapping mechanism
22 for the EMSU? Is it structural or is it
23 stratigraphic?

24 A. I'm not a geologist exactly, to define
25 that.

Cross-Examination by Mr. Rankin

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1 Q. Okay. So you're -- so you're not sure
2 whether it's a structural or trapping mechanism or a
3 stratigraphic trapping mechanism here?

4 A. From Dr. Lindsay's, you got the -- you got
5 a structural comment. And then I believe as you go
6 farther to the east, there was a deterioration of
7 the reservoirs also that he indicated on his
8 testimony. So it looks, you know, a little bit of a
9 combo.

10 Q. The -- I have to catch up to where I am
11 here.

12 MR. RANKIN: Is this a different
13 slide presentation that I got today -- last night,
14 Dana, or is it the same one, same sequence?

15 MS. HARDY: It's the same.

16 A. It's the same.

17 Q. Okay. I may have been off in my
18 numbering, makes sense.

19 Mr. West, you testified when we were
20 looking at this slide about two wells that tested
21 oil at the top of the structure, correct, in the
22 San Andres?

23 A. That is correct, confirmed by Mr. Knights'
24 testimony.

25 Q. Did Mr. Knights address in his testimony

1 whether it was San Andres or Grayburg?

2 A. I can't remember exactly, but it was a
3 San Andres test.

4 Q. And -- but you don't remember whether
5 Mr. Knights assigned a formation to the location of
6 those tests, right?

7 A. I -- I've looked at a lot of things.
8 You'd have to show me his testimony.

9 Q. Okay. But that's whatever -- is
10 Mr. Knights' testimony, and it is what it is, right?

11 A. That is correct.

12 Q. And he'll be able to clarify that if it's
13 something different.

14 But as you sit here today, you don't
15 recall whether he actually assigned that -- those
16 production tests to one formation or another,
17 correct?

18 A. Yeah, correct. I can't -- I don't have
19 his testimony in front of me.

20 Q. Now, the production tests that you
21 referred to in the 660 and 658, were they both
22 publicly available?

23 A. I'm not sure if it ever was in a public
24 document or not. I'm unsure.

25 Q. Okay. So as you sit here, you're not --

1 you can't say for certain whether the production
2 tests that you referred to were actually publicly
3 available to Goodnight or anybody else?

4 A. That is correct.

5 Q. Okay. This slide 6 here, you showed us an
6 accumulation of oil in the San Andres that was
7 produced as part of the South Eunice San Andres
8 field, correct?

9 A. From that pool, correct.

10 Q. Okay. And in this slide, you got a
11 depiction of the productive area of that -- of that
12 field, correct?

13 A. That is correct.

14 Q. And the line surrounding that production
15 that you identified, those are -- those are -- what
16 are those contours?

17 A. Looks like it's from --

18 Q. Sorry.

19 A. On the right-hand corner, it says it's a
20 net pay.

21 Q. Okay. It's a net pay. And the contour
22 intervals are what? What are the contour intervals?

23 A. I -- my eyes are not that good.

24 Q. Would you agree with me that they're
25 50-foot contour intervals, based on your map?

Cross-Examination by Mr. Rankin

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1 A. There you go. Yes, that looks to be
2 correct.

3 Q. Any reason, as you sit here, that you --
4 that's not correct?

5 A. No. I just wanted to make sure I verified
6 the contours.

7 Q. And you added those values, right, on the
8 contour intervals? The 100 feet, the 50-foot, the
9 150-foot, right?

10 A. Yes, because you couldn't really read
11 them. They're so tiny on the actual contours.

12 Q. And so if this is a 50-foot contour here
13 that I'm indicating, then the next contour involved
14 would be 0, correct?

15 A. That is correct.

16 Q. So this entire field that's surrounded by
17 a contour interval of 0, but net pay?

18 A. Net pay.

19 Q. Right?

20 A. That's correct.

21 Q. Okay. And also, as indicated by this
22 legend, we have a -- an additional figure that is
23 indicated throughout the map, which is this green
24 circle with a white center?

25 A. Okay.

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1 Q. Do you see that?

2 A. Yes, sir.

3 Q. And it's a little hard to read, but it
4 says -- I think it says something about San Andres
5 present. Do you agree with that deciphering of that
6 legend key?

7 A. Yeah, I think the best I can read it, I
8 can see "present." I don't know what that
9 two-letter word is, but that looks like San Andres.

10 Q. So it says -- I believe it says -- and you
11 agree with me, that it says, "San Andres is
12 present," right?

13 A. Yes, sir.

14 Q. Okay. So if I go back to the map and I
15 look over here and I see that to the west and south
16 of this field where the net pay goes to 0, we have a
17 lot of other wells which indicate that San Andres is
18 present, agree?

19 A. Agree.

20 Q. But based on the wells surrounding this
21 field, the data does not indicate that there's any
22 San Andres pay extending further to the west from
23 this field, agree?

24 A. Agree. It's a net pay map, and this is a
25 conventional trap. So that would be the high point

1 of the field. And where the net pay is trapped and
2 then the stuff back to the west wouldn't be part of
3 the trap. And I assume that 0 contour line would be
4 the oil-water contact.

5 Q. And so this -- would you agree with me
6 that this field, the San Andres productive field is
7 an isolated accumulation within the San Andres?

8 A. There's a trap in the San Andres in this
9 area, an accumulation that produce conventionally.

10 Q. I mean, and you would agree with me that
11 it's isolated because it goes down to 0 net pay
12 entirely surrounding this field, agree?

13 A. Or a conventional pay.

14 Q. For conventional pay. So you would agree
15 with me that it's an isolated accumulation of
16 conventional net pay in the San Andres, agree?

17 A. Agree.

18 Q. And approximately how many miles is that
19 from the EMSU?

20 A. Each one of the squares is about a mile.
21 So, one, two, three -- maybe four to the west of the
22 AGU and like another four or five up, so that's
23 seven or eight maybe, as the crow flies.

24 Q. Okay. So seven or eight miles from the
25 EMSU you've identified an isolated conventional net

1 pay oil accumulation in the San Andres of
2 approximately how many acres?

3 A. So let me . . .

4 It's tough to tell with the contours, the
5 way they cut through there.

6 Q. Yeah.

7 A. It's just to show that there -- you know,
8 there's oil in the system in the San Andres regional
9 way.

10 Q. Okay.

11 A. This is a conventional pay where you had a
12 trap.

13 Q. So how does this relate -- if it's
14 conventional pay seven miles away, how does this
15 relate to potential for ROZ in the EMSU seven miles
16 away?

17 A. From Dr. Lindsay's, you know, testimony,
18 if you add Mother Nature's waterflood, that's oil
19 migrated through the system, and it was there. And
20 this happened to be one of the accumulations when it
21 migrated through the system, that there is enough of
22 a trap that it stayed there and, you know, resulted
23 in conventional pay. So it just leads into, you
24 know, the same belief that, hey, oil was in the
25 San Andres. It's, you know, part of the system.

1 Q. Okay. So there was net pay and primary
2 production from this field indicating that there was
3 at least some previous migration of oil that
4 resulted in a -- that was trapped conventionally,
5 right, in this location?

6 A. That is correct.

7 Q. But as to the San Andres, there was no
8 primary production, right? In the EMSU -- in the
9 San Andres and the EMSU, there's been no primary
10 production, agree?

11 A. There's been primary tests but no primary
12 production.

13 Q. Okay. And there's been no accumulations
14 of conventional oil identified in the San Andres to
15 date; would you agree?

16 A. You had the -- what would be considered
17 the transition of those tests in the 660 and the
18 658. That was at the top of the structure.

19 Q. And that would depend on what you -- how
20 you define the top of the San Andres, right?

21 A. That's pretty well defined by the State.

22 Q. Well, we've been through this a lot the
23 past week-and-a-half, but there's been lots of
24 different -- I mean, Empire, itself, has just
25 recently changed its tops from its original

1 testimony, agree?

2 MS. HARDY: Object to the form. I
3 think it misstates testimony.

4 MR. RANKIN: I mean, we went through
5 it today. Yesterday Mr. McShane testified that he
6 changed all of the tops in his -- in his wells.

7 HEARING OFFICER HARWOOD: It will be
8 overruled.

9 A. I don't remember the testimony right.
10 It's only a couple of feet.

11 Q. Okay. Well . . .

12 So there is a -- your view is that there's
13 a slight potential accumulation in this -- what
14 you're calling the transition zone at the very top
15 of the -- of the structure where Empire has
16 identified the top of the San Andres, agree?

17 A. I agree that there's been oil tests in the
18 top of the San Andres.

19 Q. There -- say that again?

20 A. That there's been oil tests that produced
21 primary oil.

22 Q. There were two oil tests, right?

23 A. That is correct.

24 Q. Okay. And I'll get into the results of
25 those tests later on. But you're identifying those

1 two tests as the only two tests that resulted in
2 any -- oil tests in what Empire has identified as
3 the San Andres?

4 A. I agree.

5 Q. Okay. Does this -- going back to your
6 slide 6 -- your rebuttal Exhibit N-15, what does
7 this net pay map tell you about this structure of
8 this field here, if anything?

9 A. I can't really depict structure off a net
10 pay map.

11 Q. Okay. I'm going to skip over the second
12 economic model discussion, I think, for the moment
13 because it's going to take a little while I think.
14 And I have a series of questions to walk through
15 with you. But I don't think I'm going to do it on
16 this slide, but I may come back to this slide for
17 purposes of discussion.

18 Well, actually, I think there's just a few
19 things I want to touch on before I do leave it.
20 When you were discussing this slide, you said that
21 the way you set up these two economic models --
22 there's two, right? There's one that's for
23 250-pattern and another for a 75-pattern case; is
24 that right?

25 A. Yeah, 72 or 75.

1 Q. 72 or -- I can't remember. I may have
2 gotten the number wrong multiple times when I was
3 opposing you, and it was probably stuck in my head.
4 Okay. 72. All right. 250-pattern and the
5 72-pattern ROZ economic model, right?

6 A. Correct.

7 Q. Okay. And I heard you say, I believe,
8 that it's your opinion that this model is a worst
9 case scenario; is that right?

10 A. I didn't say worst case scenario.

11 Q. Okay. I wrote down worst case. But is
12 it -- it's not a worst case scenario, then?

13 A. No.

14 Q. Okay. But just before I move off of this,
15 my recollection is that the model is based on an
16 assumption that there is a 400-foot continuous
17 interval of 30 percent average oil saturation that
18 would be targeted, correct?

19 A. No. It's a 400-foot interval. It does
20 not need to be continuous.

21 Q. Okay. Mr. West, I'll come back to that
22 when we come back to your -- when I come back to
23 this later in your testimony.

24 But for now, are you telling me it doesn't
25 need to be continuous, but there needs to be an

1 average oil saturation of 30 percent across that
2 400 feet, because that's the basis for your model,
3 correct?

4 A. In that part of the pay, that would be it,
5 if that's what it would be, would be 30 percent
6 saturation in that model.

7 Q. Okay.

8 A. And 400-foot in that pay, just like the
9 Grayburg above you, is not a continuous.

10 Q. I'll come back to the rest of the economic
11 model later when I get to it in your testimony.

12 Now, on your next slide 8, with Exhibit --
13 where you refer to Exhibit I-3, and -- you know, we
14 went through this a lot with Dr. Lindsay and the
15 witnesses during the first week of this hearing.
16 And I was trying hard to ascertain and identify any
17 papers or documentation that established that there
18 was a record, okay, documentation of actual water
19 migrating up from the San Andres into the Grayburg.

20 And you said several times during your
21 introduction that it's been well documented
22 historically that there is San Andres water
23 migrating up into the Grayburg. And you referenced
24 that there are papers that discuss this and that
25 there is demonstration of San Andres water coming up

1 into the -- into the Grayburg formation.

2 I'm asking you to tell me: Where is it
3 well documented that there's San Andres water -- or
4 has been San Andres water communicating up into the
5 Grayburg formation?

6 A. Can you pull up the slide that you're
7 talking about?

8 Q. Oh, I put it away. Sorry.

9 I think it's this slide and the next slide
10 where you discuss this issue.

11 A. Yes. So you -- flip to the next slide. I
12 mean, this is just historical water production, so
13 it's public data that's out there that you can see
14 that water was coming in. But go to the next slide.

15 Q. But on this slide, you're saying that
16 water is coming in. What do you mean? How is it
17 showing that water is coming in?

18 A. Your production only from the Grayburg,
19 and then you have these high water volumes indicated
20 by the larger blue circles.

21 Q. How do I know that that's a high water
22 volume for that well?

23 A. It's a bigger circle, and it has the
24 variables underneath it.

25 Q. But how do I know that's a high water

1 volume relative to the production from that well?

2 A. What else would it be from?

3 Q. Well, I mean, relatively speaking, I have
4 no basis to agree with you that that's a high water
5 production. What's the overall production from that
6 well? What's the ratio of oil to water?

7 A. I don't have this. We could look back at
8 the records and determine that, but that's
9 representative of the water volume.

10 Q. You're telling me that that's an excessive
11 amount of water, and I'm asking you: How do I know
12 from this bubble plot that it's actually excessive?
13 Relative to what? Relative to -- how do I know it's
14 a high water volume?

15 A. Relative to the other wells in the area,
16 the sizes of the circles.

17 Q. But I don't know how much overall fluids
18 the other wells with smaller circles have produced,
19 do I, based on this map?

20 A. I told you that the water volume's on
21 there.

22 Q. But I don't know how much oil that well
23 produced. I don't know what the overall production
24 of fluids from that well is to know whether that's a
25 lot of water or a little water for that little dot

1 or that big dot, right?

2 A. This predicts water volume. Bigger circle
3 would be larger water volume. Smaller circle would
4 be less water volume.

5 Q. I mean, what if -- what if these bigger
6 circles that you're pointing out here also produced
7 proportionately the same proportion -- let's see if
8 we compare these two circles here, the EMSU 144 and
9 the EMSU 162, just to the southeast. Okay? Let's
10 just say for the sake of argument that the 144
11 produced proportionately more water than the 162
12 well, okay, relative to the amount of water it
13 produced. How do I -- how can you say, then, that
14 that water -- that well is producing an excessive
15 amount of water?

16 A. I would need to be able to see the -- if
17 you wanted to do that analysis, the full production
18 from each one, but just -- we're just talking volume
19 of water, not total volume production out of the
20 wells.

21 Q. I hear you. And you're telling me that
22 that -- that well, this big circle around the 144
23 produced 2.6 -- is it million barrels of water? Is
24 that right?

25 A. I can't read the numbers all the way, but

1 that looks correct.

2 Q. Okay. And you're saying that on the
3 slide, that it's -- they're high water production,
4 but I guess my -- what I'm trying to get at is, I
5 don't know that that's high water production
6 relative to the overall production from that well.

7 A. There's no relativity. It's just water
8 production there.

9 Q. But you agree with me that this map tells
10 us nothing about the total volumes of fluid that
11 were produced from the 144 well, agree?

12 A. This tells us cumulative water volumes as
13 of 1986.

14 Q. And it tells us nothing about what the
15 volume of oil or total fluids that were produced
16 from that well, agree?

17 A. This is just water volumes.

18 Q. Okay. And so I don't know, over the
19 history of that well, whether that is an abnormal
20 amount of water produced from that well or not,
21 agree?

22 A. It's a larger water volume compared to the
23 wells around it. We're just talking about water
24 volume, not ratios.

25 Q. But I don't know whether that well has

1 produced an excessive amount of water relative to
2 that well's historic production?

3 MS. HARDY: Objection, asked and
4 answered.

5 HEARING OFFICER HARWOOD: I do think
6 he's answered the question.

7 MR. RANKIN: Okay.

8 Q. Now, going back to my original question, I
9 was asking you where is it documented in historic
10 papers that there is an influx of water from the
11 San Andres into the Grayburg formation. And you
12 asked me to flip to this next slide. And if you can
13 explain to me how this slide shows that there is
14 documentation of influx of San Andres water into the
15 Grayburg formation?

16 A. So this, you know, is from the Technical
17 Committee Report referencing high water volumes.
18 Again, the peaks, as you see the scale over to the
19 far left, and that -- you know, they're using this
20 to demonstrate the plumes of the water in the field
21 and that they documented it from sulfate rich waters
22 which was coming from the San Andres. And then that
23 was causing the scale problems.

24 Q. Which paper are you referring to that says
25 that it's documented that it came from San Andres

1 water in the Grayburg formation?

2 A. I'd have to see the references. I think
3 maybe if you go to the next slide.

4 Right here this, you know, 1996 Chevron
5 paper. And this was -- you know, is where they said
6 that the San Andres water was finding its way into
7 the wellbores, you know, resulting in this barium
8 sulfate scale problem.

9 Q. So this 1996 Chevron paper that you pulled
10 some of this language from discussed the fact that
11 there -- that there was potentially some San Andres
12 water in -- in wellbores; is that right?

13 A. Correct.

14 Q. But as to the -- you're telling me that
15 there's this pluming effect. Are there any papers
16 that document that there is pluming into the
17 San Andres -- from the San Andres into the Grayburg
18 formation? So are you citing only to that 1996
19 Chevron paper?

20 A. I don't remember all the papers off the
21 top of my head. And I know that there's one that
22 Dr. Lindsay contributed to that had that.

23 Q. What other -- I mean, you're sitting here,
24 you're telling us that it was well documented, and
25 there are lots of papers that evaluated this issue

1 historically. And I'm asking you to tell me which
2 ones you're relying on.

3 A. I don't remember the exact papers off the
4 top of my head.

5 Q. So the one you're telling me about here is
6 the 1996 Chevron paper, right? That's the one you
7 can point to?

8 A. So this is, you know, the technical
9 committee showing the plume -- the plumes coming up.
10 And then you've got the Chevron paper in 1996.

11 Q. Did the technical committee discuss at all
12 that San Andres water was coming up into the
13 Grayburg?

14 A. I don't remember.

15 Q. I mean, if it did, you would have put it
16 on your exhibits, correct?

17 A. Yeah, could have put it on there. One
18 paper I do remember is the Love paper that was
19 written. It talks about down the lower zones of
20 water coming up from the San Andres.

21 Q. We went through that Love paper with
22 Dr. Lindsay, and I'm not going to pull it up right
23 now. But the -- did the technical -- I mean, I'm
24 asking you, I mean: To the best of your knowledge
25 as you sit here, did the technical committee paper

1 or any of the information presented to the
2 Commission or evaluated by the technical committee
3 in recommending the creation of the San Andres --
4 the EMSU unit identify specifically any
5 communication between the San Andres and the
6 Grayburg?

7 A. I do not remember.

8 Q. And you -- you're sitting here telling the
9 Commission that it's well documented. And you're
10 referring to this Technical Committee Report from
11 1981 saying that this represents plumes coming up
12 from the San Andres in the Grayburg. And I'm asking
13 you to be specific and tell me: Is there any
14 reference in that committee paper identifying,
15 confirming, or even postulating that there is
16 communication between the San Andres and the
17 Grayburg?

18 MS. HARDY: Objection, asked and
19 answered multiple times.

20 HEARING OFFICER HARWOOD: Overruled.

21 A. This is a document -- you know, this is
22 a -- you know, the exhibit from the 1981. They
23 started connecting the dots on the, you know,
24 sulfate rich waters, bottom waters coming up in the
25 later papers.

1 Q. What later papers?

2 A. The 1996 paper. And then I can't --
3 slipping my mind the second of which ones. The Love
4 paper talks about it.

5 Q. Okay.

6 A. Of water from the San Andres.

7 Q. Prior to the formation of the unit, wasn't
8 it well documented that the Grayburg was providing
9 substantial edge water into the unit?

10 A. I don't think there's any way that it says
11 there was substantial edge water.

12 Q. Okay. Rather than quibble over the terms
13 or semantics, wasn't it well documented by the time
14 the EMSU was created that there was edge water
15 coming up into the San Andres -- coming up into the
16 Grayburg?

17 A. I don't know. You'd have to show me where
18 it's well documented.

19 Q. I mean, Mr. West, you sat here all last --
20 first week of the hearing. Your own expert,
21 Dr. Lindsay, testified using this exact exhibit,
22 B-21, that you presented as part of your summary
23 slides that there was a strong force of Grayburg --
24 rather Goat Seep water encroaching upon the EMSU
25 forceful enough that it was able to climb 350

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1 vertical feet over the structure in the EMSU. Do
2 you recall that testimony from your expert witness?

3 MS. HARDY: I object. I think
4 Mr. Rankin is testifying. I'm not sure what he's
5 saying is correct.

6 Q. Well, it's documented on this exhibit.
7 The vertical offset between the bottom of the
8 formation to the top, as Mr. -- I'm sorry --
9 Dr. Lindsay testified is approximately 350 feet.
10 And he testified to the Commission that the edge
11 water from the Goat Seep had enough drive to reach
12 the top of the structure. Do you recall that
13 testimony, Mr. West?

14 A. So your timing is off. The original
15 question you were asking prior to 1981. This slide
16 is from 2014.

17 Q. This slide is from 2014, but it was
18 documenting the effect of the edge water drive from
19 the Goat Seep into the EMSU, correct?

20 A. Documented in 2014, not as you were trying
21 to lead in to catch me to say prior to the formation
22 of the unit.

23 Q. Mr. West, are you aware of all the
24 documentation from the 1930s and earlier discussing
25 edge water drive around this area during primary

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1 production?

2 A. I have not seen that.

3 Q. Oh, you haven't? Okay. Very well. So
4 you're not aware of all the documentation
5 historically in this area addressing the
6 long-understood effects of edge water coming in from
7 the Goat Seep during primary production in this
8 area?

9 MS. HARDY: Objection. Mr. Rankin is
10 testifying. It assumes facts not in evidence. He
11 can't -- I think he has to ask the witness a
12 question, not testify about what things show.

13 HEARING OFFICER HARWOOD: I'm sorry,
14 somehow I'm not hearing you. You're not speaking
15 into the microphone.

16 MS. HARDY: Okay.

17 HEARING OFFICER HARWOOD: And I
18 missed part of the question as well.

19 MS. HARDY: I was saying that I
20 object because Mr. Rankin is testifying and -- about
21 what documents -- other documents purportedly show.
22 And I think it assumes facts not in evidence. And
23 it's an improper question to the witness. His own
24 experts can testify about the papers if they want to
25 do that.

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1 HEARING OFFICER HARWOOD: Mr. Rankin,
2 just rephrase the question, would you?

3 MR. RANKIN: Sure.

4 HEARING OFFICER HARWOOD: I mean,
5 this is an exhibit that was brought up in direct
6 examination, so --

7 MS. HARDY: And he's asking about
8 other documents other than this exhibit.

9 MR. RANKIN: Yeah, I'm asking if he's
10 aware of the well-documented papers that address
11 edge water drive demonstrating that there is a --
12 going back into the '30s and '20s, that there is
13 well-documented edge water drive of Goat Seep
14 encroaching upon primary production in this area.

15 HEARING OFFICER HARWOOD: Are those
16 in evidence in this case yet?

17 MR. RANKIN: They will be. If
18 they're not, I believe they will be. I think -- I
19 have to think about whether any of Empire's
20 witnesses referred -- or used those as evidence.
21 I'm not 100 percent sure if they have, but they will
22 be. It's all part of Goodnight's direct testimony
23 that was filed previously.

24 HEARING OFFICER HARWOOD: Well, it's
25 a yes-or-no question. I think you can ask that.

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1 Q (By Mr. Rankin) I mean, are you aware,
2 again, Mr. West, of the well-documented historical
3 papers that address the early effect of Goat Seep
4 edge water drive in this area during primary
5 production?

6 A. Can you tell me what papers you're
7 referring to?

8 Q. It's -- I don't have it off the top of my
9 head. I'm asking if you're aware of it. I guess
10 it's a yes-or-no question, either you're aware of it
11 or you're not.

12 A. I don't think I'm aware of it.

13 Q. Okay. On this reference here, you cite to
14 this 1996 Chevron paper, correct?

15 A. That is correct.

16 Q. Is this the paper that you're referring
17 to, Mr. West?

18 A. Yes.

19 Q. Okay. And this is the paper that you're
20 saying supports your position that there is
21 documentation of San Andres water making its way
22 into the wellbores in the Grayburg?

23 A. Yes, and forming barium scale.

24 Q. Okay. And is it your opinion that this
25 paper confirms that that was, in fact, happening?

1 A. Yes.

2 Q. And when I review this paper, Mr. West, I
3 will have to go in and highlight the part that . . .

4 Sorry, one moment. I have to find the
5 language that you were highlighting.

6 There it is. The bottom of this third
7 page of the document, it states that, "During the
8 time of primary production prior to unitization and
9 initiating the waterflood in the Eunice Monument
10 field, barium sulfate scale deposition was
11 experienced in a number of producing wells.
12 Although the drilling was confined to the Penrose
13 and Grayburg formations, apparently some San Andres
14 water was finding its way into the wellbores --
15 wellbore of these wells and resulted in barium -- in
16 a barium sulfate scale, barite, deposition problem."
17 Did I read that correctly?

18 A. Yes.

19 Q. And the word that they use here is
20 "apparently." Do you agree?

21 A. Where was it again? Yes, I see that.
22 "Apparently."

23 Q. Okay. So "apparently," it doesn't sound
24 like a confirmation to me. Does it sound like a
25 confirmation to you?

1 A. "Apparently." It's pretty -- sounds like
2 a confirmation.

3 Q. Okay. So your opinion "apparently" is a
4 strong enough determination that it's a
5 confirmation?

6 A. In this context, yes.

7 Q. Okay. And then they go on to say, "A
8 possible explanation is shown in the sketch in
9 Figure 4," correct?

10 A. The document speaks for itself.

11 Q. Okay. And it goes to say that,
12 "Production experience strongly suggests that mixing
13 of the water occurs in the producing wellbores
14 rather than in the formation." Did I read that
15 correctly?

16 A. That's what the document says.

17 Q. Yeah. And you excluded that portion of
18 the -- of the paper from your exhibit, correct?

19 A. It's not about whether it's mixing in the
20 reservoir or well -- if the wellbore didn't
21 penetrate down far enough to the San Andres, then
22 how is it mixing into the wellbore?

23 Q. Well, my understanding, Mr. West, is that
24 this paper postulates a solution for that quandary,
25 and it shows in Figure 4, that the authors of this

1 paper believe that the water is being -- is
2 remaining confined within the wellbores. Is that --
3 is that your understanding of this Figure 4?

4 A. Either way, whichever way it comes into
5 there, it's coming from the San Andres and mixing
6 with the Grayburg.

7 Q. In this Figure 4, they put question marks
8 around the word "bottom water." Do you see that?

9 A. Yes.

10 Q. That indicates to me that it's an
11 uncertainty, but you're telling me that you believe
12 that this Figure 4 confirms that there's bottom
13 water from the San Andres making its way into the
14 wellbores of the San Andres -- of the Grayburg?

15 A. I said above it is making it into the
16 wellbores. Statement above said it was making it
17 into the wellbores, correct.

18 Q. I'm asking what your opinion is or what
19 your understanding of the -- of the -- of the
20 document is?

21 A. It says the, "Sketch of how [the]
22 San Andres water resulted in the formation of barium
23 scale before the waterflood was initiated."

24 Q. And so this Figure 4, right, based on the
25 document, says that it's -- "A possible

1 explanation," right, "is shown in the sketch"?

2 A. You know, it says: A possible explanation
3 in the sketch that the pure wellbore or from the
4 fractures in the formation, but San Andres water was
5 getting into Grayburg.

6 Q. Where does it say that there are fractures
7 in the formation?

8 A. Oh, that would be another possible
9 explanation.

10 Q. Does this paper identify anything about
11 fractures in any formations?

12 A. This doesn't say it.

13 Q. Okay. And does it talk about the fact
14 that there's San Andres water mixing in the Grayburg
15 formation?

16 A. I would say it's mixing in the wellbores
17 or it comes from the formation of the well, no
18 matter what you're communicating the two systems in
19 forming barium scale.

20 Q. Okay. Mr. West, in fact, this paper
21 confirms that it's not mixing in the formation,
22 doesn't it?

23 A. Well, we result in scales forming is in
24 the wellbore. So when you get the pressure and
25 temperature drop, that's where the scale is going to

1 form.

2 Q. So your opinion is limited to the --
3 making the point that there is scale forming in the
4 wellbores, right?

5 A. That is correct. It has scale that has
6 formed in the wellbores. It's formed other places,
7 but . . .

8 Q. But this paper doesn't establish that
9 there's communication through fractures between the
10 Grayburg and San Andres, agree?

11 A. It says that there's communication between
12 the San Andres and the Grayburg.

13 Q. Where does it say that there's
14 communication between the San Andres and the
15 Grayburg?

16 A. The San Andres water is finding its way
17 into the wellbores. Isn't that communication?

18 Q. It says, "Apparently, some San Andres was
19 finding its way into the wellbore," correct?

20 A. Correct.

21 Q. Was it confirmed?

22 A. Apparently, it seems to be confirmed. The
23 confirmation would be the formation of the barium
24 sulfate.

25 Q. Okay.

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1 MR. RANKIN: Mr. Hearing Officer, I'm
2 just going to cite for the record that this is --
3 I've been referring to here Goodnight Exhibit
4 Number B-5 for purposes of the record.

5 HEARING OFFICER HARWOOD: That's this
6 report that we've just been talking about?

7 MR. RANKIN: That's correct.

8 HEARING OFFICER HARWOOD: All right.

9 Q (By Mr. Rankin) Now, this next exhibit,
10 Mr. West, I understand that your direct testimony
11 was that this pressure reading was at minus 250.
12 And then your rebuttal testimony was that it was at
13 plus 250. But now your testimony is that it's
14 actually at minus -- you agree that it's at minus
15 250 subsea, correct?

16 A. I agree with that. I don't see the
17 exhibit.

18 MS. SHEEHAN: Mr. --

19 MR. RANKIN: Oh, I'm sorry.

20 A. Just to make sure we're on the same place.

21 Q. Yeah. Sorry about that, I apologize.

22 A. Yes, on this, I do agree that it should be
23 a negative 250.

24 Q. Okay. Now, Mr. Buchwalter, when he did
25 his modeling, he used -- he revised his model to use

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1 your plus 250 value, correct?

2 A. You'd have to show me that.

3 Q. I guess the record speaks for itself. But
4 do you recall whether or not Mr. Buchwalter relied
5 on your pressure basis at plus 250 in the formation?

6 A. That, I do not know.

7 Q. Okay. Let's see. Come back to this, I
8 believe. Let's see. One thing I wanted to ask. I
9 think I understood you to say when I was looking at
10 this -- when you were talking about this slide at
11 Exhibit N-8, it's the slide 12 of your presentation,
12 I thought I heard you to say that the original
13 formation pressure was at .386 pressure gradient?

14 A. If I recall correctly, that's what that
15 calculates out to be whenever do you the negative
16 250.

17 Q. Okay. Which numbers am I using to make
18 that pressure gradient calculation?

19 A. So we would have to correct this. So if
20 we did a -- I did it earlier today, but probably
21 easiest to pull it up on the other slide.

22 But, you know, you're going to take the
23 pressure and the depth and just, you know, divide
24 and get it. But I'm just trying to do the
25 conversions in my head and --

1 Q. Do you want me to go to another slide?

2 A. If you had the original one that had the
3 negative 250 on it, the calculations would be right,
4 and it would be easily to do it from there.

5 Q. I can easily do that for you.

6 A. That would be very helpful.

7 Q. I think it was -- do you remember what it
8 was? I-4?

9 Okay. Thank you. All right. Mr. West
10 here we go, I-4.

11 A. Let me make sure we're at a negative 250
12 at 1450. So, yeah, you can just take, you know --
13 the gradient, you can just take the pressure of 1527
14 and divide by 4,006. That will give you the
15 gradient.

16 Q. Okay. And that's where you get that .386
17 from; is that right?

18 A. That's correct.

19 Q. Okay. And that would be the pressure
20 gradient at 4,006 feet?

21 A. That's the column of that, you know
22 pressure, gradient. Now if it was originally taken
23 there at that negative 250 subsea, you know, which
24 was at 1450 on here, it's about negative 258 and
25 then just use the gradient up and down.

1 Q. I just want to make sure I understood
2 where that value came from and where it -- where it
3 was -- where it came from. Okay? And you're
4 telling me it came from this original I-3 exhibit,
5 correct?

6 A. That is correct.

7 Q. Based on the next one down?

8 A. Yeah.

9 Q. Okay. This is -- this has the same data
10 points as I-3, correct?

11 A. Yeah, that's just a little bit different.

12 Q. Okay. Do you know, Mr. West, whether this
13 depth at 4,006 feet is above Goodnight Midstream's
14 permeability barrier that it's identified in its
15 exhibits?

16 A. I would need to see where this is on the
17 map, and you'd have to show me a well log.

18 Q. Very well. Sitting here today, you don't
19 know whether that's above or below Goodnight's
20 permeability barrier that it's picked and relies on
21 in its exhibits and testimony?

22 A. I really don't know where Goodnight's
23 permeability barrier is.

24 Q. After all this time. And you're using
25 this as a basis to show that there's

1 communication -- pressure communication between what
2 you're calling the San Andres and the Grayburg, but
3 you haven't determined -- or ascertained for
4 yourself and you can't tell the Commission whether
5 or not it's actually within the disposal zone that
6 Goodnight is disposing into, correct?

7 A. Show me the well and you're disposal, and
8 then we can --

9 Q. I'm asking you. It's your analysis. Have
10 you determined whether or not this is in Goodnight's
11 disposal zone?

12 A. I don't really recognize Goodnight's tops
13 as being accurate and correct, so I don't know that
14 off the top of my head.

15 Q. So I don't know that the tops matter. I'm
16 asking whether or not -- you identified whether or
17 not this pressure that you've taken is actually
18 within Goodnight's disposal zone?

19 A. This would be -- this is in the --
20 San Andres is where it's depicted on here. And, you
21 know, Goodnight's disposing in the San Andres.

22 Q. So I'm going to ask you, Mr. West, because
23 there's so much back and forth about formations and
24 tops, and I'd rather talk about it in terms of
25 depths or zones or correlative intervals. Can you

1 tell me whether or not this depth that you've
2 identified as being in communication with the
3 Grayburg is within -- is correlated to or within the
4 disposal interval that -- in which Goodnight is
5 injecting its produced water?

6 A. It's indicating a pressure in the
7 San Andres.

8 Q. Okay. So you -- I mean, the answer is no,
9 you can't tell me whether or not it's actually
10 within Goodnight's disposal zone, correct?

11 A. They're disposing in the San Andres.

12 Q. And you can't tell me whether it's above
13 or below their permeability barrier that they've
14 picked and identified in their exhibits?

15 A. You'd have to show me that.

16 Q. It's your analysis, Mr. West. I'm asking
17 you whether you can tell me whether it's in or out?

18 A. It's in the San Andres.

19 Q. Okay. I'll take that as a no. Is that
20 fair? You can't tell me that it's within their
21 disposal zone? I'm just trying on get an answer,
22 yes or no.

23 A. You're disposing in the San Andres, is
24 what you're depicting. So the Goodnight, it's in
25 the San Andres.

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1 Q. Okay. All right.

2 MR. RANKIN: Mr. Hearing Officer, I'm
3 just trying to get an answer. I'm trying to figure
4 out whether, in his analysis, Mr. West has made the
5 determination that this pressure that he's read that
6 he's presenting to the Commission is being
7 determinative of there being communication
8 between -- all this says is that there -- he thinks
9 that there's communication between the San Andres
10 and the -- and the Grayburg.

11 And what I'm asking him is whether he can
12 determine whether or not that pressure location that
13 he's identified is actually within Goodnight's
14 disposal zone.

15 HEARING OFFICER HARWOOD: But what I
16 get from the answer going -- the back and forth is
17 that he needs more information to answer your
18 question, and you're not providing him that
19 information.

20 So you're getting the best answer I think
21 he can give without knowing where your top is versus
22 where Empire thinks the top is.

23 MR. RANKIN: Okay. Well, I guess --
24 I guess let me rephrase the question, then.

25 Q (By Mr. Rankin) Mr. West, have you

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1 determined -- have you, as part of your evaluation
2 to determine whether or not there's a pressure
3 communication between where -- let me ask you this:
4 Is -- as part of your analysis, did you evaluate
5 whether or not Goodnight's disposal zone is in
6 communication with the Grayburg?

7 A. The San Andres is in communication with
8 the Grayburg.

9 Q. That's not an answer to my question,
10 Mr. West. That's a different question now.

11 As part of your analysis, did you evaluate
12 whether the Goodnight's disposal zone is in pressure
13 communication with the Grayburg?

14 A. Can you define for me what Goodnight's
15 disposal zone is?

16 Q. Okay. Well, I'll tell you what. Let's
17 get to that tomorrow because it's 4:50, and I will
18 do that. Okay? Rather than try to do it on the
19 fly.

20 MR. RANKIN: And I guess at that --
21 with that, Mr. Hearing Officer, I guess I could, you
22 know, draw this out for a few more minutes, but I
23 guess I'd rather just start fresh tomorrow and
24 resume with my cross-examination of Mr. West, if
25 it's acceptable with the Commission and Commission

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1 chair and other parties.

2 CHAIR ROZATOS: Mr. Hearing Officer,
3 I think it is a good point for us to stop. If
4 Mr. Rankin has a point where he can stop, then I
5 think it's good for today, and we can continue
6 tomorrow if you're okay with that, Mr. Hearing
7 Officer.

8 HEARING OFFICER HARWOOD: Oh, that's
9 fine with me. It's been a long day --

10 CHAIR ROZATOS: It has.

11 HEARING OFFICER HARWOOD: -- and
12 everybody -- everybody's brains are tired with all
13 this technical information.

14 So just a reminder, though, we pick up
15 tomorrow morning at 10:30.

16 Is that -- that's correct, Mr. Razatos?

17 CHAIR ROZATOS: Yes, that is correct.
18 I was just going to remind everybody, but thank you.

19 HEARING OFFICER HARWOOD: All right,
20 folks. Thank you all, and we'll see you bright and
21 not so early tomorrow morning.

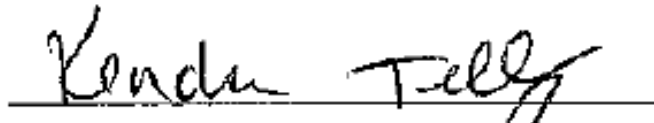
22 (The proceedings recess at 4:51 p.m.)
23
24
25

AFFIRMATION OF COMPLETION OF TRANSCRIPT

I, Kendra D. Tellez, DO HEREBY CERTIFY that on the 7th day of April, 2025, a hearing of the New Mexico Oil Conservation Commission was taken before me via video conference.

I FURTHER AFFIRM that I did report in stenographic shorthand the proceedings as set forth herein, and the foregoing is a true and correct transcript of the proceedings to the best of my ability.

I FURTHER affirm that I am neither employed by nor related to any of the parties or attorneys in this case, and that I have no interest in the final disposition of this case in any court.

A handwritten signature in black ink, reading "Kendra Tellez", is written over a horizontal line.

KENDRA D. TELLEZ

Veritext Legal Solutions

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