

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

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

IN THE MATTER OF THE HEARING Docket No.
CALLED BY THE OIL CONSERVATION 18-24
DIVISION FOR THE PURPOSE OF
CONSIDERING:
Case Nos. 24141, 24254

HEARING

DATE: Wednesday, May 29, 2024
TIME: 8:30 a.m.
BEFORE: Gregory A. Chakalian, Hearing Examiner
LOCATION: Pecos Hall, Wendell Chino Building
 1220 South Saint Francis Drive
 Santa Fe, NM 87505
REPORTED BY: James Cogswell
JOB NO.: 6716488

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

A P P E A R A N C E S

ON BEHALF OF AVANT OPERATING, LLC:

DANA S. HARDY, ESQUIRE
Hinkle Shanor LLP
218 Montezuma Avenue
Santa Fe, NM 87501
dhardy@hinklelawfirm.com
(505)982-4554

JACLYN M. MCLEAN, ESQUIRE
Hinkle Shanor LLP
218 Montezuma Avenue
Santa Fe, NM 87501
jmclean@hinklelawfirm.com
(505)982-4554

ON BEHALF OF APACHE CORPORATION:

ADAM G. RANKIN, ESQUIRE
Holland & Hart LLP
110 North Guadalupe Street, Number 1
Santa Fe, NM 87501
agrarkin@hollandhart.com
(505)988-4421

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

A P P E A R A N C E S (Cont'd)

ON BEHALF OF NORTHERN OIL AND GAS, INC:

BLAKE C. JONES, ESQUIRE (by videoconference)
Steptoe & Johnson PLLC
1780 Hughes Landing Boulevard, Suite 750
Spring, TX 77380
blake.jones@steptoe-johnson.com
(281)203-5730

ALSO PRESENT:

Dean McClure, Technical Examiner - Oil
Conservation Division (via videoconference)
Freya Tschantz, Law Clerk - Oil Conservation
Division
Blake Johnson, Witness (via videoconference)
Lucas Emmett, Witness (via videoconference)
Drew Chenoweth, Witness (via videoconference)
Evan Roback, Witness (via videoconference)
Shelly Albrecht, Witness
John Harper, Witness
Shane Kelly, Witness

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

I N D E X

PAGE

VOIR DIRE of Shelly Albrecht

By Mr. Rankin 210

OPENING STATEMENT By Mr. Rankin 44

OPENING STATEMENT By Ms. Hardy 49

WITNESSES: DX CX RDX RCX

BLAKE JOHNSON

By Mr. Rankin 53 107,
120

By Ms. Hardy 68 188

By Mr. McClure 76 92,
197

DREW CHENOWETH

By Mr. Rankin 57 113,
138

By Ms. Hardy 77 195

LUCAS EMMETT

By Mr. Rankin 63 114,

By Ms. Hardy 80

		DX	CX	RDX	RCX
1	WITNESSES (Cont'd):				
2	EVAN ROBACK				
3	By Mr. Rankin	65		117,	
4				146,	
5				203	
6	By Ms. Hardy		84		193
7	By Mr. McClure		198		
8	SHELLY ALBRECHT				
9	By Ms. Hardy	205		271	
10	By Mr. Rankin		226		274
11	By Mr. McClure		257		
12	JOHN HARPER				
13	By Ms. Hardy	279			
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

E X H I B I T S

NO.	DESCRIPTION	ID/EVD
Apache:		
Exhibit A	Self-affirmed Statement of Blake Johnson, Petroleum Landman	18/18
Exhibit B	Slides Referenced by the Testifying Witnesses	18/18
Exhibit C	Self-affirmed Statement of Drew Chenoweth, Petroleum Geologist	18/18
Exhibit D	Self-affirmed Statement of Lucas Emmett, Petroleum Engineer	18/18
Exhibit E	Self-affirmed Statement of Evan Roback, Petroleum Engineer	18/18
Exhibit F	Notice Affidavit for Case 24141	18/18
Exhibit G	Affidavit of Publication for Case 24141	18/18

1	E X H I B I T S (Cont'd)		
2	NO.	DESCRIPTION	ID/EVD
3	Avant:		
4	Exhibit A	Self-Affirmed Statement of	
5		Shelly Albrecht	22/22
6	Exhibit A-1	Resume of Shelly Albrecht	22/22
7	Exhibit A-2	Application and Proposed	
8		Notice of Hearing	22/22
9	Exhibit A-3	Executive Summary of Avant's	
10		Background and Operations	22/22
11	Exhibit A-4	Avant Management Team	22/22
12	Exhibit A-5	Avant Team Highlights	22/22
13	Exhibit A-6	Overview of Avant	
14		Operational Performance	22/22
15	Exhibit A-7	Current Active Horizontal	
16		Rig Count by Operator	22/22
17	Exhibit A-8	Horizontal Wells Drilled in	
18		New Mexico Permian Basin by	
19		Operator Since 2021	22/22
20	Exhibit A-9	General Location Map	22/22
21	Exhibit A-10	C-102s	22/22
22	Exhibit A-11	Division Pooling Factors	22/22
23	Exhibit A-12	Avant Activity Surrounding	
24		Grayling Unit	22/22
25			

1	E X H I B I T S (Cont'd)		
2	NO.	DESCRIPTION	ID/EVD
3	Avant (Cont'd):		
4	Exhibit A-13	Grayling Unit Development	
5		Schedule/Permitting Status	22/22
6	Exhibit A-14	Lease Tract Ownership Map	22/22
7	Exhibit A-15	Lease Tract Map	22/22
8	Exhibit A-16	Lease Tract Well Placement	
9		Map by Bench	22/22
10	Exhibit A-17	Lease Tract Ownership,	
11		Committed Working Interest	
12		Owners	22/22
13	Exhibit A-18	Lease Tract Ownership,	
14		Uncommitted Working Interest	
15		Owners to be Pooled	22/22
16	Exhibit A-19	Overriding Royalty Interest	
17		Owners to be Pooled	22/22
18	Exhibit A-20	Comparison of Surface	
19		Facilities for Standard/	
20		Non-Standard Unit Development	22/22
21	Exhibit A-21	Non-Standard Spacing Unit	
22		Offset Ownership	22/22
23	Exhibit A-22	Time Line on Development of	
24		Grayling Unit	22/22

E X H I B I T S (Cont'd)		
NO.	DESCRIPTION	ID/EVD
3	Avant (Cont'd):	
4	Exhibit A-23	Summary of Contacts with
5		Interest Owners 22/22
6	Exhibit A-24	Sample Well Proposal Letter
7		and Authorizations for
8		Expenditures 22/22
9	Exhibit A-25	Summary of Avant Contacts
10		with Apache Corporation 22/22
11	Exhibit A-26	Surface Ownership Information 22/22
12	Exhibit B	Self-Affirmed Statement of
13		John Harper 23/23
14	Exhibit B-1	Resume of John Harper 23/23
15	Exhibit B-2	Regional Locator Map 23/23
16	Exhibit B-3	Stress Orientation Map 23/23
17	Exhibit B-4	Gun Barrel Development Plan
18		of Avant Grayling Unit 23/23
19	Exhibit B-5	Gun Barrel Development Plan
20		of Apache Dustbowl Unit 23/23
21	Exhibit B-6	First Bone Spring
22		Stratigraphic Cross Section 23/23
23	Exhibit B-7	First Bone Spring Offset
24		Activity 23/23

1	E X H I B I T S (Cont'd)		
2	NO.	DESCRIPTION	ID/EVD
3	Avant (Cont'd):		
4	Exhibit B-8	First Bone Spring Subsea	
5		Structure Map	23/23
6	Exhibit B-9	First Bone Spring Gross	
7		Isopach and Pay Maps	23/23
8	Exhibit B-10	Second Bone Spring	
9		Stratigraphic Cross Section	23/23
10	Exhibit B-11	Second Bone Spring Offset	
11		Activity	23/23
12	Exhibit B-12	Second Bone Spring Subsea	
13		Structure Map	23/23
14	Exhibit B-13	Second Bone Spring Gross	
15		Isopach and Pay Maps	23/23
16	Exhibit B-14	Third Bone Spring	
17		Stratigraphic Cross Section	23/23
18	Exhibit B-15	Third Bone Spring Offset	
19		Activity	23/23
20	Exhibit B-16	Base of Bone Spring	
21		Subsea Structure Map	23/23
22	Exhibit B-17	Third Bone Spring Gross	
23		Isopach and Pay Maps	23/23
24	Exhibit C	Self-Affirmed Statement	
25		of Shane Kelly	23/23

1	E X H I B I T S (Cont'd)		
2	NO.	DESCRIPTION	ID/EVD
3	Avant (Cont'd):		
4	Exhibit C-1	Resume of Shane Kelly	23/23
5	Exhibit C-2	Avant Production Results in	
6		Area Surrounding Grayling Unit	23/23
7	Exhibit C-3	Comparison of Avant Grayling	
8		Development Plan with Apache	
9		Dustbowl Development Plan	23/23
10	Exhibit C-4	Graph Comparing Avant	
11		Production with Lower Density	
12		Developments in the Area	
13		Surrounding Grayling Unit	23/23
14	Exhibit C-5	Graph Depicting Avant's	
15		Proven Third Bone Spring	
16		Development Recovery	23/23
17	Exhibit C-6	Impact of Frac Hits on	
18		Offset Depletion	23/23
19	Exhibit C-7	Comparison of Avant and	
20		Apache Drilling, Completion	
21		and Facilities Costs	23/23
22	Exhibit C-8	Avant's Experience with	
23		Cutbow Development	23/23
24	Exhibit C-9	Avant's Dedicated Gas	
25		Takeaway	23/23

1	E X H I B I T S (Cont'd)		
2	NO.	DESCRIPTION	ID/EVD
3	Avant (Cont'd):		
4	Exhibit C-10	Avant's Produced Water	
5		Infrastructure	23/23
6	Exhibit C-11	Avant's Oil Takeaway	23/23
7	Exhibit C-12	Two-Mile Type Curve for	
8		First Bone Spring Wells	23/23
9	Exhibit C-13	Avant Cutbow Well Performance	23/23
10	Exhibit C-14	Two-Mile Type Curve for	
11		Second Bone Spring Wells	23/23
12	Exhibit C-15	Two-Mile Type Curve for	
13		Third Bone Spring Wells	23/23
14	Exhibit D	Self-Affirmed Statement of	
15		Dana S. Hardy	23/23
16	Exhibit D-1	Notice Letters to All	
17		Interested Parties	23/23
18	Exhibit D-2	Chart of Notice to All	
19		Interested Parties	23/23
20	Exhibit D-3	Copies of Certified Mail	
21		Receipts and Returns	23/23
22	Exhibit D-4	Affidavit of Publication	
23		for March 5, 2024	23/23
24			
25			

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

E X H I B I T S (Cont'd)

R E B U T T A L E X H I B I T S

NO.	DESCRIPTION	ID/EVD
Avant Rebuttal Land:		
Exhibit A-27	Avant's Control of Working Interest Ownership in the Unit	24/24
Exhibit A-28	Letter of Support From CXA Oil & Gas Holdings, LP	24/218
Exhibit A-29	Apache's Term Assignment	24/24
Avant Rebuttal Geology:		
Exhibit B-18	Summary of Apache's Inaccurate Depth Argument	24/24
Exhibit B-19	Apache's Performance and Engineering Analysis Ignores Geology	24/24
Exhibit B-20	Avant Compliance with OCD Filing Requirements	24/24
Exhibit B-21	Apache History of Unlawful Venting and Flaring	24/24
Exhibit B-22	Apache Oil and Produced Water Spill History	24/24

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

R E B U T T A L E X H I B I T S (Cont'd)

NO.	DESCRIPTION	ID/EVD
Avant Rebuttal Reservoir:		
Exhibit C-16	Apache's Summary of Activity is Inaccurate	24/24
Exhibit C-17	Avant Drilling Operations Minimize Disturbance	24/24
Exhibit C-18	Avant Outperforms in Analogous Rock Quality	24/24
Apache Rebuttal Land:		
Exhibit 30	Updated Development Plan Preparation Timeline	30/30
Exhibit 31	Working Interest Control	30/30
Apache Rebuttal Geology:		
Exhibit 32	Tight Spacing 1BSS: Apache v. Avant	30/30
Exhibit 33	Tight Spacing 2BSS: Apache v. Avant	30/30
Exhibit 34	Tight Spacing 3BSS: Apache v. Avant	30/30
Exhibit 35	Four-String Capitan	30/30

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

R E B U T T A L E X H I B I T S (Cont'd)

NO.	DESCRIPTION	ID/EVD
Apache Rebuttal	Petroleum Engineering:	
Exhibit 36	Typical Development Well Spacing Over Time	30/30
Exhibit 37	EUR Prediction Using Limited Production Data	30/30
Exhibit 38	Performance Degradation at Tighter Spacing	30/30
Exhibit 39	Golden Tee 3BSS Results	30/30
Exhibit 40	Avant's Full Bench Development Approach	30/30

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

P R O C E E D I N G S

THE HEARING EXAMINER: Good morning.
It is 8:30 on May 29. These are the hearings of the
Oil Conservation Division. We are having a special
hearing today for contested cases number 24141 and
24254.

Entries of appearance, please.

MS. HARDY: Good morning, Mr. Examiner.
Dana Hardy and Jackie McLean with Hinkle Shanor on
behalf of Avant Operating, LLC.

THE HEARING EXAMINER: Good morning.
Mr. Rankin, are you having trouble with
your microphone?

MR. RANKIN: Mr. Examiner, Adam Rankin
appearing on behalf of Apache in this contested case.

THE HEARING EXAMINER: Good morning.
Before we begin, let's deal with any preliminary
matters.

MR. JONES: Good morning, Mr. Examiner.
We also have Blake Jones with Steptoe & Johnson
monitoring the cases on behalf of Northern Oil and
Gas.

THE HEARING EXAMINER: Good morning,
Mr. Jones. Mr. Jones, have you had a chance to review
the exhibits?

1 MR. JONES: Yes.

2 THE HEARING EXAMINER: Including the
3 rebuttal exhibits?

4 MR. JONES: Yes.

5 THE HEARING EXAMINER: And I know
6 you're monitoring. Does that mean that you don't have
7 any objections to any of the exhibits?

8 MR. JONES: That is correct.

9 THE HEARING EXAMINER: Okay. And do
10 you have any of your own exhibits or witnesses?

11 MR. JONES: No, we do not.

12 THE HEARING EXAMINER: Okay. Do you
13 reserve the right to cross-examine witnesses?

14 MR. JONES: Yes, please.

15 THE HEARING EXAMINER: Okay. Sounds
16 good.

17 So it looks like Apache filed its
18 application first. Is that right, Mr. Rankin?

19 MR. RANKIN: That's correct.

20 THE HEARING EXAMINER: Okay. And let's
21 go through your prehearing statement and your
22 exhibits. I have a prehearing statement that has
23 124 pages. Is that correct?

24 MR. RANKIN: Mr. Examiner, I'm not
25 exactly sure of the page count. But yeah, I believe

1 it probably is because it includes not only the
2 prehearing statement but the exhibits and testimony
3 for each of Apache's four witnesses.

4 THE HEARING EXAMINER: Okay. Let's see
5 if we can deal with the exhibits and enter them into
6 evidence by stipulation of the parties.

7 Ms. Hardy and Ms. McLean, you're both
8 representing Avant?

9 MS. HARDY: Yes, that's correct.

10 THE HEARING EXAMINER: Okay. Have you
11 both had a chance to review Mr. Rankin's exhibits?

12 MS. HARDY: I have reviewed the
13 exhibits, yes.

14 THE HEARING EXAMINER: You have. Are
15 there any objections to admitting any of the exhibits
16 into evidence?

17 MS. HARDY: No, I don't have any
18 objection.

19 THE HEARING EXAMINER: Okay.
20 Mr. Rankin, the Division will enter into evidence all
21 of your exhibits.

22 (Apache Exhibit A through Exhibit G
23 were marked for identification and
24 received into evidence.)

25 THE HEARING EXAMINER: I'm looking for

1 an outline of the exhibits. What page is that on?

2 MR. RANKIN: Mr. Examiner, if you turn
3 to the prehearing statement and scroll down -- this is
4 not a separate table of contents, but within the
5 prehearing statement on PDF page 5, there's a list of
6 filed evidence. It includes an outline of what was
7 submitted, including the applications, compulsory
8 pooling checklist, and so forth.

9 THE HEARING EXAMINER: Okay. And I see
10 it here, filed evidence, page 5. So we have your
11 application, your compulsory pooling checklists, which
12 are not evidence that were already in the case. And
13 then we have Apache Exhibits A, B, C, D, E, F, and G.

14 MR. RANKIN: Correct, Mr. Examiner.
15 And with each of those, there are sub-attachments or
16 attachments for each of those exhibits.

17 THE HEARING EXAMINER: Okay. Well,
18 they're all exhibits entered into evidence at this
19 point.

20 MR. RANKIN: Mr. Examiner, one question
21 or point of clarification. We did file rebuttal
22 exhibits yesterday. I intended to mark them as
23 Exhibit B. They're a continuation of the slides that
24 are referred to by our witnesses.

25 I didn't mark them as Exhibit B. I did

1 mark them as slides in continuation of those numbers.
2 So I'd like to just make that clarification that the
3 intent was to file them as Exhibit B, rebuttal slides.

4 THE HEARING EXAMINER: All right. Let
5 me find those. Hold on one second.

6 Okay. On this document, it looks like
7 14 pages?

8 MR. RANKIN: Correct.

9 THE HEARING EXAMINER: Okay. It
10 doesn't -- it was unclear to me who filed this.
11 There's no attorney signature at the bottom of this.
12 It doesn't even say whose rebuttal exhibits they are.
13 So now that I know they are Apache's --

14 MR. RANKIN: I think maybe they do,
15 Mr. Examiner. At the top of our filing, we did state,
16 "Apache's rebuttal exhibits." And I did have a
17 signature block where I signed the document. There's
18 a cover page that goes along with our exhibit
19 documents.

20 THE HEARING EXAMINER: Ms. Hardy, did
21 Avant also file rebuttal exhibits?

22 MS. HARDY: We did, Mr. Examiner. So
23 you could be referring to ours.

24 THE HEARING EXAMINER: I think --

25 MS. MCLEAN: And it looks like theirs

1 did not make it into the case file. We received a
2 copy after 5 p.m. And I don't think they've been
3 posted to the OCD's website, Apache's exhibit.

4 THE HEARING EXAMINER: That's why I
5 can't find it, Mr. Rankin.

6 Freya, is there any way to admit or to
7 accept the filing so that I can see it?

8 MS. TSCHANTZ: I'm doing it now.

9 THE HEARING EXAMINER: Okay.
10 Mr. Rankin, apologies. Give us a minute so we can get
11 our act together.

12 MR. RANKIN: No, it took me a little
13 bit last night to get everything organized to file it.
14 So I apologize if it was a little after five.

15 THE HEARING EXAMINER: Before I deal
16 with the rebuttal exhibits for Apache, let's deal with
17 Avant's exhibits.

18 Ms. Hardy, I am going to find your
19 exhibits here.

20 Okay. Ms. Hardy, I think you filed a
21 consolidated prehearing statement?

22 MS. HARDY: That's correct.

23 THE HEARING EXAMINER: Okay. It looks
24 like it's eight pages. So I don't think that's what
25 I'm looking for.

1 MS. HARDY: Right.

2 THE HEARING EXAMINER: I think I see
3 here a 344-page document?

4 MS. HARDY: That is our exhibit
5 submission, correct.

6 THE HEARING EXAMINER: Okay. It says,
7 "Exhibit Index." I have exhibits A through A-26, B-1
8 through 17, C-1 through 15, and Exhibit D-1 through 4.
9 Are you seeking to have them admitted into evidence at
10 this time?

11 Mr. Rankin, any objection to these
12 exhibits?

13 MR. RANKIN: Mr. Examiner, the
14 only -- I have no objections to their original
15 exhibits. I do have some concerns about an exhibit
16 that was submitted with their rebuttal that I'd like
17 to address.

18 THE HEARING EXAMINER: So does that
19 mean there's no objection for these exhibits?

20 MR. RANKIN: No objection.

21 THE HEARING EXAMINER: Okay. So
22 Ms. Hardy, your exhibits are admitted into evidence.

23 (Avant Exhibit A through Exhibit A-26
24 were marked for identification and
25 received into evidence.)

1 (Avant Exhibit B through B-17 were
2 marked for identification and received
3 into evidence.)

4 (Avant Exhibit C through C-15 were
5 marked for identification and received
6 into evidence.)

7 (Avant Exhibit D through D-4 were
8 marked for identification and received
9 into evidence.)

10 THE HEARING EXAMINER: Let's deal with
11 your rebuttal exhibits because I have those open in
12 front of me.

13 Okay, Mr. Rankin. I see a 14-page
14 document titled Rebuttal Exhibit Index. It has
15 rebuttal land exhibits A-27 through 29, rebuttal
16 geology exhibits B-18 through 22, and reservoir
17 exhibits C-16 through 18. I think you just stated
18 that you have an objection to -- was it one of them?

19 MR. RANKIN: Mr. Examiner, one or parts
20 of one exhibit. It's marked as Exhibit A-28. It's
21 page 3 of the PDF file.

22 THE HEARING EXAMINER: Okay. So
23 besides A-28, do you have an objection to any of the
24 other rebuttal exhibits?

25 MR. RANKIN: I do not.

1 THE HEARING EXAMINER: Okay. So
2 Ms. Hardy, all of your rebuttal exhibits are admitted
3 to evidence with the exception of A-28.

4 (Avant Rebuttal Land Exhibit A-27 and
5 Exhibit A-29 were marked for
6 identification and received into
7 evidence.)

8 (Avant Rebuttal Land Exhibit A-28 was
9 marked for identification.)

10 (Avant Rebuttal Geology Exhibit B-18
11 through Exhibit B-22 were marked for
12 identification and received into
13 evidence.)

14 (Avant Rebuttal Reservoir Exhibit C-16
15 through Exhibit C-18 were marked for
16 identification and received into
17 evidence.)

18 THE HEARING EXAMINER: What is the
19 nature of your objection?

20 MR. RANKIN: Mr. Examiner, there are
21 elements of this exhibit that include hearsay
22 testimony. And we won't have the opportunity to
23 cross-examine the testifier, the person that made the
24 statements.

25 And so for that reason, I would ask

1 that at least portions of this exhibit be stricken
2 from the record.

3 THE HEARING EXAMINER: Okay.

4 Ms. Hardy, your response?

5 MS. HARDY: Mr. Examiner, I think it
6 meets the business records exception to the hearsay
7 rule. And in any event, the Division can consider
8 hearsay in these administrative hearings.

9 And our witnesses will be available to
10 answer questions about this document. So I think it's
11 admissible in this administrative proceeding.

12 THE HEARING EXAMINER: Okay. Who is
13 the witness that this exhibit would come in under?

14 MS. HARDY: Ms. Shelly Albrecht.

15 THE HEARING EXAMINER: Okay. And there
16 is an objection to it based on hearsay and
17 confrontation?

18 MR. RANKIN: Well, actually, I mean, I
19 guess, because it's not criminal context, I guess you
20 couldn't -- not quite confrontation clause.

21 But nevertheless, our inability to --
22 now, if I may just give more explanation for what the
23 basis of the concern is. Looking specifically at the
24 first bullet --

25 THE HEARING EXAMINER: At the first

1 what?

2 MR. RANKIN: First bullet on that
3 slide.

4 THE HEARING EXAMINER: Let me get to --
5 you said it was what page, 3?

6 MR. RANKIN: Page 3.

7 THE HEARING EXAMINER: First bullet of
8 the slide. What does it start with?

9 MR. RANKIN: CXA signed a JOA with APA.

10 THE HEARING EXAMINER: Oh, that bullet.
11 I see it.

12 MR. RANKIN: Okay. So that statement,
13 if I read it out loud, "CXA signed a JOA with APA
14 after being told APA was the established operator, and
15 CXA would be compulsory pooled if it did not sign
16 APA's JOA."

17 Then the second bullet, "CXA signed the
18 JOA with Avant after understanding APA had not, in
19 fact, been named operator."

20 Those two bullets assert certain
21 statements were made as to this fellow, Mr. Ryan
22 Youngblood, who signed this letter. So I'm unable
23 to -- apparently this is from Ms. Albrecht.

24 She was told certain things by
25 Mr. Youngblood. And I have no ability to question

Page 26

1 Mr. Youngblood to understand what his understanding
2 was or what the basis of the conversations were.

3 And so I'm unable to evaluate the
4 veracity of that statement or the understanding that
5 gave rise to these statements. And so I'm unable to
6 question Mr. Youngblood.

7 We don't have an objection to the fact
8 that CXA has submitted this letter to the Division.
9 We understand that CXA has expressed its position in
10 favor of Avant, and that's a fact. And so I'm not
11 looking to exclude the letter itself.

12 But I am looking to exclude the
13 commentary in the testimony around what Mr. Youngblood
14 apparently told or didn't tell Avant's witness.
15 Because I'm unable to evaluate what he did or didn't
16 say or what he understood or didn't understand from
17 his discussions with Apache.

18 THE HEARING EXAMINER: So, Ms. Hardy,
19 what I'm hearing from Mr. Rankin is not necessarily
20 that there's a hearsay objection or a confrontation
21 clause objection because both of those would be
22 overruled.

23 I think the objection is based on
24 reliability. And he's unable to cross-examine the
25 person who made that statement. Therefore, it's hard

1 for the Division to establish a reliability factor to
2 those statements.

3 And your response?

4 MS. HARDY: I think Ms. Albrecht can
5 answer questions about it. And the Division can
6 consider it for whatever way it decides to give the
7 information.

8 THE HEARING EXAMINER: Okay. That's
9 what we will do.

10 Mr. Rankin, we will allow you as much
11 latitude as you need to establish the reliability of
12 those statements. And then we will accept those
13 statements and give it the weight that we feel it
14 deserves.

15 Is there anything else?

16 MR. RANKIN: No, Mr. Examiner.

17 THE HEARING EXAMINER: Okay. So
18 Ms. Hardy, this exhibit has been objected to. What
19 I'll do is I will reserve judgement on it and allow
20 you to establish a foundation, for lack of a better
21 word. The rules of evidence don't control what we do
22 here to the same extent that they do in a courtroom.

23 However, the two touchstones for me are
24 reliability and relevance. So as long as you can show
25 me that, these will be admitted and we will give them

1 whatever weight we think they deserve.

2 So let's see. All of your exhibits are
3 now entered into evidence with the exception of this
4 exhibit.

5 And is this marked? Yes, it's A-28.
6 Okay. It's at the bottom of each page. That's fine.

7 Now, Mr. Rankin, let's deal with your
8 rebuttal exhibits. I still have to find them, so give
9 me one moment.

10 I think I found them. Apache's
11 rebuttal exhibits, I found them. So this looks like a
12 14-page document also. That's interesting. They're
13 both 14 pages.

14 MR. RANKIN: We like to be equitable.

15 THE HEARING EXAMINER: Yeah. And it
16 looks to me like we have rebuttal land exhibits,
17 slide 30 and 31. We have geology Exhibits 32 through
18 35. And we have slides 36 through 40, and these are
19 engineering rebuttal exhibits.

20 Ms. Hardy, have you had a chance to
21 review these?

22 MS. HARDY: Yes, I have.

23 THE HEARING EXAMINER: You have. Are
24 there any objections to any of these?

25 MS. HARDY: I do not have any

1 objections.

2 THE HEARING EXAMINER: Okay.
3 Mr. Rankin, all of your exhibits, including your
4 rebuttal exhibits, are hereby entered into evidence.

5 (Apache Rebuttal Land Exhibit 30 and
6 Exhibit 31 were marked for
7 identification and admitted into
8 evidence.)

9 (Apache Rebuttal Geology Exhibit 32
10 through Exhibit 35 were marked for
11 identification and admitted into
12 evidence.)

13 (Apache Rebuttal Petroleum Engineering
14 Exhibit 36 through Exhibit 40 were
15 marked for identification and admitted
16 into evidence.)

17 THE HEARING EXAMINER: Which party is
18 going to go first?

19 MR. RANKIN: It's been discussed,
20 Mr. Examiner. My proposal will be that, because we
21 filed our application first, we go first.

22 And on that point, Mr. Examiner, since
23 I haven't done too many contested cases with you, I
24 want to just confirm and have input from Avant's
25 counsel about your preference.

1 My thought would be we would call each
2 of our witnesses, have them adopt their direct
3 testimony, and then we would go directly into our
4 rebuttal, and then make each witness, in turn,
5 available for cross-examination by Counsel and the
6 Division.

7 So I just wanted to make sure that was
8 your understanding as well.

9 THE HEARING EXAMINER: Okay.
10 Ms. Hardy?

11 MS. HARDY: And, Mr. Examiner, I don't
12 have any issue with Apache going first. I do have
13 questions for Avant's witnesses on their direct
14 exhibits just because I think it would help them
15 provide illustrative explanation to the Division. So
16 I would like to go through those as well.

17 But I do plan to try to keep it
18 somewhat abbreviated so we're not just reading
19 through, of course, their affidavits.

20 THE HEARING EXAMINER: Yeah, that won't
21 happen. I promise.

22 And before I go on, let me also
23 announce that we have Dean McClure as our technical
24 examiner this morning and this afternoon, if
25 necessary.

1 Mr. McClure, have you had a chance to
2 review all the exhibits, including the rebuttal
3 exhibits, from both parties?

4 MR. MCCLURE: With the exception of
5 Apache's rebuttal, I have. Currently reading Apache's
6 rebuttal currently.

7 THE HEARING EXAMINER: Okay. All
8 right. Mr. McClure, is there anything that you want
9 me to address as a preliminary matter before I go into
10 how we're going to proceed?

11 MR. MCCLURE: I was going to say the
12 only possible thing I could think of is just the
13 incorrect pool code on Apache's pooling checklist.
14 But we can deal with it later, or now, depending on
15 what you'd like to do.

16 Okay.

17 THE HEARING EXAMINER: Let's deal with
18 the order of testimony and how the witnesses will be
19 presented.

20 So, Mr. Rankin and Ms. Hardy, the way I
21 would prefer to do this is that Mr. Rankin presents
22 witnesses. Each one will be sworn in. We can swear
23 them in as a group.

24 Are they here, Mr. Rankin? They're
25 virtual?

1 MR. RANKIN: Yeah.

2 THE HEARING EXAMINER: Okay. We'll
3 swear them in as a group. And then each one, in turn,
4 will adopt his exhibits and written testimony under
5 oath, make any corrections if necessary to those
6 documents.

7 And then we can have them stand for
8 cross-examination first by Ms. Hardy, then by
9 Mr. Jones, and then by Mr. McClure as a panel.

10 And of course, if any of the people who
11 are cross-examining want to direct a question to a
12 specific witness, they're more than welcome to.
13 Otherwise, they can just ask the question to the
14 panel, and the panel can select whoever they want to
15 answer.

16 And then we will go to Ms. Hardy's
17 witnesses. We'll do the same thing. Then we'll come
18 back to yours, and we'll do the rebuttal exhibits.
19 And then we'll go back to Ms. Hardy, and we'll do her
20 rebuttal exhibits.

21 Is there any questions about that?

22 MR. RANKIN: No, Mr. Examiner. I think
23 that's fine.

24 THE HEARING EXAMINER: The other thing
25 I'd like to establish is who has the burden of

1 persuasion here. I mean, I think that's important.

2 Now, of course, we are operating under
3 a preponderance of evidence standard. But in a case
4 like this with competing applications, I'm not clear
5 who has the burden of proof.

6 So Mr. Rankin, what's your position?

7 MR. RANKIN: Well, Mr. Examiner, I
8 believe that we each, as an applicant, have our own
9 burden to establish that our application should be
10 approved and the other should be denied.

11 So I think it's sort of a situation
12 where we're in an equal position, where we each have
13 our burden equally.

14 THE HEARING EXAMINER: Ms. Hardy?

15 MS. HARDY: I agree with Mr. Rankin.

16 THE HEARING EXAMINER: Okay. And I was
17 thinking about it a little bit and trying to come to
18 my own conclusion.

19 Ms. McLean, do you have any opinion?

20 MS. MCLEAN: I don't think it changes.
21 I think it's the same. Everyone presents their
22 position. The Division has the responsibility of
23 weighing all the factors to determine whose is the
24 best and then --

25 THE HEARING EXAMINER: I mean, had

1 Avant not contested Apache's application, it would go
2 through by affidavit. And then it would be up to the
3 Division to approve or deny.

4 In this case, Avant did contest or
5 protest, however you'd like to say it, and filed a
6 competing application.

7 And I think what I'm hearing from the
8 parties is, when all of the evidence is weighed on
9 either side, whoever has a preponderance of evidence
10 to show that their application is better when it comes
11 to preventing waste and protecting correlative rights,
12 then they should win. That's what I'm hearing. Is
13 that correct?

14 MR. RANKIN: That's a fair statement.

15 MS. HARDY: Yes, I agree.

16 THE HEARING EXAMINER: Okay. You
17 agree, okay. All right.

18 And we have a court reporter. Well, I
19 guess he doesn't call himself a court reporter.

20 Mr. James -- is it Cogswell or Cosgrove -- with us?

21 THE REPORTER: James Cogswell.

22 THE HEARING EXAMINER: Cogswell. Thank
23 you. Can you hear everything okay?

24 THE REPORTER: Yes, everything is
25 coming through clearly.

1 THE HEARING EXAMINER: Okay. I guess
2 I've been spoiled by having you here in person. And
3 so I wanted to make sure that you were hearing
4 everything.

5 THE REPORTER: Thanks for checking.
6 We're all good.

7 THE HEARING EXAMINER: Okay. Very
8 good.

9 Mr. Jones, any comment on what you've
10 heard so far?

11 MR. JONES: No comments. Thank you.

12 THE HEARING EXAMINER: Yeah, you're
13 welcome.

14 Okay. Are there any other preliminary
15 matters before Mr. Rankin puts on his case for Avant?

16 MS. HARDY: Mr. Examiner, I just
17 have --

18 THE HEARING EXAMINER: I'm sorry. For
19 Apache.

20 MS. HARDY: I'm sorry. I just have one
21 question. So with respect to presenting our
22 witnesses, since Avant's witnesses are all here in
23 person, how will we handle the panel situation? Or
24 should I go ahead and call one witness at a time? I'm
25 not sure how you would want to do that.

1 THE HEARING EXAMINER: I'd like to
2 swear them all in as a group. How many witnesses do
3 you have?

4 MS. HARDY: We have three.

5 THE HEARING EXAMINER: Three, okay.
6 Would those three witnesses approach the microphone
7 where Ms. Hardy is seated?

8 Okay. So what I'll ask you to do is to
9 raise your right hands.

10 Do you swear or affirm that the
11 testimony you're about to give is the truth, the whole
12 truth, and nothing but the truth under penalty of
13 perjury?

14 MS. ALBRECHT: Yes.

15 MR. HARPER: Yes.

16 MR. KELLY: Yes.

17 THE HEARING EXAMINER: Okay. Would you
18 state, starting with you, your name, and spell it, a
19 little closer to the microphone?

20 MS. ALBRECHT: Shelly Albrecht. It's
21 S-H-E-L-L-Y, last name A-L-B-R-E-C-H-T.

22 THE HEARING EXAMINER: Thank you.

23 MR. HARPER: It's John Harper, J-O-H-N
24 H-A-R-P-E-R.

25 THE HEARING EXAMINER: Good morning.

1 MR. KELLY: Shane Kelly, S-H-A-N-E
2 K-E-L-L-Y.

3 THE HEARING EXAMINER: Okay. And have
4 you all testified as experts before the Oil
5 Conservation Division in the past?

6 MS. ALBRECHT: Yes.

7 MR. HARPER: Yes.

8 MR. KELLY: Yes.

9 THE HEARING EXAMINER: And you've been
10 accepted as an expert?

11 MS. ALBRECHT: Yes.

12 MR. HARPER: Yes.

13 MR. KELLY: Yes.

14 THE HEARING EXAMINER: Okay. And would
15 each one of you state what field you are an expert in?

16 MR. HARPER: Geology.

17 MR. KELLY: Reservoir engineer.

18 THE HEARING EXAMINER: Thank you. You
19 can be seated.

20 Ms. Hardy, we'll call one at a time to
21 sit at the witness booth. And then they'll have to
22 turn on their microphone when the time comes.

23 So is Apache witnesses available to get
24 sworn in?

25 MR. RANKIN: Mr. Examiner, I believe

1 they all are. They are all in their office in
2 Houston.

3 THE HEARING EXAMINER: Ah, okay. It
4 looks like we have four witnesses?

5 MR. RANKIN: Four witnesses, yes.

6 THE HEARING EXAMINER: Very good.
7 Excellent. Okay.

8 Could I ask all of you to raise your
9 right hands, please?

10 Do you swear or affirm that the
11 testimony you're about to give is the truth, the whole
12 truth, and nothing but the truth under penalty of
13 perjury?

14 MR. JOHNSON: Yes.

15 MR. EMMETT: Yes.

16 MR. CHENOWETH: Yes.

17 MR. ROBACK: Yes.

18 THE HEARING EXAMINER: Okay. Very
19 good. One at a time, would you state and spell your
20 name and tell me what field you are an expert in?

21 MR. JOHNSON: Blake Johnson, B-L-A-K-E
22 J-O-H-N-S-O-N, land.

23 THE HEARING EXAMINER: And have you
24 been qualified as an expert before the Division?

25 MR. JOHNSON: I have.

1 THE HEARING EXAMINER: Excellent.

2 Next?

3 MR. EMMETT: Lucas Emmett, L-U-C-A-S
4 E-M-M-E-T-T, engineering.

5 THE HEARING EXAMINER: And have you
6 been qualified before the Division as an expert?

7 MR. EMMETT: No, sir.

8 THE HEARING EXAMINER: Okay. So let
9 me -- do we have a CV, Mr. Rankin?

10 MR. RANKIN: We do, Mr. Examiner.
11 Mr. Emmett's CV is attached as an exhibit behind
12 what's marked as Exhibit D.

13 THE HEARING EXAMINER: Okay. Let's get
14 to that in just a moment.

15 Next, please?

16 MR. CHENOWETH: Drew Chenoweth, D-R-E-W
17 C-H-E-N-O-W-E-T-H, and geology.

18 THE HEARING EXAMINER: And have you
19 been accepted as an expert before the Oil Conservation
20 Division?

21 MR. CHENOWETH: Yes, sir.

22 THE HEARING EXAMINER: Okay. Very
23 good.

24 And finally?

25 MR. ROBACK: Evan Roback, E-V-A-N

1 R-O-B-A-C-K, reservoir engineering.

2 THE HEARING EXAMINER: And have you
3 been accepted as an expert in that field before this
4 division?

5 MR. ROBACK: No, sir.

6 THE HEARING EXAMINER: Okay. And
7 Mr. Rankin, a CV for him?

8 MR. RANKIN: Yes, Mr. Examiner. It has
9 been attached behind his statement, which is marked as
10 Exhibit E.

11 THE HEARING EXAMINER: E. Why don't we
12 deal with those now?

13 And, gentlemen, you can by all means be
14 seated. Thank you.

15 Mr. Rankin, let's deal with -- Freya,
16 would you mute the microphones except for the ones
17 we're using right now so we don't get feedback?

18 Okay, Mr. Rankin. Let me find your
19 document.

20 First CV is for Mr. Lucas Emmett. It's
21 marked as Exhibit D-1.

22 THE HEARING EXAMINER: I see that now.
23 You wouldn't happen to have a page of the PDF; would
24 you?

25 MR. RANKIN: I can get there in a

1 moment.

2 It should be page 97 of the PDF,
3 Mr. Examiner.

4 THE HEARING EXAMINER: Thank you. 97,
5 okay. Give me a moment to review this.

6 Okay. Mr. Emmett is hereby qualified
7 as an expert before the Oil Conservation as a
8 reservoir engineer. That is what you're seeking to
9 have him admitted as; right?

10 MR. RANKIN: Correct, Mr. Examiner.

11 THE HEARING EXAMINER: And then
12 Exhibit E, what page am I looking for?

13 MR. RANKIN: Mr. Roback's CV is marked
14 as Exhibit E-1, PDF page 105.

15 THE HEARING EXAMINER: What does PE
16 stand for?

17 MR. RANKIN: Professional engineer.

18 THE HEARING EXAMINER: What is a
19 professional engineer?

20 MR. RANKIN: It's one who has, I
21 believe, taken a test and has qualified in the state
22 as an engineer qualified to make calculations and do
23 other things that I don't do.

24 THE HEARING EXAMINER: Mr. Roback, is
25 there anything you want to add to that?

1 MR. ROBACK: No, that's an accurate
2 assessment.

3 THE HEARING EXAMINER: Mr. Roback, it
4 looks like you also have on your CV that you're a
5 reservoir engineer.

6 MR. ROBACK: Yes, sir. That's correct.

7 THE HEARING EXAMINER: In what field
8 are you seeking to be an expert today?

9 MR. ROBACK: Reservoir engineering.

10 THE HEARING EXAMINER: A reservoir
11 engineer, okay.

12 So, Mr. Rankin, you'll have two
13 reservoir engineers?

14 MR. RANKIN: Yes, Mr. Examiner.

15 THE HEARING EXAMINER: Thank you.

16 Are there any objections, Ms. Hardy?

17 MS. HARDY: No objection.

18 THE HEARING EXAMINER: Mr. Roback, you
19 are admitted as a reservoir engineer expert before the
20 Oil Conservation Division. Thank you.

21 Okay. Mr. Rankin, do you want to
22 proceed?

23 MR. RANKIN: Mr. Examiner, yes, please.
24 I don't know if it would be suitable or acceptable to
25 make an opening statement, but it may be helpful, I

1 think, for the Division and the technical examiners
2 just to have a little bit of context for this
3 contested case.

4 THE HEARING EXAMINER: By all means.

5 MR. RANKIN: It was helpful for me to
6 just put it all into context.

7 Mr. Examiner, if it may please the
8 Division, in these contested cases, both applicants
9 seek an order approving a nonstandard 1280-acre, more
10 or less, horizontal spacing unit in the Bone Spring
11 formation in Sections 11 and 14 in Township 19 South,
12 Range 32 East, in Lea County.

13 And they both seek to pool all of the
14 uncommitted interests in that acreage.

15 Apache seeks to initially dedicate its
16 proposed horizontal nonstandard spacing unit to eight
17 wells to be drilled on two well pads in the south
18 half, south half of Section 14 to bottom hole
19 locations in the north in Section 11.

20 There are two main differences between
21 Apache's plan of development and Avant's that you'll
22 hear testimony about today.

23 First, Apache proposes to initially
24 drill a total of eight wells at four wells per section
25 spacing. In contrast, Avant proposes a similar

1 development also from the south to north, but
2 initially, they will drill 18 wells with six well
3 spacing per section in each of three different
4 targets.

5 Apache proposes to target only the
6 First Bone Spring and Second Bone Spring benches
7 initially, saving the Third Bone Spring interval for
8 infill development.

9 In comparison, Avant says they will
10 initially target all the prospective Bone Spring
11 zones, the First Bone Spring, the Second Bone Spring,
12 and the Third Bone Spring, with 18 wells all at once
13 and under the terms and deadlines of a pooling order.

14 So Apache's proposal here is only
15 seeking four wells per section, and that's the spacing
16 pattern that the vast majority of operators have
17 chosen for development in this acreage, and there's a
18 reason for it.

19 It is the most efficient and effective
20 spacing to develop each of the targeted Bone Spring
21 intervals in the area. And actual publicly-available
22 production data confirms it.

23 Rather than rely on actual well
24 production data to make its case, Avant resorts to
25 cherry picking a few offsetting developments as

1 analogues and skews, in our opinion, its early time
2 production results through a nontransparent EU decline
3 curve analysis that relies on production forecasts
4 more than 50 years into the future to arrive at a
5 favorable result.

6 As you'll see from the testimony,
7 Avant's approach is not supported by, in our opinion,
8 good engineering or logic. And there are a few other
9 matters of dispute now that each side raised with
10 respect to the other, ranging from cost to regulatory
11 concerns and issues.

12 Now, while disputed, we believe these
13 issues ultimately align with the Division's factors
14 for assessing competing development in way in favor of
15 Apache.

16 Avant has little document experience in
17 the Delaware Basin to date. They're a new company.
18 The few wells that Avant has drilled underperform when
19 compared to the wells drilled by Apache and most
20 operators in the area.

21 Avant's proposed six-well-per-section
22 development plan is unproven. It's inconsistent with
23 the four-well-per-section pattern adopted by the
24 majority of operators in the area and requires
25 substantially more capital for lower expected

1 recovery.

2 Avant's proposed six-well-per-section
3 development plan will cause considerably more
4 disturbance and over more time in the lesser
5 prairie-chicken restricted area.

6 And Avant's proposed 18-well drilling
7 plan does not account, in our opinion, for the severe
8 gas capacity constraints in the area. And it's
9 questionable whether they will be able to contract for
10 its efficient gas takeaway capacity to accommodate all
11 the wells coming online in a short amount of time.

12 In contrast, Apache has a long, proven
13 track record of being a prudent operator and drilling
14 successful wells and meeting and exceeding its gas
15 capture requirements in the state.

16 So Avant is going to present some
17 testimony today and evidence that, as a result of some
18 last-minute deals and trades over the last couple
19 weeks, they've been able to attain a greater share of
20 the working interest control than Apache.

21 And while that may be true, the
22 difference is insignificant. At most, a gap in the
23 working interest control is about 5 percent between
24 the two companies, the difference between roughly
25 52 percent for Avant and 47 percent for Apache.

1 The Division's recent precedent makes
2 clear that, when the difference in working interest
3 control is less than 10 percent, it's deemed to be
4 insignificant and not a controlling factor.

5 That means the Division must decide
6 which development plan will most efficiently develop
7 this subject acreage, prevent waste, and protect
8 correlative rights.

9 In our view, Avant cannot clearly
10 demonstrate with convincing evidence that Apache's
11 proposed initial development plan will cause waste or
12 negatively impact correlative rights.

13 In contrast, Apache's plan is the
14 transparent choice because it uses -- we can
15 demonstrate through clear, unmanipulated data that its
16 proposed development will be a better development for
17 the acreage.

18 Now, the last point I want to make is
19 that Apache has a correlative rights issue. Apache
20 has a term assignment for a portion of the federal
21 acreage in this proposed spacing unit that requires
22 Apache to spud and complete wells no later than the
23 end of March of 2025 or it may lose its interest in
24 135 net acres.

25 As a result, Apache should be given

1 control of the development to ensure its drilling is
2 commenced before the expiration of its term assignment
3 so its correlative rights can be protected.

4 Apache has experience in obtaining the
5 necessary federal permits. It's already filed for
6 them as of October. Avant has only recently filed for
7 its federal permits. And as we all know, it takes a
8 long time to get federal permits approved.

9 So Apache has great concerns that Avant
10 will not be in a position to drill these wells in a
11 timely fashion.

12 So with that, Mr. Examiner, we would
13 ask the Division to approve Apache's application,
14 designate Apache as the operator of this acreage, and
15 deny Avant's competing application.

16 THE HEARING EXAMINER: Thank you,
17 Mr. Rankin.

18 Ms. Hardy?

19 MS. HARDY: Thank you, Mr. Examiner.

20 The factors considered by the Division
21 in evaluating competing pooling cases weigh in favor
22 of Avant here.

23 As Mr. Rankin mentioned, Apache and
24 Avant both seek to develop the same acreage, and
25 specifically, the Bone Spring formation underlying

1 that acreage.

2 However, Avant proposes to drill six
3 wells each in the First, Second, and Third Bone Spring
4 formation, which Apache currently only proposes four
5 in the First and Second.

6 So here, Avant's plan -- and we'll
7 present evidence that it will best prevent waste to
8 protect correlative rights. Avant's
9 six-well-per-section development outperforms other
10 lower-density developments in this area.

11 Apache's development comparisons are
12 not based on wells in this area drilled in comparable
13 rock and exclude wells it does operate in this area.

14 In essence, Apache has cherry picked
15 the data that it uses in its well comparisons, and as
16 a result, they are not accurate.

17 With respect to working interest
18 control, over 50 percent of the interests are
19 committed to Avant's unit. Apache's ownership
20 information, including the information they provided
21 in rebuttal, does not reflect Avant's recent
22 acquisitions and agreements, and includes parties who
23 have more recently signed joint operating agreements
24 with Avant.

25 Regarding Apache's term assignment,

1 which expires in March of 2025, Apache initially
2 proposed these wells in 2019, but took no further
3 action until Avant proposed its wells in 2023.

4 So Apache waited years to develop this
5 acreage, and now seeks to do so at the end of the term
6 assignment. So the term assignment does not provide a
7 basis to grant Apache's application.

8 With respect to surface issues,
9 midstream capability is a major issue in this area
10 because it has been severely lacking. Avant will
11 present evidence and testimony that it has agreements
12 and systems in place to address oil, gas, and water
13 takeaway.

14 Because Avant operates other wells in
15 this immediate area, which include the Cutbow wells,
16 it is able to efficiently and effectively address
17 those midstream issues.

18 In contrast, Apache does not have any
19 midstream agreements in place and only has proposals.
20 Apache's lack of those agreements could result in
21 flaring and cost that exceeds its AFEs as well as
22 delays in producing the wells.

23 Avant has made progress on its
24 development, and it has been consistently working
25 toward producing this acreage. It has submitted APDs

1 to the BLM and has worked with the BLM to determine
2 its well pad and tank battery locations.

3 Although Apache claims Avant has
4 compliance issues, Apache fails to mention it recently
5 agreed to pay a \$4 million fine for venting and that
6 it has over 120 unresolved spills, most of which have
7 existed for years.

8 Regarding Avant's C-104s which were
9 raised by Apache, Avant has submitted all of those
10 required forms and is providing as evidence its
11 communications with OCD where OCD confirmed that Avant
12 could proceed.

13 Avant will also explain that its
14 midstream services have allowed it to resolve venting
15 and flaring concerns.

16 Finally, Avant is an experienced and
17 prudent operator. Avant's management team has many
18 years of experience drilling and operating wells in
19 the Permian Basin, including with Centennial and EOG,
20 which are the companies several of its management team
21 came from.

22 Apache's well count data is inaccurate.
23 Since 2021, Avant has drilled and completed 45 wells
24 in the Delaware Basin in New Mexico and operates the
25 Cutbow wells in adjacent acreage.

1 Apache has drilled very few wells in
2 New Mexico in the past couple of years and only
3 operates two wells within ten miles of this location,
4 which are the Lusk Federal 34 1H and 2H wells, which
5 Apache has excluded from its hearing exhibits and its
6 well analysis.

7 Avant currently has two rigs running in
8 New Mexico, while Apache has none. So Avant is
9 experienced and ready to develop this acreage and
10 should be authorized to proceed. So we would request
11 that Apache's application be denied and that Avant's
12 application be granted. Thank you.

13 THE HEARING EXAMINER: Thank you,
14 Ms. Hardy.

15 Mr. Rankin, would you like to put on
16 your case in chief?

17 MR. RANKIN: Mr. Examiner, yes, we
18 would. Mr. Examiner, at this time, I will call
19 Apache's first witness, Mr. Blake Johnson.

20 DIRECT EXAMINATION

21 BY MR. RANKIN:

22 Q Good morning, Mr. Johnson.

23 A Good morning.

24 Q Mr. Johnson, will you please state your full
25 name?

1 A Blake Johnson.

2 Q By whom are you employed and in what
3 capacity?

4 A Apache Corporation. I work as a landman.

5 Q And you previously testified before the
6 Division and had your credentials as an expert in
7 petroleum land matters accepted?

8 A I have.

9 Q And you're familiar with the application
10 filed in these competing cases?

11 A Yes, sir.

12 Q And have you conducted a study of the -- and
13 you're familiar with the lands within the proposed
14 spacing unit?

15 A Yes, sir.

16 Q Mr. Johnson, have you prepared written
17 testimony in advance of today's hearing?

18 A Yes.

19 Q Was it marked as Exhibit A in the exhibit
20 packet that was filed with the Division?

21 A Yes, that is correct.

22 Q Did you also prepare some exhibits in
23 connection with your testimony?

24 A Yes, I did.

25 Q And those were marked and attached to your

1 affidavit or your sworn statement. Is that correct?

2 A Yes, that is correct.

3 Q In addition to those, your testimony
4 addresses certain slides that were marked as
5 Exhibit B. Is that correct?

6 A Are you referring to the rebuttal slides?

7 Q No, I'm referring to the direct testimony
8 slides that were marked as Exhibit B. I believe your
9 testimony specifically addresses slides -- one moment.
10 You address slides 1 through 10 in Apache
11 Exhibit B. Is that correct?

12 A Yes, that's correct.

13 Q Mr. Johnson, having submitted this
14 testimony, do you have any corrections or
15 modifications or changes to the testimony that was
16 submitted as part of Exhibit A?

17 A I do not.

18 MR. RANKIN: Mr. Examiner, at this
19 time, I would move the admission of Exhibit A and its
20 attachments and slides 1 through 10 of Exhibit B.

21 I guess we've already done that, so I
22 apologize.

23 So with that, Mr. Examiner, I tender
24 Mr. Johnson as a witness and make him available for
25 cross-examination.

1 THE HEARING EXAMINER: I missed it if
2 you asked Mr. Johnson to adopt his written testimony
3 and exhibits under oath. Did you do that?

4 MR. RANKIN: I may not have,
5 Mr. Examiner.

6 BY MR. RANKIN:

7 Q Mr. Johnson, as you sit here today, do you
8 adopt the testimony that you pre-filed under Exhibit A
9 as your testimony today?

10 A Yes, I do.

11 Q And as well, you affirm the veracity of the
12 exhibits and slides that you attached as Exhibits A-1,
13 A-2, and slides 1 through 10?

14 A Yes, I do.

15 MR. RANKIN: Thank you, Mr. Examiner.

16 THE HEARING EXAMINER: And, Mr. Rankin,
17 just so I know where the slides are, would you direct
18 me to those slides?

19 MR. RANKIN: Mr. Examiner, starting at
20 Exhibit B of the exhibit packet, on page 59, PDF
21 page 59, of the file.

22 THE HEARING EXAMINER: I'm certainly
23 not singling you out when I make this comment, but it
24 would be very helpful if each page were marked with an
25 exhibit letter and page number or something because,

1 if it's marked once and then I don't know where it
2 ends, it takes a waste of time for me to find it.

3 But I have found page 59 now. And I
4 see that it is marked as Exhibit B. And you're saying
5 this is ten pages long, basically?

6 MR. RANKIN: Yes, Mr. Examiner. So his
7 testimony relates to Slide 1, which is the cover
8 slide. And then you'll see in the bottom right
9 corner, there's a page number. So his testimony
10 refers to Slides 1 through 10 on Exhibit B.

11 THE HEARING EXAMINER: Thank you.

12 Okay. Let's do all of your witnesses
13 and get all of their sworn adoptions and corrections
14 in. And then we'll address them as a panel for
15 cross-examination.

16 MR. RANKIN: With that, Mr. Examiner, I
17 would call Apache's next witness, Mr. Drew Chenoweth.

18 It may take a moment. I'm not sure if
19 he's in the same room. But he is.

20 MR. CHENOWETH: Morning.

21 DIRECT EXAMINATION

22 BY MR. RANKIN:

23 Q Good morning. Mr. Chenoweth, can you please
24 state your full name for the record?

25 A Drew Adam Chenoweth.

1 Q And by whom are you employed and in what
2 capacity?

3 A Apache as a geologist.

4 Q And you're familiar with the application
5 that was filed in both of these cases?

6 A I am.

7 Q And have you conducted a study of the
8 geology in the area?

9 A [No audible response.]

10 Q I can't hear you, Mr. Chenoweth.

11 A Yes, sir.

12 Q Thank you. Now, Mr. Chenoweth, you prepared
13 prewritten testimony that was filed in the exhibit
14 packet that we submitted to the Division in advance of
15 this hearing. Is that correct?

16 A That is correct.

17 Q And it was marked as Exhibit -- let me just
18 double check to make sure. I believe it's Exhibit C.

19 Your testimony was marked as Exhibit C. Is
20 that correct?

21 A Yes, sir.

22 Q And your testimony has attached to it -- you
23 refer in your testimony to Slides 11 through 18 of
24 Apache Exhibit B. Is that correct?

25 A That is correct.

1 Q Now, Mr. Chenoweth, we wanted to address one
2 thing in advance of admitting your testimony. Do you
3 have any corrections or adjustments to the testimony
4 that you submitted before the Division?

5 A I do. It's on the operator experience. And
6 those numbers are not accurate. I was operating two
7 months ago. And I needed to update them, and I did
8 not. And so I agree with -- that's number one of --

9 THE HEARING EXAMINER: Hold on one
10 second, sir. Hold on. Can you direct me to a page?

11 MR. RANKIN: Yeah, I'm working on it.

12 THE HEARING EXAMINER: Okay.

13 Mr. Chenoweth, hold on one second.

14 BY MR. RANKIN:

15 Q Which slide number is that that you're
16 referring to?

17 A Slide 12.

18 Q Slide 12?

19 A Yes, sir.

20 Q Okay. Thank you. I went right by it.

21 Mr. Chenoweth, I'm going to share my page
22 just so that there's no confusion about what we're
23 addressing.

24 Are you able to see my screen?

25 A Yes, sir.

1 Q Is this the slide you're referring to?

2 A Yes, sir.

3 Q Can you just explain for the examiner what
4 corrections and modifications you wanted to point out
5 in this slide?

6 A Okay. Two things. One is the drilled
7 horizontals by Apache. I understand Avant's position,
8 and I think it's fair to compare apples to apples. So
9 we should use the number that they've provided as -- I
10 believe it was 84 that they came up with. I agree
11 with that.

12 And then on the right, I -- I didn't do
13 enough QC in adding their 45 wells. I didn't update
14 it since 3/26. So I would like to accept their number
15 of drilled wells. And that's -- probably will need to
16 be changed in my written testimony as well because
17 neither are accurate.

18 Q So a slide where it refers to in red
19 underneath APA, which refers to Apache, where it says,
20 "Drilled horizontals," the number should be 84?

21 A Correct.

22 Q And just so it's clear, the number that you
23 put there, 155, that's all wells that were drilled in
24 New Mexico by Apache. Is that right?

25 A The intention -- it was all horizontals

1 drilled. The intention was to show our operator
2 experience in New Mexico. But again, apples to
3 apples. We shouldn't include anything that is not
4 directly in the basin.

5 Q And by the basin, you mean Delaware Basin,
6 which is what DB stands for in the exhibit?

7 A Correct, correct.

8 Q Okay. So the change here would be to make
9 the same changes in your testimony, in Exhibit
10 Correct?

11 A Correct.

12 Q Okay.

13 THE HEARING EXAMINER: Mr. Rankin, I
14 believe there were two corrections; weren't there?
15 There's the 155 that is now 84. But wasn't there a
16 correction in the other slide as well?

17 MR. RANKIN: Correct, Mr. Examiner.
18 The other correction is under Avant's heading where it
19 says, "Drilled horizontals." I believe it should
20 be --

21 BY MR. RANKIN:

22 Q Mr. Chenoweth, you said 47; is that right,
23 or 45?

24 A I was going off of the public data
25 available. I would rather use their number because

1 mine is always going to be less, based on the spuds
2 reported to the NMOCD. So in an effort to move this
3 along, I'll accept their numbers.

4 The only -- the only caveat being that I
5 don't accept wells that they didn't drill to their
6 final count.

7 Q I believe that number then, Mr. Chenoweth,
8 should be 45 wells. Is that correct?

9 MS. HARDY: I believe it's 47.

10 BY MR. RANKIN:

11 Q Forty-seven, Mr. Chenoweth. Is that right?

12 A Sure.

13 Q Thank you.

14 THE HEARING EXAMINER: So that the
15 court reporter picks this up correctly, was that a
16 yes, Mr. Chenoweth?

17 MR. CHENOWETH: Yes, sir. Sorry.

18 THE HEARING EXAMINER: Thank you. So
19 the corrected number is 47 on the right side instead
20 of 23?

21 MR. CHENOWETH: Correct.

22 THE HEARING EXAMINER: Okay. Thank you
23 for those corrections.

24 MR. CHENOWETH: You're welcome.

25 //

1 BY MR. RANKIN:

2 Q Any other corrections, Mr. Chenoweth, or
3 changes to your testimony that you submitted?

4 A No, sir.

5 MR. RANKIN: Mr. Examiner, at this
6 time, then, I would tender Mr. Chenoweth for
7 cross-examination as a panel when the time comes.

8 THE HEARING EXAMINER: Thank you. And
9 your next witness?

10 MR. RANKIN: Thank you, Mr. Examiner.
11 Our next witness is Mr. Lucas Emmett, reservoir
12 engineer.

13 DIRECT EXAMINATION

14 BY MR. RANKIN:

15 Q Mr. Emmett, can you please state your full
16 name for the record?

17 A Lucas Emmett.

18 Q And by whom are you employed and in what
19 capacity?

20 A Apache Corporation as a reservoir engineer.

21 Q And are you familiar with the applications
22 that were filed by each party in these contested
23 cases?

24 A Yes.

25 Q And you're familiar with the lands in the

Page 63

1 subject area?

2 A Yes.

3 Q And you conducted a reservoir engineering
4 study?

5 A Yes.

6 Q Mr. Emmett, have you prepared in advance of
7 today's hearing pre-filed written testimony that's
8 been marked as Exhibit D in the Apache exhibit packet
9 that was filed with the Division?

10 A Yes, sir.

11 Q And included in that exhibit packet, does
12 that include your CV resume that was previously just
13 accepted by the Division?

14 A Yes.

15 Q And as part of your testimony, did you also
16 refer to slides that were submitted by Apache and
17 marked as Exhibit B, Slides 19 through 22? Is that
18 correct?

19 A That's correct.

20 Q Mr. Emmett, do you today adopt your
21 pre-filed written testimony as your sworn testimony
22 today?

23 A Yes, sir.

24 Q Do you have any changes, modifications, or
25 corrections to make?

1 A No.

2 MR. RANKIN: Mr. Examiner, I would
3 tender Mr. Emmett as a witness in this case and
4 available for cross-examination.

5 THE HEARING EXAMINER: Thank you. And
6 your final witness?

7 Final witness, Mr. Examiner, is
8 Mr. Evan Roback, who is a petroleum engineer with
9 Apache.

10 DIRECT EXAMINATION

11 BY MR. RANKIN:

12 Q Mr. Roback, please state your name.

13 A Evan Roback.

14 Q By whom are you employed and in what
15 capacity?

16 A Apache Corporation as a reservoir
17 engineer -- as an asset reservoir engineer.

18 Q And are you familiar with the applications
19 filed in both of these cases?

20 A Yes, I am.

21 Q And have you conducted an engineering study
22 of the lands at issue?

23 A Yes, I have.

24 Q Have you prepared pre-filed written
25 testimony in preparation for today's hearing?

Page 65

1 A Yes, I have.

2 Q Has that been marked as Exhibit E?

3 A That's correct.

4 Q And attached to Exhibit E, did you also
5 include your CV, you resume, that outlines your
6 education and work experience?

7 A Yes.

8 Q And in your testimony, you refer to
9 Slides 23 through 29 of Exhibit B?

10 A That's correct.

11 Q Mr. Roback, do you, as you sit here today,
12 adopt your pre-filed written testimony as your
13 testimony before the Division today?

14 A Yes.

15 Q Do you have any corrections, modifications,
16 or changes, to your written testimony?

17 A No.

18 MR. RANKIN: Mr. Examiner, at this
19 time, I would make Mr. Roback available for
20 cross-examination by the Division and opposing
21 counsel.

22 THE HEARING EXAMINER: Thank you, sir.

23 Okay. So witnesses for Apache, the way
24 this will work is, if a person wants to direct a
25 question to a particular witness, they will.

1 Otherwise, the question will be asked, one of you
2 should select to answer that question, and then come
3 in front of the camera and speak clearly so we can
4 hear you.

5 And I'm actually going to start with
6 Mr. Jones. Mr. Jones, any questions for the panel?

7 MR. JONES: No, Mr. Examiner. Northern
8 does not have any questions for Apache's witnesses.
9 Thank you.

10 THE HEARING EXAMINER: Okay. Thank
11 you, Mr. Jones.

12 Ms. Hardy?

13 MS. HARDY: Yes, Mr. Examiner. I do
14 have questions.

15 THE HEARING EXAMINER: And if you want
16 to direct it to a particular witness, just say their
17 name.

18 MS. HARDY: Okay. I think my questions
19 are for Mr. Johnson on land.

20 THE HEARING EXAMINER: Mr. Johnson,
21 would you sit in front for us?

22 MR. JOHNSON: I'm here, sir.

23 THE HEARING EXAMINER: Thank you.

24 //

25 //

1 CROSS-EXAMINATION

2 BY MS. HARDY:

3 Q Good morning, Mr. Johnson.

4 A Good morning.

5 Q I'd like to look at your Slide Number 5,
6 your development plan preparation time line. Do you
7 have that in front of you, or?

8 A I do.

9 THE HEARING EXAMINER: Hold on,
10 Mr. Johnson.

11 Mr. Rankin, can you put that on the
12 screen for us, Slide Number 5?

13 Thank you.

14 MS. HARDY: Thank you. Yes.

15 BY MS. HARDY:

16 Q Mr. Johnson, the time line begins in August
17 of 2022; correct?

18 A [No audible response.]

19 THE HEARING EXAMINER: A little louder,
20 Mr. Johnson.

21 MR. JOHNSON: That is correct on this
22 slide. This time line does start in 2022.

23 THE HEARING EXAMINER: Thank you.

24 BY MS. HARDY:

25 Q And it states that Apache began working on

1 updated plats in September of 2023; correct?

2 A Correct.

3 Q But the C-102s included in your Exhibit A-1
4 are dated May of 2019; aren't they?

5 A Let me look at the C-102s.

6 Let's see here. It looks like that is
7 correct based on the surveyor's markings, the
8 surveyor's certification 5/9/2019.

9 Q Thank you. And Apache had originally
10 proposed its Dust Bowl wells in 2019; isn't that
11 correct?

12 A I believe that to be the case. I did not
13 propose them, but I do believe that we proposed in
14 2019.

15 Q But no pooling application was filed at that
16 time; was it?

17 A No.

18 Q And then Apache repropoed the Dust Bowl
19 wells in September of 2023; correct?

20 A That's correct.

21 Q So there is roughly a four-year lapse
22 between the initial proposal and the current proposal;
23 correct?

24 A Yes.

25 Q With respect to midstream issues, your time

1 line says that Apache began discussions with midstream
2 companies in late 2023 and now has four proposals;
3 correct?

4 A Correct, the slide says that.

5 Q But Apache does not have signed agreements
6 with those midstream companies; does it?

7 A To my knowledge, no.

8 Q And Apache hasn't identified the midstream
9 companies in this proceeding?

10 A We have not identified them in this
11 proceeding. Obviously, we know who they are. But no,
12 they're not identified.

13 Q And Apache hasn't provided any evidence in
14 this proceeding that the midstream companies have
15 capacity; has it?

16 A I don't know about the direct evidence. I
17 know that we address some slides talking about it.
18 But I don't know what specific evidence you would want
19 or would be required.

20 Q And without signed contracts for midstream
21 services, at this time, Apache can't guarantee that
22 its gas will be put on a pipeline and won't be flared;
23 can it?

24 A I don't know if that's an accurate question
25 or statement.

1 Q Well, Apache doesn't have signed contracts
2 right now; right?

3 A To my knowledge, no.

4 Q So it doesn't have guaranteed capacity
5 takeaway for its produced gas; is that fair?

6 A I don't know if that's a fair assessment.

7 Q I'm sorry. Did you say you don't know if
8 that's a fair assessment?

9 A I don't know if that's a fair assessment
10 because I know that companies work with companies all
11 the time. So I don't know -- I can't -- I can't say
12 that it --

13 Q Thank you. Let's look at your Slide
14 Number 6, consolidated working interest ownership by
15 unit.

16 A Yes, ma'am.

17 THE HEARING EXAMINER: Ms. Hardy, would
18 you wait until Slide 6 is on the -- thank you.

19 BY MS. HARDY:

20 Q Just to be clear for the record, Legion and
21 Double Cabin are Avant-affiliated companies; correct?

22 A I have not looked at the affiliation between
23 the companies. I think it's knowledgeable -- or
24 there's knowledge out there to indicate that they are
25 affiliated.

1 But I haven't specifically examined any kind
2 of contracts between the companies that would indicate
3 that. But I think it's common knowledge that they are
4 controlled by Avant.

5 Q Thank you. And your chart doesn't reflect
6 that Southwest Royalties and CXA have signed a JOA
7 with Avant; does it?

8 A [No audible response.]

9 THE HEARING EXAMINER: Mr. Johnson, we
10 can't hear you.

11 MR. JOHNSON: The chart does not.

12 BY MS. HARDY:

13 Q Can we look at your Slide Number 7, please,
14 which is the plat? And I'm looking at the table on
15 the upper right regarding the tract 5 ownership. It
16 does not identify the owners in the southeast quarter
17 and west half, west half of Section 14; does it?

18 A Can you repeat the question? I'm sorry.

19 Q Sure. It looks like it doesn't identify the
20 interest owners southeast quarter and the west half,
21 west half of Section 14, which is included in tract 5.

22 A I don't know. I'm trying to distinguish
23 that. Let's see. The -- you're saying it doesn't
24 include the southeast, southeast?

25 Q Well, it's not listed at the top of that

1 table on the right.

2 A I agree that the southeast, southeast is not
3 listed at the top of the table.

4 Q So does the table not include the ownership
5 information for those tracts?

6 A The table includes the ownership of -- of
7 what is outlined in tract 5 in the depiction on the
8 picture.

9 Q Okay. Thank you.

10 MS. HARDY: I think those are all of my
11 questions.

12 THE HEARING EXAMINER: Ms. Hardy, which
13 picture is he referring to? Because I see several
14 pictures.

15 BY MS. HARDY:

16 Q I believe, Mr. Johnson, are you referring to
17 tract 5, the lower left?

18 A Yes. Yes.

19 THE HEARING EXAMINER: And Ms. Hardy,
20 your question was specifically, if we look at that
21 diagram of that section, which ownership interests
22 were you referring to?

23 MS. HARDY: It looks like,, in the
24 table for tract 5, the table does not list out, or at
25 least it's not included in that heading in the table,

1 the tracts in the southeast quarter and west half,
2 west half of Section 14.

3 Which, they are shown in the picture as
4 part of tract 5, but those tracts are not listed in
5 the table under tract 5. So I was trying to determine
6 if some of the ownership interests are missing.

7 THE HEARING EXAMINER: So just to
8 clarify what you're asking, in that blue section that
9 we have, tract 5, you're trying to clarify the
10 ownership interests in the southeast quarter of that
11 section?

12 MS. HARDY: Yes, in the west half, west
13 half.

14 THE HEARING EXAMINER: West half of the
15 west half. So okay. So part of tract 5, okay.

16 And what was the answer to that
17 question, Mr. Johnson, about the ownership that she's
18 specifically asking you about?

19 MR. JOHNSON: Now that I'm getting
20 clarification, the ownership represented in the table
21 on the right is reflective of what is in the picture
22 on the left. So the ownership that's listed under
23 tract 5 should match up with the picture on the left.

24 Now, it appears that the header of
25 the -- of the chart itself is -- is inaccurate. And

1 that should've been updated. But the -- the ownership
2 information should be correct.

3 THE HEARING EXAMINER: Okay. So
4 Mr. Rankin, would you ask your witness to clarify what
5 the correct header should be?

6 MR. RANKIN: Mr. Johnson, if you're
7 looking at Exhibit Slide 7, if you would explain for
8 the record how that chart should read at the top so
9 that we understand how the land description should be
10 correctly interpreted?

11 MR. JOHNSON: I would say that, in
12 Section 14, it should read as the south half of the
13 west half of Section 14. And then I would say that it
14 would be the northwest of the northeast of Section 14.

15 And then it looks like it would be the
16 south -- it looks like it would be the -- let's see.
17 What did I include? There's a number of ways you can
18 describe this.

19 I think that the thing to take in
20 mind -- sorry -- is that, basically, in tract 5, on
21 the western portion of tract 5 in Section 14, it
22 includes the entire west half of Section 14 minus the
23 northeast of the northeast of Section 14.

24 And then on the west half of the
25 section, it's the west half, west half of Section 14.

1 That would include Section 5 [sic].

2 THE HEARING EXAMINER: Do you accept
3 that?

4 MR. RANKIN: Yes.

5 THE HEARING EXAMINER: Okay. Let's go
6 to cross-examination by our technical examiner,
7 Mr. McClure.

8 CROSS-EXAMINATION

9 BY MR. MCCLURE:

10 Q Mr. Johnson, what you just finished saying,
11 I guess, can you say that one more time? I believe
12 you misspoke. When you described the east half, you
13 actually described it as the west half. So can you
14 please repeat what the tract 5 showed?

15 A Yes. In the east half of Section 14, it
16 should -- tract 5 will include everything on the east
17 half of Section 14 with the exception of the
18 northeast, northeast quarter of that section. I agree
19 with you, Dean. I'm sorry that I misspoke there.

20 And on the west half, tract 5 would include
21 everything on the west half, west half of Section 14.

22 Q Okay. Thank you, sir.

23 MR. MCCLURE: Mr. Hearing Examiner, did
24 you want me to continue with my questioning? Was
25 Ms. Hardy finished with her questioning, I guess?

Page 76

1 THE HEARING EXAMINER: Yes,
2 Mr. McClure. Ms. Hardy is finished cross-examining
3 the panel as a whole. And you can ask any of these
4 witnesses any cross-examination on subjects that they
5 have testified under direct examination.

6 MS. HARDY: Mr. Examiner, apologies. I
7 do have cross questions for other witnesses as well.
8 I was just focusing my first questions for Mr. Johnson
9 on land.

10 THE HEARING EXAMINER: Okay.

11 Mr. McClure, I was premature in
12 thinking that Ms. Hardy was finished with her
13 cross-examinations.

14 Ms. Hardy, would you like to continue?

15 MS. HARDY: Sure. If you'd like me to
16 move to the next witness.

17 THE HEARING EXAMINER: They're a panel,
18 so yeah.

19 MS. HARDY: Okay, a panel. Okay, sure.
20 Okay. I have some questions that I believe I am
21 directing to Mr. Chenoweth on geology.

22 CROSS-EXAMINATION

23 BY MS. HARDY:

24 Q Good morning, Mr. Chenoweth.

25 A Good morning.

1 Q I'd like to look at your Slide Number 13.
2 Okay. And you've reviewed Avant's exhibits;
3 correct?

4 A Yes, ma'am.

5 Q And those exhibits, Avant's exhibits, show
6 that the target intervals for the first Bone Spring
7 wells are in the First Bone Spring rather than the
8 Avalon carbonates; correct?

9 A Yes, ma'am. The -- the exhibits reflect
10 that.

11 Q And TVDs can sometimes vary between a well
12 proposal and drilling once an operator has additional
13 information, is that correct, within a reasonable
14 range?

15 A It can, but there is a drilling window. And
16 if you exit that window, you have to sundry the plan.
17 So yes, within that window, which is 100 feet.

18 Q Thank you.

19 A So these are around 100 foot -- 150 foot
20 off, at least.

21 Q So that would require, in your experience, a
22 sundry?

23 A Correct.

24 Q Okay. And actually, I'll look at
25 paragraph 10 of your affidavit. Turn to that.

1 A Page 10 of my affidavit.

2 Q Paragraph 10.

3 A Oh, paragraph 10. Sorry.

4 Q Yes.

5 A Yes, ma'am.

6 Q And that paragraph notes that the surface
7 hole locations and bottom hole locations differed
8 between Avant's well proposal and pooling application;
9 correct?

10 A Yes, ma'am.

11 Q But you agree it's appropriate to develop
12 this acreage using a stand-up orientation; correct?

13 A Yes, ma'am.

14 Q And your testimony and exhibits don't
15 provide any data to show that swapping the surface
16 hole location and bottom hole locations impacts the
17 productivity of the wells; correct?

18 A That is correct. That should be no problem.

19 Q Okay. Thank you.

20 A You're welcome.

21 MS. HARDY: Okay. Those are my
22 questions for Mr. Chenoweth.

23 Would you like me to move to my next?

24 Okay. I have some questions for, I
25 believe, Mr. Emmett.

Page 79

1 CROSS-EXAMINATION

2 BY MS. HARDY:

3 Q Mr. Emmett, can you hear me?

4 A Yes, ma'am.

5 Q Okay. Thank you. We were getting some
6 background noise there.

7 Okay. Can we look at your Slide Number 20,
8 please? And the heading is Typical Development Well
9 Spacing.

10 This slide does not show a correlation
11 between spacing and well performance; does it?

12 A No, ma'am.

13 Q And just generally speaking, a lack of
14 midstream services can influence spacing patterns;
15 can't it?

16 A I don't think that is the primary
17 drive -- driver for spacing.

18 Q But if midstream services aren't available,
19 an operator may drill fewer wells; correct?

20 A [No audible response.]

21 Q Did you answer? I didn't hear your answer
22 if you did.

23 A Apologies. I said, "Correct."

24 Q Okay. And other issues can impact spacing
25 as well, right, such as land ownership, capital,

1 budget, things like that?

2 A Yes, ma'am. Other things can influence
3 spacing.

4 Q Thank you. Can we look at your Slide 21,
5 please, on historical well performance?

6 A This side doesn't address whether the wells
7 were drilled in the same formations; does it?

8 A It pools in all wells in the Bone Springs,
9 First, Second, and Third, combined, yes.

10 Q And it doesn't address whether the wells
11 were drilled in comparable rock; does it?

12 A It looks at New Mexico unilaterally in the
13 Delaware Basin, so.

14 Q And I see at the bottom left of the slide
15 that the information was filtered for First, Second,
16 and Third Bone Spring wells drilled after January 1 of
17 2015. Is that correct?

18 A Yes, ma'am.

19 Q And it looks like the Angry Angus wells are
20 included there on the map on the lower left?

21 A Yes, ma'am.

22 Q Those aren't Bone Spring wells; are they?

23 A I just went off what Enverus had listed as
24 the landing zone. So that is what they were in -- in
25 the source when I pulled it on March 5th.

1 Q And you didn't review OCD's filings on the
2 well files to show what formation they're drilled in?

3 A I personally did not, no.

4 Q All of the Apache wells identified in the
5 exhibit are further away from this proposed acreage
6 that Avant's Cutbow wells. Is that correct?

7 A [No audible response.]

8 Q Sorry. I couldn't hear you.

9 A Yes, ma'am.

10 Q And Apache actually does operate two
11 horizontal Bone Spring wells in Section 34,
12 Township 19 South, Range 32 East; doesn't it?

13 A I believe you're referring to the Lusk 34
14 wells. And we do. I don't know their exact township
15 off the top of my head. But you're correct.

16 Q And those wells are closer to this area than
17 the other Apache wells included in your exhibit;
18 aren't they?

19 A Yes, ma'am. They are. But they're much
20 older than what we would deem as to be a modern
21 completion, which is why we excluded them from this
22 analysis.

23 Q So this exhibit excludes Apache wells
24 located closer to the Dust Bowl and Grayling acreage
25 and includes Apache wells that are further away;

1 correct?

2 A Based upon vintage, yes.

3 Q Let's look at your Slide 22, Dust Bowl
4 Projected Total Recovery. In this analysis, you're
5 taking wells across the entire New Mexico Delaware and
6 using average 9-to-12-month cumulative production
7 volumes to forecast volumes for Dust Bowl and
8 Grayling; correct?

9 A Yes, to -- or to compare relative
10 performance between Apache and Avant.

11 Q And you don't provide any analysis here as
12 to whether Apache's wells were drilled in comparable
13 rock; do you?

14 A No. Again, it is taking all of the wells in
15 New Mexico Delaware Basin.

16 Q And the closest Apache wells identified on
17 the exhibit are more than 10 miles away from this Dust
18 Bowl and Grayling acreage. Is that correct?

19 A Yes, ma'am.

20 MS. HARDY: Okay. Those are all my
21 questions for Mr. Emmett on the direct.

22 I do have some questions for
23 Mr. Roback.

24 //

25 //

1 CROSS-EXAMINATION

2 BY MS. HARDY:

3 Q Good morning, Mr. Roback. Can you hear me?

4 A Yes, I can.

5 Q Okay. I'd like to look at your Slide 23 on
6 total AFE costs and economics. Regarding cost, Apache
7 does not have signed contracts in place for oil, gas,
8 or water takeaway; correct?

9 A As far as I'm aware, correct.

10 Q As a result, Apache's AFEs could increase if
11 Apache is required to build a pipeline connection to
12 third-party midstream companies for oil, water, and
13 gas takeaway. Is that correct?

14 A I don't know that.

15 Q And you don't know, if those cost increases
16 were to occur, whether they would be significant?

17 A I don't know that.

18 Q Regarding the production projections, the
19 exhibit does not provide any information regarding the
20 underlying wells; does it?

21 A The underlying wells in Slide 23, the
22 numbers will match -- I'm sorry -- Slide 22. The
23 numbers will match with Slide 22.

24 Q And this slide here doesn't address their
25 location; does it?

1 A Landing zone location or geographic
2 location?

3 Q Either.

4 A It does address landing zone, the First
5 Bone, Second Bone Spring target formation.

6 Q Okay. And can you speak up? I'm having a
7 little bit of trouble hearing you, so.

8 A Yes. I can restate that.

9 Q Yes, please.

10 A Geographic -- it does have landing zone on
11 the left, on the bottom chart. It -- it says, "First
12 and Second" --

13 Q We're still having trouble hearing you. I
14 don't know -- we weren't having trouble with the other
15 witnesses, so I'm not sure. I heard you, but it's
16 difficult to hear you.

17 MR. RANKIN: Yeah, for some reason,
18 Mr. Roback, your microphone doesn't seem to be picking
19 up as well now all of a sudden.

20 MR. ROBACK: Apologies. Nothing has
21 changed.

22 BY MS. HARDY:

23 Q It was better for a minute.

24 A Yeah, nothing has changed.

25 MR. RANKIN: Maybe, Mr. Roback, just

1 ensure that you're as close as you can be to the mic.
2 And maybe just speak up a little louder.

3 MR. ROBACK: I will do my best.

4 BY MS. HARDY:

5 Q And this slide doesn't address whether the
6 wells were drilled in comparable rock; correct?

7 A Correct.

8 Q And Apache has only drilled the Lusk 34
9 Federal 1H and 2H wells within 10 miles of this
10 location; correct?

11 A Correct.

12 Q With respect to the costs, this exhibit just
13 shows capital cost as a function of year one
14 production. Is that correct?

15 A That's not correct. Okay. They are full
16 AFE costs for finding and developing these wells.
17 They do not incorporate operational costs down the
18 road.

19 Q Okay. That was going to be one of my
20 questions. Because these wells will certainly produce
21 for -- well, they would be expected to produce for
22 something like 30 to 40 years; correct?

23 A Correct.

24 Q Let's look at your Slide Number 24, the
25 drilling comparison, 24. This slide doesn't provide

1 any information regarding when the wells at issue were
2 drilled; does it?

3 A I'm not sure I understand your question.

4 Q Well, the slide doesn't include any
5 information regarding the dates or the years when
6 these wells were drilled; does it?

7 A If you look back, previous Apache --

8 THE HEARING EXAMINER: Hold on a
9 second. Mr. Roback, we really can't hear you. And
10 the court reporter has to be able to get everything
11 you say accurately. So why don't you take some time,
12 restart your computer.

13 Let's take a five-minute break while
14 you do that. It is 9:54 a.m. Let's come back on the
15 record at 10 a.m. Thank you.

16 (Off the record.)

17 THE HEARING EXAMINER: It is 10 a.m. on
18 May 29, nineteen -- 2024. We're back on the record.

19 MS. TSCHANTZ: Back in the 1900s.

20 THE HEARING EXAMINER: It's my birthday
21 today, and so I was going to say the date I was born.
22 So that's why I just stopped.

23 Okay. Let's proceed. Ms. Hardy?

24 MS. HARDY: Thank you.

25 //

1 BY MS. HARDY:

2 Q Mr. Roback, we were talking about your Slide
3 Number 24. And I was trying to determine exactly what
4 data this is based on.

5 So I think you had said before we took the
6 break that it wasn't based on a look-back?

7 A That's correct.

8 Q Okay. So can you tell me what it is based
9 on? What information did you use to derive these spud
10 to TD days?

11 A The -- the exhibit, with the asterisk,
12 states that it was assuming similar performance based
13 on days -- based on Avant AFE days.

14 Q And okay. So this is based entirely on AFE
15 days?

16 A Correct.

17 Q Okay. And those are estimates; right?

18 A Yes.

19 Q Okay. Let's look at your Slide 25.

20 MS. HARDY: Mr. Rankin, can you show us
21 Slide 25?

22 Thank you.

23 BY MS. HARDY:

24 Q Is the graph on the left supposed to show
25 the lateral feet fracked per day?

1 A Can you restate that question just so I'm
2 clear?

3 Q Yes. Is the graph on the left intended to
4 show the lateral feet fracked per day?

5 A Well, the Y axis is lateral feet, lateral
6 length, feet, per day by frac fleet, which is the
7 different bars on the graph.

8 Q And this graph shows that, for 2021, Avant's
9 efficiency was actually slightly higher than Apache's;
10 correct?

11 A That is what the chart says.

12 Q And Apache's efficiency declined between
13 2020 and 2021; correct?

14 A That is what the chart says.

15 Q And there's no data for Apache in 2022; is
16 there?

17 A That is what the chat says.

18 Q And is that because Apache did not frac any
19 wells in 2022?

20 A That is correct.

21 Q And for 2023 -- well, I guess this would
22 apply to all of the years -- there's no indication as
23 to the location of the wells that were being fracked;
24 is there?

25 A Not on this exhibit.

1 Q And the exhibit doesn't show whether they
2 were drilled in comparable rock; does it?

3 A Not on this exhibit, no.

4 Q And it doesn't show the formation; does it?

5 A No.

6 Q And it doesn't show the frac design, such as
7 the fluid and sand volumes; does it?

8 A On this slide, no.

9 Q Can we look at your Slide Number 27, please?
10 And this relates to gas waste flaring.

11 Have you reviewed Avant's rebuttal slides?

12 A I have.

13 Q And the United States Department of Justice
14 and the New Mexico Environment Department sued Apache
15 in federal court for unlawful air emissions; correct?

16 A This is a sensitive legal matter, and I have
17 no comment.

18 Q And this is based on public information.

19 A Are you asking if this slide is public
20 information?

21 Q No, I'm asking about the information
22 regarding the Department of Justice and New Mexico
23 Environment Department lawsuit.

24 A This is a sensitive legal matter, and I have
25 no comment.

1 Q Okay. So you're aware, aren't you, that
2 Apache agreed to settle that case for \$4 million?

3 A I have no comment.

4 Q Okay. And your slide doesn't mention
5 anything about that lawsuit or the settlement; does
6 it?

7 A Not on this slide.

8 Q And your slide doesn't address whether Avant
9 has reduced flaring in 2023 or 2024; does it?

10 A The chart on the right shows flaring by
11 quarter.

12 Q So actually, Avant's flaring has been
13 reduced. You're looking at 2023 quarter one and then
14 first quarter 2024; right?

15 A I would -- if we are comparing two single
16 data points on here, first quarter 2023 versus first
17 quarter 2024, it has decreased.

18 Q Let's look at your Slide 28, Surface
19 Infrastructure and Gas Takeaway.

20 So Apache doesn't actually have contracts in
21 place for gas takeaway; does it?

22 A Correct.

23 Q So at this point, you don't know the exact
24 cost for gas takeaway; do you?

25 A I don't have that information.

1 Q And at this point, you don't know whether
2 limitations on midstream services may delay
3 production; do you?

4 A I don't know the answer to that.

5 MS. HARDY: Those are all of my
6 questions for Apache's witnesses on their direct
7 testimony and slides.

8 THE HEARING EXAMINER: Thank you,
9 Ms. Hardy.

10 Okay. Mr. McClure, what questions do
11 you have for this panel?

12 MR. MCCLURE: Thank you, Mr. Hearing
13 Examiner. I believe this question is like -- or this
14 line of questioning is likely for Mr. Johnson.

15 MR. JOHNSON: Okay. I'm ready.

16 RECROSS-EXAMINATION

17 BY MR. MCCLURE:

18 Q Yes, sir. In Apache's communications with
19 Avant, were several different trades proposed?

20 A To my knowledge, yes.

21 Q Do you believe those -- or to your
22 knowledge, are you familiar with them, I guess?

23 A I'm familiar that there were discussions
24 being had, that there were multiple different counter
25 parties at both Apache and Avant.

1 Q Okay. To your knowledge, were those trades
2 equitable?

3 A I think that's in the eye of the beholder.
4 I think trades could be determined as equitable or not
5 equitable by various people in different ways.

6 Q In Apache's opinion, were they equitable?

7 A I don't know specifically which trade you're
8 talking about. But if it's a trade that we proposed,
9 then we think it was equitable. If we -- if we did
10 not accept a trade from Avant, then that probably
11 would mean that it's not equitable to us.

12 Q Seeing if I have the page referenced in my
13 notes anywhere here.

14 Okay. I'm specifically looking in Avant's
15 exhibits, page 125 and 126 of 344.

16 A I'm looking for it. I -- what is it
17 labeled?

18 Q I believe Mr. Rankin is bringing it up.
19 It's labeled at the top of the slide Summary of Avant
20 Contact With Apache, one of two.

21 MR. MCCLURE: It should be page 125,
22 Mr. Rankin.

23 MR. JOHNSON: I see it.

24 BY MR. MCCLURE:

25 Q Are you familiar with these specific -- with

1 this specific lines communication?

2 A I reviewed the lines of communication.
3 Obviously, I didn't have -- I didn't -- not all of
4 this was me. There was a previous landman that worked
5 this. But I'm aware of the -- of the communication
6 between the companies, yes.

7 Q And are you unsure as to whether Apache felt
8 that these trade proposals were equitable or not?

9 A I did not review every single trade, so I
10 can't determine what was decided as equitable or not
11 equitable.

12 Q Okay. I guess, to your knowledge, then, do
13 you believe that Apache negotiated with Avant in good
14 faith?

15 A Can you repeat the question?

16 Q Do you believe that Apache had good faith
17 negotiations with Avant?

18 A Yes, absolutely.

19 Q Okay. Thank you, sir. Okay, sir. On
20 page 18 of 124 on Apache's exhibit --

21 MR. MCCLURE: This will be page 18 of
22 Apache's, Mr. Rankin.

23 BY MR. MCCLURE:

24 Q I believe it's your -- your affidavit,
25 Mr. Johnson?

1 A Yes, sir.

2 Q On paragraph 9 of that page, reference is
3 made to Apache's anticipation that they'll develop
4 other potentially productive intervals in the Bone
5 Spring and Wolfcamp formations. Do you see where I'm
6 referring to?

7 A In the testimony, in Slide -- or I
8 mean -- sorry -- in paragraph 9?

9 Q Yes, that's correct.

10 A Yes, I see that we made that statement.
11 Yes.

12 Q Specifically to the Bone Spring, which other
13 potentially productive interval were you referring to?

14 A I am not a reservoir engineer, nor am I a
15 geologist. But our team specifically, I believe, is
16 referring to the Third Bone Spring.

17 Q Okay. Now, this also references if it's
18 potentially productive. What would Apache consider to
19 be potentially productive?

20 A That's a line of questioning probably more
21 suited for our geologist or our -- our engineers.

22 However, I will say and make the statement
23 that I think that we know that the Bone Spring is
24 productive, and we plan on moving forward with
25 development of the Third Bone Spring. This could've

1 been worded a little bit better.

2 Q Okay. So just to confirm, even though
3 Apache is not included it in its compulsory pooling
4 application, Apache does intend to develop the Third
5 Bone Spring at a later date. Is that correct?

6 A Yes, we are actively working on getting well
7 proposals sent out for the Third Bone Spring
8 formation. That's something that we're working on
9 right now.

10 Again, as you'll hear from our testimony
11 from our technical witnesses, in the reservoir
12 engineering side specifically, one of the reasons we
13 did not propose the Third Bone is because you can have
14 a smaller facility, which reduces the one capital
15 commitment for the project and also reduces the
16 footprint on a surface level for that facility if you
17 develop in stages. And then also, it helps with gas
18 constraints.

19 Q So then, Apache's plan will be to wait for
20 the Bone Spring One and Bone Spring Two wells to
21 decline in their production before developing the Bone
22 Spring -- the Third Bone Spring. Is that correct?

23 A Again, I'm not a production engineer. I'm
24 not an engineer. But I would -- I -- that is the plan
25 that I -- as I know it, that you need production to

1 come off in order to utilize that -- that facility and
2 not have to overbuild or build two separate
3 facilities. So you wait for the production to come
4 down as you indicated.

5 Q Okay. Thank you, sir.

6 A Yes, sir.

7 Q Mr. Johnson, if I may direct your attention
8 to page 64 of 124. That's the slide with consolidated
9 working interest ownership by -- oh, yeah, Mr. Rankin
10 has it there for you.

11 A Yes, sir.

12 Q This slide, it was either produced by you or
13 under your direct supervision. Is that correct?

14 A Yes.

15 Q I guess, how were these persons and their
16 percentages derived?

17 A We had a title opinion that was rendered for
18 Apache Corporation. So they're derived based on that
19 title opinion. That title opinion was recent.

20 Q Now, in this slide, there's several working
21 interest owners which are all bundled together, Wadi,
22 Red Bird, Minoco. I'm likely mispronouncing some of
23 those.

24 A Sure.

25 Q Why were they bundled together instead of

1 separated?

2 A Yeah, so there's a -- there's a title issue
3 with those partners that one of our previous landmen
4 was working on on this. And the nature of that title
5 issue basically requires those parties to stipulate
6 what their interest is.

7 So we know that the working interest is
8 combined 4.6875 percent. And we have assumptions of
9 what we think the working interest should be. But we
10 need those parties to stipulate what the interest is
11 because of the fact that we believe there's a title
12 dispute there amongst those parties.

13 And we do know that some of the parties have
14 executed the stipulation. I believe that it's Minoco
15 1980 III Oil and Gas that either is a defunct entity
16 or we can't find the principal. So the stipulation is
17 hard to kind of secure at this point in time.

18 Q Now, of the interest that is in this 4.6875,
19 that includes Southwest Royalties, Incorporated. Is
20 that correct?

21 A That's correct.

22 Q And has Southwest Royalties, Incorporated
23 signed a JOA with Apache?

24 A They did.

25 Q To your understanding, how much working

1 interest does Apache control of this unit?

2 A To my understanding -- I have a rebuttal
3 slide that speaks to this a little bit. But as I put
4 this together, we were unaware of the fact that CXA
5 had signed a JOA with -- with Avant, nor did we know
6 that they sent a letter of, you know, support for
7 Avant.

8 So at the time that I put this together, I
9 thought that we had 51.96 percent of -- of working
10 interest control or support for Apache.

11 It was just last night that we found out
12 about the letter from CXA. I still don't think that
13 changes the fact that they did execute our JOA. And I
14 think that Mr. Rankin made it clear that the facts of
15 the matter surrounding the, you know, negotiations
16 that were in dispute.

17 Q So to your current understanding, do you
18 believe that CXA has signed a joint operating
19 agreement with both Apache and Avant then?

20 A I do.

21 Q Okay. Of the working interest percentages
22 that's on this table we're looking at here, Slide 6,
23 do you believe these percentages to be accurate?

24 A Yes. I would also like to point, I know
25 Avant has indicated that, for example, they have

1 acquired some of these parties. Obviously, we saw
2 that last night from the exhibits that they sent over.

3 I checked Enverus on their courthouse data
4 to see if any of these assignments have been recorded.
5 And I cannot see anything of record as such. I
6 believe that the working interest would be correct
7 based on that fact.

8 Q Okay. Thank you, sir. May I direct your
9 attention to, on the Avant exhibit, page 54 of 344.

10 A Yes, I see it.

11 Q Now, just to look at one specifically, CXA
12 Oil & Gas Holding, L.P., do you see where they have
13 listed that they own 6.3762 percent working interest?

14 A Yes.

15 Q Now, this is a different working interest to
16 what you believe is correct. Is that correct?

17 A Yes.

18 Q Does it surprise you to see this percentage
19 that Avant is asserting CXA holds?

20 A No, it doesn't. I've looked at title for
21 the past ten years. And usually, when you get a title
22 opinion back or an ownership report, in our case, a
23 title opinion -- I'm not exactly where -- sure where
24 Avant's numbers come from -- but there are differences
25 of opinion when examining title.

1 And so you do see small, subtle differences
2 between working interests from time to time. And
3 that's usually sorted out during the -- the drilling
4 process and division order process. So I'm not
5 surprised to see it. Also, I think that the -- the
6 numbers are close.

7 Q Okay. So what do you contribute -- I mean,
8 you kind of, sort of answered this -- but just to get
9 it directly, what do you contribute the difference in
10 working interest to do between Apache and Avant?

11 A Are you talking about CXA specifically,
12 or -- I'm not sure I understand the question.

13 Q Let me broaden, I guess. I guess, does it
14 appear to you, looking at Apache -- or excuse
15 me -- Avant's exhibit here, does it seem to you that
16 all of the working interest is slightly different
17 between all of the persons?

18 A I haven't compared them specifically. I
19 don't have them pulled up side by side. But it does
20 appear there are slight differences, which I'm not
21 surprised.

22 Q Okay. What do you contribute those
23 differences to?

24 A Usually, it's running title and difference
25 in -- of opinion when an attorney or a

1 broker -- again, I don't know what -- who put together
2 Avant's exhibits or -- or I guess I should say title,
3 was. But the -- the difference I'm attributing to
4 that is a difference of opinion between title
5 examiners.

6 Q Okay. Thank you, sir. Now, just a bit ago,
7 you referenced that, during the drilling process,
8 these percentages would be ironed out, paraphrasing.
9 That, obviously, has not happened yet. Is that
10 correct?

11 A No, we have not drilled the wells.
12 And -- and what I mean by that is the fact that you
13 send out division orders, they -- parties execute
14 division orders as they participate in wells, and if
15 there are disputes that arise, typically, they -- they
16 come up during that time.

17 And each party, you know, works out
18 what -- what the difference is. And if there's -- we
19 usually go to a party and say, "Hey, we believe you
20 have this much, and here's why, and here's the chain
21 of title, and here's the attorney that rendered that
22 opinion."

23 And if there's any differences there, we
24 work it out. And that's a standard procedure, kind
25 of, with any company.

1 Q And these disagreements would be between
2 Apache and these individual persons. Is that correct?

3 A I don't know that I would even call it a
4 disagreement. I would just say that we had a title
5 opinion put together. We showed it a difference. And
6 if there was a difference in what they believed that
7 they own, we would work it out with them.

8 And we would either convince them that our
9 opinion is correct and our title opinion is correct
10 or, if they could provide evidence to -- to the
11 contrary that would adjust those working interest
12 numbers, we would obviously accurately reflect that.

13 Q Okay. Thank you, sir. Now, within Avant's
14 rebuttal exhibits, they are asserting that Avant
15 controls 52 percent of this unit. Do you disagree
16 with that or do you agree with that?

17 A I would disagree with that because
18 you -- you can't control what you don't have of record
19 yet. And so I -- I don't know the nature of the
20 contract that they have with some of these parties
21 that they claim to have acquired on their rebuttal
22 slide that we saw last night.

23 But again, if it's not of record and no
24 party can see that, then I don't know. And so what I
25 can tell you, though, is that sometimes when you're

1 negotiating an exchange agreement or a closing
2 agreement or a trade, maybe you have a due diligence
3 period baked in there and there's a title defect or
4 something of that nature.

5 And so a lot of times in my experience, you
6 know, trades fall apart. And so I don't think that
7 you can accurately say that you control a specific
8 working interest unless you have that document
9 reported.

10 Again, I checked the records. I have not
11 seen any of these new documents or new agreements or
12 new assignments from Avant -- or from other companies
13 to Avant that they are claiming. So I don't think
14 that is -- that is a correct -- a correct summation of
15 their total controlled working interest.

16 Q What percentage do you believe Avant
17 controls?

18 A I -- I have the statement on -- on my slide.
19 But twenty -- I believe it was 26 percent, which was
20 what was of record.

21 Again, I can't -- I can't clarify who has
22 signed a private agreement, like a JOA for example,
23 because you're not recording that at this time. So
24 I -- I don't know that.

25 And then also, at the same time, like, I

1 did -- I did not see the CXA portion. So at this
2 point, I would say that I would take Avant's interest
3 that we have on Slide -- let me get to my slides.

4 MR. JOHNSON: If we could pull up
5 Apache's consolidated working interest slide? Yeah,
6 thank you.

7 I would say that Avant
8 specifically -- we've established that Northern,
9 Legion, and Avant are kind of controlled by the same
10 entity, so I -- I would say those, Avant, Northern,
11 and Double Cabin Minerals added together.

12 I would also say now that CXA because
13 they have sent the letter that we have seen. I think
14 that they control them as well. I believe that that
15 adds up to roughly 30, 31 percent.

16 I don't have a calculator in front of
17 me, so -- I'm just a landman. So adding 24.399738
18 plus 1.61221 plus .087, 5.57, it's difficult. But
19 yeah. I'll try to get a calculator if you want.

20 BY MR. MCCLURE:

21 Q No, no. That's fine. I was just trying to
22 have a basis for -- no, you're good.

23 To your understanding, can a person with
24 working interest sign two different JOAs? Like in
25 this case, could CXA sign a JOA with Apache as well as

1 with Avant?

2 A Let me state it this way, obviously, the
3 physical capability of signing a JOA, yes, that
4 occurred.

5 From a legality standpoint, I'm not a
6 lawyer. I'm not going to profess to be a lawyer. So
7 I do not understand how contractually that would work.

8 Q Okay. Thank you, sir.

9 MR. MCCLURE: Mr. Hearing Examiner, do
10 you want me to address the incorrect pool in Apache's
11 exhibits now?

12 THE HEARING EXAMINER: Okay. Thank
13 you.

14 MR. MCCLURE: Okay. Mr. Johnson or
15 Mr. Rankin, whoever needs to take care of it --

16 MR. JOHNSON: I can take care of it.

17 BY MR. MCCLURE:

18 Q Okay. Thank you, Mr. Johnson. On your
19 pooling checklist -- let me get down to that page.
20 Page 13 of 124, there's reference to a Triste Draw
21 Bone Spring 96603. Do you see where I'm referencing?

22 A I do.

23 Q Okay. The correct pool to include there
24 would be the Lusk Bone Spring East. The pool code is
25 41442.

1 Essentially, what we'll need is we'll need
2 this pool -- pooling checklist to be corrected to have
3 that pool on it as well as new C-102s submitted with
4 that pool included on those instead of the currently
5 listed pool.

6 A Sure. We can get that done.

7 Q Okay. Thank you, sir.

8 MR. MCCLURE: Thank you, Mr. Hearing
9 Examiner. I have no more questions at this time for
10 Apache's witnesses.

11 THE HEARING EXAMINER: Thank you,
12 Mr. McClure.

13 Mr. Rankin, redirect?

14 MR. RANKIN: Thank you, Mr. Examiner.
15 I'll start with Mr. Johnson.

16 REDIRECT EXAMINATION

17 BY MR. RANKIN:

18 Q Mr. Johnson, I'm going to pull up your time
19 line here as soon as I get to it. I believe it's --

20 A It's down.

21 Q Sorry.

22 A No problem.

23 Q Okay. Thank you. Avant's counsel asked you
24 about this time line and pointed out in the testimony
25 that there was a gap between 2019 and the current

1 present time when Apache resumed efforts to develop
2 this acreage.

3 What happened between 2019 and 2023 in world
4 affairs that affected Apache's ability to develop this
5 acreage?

6 A I would say that COVID-19 had a substantial
7 impact on the oil and gas industry.

8 Q And specifically with respect to this
9 acreage, how did it affect Apache's ability to develop
10 this acreage under its term assignment?

11 A Amongst us and other operators, a lot of
12 companies laid down rigs. It wasn't economic to
13 develop anything at that time. I think we were not
14 unique in the fact that we were not drilling during
15 this time.

16 Q So as a consequence of COVID-19 and world
17 economics, Apache didn't pursue its development,
18 didn't believe it was prudent to develop this
19 development at that time?

20 A It's hard to say when oil and gas goes
21 negative. But yeah, no, we did not.

22 Q But that's changed, and Apache is pursuing
23 this acreage at this time, obviously?

24 A Yes.

25 Q In fact, didn't Apache nominate two of the

1 federal leases that are included in this acreage?

2 A That is correct.

3 Q In order for Apache to be able to
4 develop -- or anybody to be able to develop this
5 acreage? Is that correct?

6 A Sure. Every tract has to be leased. There
7 were two unleased tracts. We nominated those.

8 Q And we'll touch on that more in your
9 rebuttal.

10 But now, another topic that Ms. Hardy
11 questioned you on was about midstream companies and
12 whether or not Apache has a contract or any agreements
13 in place.

14 In this slide here, you note that late last
15 year, you began discussions with midstream companies,
16 and you've got four proposals in hand.

17 Can you explain just a little bit about how
18 this works with Apache? What are those proposals, and
19 does Apache generally enter into agreements before
20 you've got operatorship in hand for acreage?

21 A No. First, to give you some color and
22 clarity on our process, we have a dedicated midstream
23 companies, we've got -- or dedicated midstream teams,
24 so water, oil, and gas, that handle all of this for
25 Apache.

1 I've spoken with them about this
2 specifically. And it is our standard operating
3 procedure to have conversations with all these
4 additional -- all -- all the companies that we need
5 to -- to have our gas, water takeaway handled.

6 But we do not execute the agreement until
7 we -- until we know we're going to be operator. And
8 there are various reasons for that.

9 Q So the four proposals you've got back, those
10 are based on Apache's estimates for its production
11 volumes for the initial eight wells it's proposing.
12 Is that correct?

13 A I didn't put them together, but yes, I would
14 assume that would be correct.

15 Q I think I want to just briefly address the
16 good faith negotiations between Apache and Avant.

17 I think Mr. McClure did a good job of kind
18 of drawing out your view that, you know, you believe
19 that the proposals you put forward to Avant were
20 equitable and fair, and if you didn't accept their
21 counter-proposals, it was because you didn't believe
22 they were equitable and fair.

23 And that's essentially the nature of
24 negotiations between parties. Is that your
25 understanding, or you agree with that statement?

1 A I would agree with that statement.
2 It's -- it's the nature of that in everyday life. We
3 go to a store and exchange goods and services.

4 And it's -- the same thing goes for an oil
5 and gas negotiation. And if we don't agree, then
6 that's just a difference of opinion.

7 Q Mr. McClure asked you a couple questions
8 about some of these interest owners on your
9 consolidated working interest ownership chart. I just
10 want to kind of make sure I understood what your
11 position is.

12 Mr. McClure elicited testimony from you that
13 Southwest Royalties, as you understood, had signed a
14 JOA both with Apache and with Avant; correct?

15 A I know they have signed one with Apache.
16 And Avant told us on their rebuttal slides last night
17 that they've executed one with them. So that's what I
18 believe to be accurate.

19 Q And in light of that, is it your opinion
20 that Southwest Royalties and its interests should be
21 deemed neutral as between the parties, given that
22 they've indicated that they've signed JOAs as to both
23 parties? Or what's your position on how the Division
24 should look at that?

25 A I think at this point in time, they signed a

1 JOA with Apache; they signed one with Avant. They
2 would rather have the provisions or be governed by the
3 provisions of the JOAs for either party rather than be
4 force pooled. So they made decisions to execute both.

5 And then obviously, whoever is ordered
6 operatorship, the -- most likely, the other party's
7 JOA would lapse due to inactivity. So they probably
8 executed both.

9 Q And on that same topic, as to what we
10 learned late last night, that Northern may have
11 entered into some sort of trade agreement, Northern
12 Oil & Gas that I'm highlighting here entered into some
13 sort of trade agreement with Avant.

14 You haven't seen anything filed of record.
15 You haven't seen an agreement. You don't know whether
16 it's been executed. You don't know whether there's
17 any conditions or other requirements that need to be
18 completed for it to be final. Is that right?

19 A That's correct.

20 Q And so your opinion, I think -- I just want
21 to make sure I understood -- is that, unless and until
22 that's done, and unless the actual agreement is filed
23 of record with the County and recorded, that you're
24 unable to determine, you know, what Northern's
25 position is in this case?

1 A That's correct. And I'll just say that,
2 again, there are a lot of different factors that go
3 into that. And so I cannot determine until something
4 is of record what a negotiation looks like between
5 another company or if an agreement will make it to the
6 finish line or if a trade will make it to the finish
7 line.

8 Just like with any transaction -- about
9 earlier, until the actual transaction is completed,
10 there are a lot of unknowns and variables as to if
11 that will close.

12 So I think representing working interest as
13 owned and controlled by a party without having it
14 recorded is difficult to -- to address.

15 MR. RANKIN: Mr. Examiner, I have no
16 further questions of Mr. Johnson, so I'll move on to
17 my next redirect, and that will be towards
18 Mr. Chenoweth, I believe.

19 MR. JOHNSON: I'll pass this to Drew so
20 he can hear.

21 MR. CHENOWETH: Okay. I'm ready.

22 REDIRECT EXAMINATION

23 BY MR. RANKIN:

24 Q Good morning, Mr. Chenoweth.

25 A Good morning.

1 Q I believe Ms. Hardy was asking you about
2 your Slide 21. And I'll move over to that slide so we
3 can kind of discuss it together.

4 She was asking you specifically about the
5 fact that you filtered the data that is represented on
6 this exhibit. Do you recall that questioning?

7 A No. That wasn't directed toward me.

8 Q Oh, it wasn't?

9 A No, sir.

10 Q It was not.

11 A I believe that was Mr. Emmett.

12 Q You're right. I apologize.

13 A That's okay.

14 Q Well, you're off the hook for that one,
15 then.

16 Mr. Chenoweth, I called you back to the
17 stand for no good reason. I apologize.

18 A Well, thank you. I'll see you in a bit.
19 Would you like me to get Luke?

20 Q I would, please.

21 A Thank you.

22 REDIRECT EXAMINATION

23 BY MR. RANKIN:

24 Q Mr. Emmett, I apologize. I was trying to
25 ask Mr. Chenoweth a question that should've been

1 directed to you.

2 A No problem.

3 Q Looking at Exhibit 21 that I have up on the
4 screen, are you able to see that?

5 A Yes, sir.

6 Q Do you recall the questioning from Ms. Hardy
7 on this slide asking you about whether and why you
8 filtered the data that's represented on this slide?

9 A I believe so. But if we could repeat it,
10 just for --

11 Q Do you recall -- I believe the testimony
12 that you gave was, she asked whether or not you had
13 filtered the data, and you indicated that you had, and
14 it was filtered as of January 1, 2015. Is that
15 correct?

16 A That is correct.

17 Q And I'm not sure -- I want to make sure the
18 record is clear. But can you explain why it is that
19 you set that date as a filter date for your assessment
20 or review of the information as presented on the
21 slide?

22 A Yes. I mean, Apache, along with a lot of
23 other oil companies will exclude older vintage
24 wellbores. As the understanding of the Delaware Basin
25 has grown greatly with time, we deem anything before

1 2015 essentially as almost noncomparable as the
2 technology has advanced so much since then.

3 Q So the decision to filter based on that 2015
4 date was not necessarily an arbitrary decision, but it
5 was based on an industry understanding of what is
6 deemed to be a more modern completion technique. Is
7 that right?

8 A Correct.

9 Q Okay. On the same slide, Mr. Emmett,
10 Ms. Hardy asked you about the distances from the Dust
11 Bowl proposed spacing unit for some of these wells
12 that Apache reviewed. Do you recall that line of
13 questioning?

14 A Yes, sir.

15 Q Now, do you recall in Avant's testimony that
16 they also looked at some of their offsetting
17 developments, including the Golden Tee?

18 A Yes, sir. I believe they focused primarily
19 on the Golden Tee development in particular, which is
20 the furthest away, as the crow flies.

21 Q What's the distance to the Golden Tee?

22 A I don't have that exact figure. I believe
23 it's over 25 miles.

24 MR. RANKIN: Let's see. That's, I
25 think, all the questions I have for you, Mr. Emmett.

1 Will you please see if Mr. Roback is
2 nearby?

3 MR. EMMETT: Yes, sir. Thank you.

4 REDIRECT EXAMINATION

5 BY MR. RANKIN:

6 Q Mr. Roback, how are you?

7 A I'm well.

8 Q Good. Mr. Roback, just a couple of
9 questions that I want to make sure I understand your
10 testimony on.

11 Looking at Slide 25, I believe you indicated
12 that -- one thing I want to understand, because it's
13 not clear from the slide, is the data that you pulled
14 to generate these values, are they only with respect
15 to Apache's operations in New Mexico?

16 A They are. This is entirely New Mexico data.

17 Q So the fact that there's no completions
18 listed in 2022 is not indicative of the fact that
19 Apache didn't complete any wells in '22. It just
20 didn't complete any wells in New Mexico. Is that
21 right?

22 A That's correct. We fluctuate our
23 completions team where they're needed at the time. It
24 just so happened in 2022 we focused in Texas. And we
25 came back in '23.

1 Q And in Texas, does Apache operate and drill
2 wells and complete wells in the Delaware Basin on the
3 Texas side of the border?

4 A We do. We drill and complete and produce a
5 significant number of wells on the Texas side. In
6 fact, we made an acquisition -- I believe it was at
7 the very beginning of this year -- for acreage in the
8 Delaware Basin on the Texas side where we -- we have
9 taken over many wells and we have drilled many wells.

10 Q And part of the decline in recent operations
11 in New Mexico, is it simply because you guys were more
12 active on the Texas side in the last couple years?

13 A That's correct. We have a whole portfolio
14 of wells in the Permian Basin. We move rigs from
15 place to place. We move completion teams to follow
16 the rigs.

17 Q And just so I'm clear, I mean, as part of
18 this effort for this spacing unit, is Apache now
19 looking to develop some additional acreage in New
20 Mexico in this year and in the coming months?

21 A That's correct. Our drilling schedule can
22 change, but it's my understanding that two rigs are
23 coming to New Mexico to develop acreage in the Ghost
24 Rider area as well as the Palmillo, specifically
25 Camacho.

1 Q And of course, if Apache were to prevail on
2 this case, one of those rigs would be dedicated to the
3 Dust Bowl area; correct?

4 A It would. Again, schedules change. At the
5 same time, it was our -- we've been given directive
6 from management that we are to drill these wells as
7 soon as possible, as early as October, pending the
8 results.

9 Q When you say the results, you mean the
10 results of this contested hearing?

11 A Yes, sir.

12 MR. RANKIN: Okay. I have no further
13 questions of Mr. Roback, Mr. Examiner, and I have no
14 further redirect of these witnesses.

15 THE HEARING EXAMINER: Ms. Hardy, do
16 you have any cross-examination based on the redirect?

17 MS. HARDY: I do not, Mr. Examiner.

18 THE HEARING EXAMINER: Mr. McClure, do
19 you have any cross-examination based on the redirect?

20 MR. MCCLURE: I do not, Mr. Hearing
21 Examiner.

22 THE HEARING EXAMINER: All right.
23 Mr. Rankin, let's deal with your rebuttal case.

24 MR. RANKIN: Mr. Examiner, I'd like to
25 call our first witness on rebuttal, Mr. Blake Johnson.

1 THE HEARING EXAMINER: Please proceed.

2 FURTHER REDIRECT EXAMINATION

3 BY MR. RANKIN:

4 Q Mr. Johnson, you have reviewed Avant's land
5 testimony that was submitted in anticipation of this
6 hearing today?

7 A Yes, I have.

8 I'm getting connected. Can you hear me?

9 Q Yes.

10 A Thank you.

11 Q Let's see, Mr. Johnson. You prepared some
12 rebuttal slides in response to Avant's direct
13 testimony and exhibits?

14 A Yes, that's correct.

15 Q And they were marked as Exhibit Slides 30
16 and 31, is that correct, under Exhibit B?

17 A Yes, that's correct.

18 Q Looking at what's marked as Apache Rebuttal
19 Slide 30 under Exhibit B, will you just review for the
20 examiners what this rebuttal slide shows and how it's
21 been updated from the original time frame slide that
22 you filed with exhibits?

23 A Sure. I think that there was more clarity
24 that needed to be addressed versus what we had
25 originally put on the slide.

Page 120

1 Avant has indicated that they are the first
2 movers on everything and that Apache is only
3 reactionary in nature. I put this together because
4 that's simply not true.

5 Now, while I will admit that -- that Avant
6 did, in fact, propose wells before Apache, everything
7 that Apache has done recently is in order to get this
8 ready to drill.

9 So when you look at this, you can say, okay,
10 well, who was the party that nominated the leases
11 first? Well, that was Apache. Who applied to APDs
12 and drilling permits first? That's Apache.

13 And we know that Avant's earliest permit --
14 based on the slides that they submitted, they applied
15 on their earliest permit in February of 2024, with
16 some of those permits being as late as April of 2024.

17 Lastly, you can look at the fact that Apache
18 has also filed for compulsory pooling, as evidenced by
19 the fact that we're going first today, and Avant filed
20 for pooling after Apache.

21 So I think that there was some indication
22 from Avant or some direction from Avant to -- to try
23 to state that Apache has -- has been reactionary only
24 to Avant. But the evidence points to the contrary.

25 Q On that point, Mr. Johnson, can you explain

1 why it is that Apache was motivated to take all the
2 steps that it did in the first instance, including
3 nominating the federal leases, issuing the well
4 proposals, submitting the APDs, for filing with the
5 BLM, filing, in the first instance, the pooling
6 application in this case?

7 Can you explain why it is that Apache is so
8 strongly motivated to ensure that it has the ability
9 to control the drilling and development of this
10 acreage?

11 A One, I think the -- the fact of the matter
12 is we -- we like this acreage and we want to drill
13 this acreage, and we like our development plan better
14 than Avant's.

15 The other I think has been brought out
16 multiple times is the fact that Apache does have
17 acreage that expires in here via a term assignment.
18 And so in order to make sure that we perpetuate that
19 term assignment.

20 We have gone through all the proper steps to
21 make sure that we get our APDs in place so that we can
22 spud the wells and then have the compulsory pooling
23 hearing so that we can determine who the operator is.
24 And then we can spud the wells based on the OCD orders
25 coming out.

1 So everything that we've done is not only
2 because simply, you know, we want to drill the wells,
3 we like the rock, we like the area, but also, we do
4 have a term assignment that does expire.

5 Q And just so it's all clear, starting back in
6 August '22, Apache initiated efforts to ensure that it
7 was going to be able to meet that drilling deadline.
8 Is that correct?

9 A That's correct because you cannot drill
10 through an unleased tract of BLM acreage, so you have
11 to nominate that, which we did.

12 I'd like to point out, too, we bid on it.
13 Now, Avant did secure the lease. But we were
14 motivated to -- to nominate it and move forward with
15 drilling.

16 Q Now, I'm going to move to this next slide.
17 And I think you can just address, you know, the intent
18 behind this slide, which was to rebut the original
19 exhibits that Avant had submitted.

20 I think you addressed, to some extent, much
21 of this on your questioning with Mr. McClure. But I
22 think it would make sense at this point just to give a
23 recap of your understanding of the current state of
24 the working interest and working interest control in
25 the acreage.

1 A Sure. So what we tried to do here was go
2 off of -- of title, what's of record title, based on,
3 you know, what Avant represented that they controlled
4 and what Apache represented that it controlled, and
5 just take a look at it.

6 And again, I did address this with
7 Mr. McClure, but Avant had represented originally on
8 their slides -- and again, the -- the numbers and the
9 columns on the left under the Avant portion of this
10 slide are directly represented of what Avant slide
11 showed.

12 So they said in their -- not rebuttal
13 exhibits, but their original exhibits -- I don't know
14 how you describe that -- but that they -- that they
15 owned 38.62 percent working interest.

16 So if I take Avant's 38.62 percent working
17 interest and I subtract it by Avant's [sic] working
18 interest, as I know it, 38.62 minus 15.71, then they
19 would only have 22.91 percent.

20 Now, that's according to their title. Now,
21 the only reason I had to use Northern's number of
22 15.71 is because they did not break out what
23 Northern -- or what they believe Northern to have.

24 So while I think that Northern had a little
25 bit higher working interest, based on their title, and

1 then subtracting Northern's working interest, you get
2 to 22.91 percent.

3 So the next bullet point shows, you know,
4 Avant is representing that they have 15.71 percent
5 more control based on the fact that they claim to have
6 acquired Northern. But I don't see that that's
7 recorded.

8 And we, again, address the fact -- or
9 address the whole reasoning behind that statement with
10 Mr. McClure.

11 So again, if you sum this up, Avant -- Avant
12 represented in their slides that they controlled
13 49.78 percent.

14 And then what I did at the bottom to kind of
15 sum up what I thought they actually controlled -- and
16 this was, again, prior to the evidence that they
17 submitted in their rebuttal slides -- I took the
18 actual working interest that I thought they owned
19 based on the described above and then added the
20 parties that they had claimed to have executed the
21 JOA, based on their original exhibits.

22 So that was 27.48 percent. Again, it's
23 notated there, but Avant working interest plus the
24 parties executing an Avant-only JOA. And I made a
25 notation about CXA and South Royalties, as I knew it

1 before I received Avant's rebuttal slides.

2 And then further, if you look on the -- on
3 the right, you can see Apache's working interest as we
4 represent it based on our title with 46.01 percent.

5 Avant had represented Apache to own
6 48.85 percent.

7 MR. JOHNSON: I'd like to point out,
8 Mr. McClure, these are one of those small differences,
9 as we talked about, that would be sorted out, you
10 know, as we move forward. It's -- it's standard.

11 So the fact that they're within, you
12 know, a percent or 2 percent is -- it's pretty close.

13 And then so I just took our total of
14 what Apache's working interest was, as I know it,
15 46 percent, plus a party that signed Apache's only
16 JOA, which was Roy Guinnup, I believe. And that came
17 up with 46.31 percent, again, excluding any party that
18 had signed both JOAs.

19 So as I know it, or as I knew it at the
20 time before I saw Avant's rebuttal slides, Apache
21 controls 46.1 percent, and Avant would control
22 27.48 percent. The difference of that is 18.83
23 percent.

24 And just to -- to highlight, if there's
25 a JOA out there that I can't see that somebody

1 executed on behalf of -- you know, or -- or for Avant,
2 I -- I don't know what the totals could be.

3 And then also, if nothing is of record
4 and nothing is filed in the County Courthouse, I would
5 have no way to go off anything different than what I
6 could publicly find.

7 BY MR. RANKIN:

8 Q And Mr. Johnson, on that point, I mean, we
9 haven't been provided any executed documents or
10 agreements. So we wouldn't be able to independently
11 ascertain whether those deals have been completed or
12 executed; correct?

13 A Correct.

14 Q Now, as to CXA, you referred to Avant's
15 rebuttal exhibits, and you saw that CXA had submitted
16 a letter of support favoring Avant's development plan?

17 A I did see that, yes.

18 Q And you have no basis to dispute that, at
19 this point, that CXA is supporting Avant over Apache;
20 correct?

21 A Correct.

22 Q Now, in addition to these rebuttal exhibits
23 that you have prepared, do you have some additional
24 testimony you'd like to provide in response to some of
25 Avant's slides that they prepared for this hearing?

1 A I do.

2 Q I'm going to do my best to navigate. I'm
3 not an expert, but I will try very hard.

4 I'm going to direct your attention first to
5 Avant's slides, Exhibits A-3, and I'm going to ask you
6 to address Exhibits A-3 through A-6. And just explain
7 what your response is to Avant's assertions about its
8 expertise and experience.

9 A Yeah. When I look at this, Apache did not
10 provide an executive summary. And so what I want to
11 just point out is the fact that, you know, they put
12 this together to kind of establish credibility in the
13 area.

14 They've only been around for a couple years.
15 I don't know about a couple, I should say.
16 They -- they haven't been around as long as Apache.
17 But what I'd like to point out is the fact that, if
18 they're indicating that Apache isn't a proven operator
19 or isn't an established company, I mean, obviously,
20 Apache has been around for 70 years.

21 From an experience standpoint, if we
22 multiplied all of Apache's experience, it would vastly
23 trump any Avant experience. And we've drilled wells
24 all -- all over the world.

25 And I thought somebody said something.

1 I'd just like to point out that, just within
2 the -- the four parties that are testifying today,
3 there's 36 years' experience. So we've got a lot of
4 experience here.

5 We are not only supported by the four of us,
6 but as kind of indicated by some of the testimony we
7 put together, you know, an entire organization,
8 corporation with tons of experience all over the
9 world.

10 Q Moving to Apache's Slide A-7 --

11 THE HEARING EXAMINER: Mr. Rankin,
12 Apache's slide?

13 MR. RANKIN: I'm sorry. Avant's slide.

14 Thank you. Good catch, Mr. Hearing
15 Examiner. You're paying attention. That's good.

16 BY MR. RANKIN:

17 Q Mr. Johnson, looking at Avant's Slide A-7,
18 it appears to indicate that Apache has zero rigs in
19 New Mexico. It shows that Apache has zero rigs in New
20 Mexico. And it, I think, is just based on current
21 active rigs. So Apache shows here as zero rigs. Is
22 that correct?

23 A That's correct. There are no rigs currently
24 running in New Mexico.

25 Q How many rigs is Apache currently running in

1 the Permian Basin, including Texas?

2 A Ten.

3 Q Ten. Tell me, if you would, what's Apache
4 practice for how it manages its rigs between Texas and
5 New Mexico, within the Permian Basin and the Delaware
6 Basin in particular?

7 A Yeah, so we move rigs in and out of states
8 and in and out of basins all the time within the
9 Permian Basin. So we take time to put together wells
10 and units to drill, and then we come in and we drill,
11 you know, a variety of wells at -- at any given time.

12 And so I think everybody knows that one of
13 the reasons we're sitting here today is the fact that
14 it does take time to put these units together.

15 And so we -- we move rigs to -- to available
16 locations, and we move them in and out of different
17 areas within the Permian Basin.

18 Q So I want to understand. If you would,
19 Mr. Johnson, what are Apache's plans for developing
20 and drilling in New Mexico going forward for this year
21 and into the, you know, next year or so? What does
22 Apache plan to do in terms of drilling?

23 A Yeah, so right now, we have planned
24 developments at a Ghost Rider development and our
25 Camacho development.

1 Again, that -- and then I believe that the
2 plan would be to -- and Dust Bowl, I should say, as
3 obviously, we're talking about Dust Bowl. So our
4 Camacho, our Ghost Rider, our Dust -- Dust Bowl
5 developments.

6 And I believe the -- we're bringing in at
7 least two, potentially three rigs into New Mexico this
8 year.

9 Q So you've got wells on your rig schedule,
10 and you intend to have drilling campaigns in the
11 Delaware Basin and New Mexico starting this year?

12 A That's correct.

13 Q You talked a little bit about why Apache
14 wanted to be able to control the development in this
15 acreage in light of its term assignment.

16 And I'd like for you to just talk a little
17 bit more about that, in particular with respect to the
18 information that Avant put forward on this slide here,
19 marked Exhibit A-12.

20 If you would, just explain why, when you
21 reviewed this exhibit, it causes you concern, given
22 your sensitive timing around the development and the
23 deadlines under your term assignment in the Dust Bowl
24 acreage?

25 A Yeah. So the first thing I'll do is start

1 off by saying that, you know, with a term assignment,
2 by the nature of a term assignment, the way that it
3 works is, if you don't perpetuate the term of the term
4 assignment, then it just goes back to the party that
5 assigned it to you.

6 And so because of the fact that that term
7 assignment wasn't with Avant, you know, one could
8 argue that Avant has no interest or reason to care
9 about our term assignment expiring or being
10 perpetuated or not.

11 It doesn't do them any good one way or
12 another because it doesn't go back to them. So they
13 don't care if, you know, they perpetuate it and the
14 acreage stays with Apache or if they don't perpetuate
15 it and it goes back to the company that we did the
16 term assignment with.

17 So right there, they don't have a vested
18 interest in the term assignment. So it doesn't
19 behoove them to -- to get out and -- and drill or
20 perpetuate this term assignment at all.

21 So that's why we're so concerned about
22 controlling our own destiny. Because we will be out
23 there drilling and making sure that we perpetuate our
24 term assignment and secure our acreage.

25 That being said, I have also got some

1 concerns based on this slide, Exhibit A-12 that they
2 put together. You know, Avant is making the claim
3 that, oh, we're going to come out here and we really
4 want to drill this Dust Bowl development.

5 But they've also stated that they've got
6 86 active permits, according to this slide. And if
7 they have 86 active permits in this slide, I would
8 think that they could potentially go to another
9 location before this.

10 And if you have 86 active permits, it's
11 going to be difficult for them to juggle all of those
12 permits and all of those locations.

13 So if I'm looking at this and I'm saying,
14 okay, one, they have to -- I mean, I know that they've
15 acknowledged that we have a term assignment, but they
16 have to, you know, honor it and perpetuate it.

17 I've -- I've got some serious concern
18 thinking that that's going to happen. One, they have
19 no reason to because it doesn't interest them.

20 And then two, they've got all this other
21 activity out here. It would be very easy to -- for
22 them to, you know, move to a different development,
23 not get enough rigs in time.

24 I mean, they can state all day long that
25 they are going to get here and perpetuate our term

1 assignment, but again, they have no vested interest in
2 wanting to do that. They can make that claim, but I
3 have a serious concern that that will happen.

4 Q Mr. Johnson, in contrast, you mentioned that
5 Apache is looking at three different drilling
6 campaigns or three areas that it's going to focus its
7 drilling campaigns on in New Mexico, and with two,
8 maybe three rigs. Is that correct?

9 A Yes.

10 Q And the primary interest or the
11 principle -- the word is escaping me. But the
12 paramount interest or focus would be on the Dust Bowl,
13 perpetuating the term assignment under the Dust Bowl
14 and drilling the Dust Bowl acreage if Apache were to
15 be awarded operatorship?

16 A Are you asking if that would be the
17 priority? I'm sorry. Can you repeat the question?

18 Q "Priority" is the word I was looking for.
19 Thank you.

20 Would Dust Bowl be the priority if Apache
21 were awarded operatorship to initiate drilling?

22 A We have prioritized all of these
23 developments. But Dust Bowl is -- is one that we want
24 to slide up on our rig schedule if -- if we are
25 granted operatorship. So all these are priority, but

1 Dust Bowl is -- is a high priority, if not the highest
2 priority.

3 Q And Mr. Johnson, I think the other thing I
4 wanted you to explain to me, you know, if you concerns
5 about the fact that Avant has one rig listed here and
6 86 active permits?

7 A Yeah, I -- I think I hit on that. I mean,
8 if you've got 86 active permits, and we know that
9 those permits expire, and you've got pooling orders
10 that expire, and everything else, I mean, how can you
11 possibly perpetuate 86 permits with one rig? It's
12 impossible.

13 They make the claim and assertion that we
14 don't have rigs. Well, if they really have
15 86 permits, and then they also make the claim that we
16 let a permit expire, I mean, they're going to have a
17 lot of permits expire, and they're going to have
18 compulsory pooling orders expire.

19 And so they're going to have to move their
20 one rig, according to this slide, around based on that
21 fact.

22 Q Mr. Johnson, is there any other additional
23 testimony that you'd like to offer in rebuttal to
24 Avant's land exhibits or testimony that I didn't
25 elicit from you?

1 A Can you scroll down to the next slide?

2 I would like to make a comment on Slide 12,
3 that we do have concerns with when they filed for
4 their permits. I know we briefly talked about this.
5 But I'd also just like to point out the fact that,
6 again, Apache filed for its permits and APDs in
7 October in order to ensure that we were able to get to
8 this development and drill it.

9 BLM permits take a long time to get. And so
10 based on these dates, February, May -- or sorry --
11 March, February, and April of 2024, they submitted
12 these permits well after Apache.

13 And if they really had plans on getting out
14 here quickly and drilling, I just ask the question of
15 why file for permits so much later, and why file for
16 compulsory pooling so much later than when you
17 actually proposed to drill the wells?

18 So I think this just hits on the testimony
19 of the slide above. We're concerned with their
20 ability to get out here and drill these wells.

21 Q Mr. Johnson, in your experience, how long
22 does it take for operators to get APDs approved from
23 the BLM at this time?

24 A I think that's a very -- there's a very wide
25 range. It could -- we've heard it can take up to a

1 year --

2 Q I'm sorry. What was that?

3 A I said, "If not longer."

4 Q Now, in contrast, did Apache file all eight
5 of its APDs at the same time?

6 A Correct.

7 Q And that was, you said, in October. Is that
8 correct?

9 A That's correct.

10 Q And on this exhibit here, you'll see, at the
11 bottom, there's a bullet that says, "The Grayling APDs
12 are on a, quote, high-priority list, end quote."

13 Are you familiar with any high-priority list
14 that the BLM maintains for pending APDs?

15 A I am not.

16 Q Have you had -- okay, so you're not aware of
17 any fast-track system over there that would allow you
18 to get your APDs head of the line?

19 A I'm not aware of anything. I know that we
20 have regulatory departments that handle that. But no,
21 I'm not aware of anything.

22 Q Thank you, Mr. Johnson. Anything else that
23 you'd like to address that I didn't elicit from you on
24 rebuttal?

25 A That's all.

1 Q Thank you.

2 MR. RANKIN: Mr. Examiner, I have no
3 further questions of Mr. Johnson, and tender him for
4 further examination by counsel and the Division.

5 THE HEARING EXAMINER: Let's finish
6 with your rebuttal case in full, and then we'll turn
7 it over to cross-examination.

8 MR. RANKIN: Mr. Examiner, the next
9 witness I'd like to call up for rebuttal purposes is
10 Mr. Chenoweth.

11 MR. CHENOWETH: Okay. I'm ready.

12 FURTHER REDIRECT EXAMINATION

13 BY MR. RANKIN:

14 Q Mr. Chenoweth, this time, we actually want
15 you there.

16 You prepared some rebuttal slides in
17 response to the testimony and exhibits that were
18 prepared by Avant in their direct case. Is that
19 correct?

20 A That's correct.

21 Q Now, Mr. Chenoweth, I'll ask you to go ahead
22 and review each of these slides. I believe the slides
23 you prepared -- and you can confirm for me -- are
24 marked as Rebuttal Slides 32, 33, 34, and then 35. Is
25 that correct?

1 A That's correct.

2 Q So let's start with 32. If you would,
3 Mr. Chenoweth, just review what information is on this
4 slide, what it shows, and then what your conclusions
5 are based on the information provided.

6 A Okay. So starting on the left, I've got a
7 subsea TVD structure map of the Second Bone Spring
8 carbonate. And I've got our acreage -- or the
9 contested acreage for Dust Bowl or Grayling. I've got
10 Cutbow, Ghost Rider, and Golden Tee. And I included
11 mainly Cutbow and Golden Tee on these because they
12 were referenced in their exhibits.

13 And I just -- I wanted to show that they're
14 not actually developing these at the same time, all
15 six at the same time, and they're not actually
16 developing them at six-by spacing, which is what they
17 claimed in their exhibits.

18 So if you look at the Cutbow section,
19 I -- I've only got those three on the east in the
20 NMOCD as spud. But I included the other two.

21 But essentially, they did six-by spacing on
22 the east side in '23, and then they came back in '24
23 and did five-by spacing, kind of a staggered five-by.

24 And then if you look at Golden Tee, same
25 thing. They developed the section in -- in two parts.

1 So it's kind of a skewed five-by spacing.

2 So for example, if I was going to get a
3 non-op proposal from another company, and if there
4 were already three wells at the Golden Tee, and they
5 were proposing the 301 and 302, we probably wouldn't
6 participate because the 302 is definitely going to
7 have degradation due to the 304 parent well.

8 And so if they were to drill all of them at
9 once, it probably wouldn't be an issue. But that's
10 not what they've shown in these two developments.

11 So then if you go to the next slide, same
12 thing. Golden Tee, staggered five-by spacing, not
13 six-by.

14 And then I've included our Ghost Rider where
15 we did a wine rack eight-by spacing. And we did that
16 all at once. So all of our developments we drill all
17 at once. We never drill them half and half.

18 On the Cutbow, I couldn't find any -- any
19 information, really. I -- I assume that they're
20 drilling those two right now. And I can't say that
21 they're not going to drill the other half. I assume
22 they'll continue across the acreage.

23 But mainly, the Golden Tee was the example
24 here.

25 Okay. If you keep going down.

1 Oh, sorry. Go ahead.

2 Q Yeah, just a quick question on this one.
3 Can you determine, based on the Division's records,
4 publicly-available information, whether those two
5 wells in Avant's Cutbow here in the Second Bone
6 Spring -- they've been drilled, but can you determine
7 whether they've been completed and are producing at
8 this point?

9 A Sorry. I couldn't tell as of 5/24. They
10 were just blank.

11 Q And just to be clear -- oh, sorry. Go
12 ahead.

13 A I was just going to say, I -- I know that
14 they're drilling a lot of wells. And even if they
15 submit things on time, they can take time to get
16 through the system, so.

17 Q Yeah. And then, based on your ability to
18 review the publicly-available information, you didn't
19 see anything showing up on the east half of that
20 Second Bone Spring acreage?

21 A No. I only saw those three listed. So they
22 may continue drilling them, but they may end up doing
23 the west half first, and then doing the east half at a
24 later time. But I can't really assert that.

25 Q Now, next slide, Slide 34, what does this

1 show?

2 A This one is the Third Bone and then the
3 XY sands. And it shows what we did at Ghost Rider,
4 which is XY and A sand. And then it shows what we
5 plan to do at Dust Bowl, which is stagger Third Bone
6 and XY.

7 It also shows what they plan to do at Dust
8 Bowl. Honestly, had they submitted things in the
9 manner that they showed in their exhibits, it would've
10 been perfect. I think we're targeting the exact same
11 stuff.

12 And the only problems I had was, out of
13 everything, it seems like the Avant Golden Tee Third
14 Bone wells were the only development where they
15 developed them all at once. I think there was only a
16 three-month period from start to finish of, you know,
17 spud from the first to the sixth.

18 At Cutbow, they waited a year in between.
19 And they didn't -- they didn't get the XY. It looks
20 decently thick over there. So I put a question mark.

21 But I think Evan will talk more about what
22 can happen if you don't development this section all
23 at once. So that's about it for this one.

24 Q On that point, Mr. Chenoweth, I mean, you're
25 aware that the exhibits that Avant and the testimony

1 Avant put forward are claiming that it's very
2 important to them to develop all their benches at one
3 time; correct?

4 A Right, correct.

5 Q But the point of these slides is to show
6 that, to date -- and Avant is a fairly new company --
7 that they haven't yet done that but for one example;
8 correct?

9 A Correct. And secondly, that they're not
10 true six-bys; they're five-bys with the exception of
11 that Golden Tee.

12 Q Do you have an understanding, or do you have
13 a guess -- or not a guess, but do you have an
14 understanding for why Avant may have only drilled five
15 wells for some of those benches?

16 A I mean, all I can do is, you know, make a
17 guess.

18 Q I'm not asking you to guess.

19 A Yeah. I don't want to --

20 Q I'm not going to ask you to guess. Very
21 good.

22 Now, the next slide you prepared is on a
23 slightly different topic.

24 A Correct. So --

25 Q Before you jump into it, though,

1 Mr. Chenoweth, if you would just give us a little --
2 because, other than the written testimony, we haven't
3 yet had the opportunity to understand why this is even
4 an issue or potentially an issue, given the sequencing
5 here.

6 So if you would, just give us a little bit
7 of a background. Explain what this is all about.
8 What is four-string casing, and why do we even have a
9 slide that you're going to address about it?

10 A So the creation of this slide was to
11 potentially address some confusion that we had.
12 In -- in their testimony and their exhibits, they
13 referenced four-string casing design.

14 And we weren't sure if they were going to
15 propose four-string casing design on these wells.
16 They did submit three-string designs in their AFEs.
17 But they did reference four-string design.

18 So we weren't sure -- was it just to show
19 that they're good at four-string, but they're going to
20 do three?

21 Anyway, so I -- I wanted to make sure that
22 everyone is aware this is outside of the required
23 four-string casing AOI. And then I'm also including a
24 note from the BLM indicating that.

25 So we plan to move forward with three-string

1 on this.

2 Q And so just so I'm clear, Apache back in
3 June communicated with the BLM to confirm whether the
4 proposed acreage here is within BLM's area where
5 four-string casing is required?

6 A Correct.

7 Q And the response back from the BLM was that,
8 no, four-string casing is not required in this
9 acreage?

10 A That's correct.

11 Q Okay. And now, as I mentioned, we don't yet
12 have testimony from Avant to confirm whether they
13 intend to proceed with four-string casing or not.

14 A Right.

15 Q But as you indicated, the well proposals and
16 the AFEs that were submitted and that are of record
17 both provide an intention to develop with three-string
18 casing and provide cost for three-string casing?

19 A Correct. Obviously, if they do switch to
20 four-string, they're going to be a lot more expensive,
21 both per well and by development.

22 Q Anything further, Mr. Chenoweth, on this
23 exhibit?

24 A No, sir.

25 Q Before I let you go, Mr. Chenoweth, is there

1 anything additional that you would like to address or
2 respond to in Avant's geology testimony and exhibits
3 that you haven't already addressed on rebuttal?

4 A No. I like the slides. I think they were
5 great.

6 MR. RANKIN: Thank you, Mr. Examiner.
7 Mr. Chenoweth, nothing further.

8 Mr. Chenoweth can be excused.

9 MR. CHENOWETH: Okay. Thank you.

10 FURTHER REDIRECT EXAMINATION

11 BY MR. RANKIN:

12 Q Good morning, Mr. Roback. Welcome back to
13 the stand.

14 A Thank you.

15 Q Mr. Roback, you have reviewed the exhibits
16 and testimony relating to the engineering that Avant
17 submitted to the Division and its pre-file testimony?

18 A I have.

19 Q And have you, in response, prepared some
20 rebuttal slides and testimony addressing that
21 testimony and those exhibits?

22 A Yes.

23 Q And those were filed late yesterday, and
24 it's provided to Counsel and marked as Rebuttal Slides
25 36, 37, 38, 39, and 40. Is that correct?

Page 146

1 A That is correct.

2 Q Mr. Roback, I'm going to ask you to address
3 each one of these in turn. And depending on what you
4 cover, I may elicit some additional testimony from you
5 before moving on.

6 So looking at Exhibit Slide Number 36, if
7 you would, just explain what this slide shows and what
8 you included or added to this slide and what your
9 conclusions are, based on the information.

10 A Absolutely. The -- the additions to the
11 slide are outlined in red. So it's the center chart
12 as well as some of the verbiage down below.

13 The importance here on the center chart is
14 to show what I would consider to be a standard
15 development procedure by many operators over a certain
16 AOI. You can see when we start off -- and sorry. The
17 numbers are a little bit small.

18 But in early time -- yeah, maybe if we zoom
19 in. In early time, in 2015, 2016, 2017, we're -- many
20 operators were looking at, you know, either a standard
21 four-by development or standalone wells.

22 You can see all of the data points here
23 which show well sections by year for all wells within
24 this AOI.

25 And -- and we start off trying to

1 understanding the rock. With time -- so now we're
2 looking more in the 2018, 2019, 2020 time frame -- we
3 start to step out of our comfort zone. We test
4 tighter and tighter spacings to see what the rock can
5 support.

6 And we -- you can see that there are a
7 number of operators who tested six-by and eight-by
8 spacing in this time frame.

9 The next logical step for any operator in an
10 area is to then analyze those results and make
11 adjustments to your development program. And you can
12 see that happening in 2021, 2022, and 2023. Almost
13 everyone in this area has four-by spacing as their
14 development plan.

15 The one exception to that is what Avant
16 has drilled in their Cutbow. You can see those are,
17 since 2021, some of the only wells -- actually, since
18 end of 2020, almost, some of the only wells that have
19 been drilled other than four-by spacing or standalone
20 wells.

21 So the purpose of showing this is that the
22 proposed Avant development is not carrying along with
23 the trend that we see in this area. We are not
24 continuously getting tighter spacing as we learn more,
25 that they are, in fact, going against the grain.

1 And some of the other slides will
2 demonstrate why that is not what Apache would do, and
3 that is not what we would recommend.

4 Q So just so it's clear, Mr. Roback, the data
5 points on this scatter chart here reflect the well
6 spacing density on a section basis of all the wells in
7 this dark map inset to the right. Is that correct?

8 A That is correct.

9 Q Okay. So when you refer to the area of
10 interest, that's everything within this inset map
11 area?

12 A Correct.

13 Q Okay. Now, what does this next slide show?
14 If you would, just explain what all these numbers mean
15 and what your conclusions are based on them.

16 A Absolutely. In Avant's prepared material,
17 they have shown a practice of providing deterministic
18 EURs, which mean EURs with no uncertainty captured in
19 there from wells that produce less than one year.
20 This is shown in Exhibits C-3, C-4, C-5, and I would
21 suspect others.

22 The reason this is important to note is
23 because this study here, which is not an abnormal
24 study -- this is not something that is -- is
25 groundbreaking. It was gathered other the last four

1 days after receiving material from Avant.

2 But this study shows how, at different time
3 steps, the error can change in your ability to predict
4 EUR from period to production.

5 So what we're seeing here, the equation on
6 the top is percent EUR change between two different
7 time stamps. That's TK minus T24. TK would be
8 T-step, the far left column. T24 would be 24 months.

9 So what we're essentially doing here is
10 attempting to calculate the EUR at a certain T-step
11 and then attempting to calculate the EUR at T24, which
12 is two years.

13 We then calculate the difference, the
14 percent difference between those two values at a
15 certain T-step and at T24 and see what sort of error
16 we would see at that time.

17 So for example, outlined in red here, when
18 we take T-step six, which would be after six months of
19 production, attempting to calculate the EUR after six
20 months of production in this case can show a range of
21 errors, whether you're using the three, you know,
22 classical decline curve methods.

23 It can range anywhere from 64 to 78 percent.
24 I mean, that is a significant number. That's at time
25 step six.

1 Of course, the underlying assumption here is
2 that, as you get more production, you are more
3 accurate in your EUR determination. And that's why
4 T24 is used. It's a more accurate determination of
5 where your EUR is going to be.

6 The reason we looked at this is because I
7 have serious concerns about the numbers that Avant
8 kind of portrays throughout their prepared remarks and
9 how they arrived at those numbers.

10 We will talk about specific slides later.
11 But they have a habit of using wells with less than
12 one year of production and giving you, the examiner,
13 and anyone looking at this material a feel that they
14 know exactly what's going to happen with these wells.

15 In reality, look at the difference in T-step
16 between 6 months and even 12 months. You go from 65
17 to 80 percent error down to 15 or 20 percent error. I
18 know for a fact that a number of their wells have been
19 producing for about nine months.

20 And, obviously, this isn't a linear change
21 between those steps. So I would say it's my
22 estimation that they have at least 40 to 50 percent
23 error in the EUR numbers that they are calculating off
24 of that data.

25 Q Mr. Roback, in contrast, I mean, the

1 exhibits that Apache put forward, did they use EUR, or
2 what data did Apache use when it was doing its
3 comparisons?

4 A When Apache pooled together our information,
5 we made a discrete effort to use only public,
6 verifiable data. You can take anything that comes
7 from our slides, look it up the same exact way, and
8 get the same exact answer.

9 The problem with using EURs in general is
10 that you have interpretation bias on there. You can
11 make wells look however you want them to make when
12 they've only been producing for a short period of
13 time. We have an exhibit that we will talk about
14 that -- that demonstrates that fact.

15 When Apache decided to use only
16 publicly-verifiable data, that's production
17 months -- that's why we showed 9-month cume, 12-month
18 cume -- and don't try to forecast out, we take out
19 biases in data.

20 Obviously, we -- any engineer is going to
21 get any different result. But the purpose of this
22 slide is to show that trying to calculate EURs from
23 wells that have been producing nine months is highly
24 inaccurate. And that has not been demonstrated in any
25 of their slides.

1 Q Let's move on to your next slide here,
2 Rebuttal Slide 38. If you would work your way through
3 the information on this slide, explain what it is and
4 what conclusions you've come to based on what you're
5 showing here.

6 A Absolutely. Avant shows in multiple
7 different ways with varying degrees of support that
8 drilling at six-by spacing in a certain development
9 they will experience no per-well deterioration
10 compared to four-by spacing.

11 This is shown in all of the exhibits you see
12 here, C-3 all the way through C-15, the ones that I've
13 numbered.

14 Similarly, Avant has used wells that are
15 loose spacing, call it standalone and two-by wells, as
16 reasonable analogues for their six-by proposed
17 development. That's shown in Exhibit C-12, 14, and
18 15.

19 And there's a significant error in using
20 this. There's a significant issue in making this
21 determination.

22 I -- again, in four days, I pulled three
23 different studies -- those are shown on the left,
24 center, and right -- that all point to the same
25 direction.

1 These are all academic studies performed in
2 the Permian Basin. And all of them show that, as you
3 increase the number of wells in a section, the EUR per
4 well decreases.

5 This is a stated fact that any reservoir
6 engineer would agree with it. And it's not
7 incorporated into any of Avant's slides or numbers.

8 So we'll step through these individually.
9 And I'm happy to provide more detail if I move too
10 fast on any of them.

11 But the left study shows that it's well
12 density N, or subscript N. At four-by spacing, you
13 see a relative EUR factor of around .9, .95. That's
14 compared to three-by spacing. So a slight
15 degradation, but not major.

16 And then as you get all the way down to
17 six-by spacing, you're down at .6, .7. You know,
18 that's hard to determine for sure. But there is clear
19 degradation on your per-well performance when you
20 increase your density down to six-by spacing.

21 The center here shows a different study with
22 the same conclusion. This shows on the top that, as
23 your well count increases from four-by to six-by, that
24 the average EUR per well in this study decreased from
25 around 750 MBO to 300 MBO. That is a significant

1 decrease in per-well EUR in this study.

2 The same study showed something differently.
3 It showed -- this was a study done specifically in the
4 Second Bone Spring. The bottom -- the chart right
5 below this shows that, by spacing, not necessarily by
6 well count -- but four-by spacing is around 1300-foot
7 spacing.

8 I want to make sure I said that correctly.
9 Four-by spacing is 1300-foot spacing. Six-by spacing
10 is 900-foot spacing.

11 So again, you can see here that, as you move
12 from four-by -- six-by spacing, which is you're
13 showing right now, up to four-by spacing, there is a
14 clear difference in per-well performance. There is a
15 clear degradation as you decrease from four-by to
16 six-by.

17 And then I -- I don't think it's necessary
18 to continue to beat this point over and over again.
19 But this is a third study, again, performed in the
20 Permian Basin. And this shows oil EUR per well based
21 on -- based on a benchmark of two-by spacing.

22 And again, you can see, as you down-space,
23 even moving from two-by to three-by, you still see
24 degradation.

25 But again, look at the difference between

1 four-by and six-by and extrapolate out as far as you'd
2 like to some of the tighter spacings. You will
3 always, as a whole, see degradation as you put more
4 wells in a section.

5 Q What's your next slide here, Slide 39? What
6 does this show?

7 A So this -- this slide is a reference to the
8 first rebuttal, technically the second rebuttal slide,
9 where we talk about making calculations on -- on data
10 from short time periods.

11 The screen grab that you see here on the,
12 kind of, center left comes directly from Avant
13 Exhibit C-4. What they've tried to show here is
14 they're using their Golden Tee development -- again,
15 this is -- this is a development that -- that they put
16 together that's a pretty far distance away from Dust
17 Bowl.

18 But what they tried to show in this exhibit
19 is that the performance of Golden Tee, which is in the
20 Third Bone Spring, which is drilled at six-by spacing
21 and -- it's drilled at six-by spacing, how that
22 compares to two offset analogues -- actually three
23 offset analogues; apologies -- to the north, so the
24 Winnebago, the Gordita, and the Eric Cartman.

25 And in their exhibit, without any further

1 information, what you would do is you would look at
2 the Golden Tee average, six wells per section, and
3 you'd follow the grain line all the way to 700-plus
4 months, which is -- correct me if I'm wrong -- I
5 believe that's over 50 years.

6 And you say, wow, those -- those green wells
7 have produced a really good amount. Those are -- you
8 know, the other developments here are going to be able
9 to multiply this number by five 'cause it's five wells
10 per section.

11 The green curve here is going to be able to
12 multiply their results by six 'cause it's six wells
13 per section. Hence, you know, the -- the Golden Tee
14 development is going to have a higher EUR for the
15 entire section. What --

16 Q Mr. Roback, sorry to interject. Just to be
17 clear, I think you were talking about the Golden Tee
18 being green wells on the curve. But I want to make
19 sure --

20 A Oh, I apologize.

21 Q You agree it's the dark blue one; correct?

22 A That's correct. That's my mistake. It's
23 the dark blue. You can see it actually -- it's the
24 second highest EUR at time stamp 700 just below the
25 green ones. Thank you for the clarification.

1 So -- so what -- what we want to show is
2 that, when you look at actual data -- this is
3 verifiable, public information that -- that anybody
4 can look up for the performance of these wells -- that
5 the -- sorry -- that the Golden Tee wells have been
6 producing for nine months. That's what shows in
7 Enverus.

8 That time stamp, if we're looking at Avant's
9 Exhibit C-4, occurs at the red line. And it is
10 intentionally extremely close to the Y axis here. You
11 cannot make any sort of determination on how these
12 wells have performed relative to their analogues,
13 based on the image that Avant has shown.

14 And as such, they can decline their wells
15 however they see appropriate to fit whatever story
16 they want to portray.

17 What actually happens -- you can see this on
18 the right two -- is that, on a full development
19 perspective -- this is all wells producing in
20 development -- they are not producing more oil than
21 their three offset analogues.

22 That, again, is the blue line that
23 terminates at the vertical red line. That's how much
24 data we have.

25 Out of two of the three analogues, they are

1 coming in on par, you know, slightly below some of
2 those analogues.

3 On the bottom here, this is when you can
4 look at their performance per well. So again, this is
5 full development divided by the number of wells.

6 The -- the reason that that dark blue line
7 has shifted down is because, even though Avant
8 has -- even though Avant has six wells compared to
9 five, they are not producing more. And so on a
10 per-well basis, they are seeing below-average results,
11 based on these analogues.

12 And so that I'm clear, I've -- I've stressed
13 consistency in data and making sure that everything is
14 verifiable. The three analogues are 10,000 feet
15 lateral length. The Golden Tees are 7500 foot lateral
16 length. So these have been adjusted to -- to account
17 for difference in lateral length.

18 But -- but the -- the culminating point here
19 is that their production on the top, on a full
20 development basis, shows no difference from what
21 the -- from what the green or the orange line show.
22 In fact, they're below the green.

23 What they've done is actually take their
24 bottom chart here -- if I'm reading this correctly,
25 they've taken -- they've taken the bottom chart that

1 you can see, which is production per well, and they
2 have extrapolated that out to make the blue well
3 perform better than the orange well and on par with
4 the green well.

5 And I think that that is a serious
6 miscalculation. And I think that it's intentional
7 that they forecast out to 700 months because then you,
8 the examiner, and everyone else are unable to see what
9 their per-well production is looking like. No one is
10 going to be able to look at this blue line, the dark
11 blue line on the bottom right and say, I know for sure
12 that it will produce more than the orange or green.

13 And I think it's a serious miscalculation.
14 And I think that it -- it invalidates anything they're
15 trying to prove with this Exhibit C-4 on why their
16 six-by spacing is superior to five-by spacing.

17 Q Looking at your Slide Number 40, Mr. Roback,
18 what does this show? And if you would just explain
19 the data and information and how it supports your
20 conclusion that Apache's development plan should be
21 approved and Avant's should be rejected?

22 A Yes, sir. So Avant has stated multiple
23 times that developing in a single band -- in a single
24 bench simultaneously is the best approach for
25 development.

1 Apache, as operators, we don't disagree with
2 that statement. Every time, you know, we try to
3 develop acreage, we try to develop the entire bench at
4 the same time concurrently.

5 And the reason we do that can clearly be
6 shown here. So this is production, again, public
7 production from the Cutbow development in the Third
8 Bone Spring sand, on the right here, to be clear.

9 You can see that they had three wells come
10 online in April of 2023. That's the purple, blue, and
11 teal lines. They have their IPs.

12 And then what happens is that three more
13 wells come online afterwards. That's the -- I'm going
14 to call that the magenta, red, and then line -- green
15 lines. Those come online in October.

16 As a result, their first three wells that
17 they drilled produce at a lower rate afterwards. This
18 is classically known as a frac hit. This is a severe
19 example of a frac hit.

20 They not only affected -- you know, the only
21 well that it looks like they didn't affect would be
22 the 601 -- or that's a tough number to read. I think
23 it's the 601. I could be wrong on that. It's the
24 purple line.

25 The purple line recovers, but the other two

1 do not recover. And that means that these wells are
2 draining from the same reserves. They've -- they've
3 developed it incorrectly.

4 This is a serious misstep in their
5 development. They are saying multiple times that they
6 want to drill -- they want to develop everything
7 concurrently. And Cutbow, right next to it, they did
8 not develop it correctly. They hurt themselves. They
9 frac hit themselves in the method that they developed
10 their wells.

11 Now, part of why this is important to look
12 at is the -- the chart on the left with a lot of time
13 stamps.

14 I'm going to try to walk through this
15 clearly so that you can understand the time of
16 development for what Avant has done in their Cutbow
17 development, which they've referenced multiple times,
18 based on its proximity to Dust Bowl, and -- and try to
19 explain what has happened here and try to
20 differentiate actions from words.

21 Someone saying that they want to develop
22 everything concurrently is great, but are they
23 actually doing that as a company?

24 What you can see here is that, like I said,
25 they came in and developed the 601, 602, 603. Those

1 came online March 2023. That's development phase one.

2 And then, like I indicated, again, they came
3 online in -- or they brought wells online, this says
4 September 26th. I mentioned October. It's very
5 close. They brought online the second three set of
6 wells and -- and hit them -- hit -- frac hit their
7 development one. That's indicated on the right.

8 And so, you know, I -- you know, I would
9 think that you would try to learn from what occurred
10 here and make adjustments moving forward. Those frac
11 hits would've occurred in September of 2023.

12 Two months later, they came back and made
13 the conscious decision to drill three First Bone
14 Spring wells and bring those wells online.

15 They had the results from this frac hit.
16 They saw their wells get hit. They saw the
17 deterioration in -- in performance, and they said,
18 "That's okay. We'll deal with it."

19 So they drilled three wells here and brought
20 them online February of 2024 and then subsequently
21 started drilling their next round of development,
22 which is two wells in the First Bone Spring and two
23 wells in the Second Bone Spring as -- as we expect,
24 based on the data we see.

25 So that's two important parts that are tough

1 to understand unless you look at them all together.
2 And I have two points to make based on that.

3 First, when they bring online the 301 and
4 302, they're going to frac hit themselves again. They
5 developed the Third Bone Spring incorrectly, and
6 they've done it again in the First Bone Spring.

7 What -- what the error -- what -- what I
8 would expect is that they have decreased the number of
9 wells in the First Bone Spring from six down to five
10 because of this serious mishap in their development
11 strategy.

12 So they can keep saying they want to drill
13 six wells at a time. They, in 2024, have not done
14 that in a well -- in -- in a development right next to
15 it.

16 So not only are they going to frac hit
17 themselves in the First Bone Spring again, but they
18 also had to release a well. That would be the 303.
19 And we know that it probably wasn't drilled because
20 there's no logical reason why you would number your
21 wells 301, 302, skip the 303, and then hit 4, 5, 6.

22 And then the final point here is that they
23 appear to be doing the same exact thing in the Second
24 Bone Spring.

25 So to say that we've learned our lesson and

1 we -- we are going to improve, you know, again, the
2 Second Bone Spring was -- only has two wells drilled
3 in a full development. When they come back and
4 continue to develop the Second Bone Spring, they are
5 going to frac hit themselves again.

6 So we -- the -- the lesson has not been
7 learned from the Third Bone Spring. And you know,
8 I -- I would question why the lesson hadn't been
9 learned in the first place.

10 With all of the experience and -- and
11 everything that they've shown in some of their
12 exhibits -- this is not a novel activity that happens
13 when you develop benches in different phases.

14 Q Mr. Roback, in addition to preparing
15 specific slides to respond to Avant's testimony and
16 exhibits, have you also prepared some comments and
17 testimony to respond directly to some of Avant's
18 exhibits that were presented initially in this case?

19 A Yes, sir. I have.

20 Q Let's --

21 MR. RANKIN: Yes?

22 THE HEARING EXAMINER: How is that
23 rebuttal testimony? The original exhibits, how is
24 that rebuttal?

25 MR. RANKIN: Mr. Examiner, it's

1 rebuttal because we did not anticipate what their
2 testimony was going to be. So we were unable to
3 address it initially. So in other words, we have to
4 respond to it only through rebuttal.

5 THE HEARING EXAMINER: Okay. Let's
6 take a five-minute break before we get into that.

7 It is 11:51 a.m. Let's come back at
8 11:56 a.m. Thank you.

9 (Off the record.)

10 THE HEARING EXAMINER: -- for Apache.

11 MR. RANKIN: Thank you, Mr. Examiner.

12 BY MR. RANKIN:

13 Q Mr. Roback, are you with us?

14 A Yes, I am.

15 Q Mr. Roback, we left off, you just had just
16 completed providing some testimony on rebuttal slides
17 that you had prepared for today's hearing in response
18 to Avant's exhibits and testimony.

19 Now, in addition to rebuttal slides, you
20 also have some testimony to respond directly to the
21 exhibits and testimony that Avant had submitted;
22 correct?

23 A That's correct.

24 Q I'm going to guide you through this. And
25 I'm going to start with -- it's going to take me a

1 moment. I apologize because -- yeah, there we go.

2 I have these in parts. But looking at
3 what's been marked as Avant Exhibit C-2 on the exhibit
4 packet -- and I'm sorry, I do not have the page number
5 on PDF.

6 Maybe Ms. Hardy can direct us to what
7 exactly the PDF page is. But I have these PDFs in
8 parts because they were large, so I can't tell you
9 what the total PDF page is.

10 MR. RANKIN: Do you know what it is?

11 BY MR. RANKIN:

12 Q When she gets to it, she'll let us know.

13 So -- okay, I appreciate it.

14 Mr. Roback, looking at this exhibit that I
15 have up on the page, would you please explain to us
16 what your response is to the information that Avant is
17 using here to support its development proposal?

18 A Absolutely. I believe the purpose of this
19 is to show the difference in performance as
20 characterized by IP24 between some of their
21 developments and some of the other developments.

22 Now, IP24 as I understand it would be
23 the -- it is a metric used to determine peak rate,
24 essentially.

25 You know, the -- the problem with I24 is

1 that, a) it's defined by a lot of different companies
2 in many different ways. It can be the first 24 hours
3 of production. It can be the first 24 hours of
4 production after you put on an artificial lift. It
5 can be the maximum 24 hours of production. And that's
6 not clear here.

7 And secondly is that IP24 isn't really used
8 anywhere in the industry to show difference in
9 performance. I already showed a rebuttal exhibit
10 earlier that short periods of production are not
11 indicative of long-term EUR, and long-term EUR being
12 the ultimate goal for any oil company.

13 To use a miniscule tiny piece of data that,
14 you know, occurs over 24 hours as a -- as a type of
15 proxy for operational prowess I think is -- I think is
16 inaccurate.

17 And -- and secondly, again, this is a point
18 that I've hit on a couple of times so far. We as
19 Apache and any third party looking at this has
20 absolutely no way to verify any of these numbers.

21 These numbers are -- they're not publicly
22 stated anywhere. And it's something that, you know,
23 we have -- we don't have the ability to cross-check.
24 SO I can't comment on their validity.

25 Q Mr. Roback, to your knowledge, is IP24 a

1 metric that is commonly used today in the industry for
2 evaluating or comparing wells or development projects?

3 A I think back, you know, five-plus years ago
4 when, you know, companies would show these every now
5 and then. It's great for the investment community
6 because they see 6700 barrels, and they say, wow, that
7 well must be fantastic.

8 I think that for what we are talking about
9 today, which is EUR per section, they are null and
10 void and -- and aren't -- aren't directed at, you
11 know, understanding what an EUR for a development is
12 going to look like.

13 Q Moving on, I'm going to have you address, if
14 you would, Mr. Roback, your comments -- and you
15 touched on this to some extent in your rebuttal slide,
16 this particular slide, but if you have anything
17 additional to say, I want to make sure you have the
18 opportunity to say it.

19 So looking at Avant Slide C-4, do you have
20 any additional comments on this slide?

21 A I wouldn't -- I wouldn't say anything
22 significant. I think it's great that we're showing it
23 now compared to our rebuttal slide.

24 And consider the message that I kind of
25 brought forth last time, which is that, when you only

1 look at this slide, I think that showing that the dark
2 blue Golden Tee wells as some of the top producers is
3 simply inaccurate, based on the actual data that has
4 been verified by public sources.

5 Q Next slide here is Avant Exhibit C-5. It
6 looks similar. If you would just review your comments
7 and response to the information that Avant put forward
8 here.

9 A Absolutely. So in this slide, Avant makes
10 the statement that Earthstone's development is at four
11 wells per section in higher-quality rock. Actually,
12 in the map to the right, they show four wells as being
13 drilled in this location.

14 When -- when we went to cross-check this
15 information, four wells could not be found in this
16 development.

17 I think that what happened is that there
18 was -- my memory is a little bit foggy here, but I
19 believe there was two wells in this section that was
20 then adjusted and multiplied in order to, you know,
21 provide a curve that shows four-well section.

22 That would not be the preferred methodology
23 for trying to benchmark what four-by production is
24 actually going to look like.

25 In fact, in some of the geology exhibits

1 that Avant has shown, there are many more true four-by
2 developments in the area that could've been used as
3 analogues.

4 So handpicking the Anaconda development
5 to -- to try to show how the Cutbow wells are
6 performing relative to that, I think, is a serious,
7 you know, miscalculation in terms of its validity.

8 And this also points back to, again, my --
9 my second rebuttal slide, which is that the -- you
10 know, the -- the Avant Third Bone wells have not been
11 producing for a significant amount of time.

12 And to put this -- this curve on there with
13 no sort of risk or -- or estimation on how things, you
14 know, could change in the future, I think, is in poor
15 practice and -- and is -- and that risk should be
16 quantified and shown to the -- the viewing bodies.

17 Q When you say viewing bodies, you mean the
18 Division examiners?

19 A Yes, sir.

20 Q Next slide I think that we had marked for
21 you to discuss directly, Mr. Roback, is this
22 Exhibit C-13. If you would, explain what this shows
23 and your response to it and concerns about whether and
24 how this supports Avant's position and proposed
25 development.

1 A Absolutely. So what this is attempting to
2 show is the difference in performance between some of
3 their wells that have recently come online -- that's
4 the Cutbow 304, 305, 306 -- and how its performance
5 compares to the Diamondback wells, which are shown
6 here. Off the top of my head -- oh, 2019 is what that
7 shows in the slide.

8 You know, I think one -- one concern that I
9 have with this slide is, first and foremost, comparing
10 daily data to monthly data. You can see on the daily
11 data side that, for their Cutbow 306, which is the
12 lightest green, that shoots up immediately to
13 900 barrels a day.

14 The problem with pulling monthly data is --
15 the monthly data being the orange and blue curves --
16 is that, if these wells come -- come online late in
17 the month, say with five days left in the month, then
18 that amount of production that has occurred is divided
19 by the full month.

20 And so it can -- it will push out what the
21 IP looks like in -- in monthly data, especially
22 compared to daily data.

23 So I think that, you know, standard practice
24 is to adjust these -- the -- the monthly curves to the
25 left to account for, you know, the -- basically the

1 frequency of the data that you have at hand.

2 The -- the second point that I have when --
3 when looking at this is that it looks like they are
4 using monthly data, likely public monthly data. I was
5 unable to find what the lifting method is for these
6 wells. They note that they have an ESP installed in
7 these wells.

8 If these offset wells, for example, are gas
9 lift, this would be an apples to oranges comparison to
10 try to compare two wells in their early production on
11 two different artificial lifts.

12 So that's something that was not made clear
13 and something that I don't -- I don't know how
14 comparable these two examples are.

15 And then the final point, and possibly the
16 most important point, is that a statement is made here
17 that says, "Avant wells continuing to climb on ESP
18 expected to IP in line with offset wells, if not
19 higher."

20 That is simply a statement that can -- you
21 know, cannot be made with any sort of verifiable
22 source. At any point in time, these wells that are
23 already on ESP could flatten and start to decline away
24 from the trend they are saying they are going to get
25 to.

1 You know, I think that that is -- that is a
2 point of conjecture and something that, you know,
3 can't be confirmed.

4 And I -- you know, as a -- as someone who
5 read this slide, I wanted to make it clear to the
6 examiners here that that is -- that would be something
7 that I would question pretty significantly, especially
8 because, in order to reach that top curve, they're
9 going to have to add 400 barrels a day to their
10 best-performing well, or thereabouts -- I mean,
11 it's -- it's a rough estimate -- which is a
12 significant production increase.

13 So think about that dark green -- that dark
14 black line continuing to increase for another 50 days,
15 so a month and a half, if not longer, in order to
16 reach that peak. I think that's -- that's difficult
17 to explain. It's difficult to justify.

18 Q Next, I want you to talk, if you would --
19 walk us through Slides -- I'm going to go back one
20 slide to C-12.

21 And I'm going to ask you to address -- I
22 think you can address C-12 by itself, but I think you
23 can also, at the same time, address Slides
24 Exhibits C-14 and C-15 because I think your points are
25 going to be the same.

1 So if you would, let us know what your
2 response is to this slide and I think let us know if
3 the same assessment applies to C-14 and C-15 as well.

4 A Yes, sir. So there are -- like -- like you
5 said, there are three exhibits here, C-12, C-14, and
6 C-15 that have generated type curves by landing zone
7 for the -- they're basically the backbone, the -- the
8 understanding of some of the final numbers that we'll
9 talk to and the calculation of those numbers.

10 And the -- the reason we kind of stepped
11 through these -- these exhibits in -- in a different
12 order than what they were provided as is because it's
13 crucial to understand the underlying assumptions in
14 these type curves that are presented to you.

15 You know, there are -- there are concerns
16 that we have about the data that's been brought
17 forward in these type curves and how -- how valid they
18 are.

19 So my first point is going to be the
20 selection of analogues here.

21 Actually, if you wouldn't mind, can you move
22 forward to C-14? They're all the same. I'm happy to
23 look for -- through them in detail. But I think C-14
24 illustrates it better.

25 On the top right here, you can see the

1 analogue selection that was used in order to generate
2 a six-by type curve.

3 So again, I -- I'm not going to, you know,
4 belittle this point, but -- yeah, that -- that's
5 great.

6 So what is being used here is a combination
7 of many different types of spacings. You know, using
8 the six-by spacings at the bottom, that's fantastic.

9 Using standalone two-by spacing wells, as
10 you can see in the center and the right artificially
11 increases the amount of -- you know, standalone wells,
12 as I showed in one of my rebuttal exhibits, are going
13 to produce better than wells in six-by spacing.

14 So including a list of standalone wells in
15 your analogue set will -- will artificially increase
16 what you expect a six-by well to do.

17 Would you mind zooming back out, please?

18 And so the selection of analogues is -- is
19 not advisable here. You know, the -- the standard way
20 to approach this, the correct way to approach this
21 would be to select wells as analogous as possible.

22 In this instance, because there aren't a lot
23 of six-by wells -- in fact, you know, there are very
24 few, as shown on one of the earlier exhibits -- using
25 four-by wells and putting on some sort of degradation

1 factor that you expect for well-to-well interference
2 when you down-space to six-by. So that has not been
3 done here.

4 Point two dates -- or -- or references one
5 of the earlier rebuttal slides, which is that there
6 are likely wells in this population that are -- that
7 have been producing for a short period of time. With
8 that, you have no way of understanding what the
9 long-term EUR is going to look like for those wells.

10 And so for putting a deterministic EUR on
11 wells producing for a short period of time, the
12 ultimate EUR is going to be an inaccurate statement.

13 And then the final point, I believe, unless
14 there's any other questions on this, is going to be
15 math. It's pretty straightforward math, actually.

16 So while I wholeheartedly disagree with
17 their oil EUR number of 900,000 barrels for -- for
18 this type curve, what they have done in their math is
19 take 900,000 barrels and multiply it by four. And
20 that's what Apache recovers for four-by spacing
21 development.

22 They have also taken 900,000 barrels,
23 multiply it by six, and now you get 5.4 million
24 barrels on the reserves comparison.

25 So you know, they take this number

1 and -- and it's stated that, you know, their -- our --
2 that the waste is 1.8 million barrels. That has poor
3 calculations going into it. It has poor input data.
4 And it has a fundamental misrepresentation for how
5 wells interact with each other when you down-space.

6 There is no way, shape, or form that you can
7 take a four-by spacing development and a six-by
8 spacing development and put the same exact type curves
9 on the both of them.

10 I would be absolutely shocked if a company
11 used that for their internal documentation for how to,
12 you know, predict the recovery of a specific
13 development.

14 Q Mr. Roback, following this same approach in
15 this analysis that Avant put forward, I mean, I think
16 I could come back and say, well, why not do a set of
17 six? Let's try seven or eight. Wouldn't I get a
18 bigger number then, seven-well or eight-well spacing?

19 A Using their logic, you absolutely would.
20 You would -- you know, developing an eight-by spacing,
21 take 900,000 barrels, multiply it by eight. Bam, we
22 have 7.2 million barrels in that -- in that -- you
23 know, by that logic.

24 So I think that their logic is flawed. And
25 I think that they've misrepresented how much they

1 actually expect to recover from these wells for all
2 the reasons just mentioned.

3 Q And I guess, is it your view that, if that
4 were the case, if it were simply a mathematical linear
5 relationship and there were no degradation, we would
6 see a lot more seven, eight, nine-by wells in this
7 acreage?

8 A Oh, absolutely. I mean, if you -- if you
9 look, again, at how the spacings in this general AOI
10 has evolved with time, it makes total sense.
11 You -- every company wants to drill as many wells as
12 they can economically and in the form or fashion that
13 best fits their company.

14 And people have tried that. You can see the
15 six-by wells or even eight-by wells on this map here.
16 And it's been attempted. And everyone has seen those
17 results and said, I'm actually going to back off.
18 Four-by spacing is the best way to produce -- or to
19 prevent waste.

20 Q So your assessment and approach -- the
21 walkthrough you did here applies to both C-12 and C-15
22 as well?

23 A Yes. All three of them used the same
24 methodology. They come to the same conclusions. They
25 have the same math. And all three of them, I have

1 serious concerns with the validity -- validity of.

2 Q Let's look at -- I think we're going to go
3 back here again to C-3. If you would, review this
4 exhibit and explain to us your concerns about what
5 this exhibit shows and your response.

6 A I think this exhibit was put together to put
7 a big flashy number on a slide and draw your attention
8 to over 100 percent uplift in total reserves with full
9 unit development across the Bone Spring.

10 But again, the reason that we went through
11 the prepared slides in the order that we did was to
12 explain the underlying assumptions and the underlying
13 miscalculations in these numbers.

14 So again, what -- what has been done for
15 this slide comes from the slides I just talked about,
16 C-12, 14, and 15. And they've taken that number and
17 kind of -- kind of added it together.

18 So they make their development look
19 significantly better at 9.9 million barrels. They
20 make ours look significantly worse at 6.6 million
21 barrels.

22 I don't see the justification for these
23 numbers. And I don't think that -- I -- I don't think
24 they're real. I think that they are numbers that
25 any -- you know, an engineer could look at and, you

1 know, disagree with them wholeheartedly.

2 And then, again, this has been mentioned
3 multiple times, but Apache has every intention to
4 develop the Third Bone Spring. So just because, you
5 know, that -- that it hasn't been included does not
6 mean it will not be developed.

7 And it is not part of -- you know, of -- it
8 should not be included in that 14.9 number. I think
9 you can't -- you can't compare a three-bench
10 development with a two-bench development with any sort
11 of -- with -- with any sort of accuracy there.

12 Q Yeah, and just on that point, just to be
13 clear, Apache does intend to develop the Third Bone
14 Spring, just not initially under a pooling order;
15 correct?

16 A That is correct.

17 Q But it would intend to drill these as infill
18 wells subsequent to the initial eight wells under a
19 pooling order?

20 A That is correct.

21 Q And just so I'm clear and so the examiners
22 are clear, your understanding of where this 6.6 figure
23 came from is by adding the first and second bone
24 spring values that they calculated here, times the
25 number of wells?

1 A Correct.

2 Q So for Apache, it would be 3 million in the
3 First Bone Spring, plus 3.6 in the Second Bone Spring,
4 which gets them to 6.6 in Exhibit C-3; right?

5 A That's correct. And that is -- again, that
6 is a number not provided by Apache. Obviously, that
7 is not a number that Apache would accept.

8 And again, this is a -- this is
9 something -- this is a number that Avant has placed
10 upon Apache to make it look worse based on
11 their -- you know, based on their logic, based on
12 their math that -- that we disagree with.

13 Q But again, I guess, the bigger problem you
14 have would be with how they calculated their 9.9 value
15 for a two-bench development because that, as you
16 explained, I believe, doesn't account for well-to-well
17 degradation in a higher-density development, six-by
18 development; correct?

19 A Yeah. I -- I have problem with the -- with
20 the selection of analogues and the -- and -- and
21 not -- and not selecting true analogues. I have
22 problem with not accounting for degradation. I have
23 problems with forecasting EURs for wells that haven't
24 produced significant amounts of time.

25 I have problems, really, throughout the

1 entire process. And it all dates back to some of the
2 early rebuttal slides, which show that -- that, from
3 an academic perspective, you can't make any of those
4 assumptions, that they are all -- they are all
5 assumptions that have likely been weighted in the
6 favor of Avant in their own slides to help their case.

7 Q Mr. Roback, I think we may have addressed
8 all of the specific slides. Do you have any closing
9 responses in rebuttal to any of the approaches or
10 exhibits or testimony in Avant's direct that I didn't
11 elicit from you directly?

12 A The -- the thing I want to mention here is
13 that everything we kind of talked about to this point
14 is from the academic standpoint.

15 I mean, you know, the academics would agree
16 that you cannot forecast short -- you know, short
17 production wells to a far out date in 50-plus years.
18 Academics would agree that you will have per-well
19 degradation at tighter spacings.

20 And those are aspects that Avant will -- you
21 know, has attempted to -- to prove with -- with flawed
22 metrics and with handpicked analogues that fit their
23 case.

24 So I disagree with that. I disagree with
25 the calculations that they used. And mostly, I

1 disagree with this slide because I think it's -- it's
2 simplified, it's easy to get hung up on, and it
3 completely, you know, forgets the assumptions that
4 they've baked into these numbers.

5 But will all that being said, you know, part
6 of the reason that Apache used verifiable data that
7 can pulled from any person that has an interest in
8 this is that there's no biases involved.

9 I mean, there -- you know, you look at --
10 you look at the data and you -- you have a set of --
11 of conclusions that can be drawn.

12 Sure, they can be slightly different. But
13 we're not talking about forecasting an EUR off of a
14 well that's producing over nine months. I can promise
15 you the difference in -- in that is going to vary
16 drastically.

17 And if, for example, Apache were trying to
18 forecast wells to prove our point, Avant were trying
19 to forecast their wells to prove their own point, we
20 would get massively, massively different numbers. And
21 that's something that we weren't comfortable including
22 in this -- in this presentation.

23 And secondly, you know, all of the
24 information that Apache has pulled together on our own
25 slides shows how Apache's performance compares to

1 Avant's performance.

2 It shows how Apache's performance compares
3 to a wide set of analogues. And it shows how
4 Apache -- or how Avant's performance performs to a
5 wide set of analogues.

6 What you've seen in here is that Avant
7 compares themselves to handpicked analogues, analogues
8 that are nearby or analogues that -- you know, that
9 make themselves look good.

10 And we showed that on one of our rebuttal
11 slides, that, when you look at the actual data,
12 they're -- on a per-well basis, they're performing
13 under two of the analogues they wanted it to be shown
14 that they are overperforming.

15 And so that's the entire reason why Apache
16 is comparing themselves to a wide set of analogues and
17 the reason we want to show -- we have shown that
18 Apache performs better to the analogues in our area.
19 And we've also shown that Avant performs poorly to the
20 section of -- or to the analogues in our area around
21 the Dust Bowl acreage.

22 MR. RANKIN: Mr. Examiner, at this
23 time, I have no further rebuttal witnesses.

24 And I don't know if Ms. Hardy would
25 prefer a lunch break before she dives into her cross.

1 But I'm happy to accommodate a lunch break at this
2 point.

3 THE HEARING EXAMINER: Well, I don't
4 know if Ms. Hardy does or not, but I do.

5 It's 12:22 p.m. And we're going to
6 take a break for lunch.

7 How much time do the parties need for a
8 lunch? Ms. Hardy?

9 MS. HARDY: I think if we could come
10 back at 1:30?

11 THE HEARING EXAMINER: Or come back at
12 1:15.

13 MS. HARDY: 1:15, okay. Thank you.

14 THE HEARING EXAMINER: Yes. Because I
15 do want to wrap this up today. You have your
16 witnesses who are here.

17 MS. HARDY: Yes, I do. Yes.

18 THE HEARING EXAMINER: And after we
19 come back, you will be given cross-examination time
20 for the rebuttal testimony specifically. So will
21 Mr. McClure.

22 And then I suspect that will wrap up
23 your rebuttal case, Mr. Rankin?

24 MR. RANKIN: It will, Mr. Examiner.
25 And hopefully, you know, I was accomplish much of what

1 I might otherwise have to do through cross, having
2 presented rebuttal.

3 So I may be able to hopefully
4 streamline some of the cross-examination; I'll do my
5 best, of Avant's witnesses, once they're presented.

6 THE HEARING EXAMINER: All right. And
7 when we come back, Ms. Hardy, what I'm going to ask
8 you to do, when you present your case in chief, why
9 don't we present your witnesses one at a time.

10 They can adopt their direct and their
11 rebuttal exhibits, make any corrections. And then we
12 can have each one stand for cross-examination
13 individually because they're going to be here at the
14 witness podium. Is that acceptable?

15 MS. HARDY: Yes, it is. Thank you.

16 THE HEARING EXAMINER: Okay. So I'll
17 see everyone at 1:15. Thank you.

18 (Off the record.)

19 THE HEARING EXAMINER: All right. It
20 is 1:15 p.m. on May 29, 2024. We are here to hear the
21 contested case between Avant and Apache.

22 Apache has put on its rebuttal
23 witnesses and concluded its rebuttal case, with the
24 exception of any redirect after cross-examination of
25 its rebuttal witnesses.

1 And we turn now to Ms. Hardy.

2 Mr. Cogswell, are we on the record?

3 THE REPORTER: We are on the record.

4 THE HEARING EXAMINER: All right.

5 Thank you, sir.

6 Ms. Hardy, you have the floor to
7 cross-examine the witnesses as a panel or
8 individually.

9 MS. HARDY: Thank you. And I do have
10 questions for them I think I can direct individually.

11 THE HEARING EXAMINER: Of course.

12 MS. HARDY: So I can start, perhaps,
13 with Mr. Johnson, if he is --

14 MR. JOHNSON: I'm here, Ms. Hardy.

15 MS. HARDY: Are you there? Okay. I
16 guess I'm just looking at a different screen. I
17 can't --

18 THE HEARING EXAMINER: Freya, can we
19 have Mr. Johnson on the screen, please?

20 Thank you.

21 RE-CROSS-EXAMINATION

22 BY MS. HARDY:

23 Q Okay. Mr. Johnson, I have some questions
24 about your rebuttal exhibits.

25 A Okay.

1 Q Okay. So if we can look at your rebuttal
2 slide -- I believe it's your development plan time
3 line, Rebuttal Slide 30.

4 THE HEARING EXAMINER: Rebuttal Slide
5 what?

6 MS. HARDY: 30, Rebuttal Slide 30.

7 THE HEARING EXAMINER: 30, thank you.

8 MS. HARDY: Mr. Rankin, do you
9 have -- is it up there?

10 MR. RANKIN: It's small.

11 MS. HARDY: It's small. Okay. Got it.

12 THE HEARING EXAMINER: Freya, can you
13 make the Adam Rankin larger so we can see it? Thank
14 you.

15 MS. HARDY: Thank you.

16 BY MS. HARDY:

17 Q Mr. Johnson, so this slide doesn't include
18 the fact that Avant proposed its wells three months
19 before Apache; correct?

20 A It does not have when they proposed the
21 wells.

22 Q Okay. And with respect to your testimony on
23 the ownership interest --

24 MS. HARDY: And if we can look at
25 Rebuttal Slide 31, that might be helpful.

1 BY MS. HARDY:

2 Q You've mentioned that Avant's ownership
3 information shows several agreements that have been
4 entered into recently. And isn't it true that there
5 are commonly delays in recording documents and county
6 records?

7 A I wouldn't say that it's commonplace
8 anymore. You can record a document online today.

9 Q There can be delays on what's shown publicly
10 between when documents are filed when they're publicly
11 available. Isn't that true?

12 A That's not my experience. Usually, when you
13 record something, it's pretty quick.

14 Q Okay. And in this case, regarding those
15 agreements and transactions, we have Ms. Albrecht's
16 sworn testimony that they have occurred; correct?

17 A I -- I don't know if I understand the
18 question.

19 Q Well, have you reviewed Avant's testimony
20 and exhibits?

21 A Yes.

22 Q And Ms. Albrecht has stated under oath that
23 those agreements have been entered into; correct?

24 A They're -- they're pending.

25 Q I'm sorry?

1 A I think her slide says that they're pending.
2 So you can -- you can have an agreement that
3 has been, in your reference, entered into but is still
4 pending.

5 Q Okay. And with respect to Northern's
6 interest that you've mentioned, Northern is a party
7 represented by counsel in this case; correct?

8 A I believe that that's the case, yes.

9 Q Okay. You had commented earlier on Avant's
10 Exhibit A-2.

11 MS. HARDY: Mr. Rankin, do you have
12 that?

13 THE HEARING EXAMINER: While Mr. Rankin
14 finds Avant's --

15 Mr. Johnson: Yes, the executive
16 summary.

17 THE HEARING EXAMINER: Excuse me.
18 Excuse me. Hold on a second.

19 While Mr. Rankin finds Avant's
20 Exhibit A-2, I want to say thank you to him. It was
21 not a job that he had signed up for, but it certainly
22 has helped this hearing that he has been able to put
23 all the exhibits from both parties on the screen. So
24 thank you, sir.

25 MS. HARDY: Thank you, Mr. Rankin.

1 I'll be happy to do this for Avant's exhibits. I'll
2 trade you.

3 MR. RANKIN: You said 8?

4 MS. HARDY: A-12. Okay. That's it.
5 Thank you.

6 BY MS. HARDY:

7 Q And I think you had referenced Avant's
8 active permits in this area. Do you recall giving
9 testimony about that?

10 A I do.

11 Q Okay. And these are all active permits
12 within ten miles of this acreage; correct?

13 A I'm using the numbers that Avant provided
14 based on the slides that were presented.

15 Q And it states there --

16 A So the -- it states that, yes.

17 Q Okay. And did you see Avant's testimony
18 that it has two rigs running in New Mexico and plans
19 to add another one?

20 A I did.

21 Q With respect to BLM permitting, isn't it
22 true that the APDs will not be approved until either
23 party has a pooling order? Isn't that correct?

24 A I don't know if that's correct or not.

25 Q And although you've testified Apache has

1 concerns about the term assignment, Apache waited
2 until January of 2024 to file its pooling application;
3 correct?

4 A We filed our pooling application in January
5 of 2024, yes.

6 Q And the term assignment expires in 2025;
7 right?

8 A Correct.

9 MS. HARDY: Okay. Those are all of my
10 questions for Mr. Johnson.

11 I have a couple of questions for
12 Mr. Roback and a couple for Mr. Chenoweth. I don't
13 know who wants to go first.

14 I can question Mr. Roback first.

15 MR. JOHNSON: I'll get Evan.

16 RE-CROSS-EXAMINATION

17 BY MS. HARDY:

18 Q Can you hear me?

19 A Yes, I can.

20 Q Okay. Thank you. I wanted to look at your
21 Slide 36, which I believe is one of your rebuttal
22 slides.

23 Okay. So if you were to move this map a
24 couple of miles east, it would include other wells in
25 the Bone Spring that have spacing greater than four

Page 193

1 wells per section. Isn't that true?

2 A I don't know that to be true.

3 Q Now, if you look at Slide C-3, Avant's
4 Slide C-3, when you were talking about this slide
5 earlier, you stated that Apache also intends to drill
6 Third Bone Spring wells; correct?

7 A Correct.

8 Q As infill wells?

9 A Can -- can I make a point of clarification?

10 Q Sure.

11 A Classically, infill wells would mean in
12 between other wells. I wouldn't technically use the
13 term "infill." I would use the term "subsequent
14 develop." "Infill" usually means you're drilling in
15 between two wells within the same bench.

16 Q Okay. You stated that Apache intends to
17 drill Third Bone Spring wells subsequently to these
18 wells; correct?

19 A Correct.

20 Q Okay. But those wells are not included in
21 Apache's application; are they?

22 A I didn't generate the application.

23 Q And they haven't been proposed yet; correct?

24 A I didn't generate the proposal.

25 Q Okay. You've had a lot of criticism today

1 of Avant's type curves. Do you recall that testimony
2 before we broke?

3 A I do.

4 Q You haven't generated any type curves in
5 this case that you filed; have you?

6 A We have not provided type curves.

7 MS. HARDY: Thank you.

8 Those are all of my questions for
9 Mr. Roback.

10 I have a few for Mr. Chenoweth.

11 RE CROSS-EXAMINATION

12 BY MS. HARDY:

13 Q Hello, Mr. Chenoweth.

14 A Hello.

15 Q I'd like to look at your Rebuttal Slide 32.
16 In here, you've included the Ghost Rider wells,
17 correct, as a comparison?

18 A That's correct.

19 Q And those wells are about 27 miles away from
20 this acreage; correct?

21 A That is correct.

22 Q And then if we can look at Slide 33, please?
23 That slide also includes the Ghost Rider wells that
24 are about 27 miles away; correct?

25 A I've included the Golden Tee and the Ghost

1 Rider as a similar distance away from the Cutbow. And
2 they're at a similar SSTVD. That's why I did so.
3 It's the best way to look at a lot of the wells that
4 were talked about in Avant's exhibits.

5 Q And Apache's Black & Tan wells are actually
6 closer to this acreage, aren't they, than Ghost Rider?

7 A What are you talking -- in Second Bone
8 Spring?

9 Q Yes.

10 A We don't have Second Bone Spring at Black &
11 Tan.

12 Q Then in the Third --

13 A We do have Third Bone Spring in there. Yes,
14 ma'am.

15 Q Okay. And that's on Slide 34?

16 A Correct.

17 Q Okay. So there, you've included Ghost Rider
18 but not Black & Tan?

19 A Correct.

20 Q Okay. With respect to your Rebuttal
21 Slide 35, which is the casing discussion that you had
22 earlier, don't Avant's well proposals and AFEs include
23 three-string casing?

24 A They do.

25 Q Okay. Thank you.

1 A You're welcome.

2 MS. HARDY: Then those are all my
3 questions.

4 MR. CHENOWETH: Okay. Thank you.

5 THE HEARING EXAMINER: Thank you,
6 Ms. Hardy.

7 Mr. Jones, do you have any questions
8 for these witnesses on rebuttal?

9 MR. JONES: Northern does not have any
10 questions at this time. Thank you.

11 THE HEARING EXAMINER: Thank you.

12 Mr. McClure?

13 MR. MCCLURE: Thank you, Mr. Hearing
14 Examiner.

15 I have a quick question for
16 Mr. Johnson.

17 FURTHER RECROSS-EXAMINATION

18 BY MR. MCCLURE:

19 Q Oh, there you are.

20 A Yes, sir.

21 Q If I may direct your attention to page 5 of
22 14 of Apache's rebuttal exhibits. I believe it's
23 labeled -- oh, I guess it's Slide 31, if you see it
24 down there.

25 Is it correct that this 46.31 percent was

1 derived by subtracting Southwest and CXA's working
2 interest from the 52 percent from Apache's normal
3 exhibits?

4 A Apache's normal exhibit showed that Apache
5 had 46.01 percent working interest. The number
6 46.31 percent working interest that you're talking
7 about is taking Apache's working interest, 46.31, plus
8 I believe it's Roy Guinnup's working interest.

9 So to your question, yes it took out CXA and
10 Southwest Royalty. It has effectively neutralized
11 them because they signed a JOA with Avant as well as
12 Apache.

13 Q Okay. Thank you. Yeah, that was exactly --
14 I guess you answered what my next question was going
15 to be.

16 MR. MCCLURE: Yeah, actually, yeah,
17 thank you, Mr. Johnson. That was short and quick.

18 I do have some questions for
19 Mr. Roback.

20 MR. JOHNSON: Sure, I'll grab him.

21 MR. MCCLURE: Thank you, sir.

22 MR. JOHNSON: Thank you.

23 CROSS-EXAMINATION

24 BY MR. MCCLURE:

25 Q Mr. Roback, if I can direct your attention

1 to page 12 of 14 of Apache's rebuttal exhibits. It
2 looks like Slide 38.

3 Oh, yeah. There we go.

4 On your left-hand graph there -- or let me
5 back up.

6 The paper from which this was derived, is it
7 applicable to the Bone Spring formation in the Permian
8 Basin here?

9 A Yes, sir. I would -- I would say so.
10 Actually, a number of the authors that worked on that
11 paper are current employees or past employees of
12 Apache. This study was done in the Permian Basin.

13 And my assessment, as a reservoir engineer,
14 is that, if you are using a reservoir with similar
15 fluid properties, that a broad statement about the
16 well-to-well interaction within a reservoir similar to
17 that is applicable across reservoirs.

18 So some of these studies occurred in the
19 Wolfcamp, for example. That does not mean that they
20 are not applicable to the Bone Spring.

21 Q Okay. Thank you, sir. On the left-hand
22 graph that's on this slide that Mr. Rankin has
23 displayed here, can you describe for me what the
24 different SR numbers would be depicting here?

25 A I believe -- I believe the different SR

1 numbers are shown as, essentially, tiers of recovery.

2 I'm not sure what the acronym SR refers to.
3 But it -- it kind of -- it -- it breaks down the
4 recovery on -- on different levels is how I've
5 interpreted it.

6 Q Okay. I guess, overall in this graph, is it
7 trying to tell us what the next well being drilled,
8 what it's relative estimated ultimate recovery is? Am
9 I -- do I have the right interpretation of this graph?

10 A I don't know that I would classify it as the
11 next well per se. I -- I would interpret it on a full
12 developmental basis.

13 This was, again, conducted over a very large
14 area, so they had a large population. And so it is
15 depicting the relative EUR per well at different
16 spacings, not necessarily, like, a parent-child
17 relationship, but concurrent development between wells
18 and how their, you know, stimulated rock volume might
19 overlap and therefore degrade the results.

20 Q Okay. So is this kind of depicting similar
21 information to what that middle graph is showing,
22 then?

23 A Yes, sir. It is.

24 Q Now, am I understanding that middle graph
25 correctly where what -- what it's stating is, if there

1 was four wells drilled, each well would average
2 approximately 750 million barrels, I'm assuming, or
3 750,000 barrels, perhaps?

4 A Correct, correct. That -- that is my
5 interpretation of the data as well.

6 Q So then, is this suggesting that each well,
7 if six was drilled, each well would only produce
8 approximately 300,000 barrels?

9 A In the data set that they examined, yes.

10 Q So is this suggesting that drilling six
11 wells would lead to less ultimate recovery than
12 drilling four wells?

13 A I would say that there's variation in the
14 data set. But this is showing a general trend.
15 That -- that's not a for sure conclusion, but it is a
16 conclusion that they drew on the deterioration by
17 well.

18 Q So I guess, just to confirm, is your
19 understanding from this graph that, if four wells were
20 drilled, the ultimate recovery between those four
21 wells would be approximately 3 million barrels?

22 A Based on this data, I believe your math is
23 correct.

24 Q And based off the same data, if six wells
25 were drilled, the ultimate recovery would only be

1 1.8 million from all six wells?

2 A Based on the data, I believe your math is
3 correct.

4 Q I guess, do you believe that, at any point,
5 the well -- or well deterioration effect would cause
6 the production to go negative overall then as you add
7 additional wells?

8 A No, sir. I don't. And kind of like I
9 discussed, the review of pulling these together was
10 done in a short period of time. The intent here was
11 more to show that the general industry agrees in
12 degradation at higher spacings.

13 Of course, we can look into that data in
14 more detail if it's something that piques your
15 interest.

16 Q Do you think it's -- do you think a
17 possibility for why this data is such is because of
18 different rock quality and reservoir qualities leading
19 to the lesser overall production?

20 A It's always difficult to boil down
21 performance into a single variable. It's -- it's well
22 known that many variables factor into the productivity
23 of a well.

24 So you know, the -- the ability of a paper
25 to correct for variability in rock and -- and operator

1 and -- and many other properties, you know, is
2 something that wasn't looked at for this paper
3 specifically.

4 But I -- I do see your point here.

5 MR. MCCLURE: Okay. Thank you, sir. I
6 believe that's all -- that's all my questions. Thank
7 you, sir.

8 Thank you, Mr. Hearing Examiner.

9 THE HEARING EXAMINER: Thank you,
10 Mr. McClure.

11 Mr. Rankin, do you have any redirect on
12 those specific questions?

13 MR. RANKIN: Mr. Examiner, I do, just a
14 quick one. Since Mr. Roback is up, I'll ask him.

15 FURTHER REDIRECT EXAMINATION

16 BY MR. RANKIN:

17 Q Mr. Roback, you were asked by counsel for
18 Avant whether or not Apache had prepared its own type
19 curves for this case. Do you recall that question?

20 A Correct.

21 Q And you answered you had not. And I'm
22 wondering if you would explain why you chose not to
23 prepare type curves for your analysis.

24 A Well, I think that what we've demonstrated
25 in some of our prepared material is that type curves

1 include inherent bias, that an engineer can take a
2 single set of data, especially data that has only --
3 data from a short period of time of production, and
4 make the final number look however you'd like it to
5 look.

6 We didn't see that as the best opportunity
7 to demonstrate Apache's strength as an operator. We
8 instead opted to show real production data that could
9 be verified.

10 And that's the inherent concern with using
11 type curves and -- and forecasting EURs, is that they
12 can't be verified. And we -- we don't know what
13 assumptions are behind them.

14 Traditionally, a company will have their own
15 sets of rules and regulations that they follow for how
16 to make those -- how to make those EUR determinations.
17 I -- we -- we have no idea of knowing where they're
18 at. And -- and they can be hidden.

19 MR. RANKIN: Thank you, Mr. Roback. No
20 further questions.

21 THE HEARING EXAMINER: Ms. Hardy, do
22 you have a cross-examination on that point?

23 MS. HARDY: No, I don't. Thank you.

24 THE HEARING EXAMINER: Okay.

25 Mr. Rankin, does that conclude your case?

1 MR. RANKIN: It does, Mr. Examiner.

2 THE HEARING EXAMINER: Okay.

3 Ms. Hardy?

4 MS. HARDY: Mr. Examiner, we would call
5 our first witness, which is Ms. Shelly Albrecht.

6 THE HEARING EXAMINER: And I'll remind
7 all your witnesses they are under oath.

8 DIRECT EXAMINATION

9 BY MS. HARDY:

10 Q Good afternoon, Ms. Albrecht.

11 A No, not yet.

12 Q Ms. Albrecht, your testimony and exhibits
13 have been previously admitted into evidence, other
14 than one of those. But I just wanted you to affirm
15 that your testimony is still true and correct?

16 A That's correct.

17 Q And do you have any corrections to make to
18 your exhibits?

19 A I do. I have one clarification to make.
20 And that is on -- I believe it's the seven factors. I
21 think it's --

22 Q I can share my screen here.

23 THE HEARING EXAMINER: Ms. Albrecht,
24 would you speak more clearly into the microphone?

25 MS. ALBRECHT: Yes.

Page 205

1 It's on our seven factors slide, which
2 can be found on Exhibit A-11.

3 THE HEARING EXAMINER: And is there a
4 page number?

5 MS. ALBRECHT: It is page 48 of 344 of
6 the OCD numbering.

7 So the point of clarification here is
8 on the second risk factor, which is risk. We have
9 stated here that APA hasn't drilled a well within a
10 ten-mile radius of our Grayling unit.

11 And I just want to say a caveat to that
12 is that we want to say within the past ten years.
13 Those Lusk 34 wells that were also admitted -- or
14 omitted from Apache's exhibits were drilled just
15 outside of that ten-year window.

16 BY MS. HARDY:

17 Q Did you have any other corrections to your
18 exhibits?

19 A [No audible response.]

20 Q And Ms. Albrecht, I'd like to go through
21 with you --

22 THE HEARING EXAMINER: Ms. Hardy,
23 before you go through anything, would you ask your
24 witness to adopt under oath all of her exhibits,
25 including her rebuttal, if there were any?

1 MS. HARDY: Sure.

2 BY MS. HARDY:

3 Q Ms. Albrecht, do you adopt under oath today
4 your testimony exhibits and rebuttal exhibits?

5 A Yes.

6 Q Thank you. And I had a couple questions for
7 you. I wanted to go through your rebuttal exhibits.
8 And I can pull those up.

9 So the first one has been marked as
10 Avant's -- it's Exhibit A-27. And did you prepare
11 that exhibit?

12 A Yes, I did.

13 Q Okay. And can you tell us what that exhibit
14 shows?

15 A So essentially, this is just a roll-up of
16 the entire ownership and committed interests that are
17 attributed to Avant.

18 And in pulling this table together, again,
19 there were -- which was mentioned several times --
20 several times in past testimony -- there were some
21 discrepancies on the interests and the title that
22 Apache had versus Avant's title.

23 So as Apache did, I used their figures --
24 they used ours -- to clarify how the interests roll
25 up.

1 Q And is it your testimony here today that
2 these interests are correct to the best of
3 your ability?

4 A Yes.

5 Q And did you hear Mr. Johnson testify earlier
6 about the fact that he wasn't able to locate
7 publicly-filed copies of these documents?

8 A I did hear that.

9 Q And can you respond to that?

10 A Yes. The -- the documents that we have
11 signed here this month that they haven't accounted for
12 were, indeed, filed of record. There is oftentimes a
13 delay in the posting online. That's very common. We
14 experience that quite a bit.

15 Q So the JOAs listed here -- for example, you
16 have Wadi, Red Bird, Southwest Royalties -- those have
17 been submitted to the county records, they just
18 haven't been posted?

19 A Not the JOAs. Sorry. To clarify, just the
20 transactions where we acquired interest.

21 Q And with respect to CXA and Southwest
22 Royalties, is it your understanding that they signed
23 JOAs with both parties?

24 A Yes, that appears to be the case.

25 Q But if we look at your next rebuttal slide,

1 which I will pull up, Slide A-28 --

2 THE HEARING EXAMINER: And Ms. Hardy,
3 this one has not been admitted into evidence yet.

4 MS. HARDY: Correct.

5 THE HEARING EXAMINER: Do you want to
6 provide some foundation for this?

7 MS. HARDY: Yes, I will.

8 BY MS. HARDY:

9 Q Ms. Albrecht, can you explain how you
10 developed this information?

11 A Absolutely. So when we got the original
12 Apache exhibits last week, we reached out to CXA
13 because they had signed a JOA with us. And we asked
14 them to clarify whether or not they had, indeed,
15 signed a JOA with Apache.

16 Their response over email -- which we're
17 happy to submit as additional evidence to the
18 record -- was they did because they thought that,
19 otherwise, they would get pooled if they didn't sign
20 the Apache operating agreement.

21 However, they said, "Does that preclude us
22 from supporting Avant? Hope not." That was the -- a
23 paraphrased version of the email.

24 Q And based on those communications with CXA,
25 did they provide to you this letter that's included

1 on --

2 A Indeed. After we responded and said, "Well,
3 a letter of support to clarify that you oppose Apache
4 operating and support us, if that is your position,
5 would be helpful to present to the NMOCD to clearly
6 and unequivocally show that you support Avant's
7 development plans over Apache's." Which they quickly
8 did.

9 MS. HARDY: Mr. Examiner, I would move
10 the admission of this exhibit since it hasn't been
11 addressed yet.

12 THE HEARING EXAMINER: Do you want to
13 voir dire the witness?

14 MR. RANKIN: Yes, Mr. Examiner. I just
15 have a quick question.

16 EXAMINATION

17 BY MR. RANKIN:

18 Q Ms. Albrecht, how are you today?

19 A Great.

20 Q Sorry that you didn't have enough time to
21 have a real lunch.

22 On the question about your discussion or
23 correspondence with CXA, the CXA representative, you
24 mentioned that you got an email from them in which
25 they explained that they signed the JOA with Apache

Page 210

1 because they were under the impression that, if they
2 didn't, that they would be subject to a pooling order;
3 correct?

4 A Correct.

5 Q Now, in your bullet on this exhibit on the
6 top left, it's a slightly different representation of
7 what happened because you say here that they were told
8 that Apache was the established operator. And is that
9 something that was communicated in the email?

10 A I believe that could be easily surmised from
11 what the email stated, yes.

12 Q I guess my concern is that, the way this
13 bullet is written -- and Apache's concern is it sounds
14 like there was a misrepresentation from Apache to CXA.

15 And that's a concern I have, is that I can't
16 examine Mr. Youngblood, and I don't have that email,
17 so I cannot determine what he said in the email and
18 whether he indicated that he believed he was misled or
19 if he just had an understanding that, if he didn't
20 sign the JOA, that he would be pooled. Do you see my
21 concern about that?

22 A My recollection is the email said that they
23 would be operator, and they needed to sign the JOA to
24 not be pooled.

25 MR. RANKIN: Okay. I guess, since I

1 don't have that email, my concern is mostly on that
2 first bullet, Mr. Examiner.

3 And I would ask, because I don't have
4 that email and I can't examine Mr. Youngblood and I
5 don't understand the nature of the discussion or his
6 understanding that I would ask that that first bullet
7 be stricken from the exhibit.

8 THE HEARING EXAMINER: So what's the
9 legal basis for the objection?

10 MR. RANKIN: Well, technically, it's
11 hearsay. The statement here is offered for the truth
12 of the matter asserted, which is that they signed the
13 JOA because they understood that, originally, because
14 Apache was the operator, and that was the only reason
15 for them to sign it.

16 So that's being offered for the truth
17 of the matter asserted. And that's hearsay. And for
18 that reason, because I cannot ascertain the basis for
19 that statement, I think it needs to be stricken from
20 the record.

21 THE HEARING EXAMINER: I don't think --
22 I'll come to you in just a moment, Ms. Hardy.

23 So this is a statement made by this
24 witness. Is that correct?

25 MS. ALBRECHT: Correct.

1 THE HEARING EXAMINER: You're making
2 this statement here? You're summarizing something --

3 MS. ALBRECHT: I'm summarizing the
4 email. And that's my statement.

5 If we need to strike it, I think the
6 exhibit still --

7 THE HEARING EXAMINER: Hold on a
8 second. I haven't said anything yet.

9 So this witness states CXA signed a JOA
10 with APA after being told APA was the established
11 operator. So the after being told APA was the
12 established operator and CXA would be compulsory
13 pooled if it did not sign APA's JOA, that's the part
14 of the sentence that you're objecting to. Okay. I
15 understand that.

16 Ms. Hardy, is there -- and I'm not
17 saying that I would rule in favor of this objection
18 just based on hearsay. But is there a simple way to
19 reformulate that sentence so that it is your witness's
20 statement and does not include this hearsay from this
21 other person?

22 MS. HARDY: I think so. I think I
23 could ask Ms. Albrecht if it's her understanding.

24 THE HEARING EXAMINER: Okay.

25 //

1 BY MS. HARDY:

2 Q Is it your understanding, Ms. Albrecht, that
3 CXA signed a JOA with Apache after being told that
4 Apache was the established operator and CXA would be
5 compulsory pooled if it did not sign?

6 A Yes.

7 MR. RANKIN: Mr. Examiner, I object to
8 that. It's the same issue. I think she's close. But
9 I have the same concern because it's about what the
10 out-of-court person is saying that I have a concern
11 about.

12 THE HEARING EXAMINER: I understand
13 your objection. But as you know, hearsay is
14 admissible at an administrative hearing. And it is up
15 to myself and Mr. McClure to give it the weight that
16 we deem it has.

17 And the question now is, the
18 understanding -- I realize that it brings in her
19 understanding of an out-of-forum statement. However,
20 this, I believe, is -- would you answer the question,
21 please?

22 Ms. Albrecht: Can you restate the
23 question, please?

24 BY MS. HARDY:

25 Q Yes. Ms. Albrecht, is it your understanding

1 that CXA signed the JOA with Apache after being told
2 that Apache was the established operator and CXA would
3 be compulsory pooled if they did not sign?

4 A Yes.

5 THE HEARING EXAMINER: Okay. Now,
6 Ms. Hardy, would you be willing to resubmit this
7 exhibit with that as the bullet point?

8 MS. HARDY: Sure.

9 THE HEARING EXAMINER: And I note your
10 objection. Did you want to say something else?

11 MR. RANKIN: I would, Mr. Examiner. I
12 think I just want to make this on the record. And I
13 think there's another solution I'm going to offer --

14 THE HEARING EXAMINER: Let's hear it.

15 MR. RANKIN: Okay. The concern from
16 Apache is that they're a publicly-traded company and
17 now there's something on the record potentially
18 indicating that somebody said something that was not
19 true.

20 So my offer here would be to say,
21 rather than to take out "being told," would be to say,
22 "CXA signed a JOA with APA based on the understanding
23 that APA was the established operator." That
24 eliminates the hearsay concern.

25 THE HEARING EXAMINER: Okay. Is there

1 an objection to that?

2 MS. HARDY: That's fine.

3 THE HEARING EXAMINER: Okay. So would
4 you state it again? And would you take notes because
5 we need a cover letter and an amended exhibit packet
6 with this bullet point there?

7 MR. RANKIN: I would strike, "After
8 being told," and I would replace it with, "Based on
9 the understanding." And I think that would satisfy my
10 concerns about --

11 THE HEARING EXAMINER: Wouldn't it be,
12 "Based on my understanding," since this is an exhibit
13 by a witness?

14 MR. RANKIN: No. I think she's trying
15 to say it was based on this Joel [sic] Yougblood's
16 understanding.

17 THE HEARING EXAMINER: Is that correct?

18 MS. ALBRECHT: Yes, that's correct.

19 THE HEARING EXAMINER: Okay. Good. I
20 think that clarifies it.

21 Ms. Hardy, do you understand how to
22 change this?

23 MS. HARDY: Yes, I do. Yes.

24 THE HEARING EXAMINER: And is that
25 acceptable? Is that the truth?

1 MS. ALBRECHT: That's acceptable, yes.

2 THE HEARING EXAMINER: And it is the
3 truth?

4 MS. ALBRECHT: Yes, it's the truth.

5 THE HEARING EXAMINER: Ms. Hardy, you
6 were conducting direct?

7 MS. HARDY: Yes, thank you.

8 BY MS. HARDY:

9 Q Ms. Albrecht, so actually, well, the part of
10 the exhibit that's really more important is the actual
11 letter of support. Do you agree?

12 A I agree.

13 Q Okay. And what the gist of that letter?

14 A Well, the -- the letter first offers their
15 support to us as operator.

16 And then I think one of the most important
17 parts of this letter is the last sentence of the first
18 paragraph that says, "CXA opposes Apache Corporation
19 being named operator because Apache's proposed
20 development plans would result in waste, are
21 inefficient, and Apache has not run a rig in Lea
22 County in several years."

23 Q So that was CXA's concern as stated in the
24 letter?

25 A Correct.

1 Q Okay.

2 THE HEARING EXAMINER: And Mr. Rankin,
3 let me close the loop on that objection.

4 So ultimately, even though I originally
5 did not rule in your favor, I ruled in your favor, and
6 we have a clarification of that bullet point. So I
7 sustain the objection. But I think we have found a
8 way around it.

9 MS. HARDY: So just to clarify for the
10 record, Exhibit A-28 as amended is admitted into the
11 record?

12 THE HEARING EXAMINER: I'm glad you
13 brought that up. Yes. Exhibit A-28 is admitted into
14 the record. Thank you.

15 (Avant Rebuttal Land Exhibit A-28 was
16 received into evidence.)

17 MS. HARDY: Thank you.

18 BY MS. HARDY:

19 Q And let me go back for a minute to your
20 chart that I've got here up on the screen. With
21 respect to Northern Oil & Gas, there's been discussion
22 today of that interest because it seems to be around a
23 15 percent interest or a little more, almost
24 16 percent.

25 And is it correct that Avant has an

1 agreement in place with Northern Oil & Gas?

2 A That is correct.

3 Q And so it's correctly attributed here to
4 Avant's interest in the unit?

5 A That is correct.

6 Q Thank you. Is there anything else on that
7 slide that you wanted to address?

8 A Let's see. I guess I would just add that
9 Avant has a long history of dealing with Northern. We
10 have successfully closed several transactions with
11 them. And we've partnered with them on several
12 projects. So we have no anticipation that there are
13 any issues.

14 And furthermore, their counsel is on the
15 call here today, and I'm sure would chime in with any
16 objection to being represented on the slide as they
17 are.

18 Q And Ms. Albrecht, let me pull up your third
19 rebuttal exhibit. That is Exhibit A-29. Can you
20 please explain what that exhibit shows and why you
21 submitted it?

22 A Sure. So this is another rendition of the
23 time line of events, primarily circling around
24 proposals and to get here today.

25 Wanted the -- the difference here in the

1 rebuttal slide is we wanted to address the term
2 assignment that Apache has with Marathon.

3 This term assignment, which is highlighted
4 in the red box, was signed all the way back in March
5 of 2020. So by March of 2025, next year, they will
6 have had five years to satisfy this term assignment.

7 You can -- there was testimony that, you
8 know, we all experienced the pandemic that led to a
9 gap in this time line on Apache's part. However, in
10 other testimony, they provided they did touch on the
11 fact that they were developing properties in Texas
12 during that time.

13 So I think it's just -- it's very clear that
14 they have been complacent when it comes to developing
15 this unit. And they had opportunities to satisfy the
16 term assignment.

17 And -- and in any event, Avant plans to
18 drill it before the term assignment expires, pending
19 approvals of the pooling order here and permits.

20 Q And let's talk about the permits. And I can
21 actually pull up your original slide on the permits
22 because I think that this information was referenced
23 by Apache's witnesses earlier today. And I am looking
24 at your Exhibit A-13.

25 THE HEARING EXAMINER: Ms. Hardy, can

1 you speak up?

2 MS. HARDY: Sure.

3 BY MS. HARDY:

4 Q I'm looking at your Exhibit A-13. And you
5 have a statement there that the Grayling APDs are on a
6 high-priority list.

7 A Yes.

8 Q Can you explain that, please?

9 A Well, the BLM does maintain, contrary to
10 testimony by Apache, a priority list. It helps them
11 to balance the volume of permit requests that they get
12 filed.

13 So right now, they know that this is on the
14 high-priority for all the permits that have been filed
15 for Avant. And we have regular check-ins weekly with
16 them to maintain that -- those priorities.

17 Q And what is the expected date for the
18 permits should Avant be awarded operatorship?

19 A I believe it's end of this year, however,
20 likely sooner. We're seeing that we can get permits
21 on the high-priority list turned around in six to
22 seven months.

23 Q And does Avant plan to expeditiously drill
24 these wells once it has its approved permits?

25 A Indeed, yes.

1 Q And I see there in your slide a discussion
2 of the number of rigs. Is that still correct?

3 A That is correct. We're currently running
4 two rigs with plans to pick up a third this fall.

5 Q And having those rigs running in New Mexico
6 would enable Avant to proceed with developing this
7 acreage shortly after it has the permits. Is that
8 correct?

9 A Yes. Those rigs, one is running in Eddy
10 County right now. It will shift over to Lea. And
11 soon, we'll have three rigs in Lea County, is the
12 plan.

13 Q And then Ms. Albrecht, I wanted to talk with
14 you about Apache's rebuttal slides. I'm looking right
15 now. I've pulled up their Slide 30. Do you have any
16 comments or response to that slide?

17 A Slide 30 on rebuttal?

18 Q Yes.

19 A I think I'm missing --

20 Q I think they're in the back of Apache's
21 binder.

22 A I think this one is missing.
23 Got it.

24 Q Do you have their Slide 30?

25 A Yes.

1 Q Okay. And did you have any comments or
2 response to the information they'd added on that slide
3 to the development time line?

4 A I don't believe so. I just -- no, I don't
5 believe I do.

6 Q And then I'm pulling up their working
7 interest rebuttal slide, which is the next slide.

8 THE HEARING EXAMINER: Is there a
9 question, Ms. Hardy?

10 MS. HARDY: Yes.

11 BY MS. HARDY:

12 Q Do you agree with what Apache has
13 represented there?

14 A I do not.

15 Q And can you explain why?

16 A Well, the biggest thing is they're not
17 crediting us with the Northern interest, which we've
18 said -- or which I've said today we have an agreement
19 with Northern to acquire via a trade all of their
20 interest in these lands.

21 I mean, the other -- the other discrepancy
22 is they've washed or neutralized both CXA and
23 Southwest Royalties. And I can see that perspective
24 with Southwest Royalties.

25 But given the very clear letter of intent

1 that we received from CXA, I don't think it's fair for
2 them to consider that a neutralized interest. It
3 should be credited to Avant.

4 Q And when you consider the CXA interest and
5 the Northern interest, what is Avant's controlled
6 percentage for this acreage?

7 A Fifty-two percent, or a little bit over
8 that.

9 Q And Ms. Albrecht, did you have anything that
10 you wanted to add about Apache's original or initial
11 land exhibits that you haven't addressed?

12 A I -- I would like to comment on the
13 communication log that they provided. I'm trying to
14 get to that.

15 It looks like it's their Slide 9 of
16 Exhibit B.

17 Q Okay. I got it.

18 A You'll note that the communication with
19 Avant on this slide at the bottom right has two
20 bullets. This is a huge disparity.

21 On the communication log that we've
22 provided, that captures multiple attempts to work a
23 trade agreement with them that were unsuccessful.

24 The way that played out is we would propose
25 something, and it almost always got returned with

1 something that was inequitable or just dead on arrival
2 with them.

3 And then lastly, the big difference is, in
4 the spirit of compromise, we reached out to Apache,
5 and this is captured on our communication exhibit.

6 Q I believe it's A-25.

7 A On the second page of that summary of
8 contacts --

9 Q I'm trying to get there.

10 A A-25, which is OCD page 126 out of 344.

11 In April, anticipating that this might end
12 up in a contested case and both companies and the New
13 Mexico Oil Conservation Division would be expending a
14 lot of resources to hear us out today, we attempted to
15 come to an agreement where we would split this unit,
16 maybe east half, west half, so that we could move
17 forward without a protested hearing. And that was
18 immediately declined.

19 MS. HARDY: Ms. Albrecht, I think those
20 are all of my questions for now. Thank you.

21 THE HEARING EXAMINER: Is this witness
22 available for cross-examination?

23 MS. HARDY: Yes.

24 THE HEARING EXAMINER: Mr. Rankin,
25 we'll start with you. And Mr. Rankin, if you're going

1 to cross-examine on an exhibit, would you let
2 Ms. Hardy know so she can bring it up on the screen
3 for us?

4 MR. RANKIN: I will. I appreciate
5 that.

6 CROSS-EXAMINATION

7 BY MR. RANKIN:

8 Q Ms. Albrecht, you testified that, to the
9 best of your knowledge or understanding, the working
10 interest percentages that Apache represented for
11 Northern were true and accurate on a unit-wide basis?

12 A Our title shows discrepancies across all of
13 the interests that Apache represented. So I don't
14 confirm that their title figures are correct and
15 accurate.

16 Q Okay. I misunderstood. I thought when you
17 were talking about Apache's rebuttal exhibit that you
18 were saying the -- I'm sorry.

19 It was your exhibit. I guess it was. Okay.

20 And your rebuttal exhibit showed that you
21 were adopting Apache's title figures; correct?

22 A No. For ease of understanding of how the
23 figures would shake out assuming Apache's numbers, we
24 just wanted to provide an alternative view. We had
25 already presented our case showing what our ownership

1 figures were where we didn't bundle any interests.

2 And so in a rebuttal exhibit, it made sense
3 to see it through a different lens, which would be,
4 you know, looking at it from Apache's title figures.
5 Both result in the majority interests going to Avant.

6 Q So on Avant Rebuttal Exhibit A-27, I thought
7 I understand you to say that, in response to
8 Ms. Hardy's question, that you agreed that the title
9 figures represented on the exhibit were true and
10 accurate to the best of your understanding. Is that
11 not the case?

12 A They are true and accurate in that they're
13 what Apache advertised.

14 Q So my next question then is, because Avant
15 didn't provide it in its title plats or information in
16 its exhibits, what was the percentage interest for
17 Northern Oil & Gas that your title showed on a
18 unit-wide basis?

19 A It was just under 10 -- 10 percent.

20 Q So if I were to use Avant's interests for
21 Northern -- did Northern disagree with that in your
22 discussions with them prior to the trade?

23 A We have an agreement that, regardless of how
24 that title is sorted out, we will trade equal acres.
25 It's -- we have the flexibility to do that with our

1 position around the area.

2 Q So that trade is still subject to final
3 determination of what the interest is going to be. Is
4 that true?

5 A I would say it's subject to a final
6 understanding. I've gone through the title with our
7 title attorney. She's provided multiple opinions
8 trying to reverse engineer into Apache's numbers. And
9 we keep finding that their numbers are not correct.

10 So it will be just a clarification exercise
11 with Northern. Again, we have a strong working
12 relationship with them and don't see this being any
13 sort of roadblock.

14 Q So you think your title attorney's numbers
15 were more correct than Apache's. So if I were to use
16 your numbers, which is more like 10 percent for
17 Northern, then Avant would be under 50 percent working
18 interest on a unit basis; correct?

19 A With CXA and Northern, even with our
20 figures, we would land higher.

21 Q I'm sorry. Say that last part?

22 A Even with Northern and CXA on Avant's
23 figures, we still land higher than Apache.

24 Q I understand. That wasn't my question. My
25 question was, if you were to use your figures for

1 Northern, which is closer to 10 percent, then you
2 would fall under 50 percent working interest; correct?

3 A Yes.

4 Q What does Avant's work title show for CXA
5 Oil & Gas Holdings for its working interest on a
6 unit-wide basis?

7 A If you look at Exhibit A-17 -- it's NMOCD
8 page 54 out of 344 -- we show CXA Oil & Gas Holdings
9 with 6.3762 percent. They're the -- the last line on
10 that table.

11 Q Now, on the agreement with Northern, you
12 testified that it's been filed of record, and it's now
13 subject to, I guess, sort of final determination of
14 what the actual interests are; correct?

15 A The transactions that we've closed are filed
16 of record. This Northern agreement is not yet filed
17 of record. Point of clarification.

18 Q Oh, okay. I'm sorry. What was filed of
19 record, then?

20 A All of the transactions that we have
21 captured -- that I captured in Rebuttal Exhibit A-27.
22 And you'll see a column that has the status of each of
23 those. So I can run through them individually if
24 you'd like.

25 Q Well, I guess, for now, I'm mostly

1 interested in Northern. So Northern, it says,
2 "Trading to Avant entities, agreement signed 5/24,"
3 correct?

4 A Correct.

5 Q Just out of curiosity, when was it fully
6 executed?

7 A The exact day?

8 Q Yeah. I'm just kind of curious, if you
9 know.

10 A I don't recall the exact day. It was --

11 Q No problem.

12 A -- here in -- here in May.

13 Q It's been a busy week. Now, on Northern's,
14 it has not yet been filed of record. Is there a
15 reason it hasn't been filed of record?

16 A Well, it hasn't -- I mean, we are waiting to
17 exchange assignments once we -- when they got
18 different title figures from Apache -- we would've
19 done a quick -- a quick deal here, but whenever
20 they're seeing differences from Apache, it warranted
21 ferreting out what those differences are.

22 There -- oftentimes with title, there are
23 agreements that are off record that we may not be
24 privy to. So we need to fully explore that.

25 Q I'm sorry. I guess I misunderstood because

1 I thought I understanding that maybe that agreement,
2 the trade with Northern, had closed and it was
3 complete. But it's not closed yet. Is that correct?

4 A Not yet. But it's -- it's under agreement
5 right now.

6 Q Okay. So is there a due diligence period
7 remaining under that agreement?

8 A It's -- it's a customary due diligence
9 period.

10 Q So there's no set time frame or deadline
11 under that due diligence?

12 A Not yet established.

13 Q Okay. But because you've done deals with
14 Northern in the past, you guys work well together and
15 you're comfortable having that exchange to make sure
16 you're comfortable with the terms of the agreement.
17 Is that fair to say?

18 A Yes, absolutely.

19 Q Okay. As part of the agreement, are there
20 any subsequent conditions that would affect the
21 closing of the deal?

22 A No.

23 Q Any other conditions that require either
24 Avant or Northern to perfect in order to close the
25 deal?

1 A Not -- I'm not a title -- or legal -- an
2 attorney, so I -- I don't know that I'm suited to
3 answer that question.

4 Q But the main issue is that, between Northern
5 and Avant, there remains some title issues to sort
6 out, and that's what's holding up resolution of that
7 agreement right now. Is that right?

8 A Yes.

9 Q Okay. And so it's unclear how long that
10 will take or when that will be complete?

11 A I don't anticipate it taking long. We
12 can -- there are ways we can work around it.

13 Q Okay. But as of today, as we sit here, that
14 15.7 percent interest, or 10 percent, depending on how
15 you calculate it, is still pending closure of that
16 agreement; correct?

17 A It's committed to an agreement.

18 Q It's committed to agreement, but it hasn't
19 been closed yet; correct?

20 A It has not yet been closed.

21 Q Okay. So it's under contract, so to speak;
22 correct?

23 A It's under agreement, yes.

24 Q Okay. Very good. Ms. Albrecht, you were
25 talking about the term assignment at issue here for

1 Apache. And you made the point --

2 MR. RANKIN: Maybe if Ms. Hardy
3 would -- and I'm happy to share too because I drive it
4 around. But Ms. Hardy, if you wouldn't mind pulling
5 up Exhibit A-29, which is the rebuttal time line?

6 MS. HARDY: A-29?

7 THE HEARING EXAMINER: I think he means
8 Apache.

9 MR. RANKIN: Apache. Sorry.

10 MS. HARDY: Apache's --

11 MR. RANKIN: No, no. I meant Avant. I
12 didn't say it, but I mean Avant. Avant A-29.

13 MS. HARDY: A-29 Avant.

14 MR. RANKIN: Yeah, which is
15 Ms. Albrecht's updated time line.

16 BY MR. RANKIN:

17 Q You made the point, Ms. Albrecht, when --

18 MS. HARDY: Hang on. Sorry.

19 MR. RANKIN: That's okay. It's page 4
20 of that. There you go. We're getting there.

21 MS. HARDY: There we go.

22 MR. RANKIN: It's really fun to drive
23 the exhibits --

24 MS. HARDY: Yes. I'm sorry,
25 Mr. Rankin. Thank you.

1 MR. RANKIN: -- come on, get there.

2 BY MR. RANKIN:

3 Q In this time line, you pointed out,
4 Ms. Albrecht, that the term assignment that Apache
5 owns was entered into in 2020, so they've had five
6 years to develop that acreage; correct?

7 A Almost five years, yes.

8 Q Almost five years. Now, we pointed out in
9 testimony, you know, that there was this thing called
10 COVID that shut down a lot of activity. And you made
11 the point in your rebuttal testimony that Apache was
12 drilling in 2022 in Texas; correct?

13 A I believe in the slide that Mr. Roback
14 presented called Completion Comparison, there were
15 bars that had activity even in 2019, 2020. I don't
16 have that slide in front of me, but there was activity
17 that piqued my interest that was during that time
18 period.

19 Q So part of the problem, I guess, though,
20 Ms. Albrecht, was that there were two federal leases
21 that canceled, correct, during that period of time?

22 A They expired. However, there are slots in
23 this 1280 development area that could've been drilled
24 to satisfy this without passing through those expired
25 tracts.

1 Q So I'll talk about that in a moment. Well,
2 I guess I'll go ahead -- well, let me see. I'm trying
3 to get my thoughts here.

4 So those federal leases expired. And so if
5 you wanted to drill the entire section, and it's a
6 two-mile well, as a 1280, then you would need to
7 nominate those federal leases again; correct?

8 A Yes.

9 Q Okay. And Apache did that back in the
10 summer of 2022; correct?

11 A Yes.

12 Q So it was just slightly over -- not quite
13 halfway through the term assignment period when they
14 reinitiated the process of getting that development
15 started by renominating those those federal leases
16 that had expired; correct?

17 A Yes.

18 Q And now that brings us to this point today.
19 There's a lot of stuff to do between the time you get
20 a lease nominated, get it leased, to putting a packet
21 together. And that's now taken us more than, what
22 two-plus years to get to that point today; correct?

23 A Yeah, which is equivalent to almost the life
24 of our company.

25 Q It takes a while. Now, you made the point

1 that it would've been possible, I guess, to drill
2 half, you know, to avoid those federal leases so that
3 you can nevertheless develop some of the acreage
4 potentially to hold that term assignment.

5 But Avant's position, as I understand, has
6 been that it's a better outcome to drill each bench as
7 a full section; correct?

8 A Indeed, yes.

9 Q Yeah. And is it your understanding that
10 Apache takes the same position?

11 A Yes, I believe so.

12 Q So Apache's preference, as you understand
13 it, would be to go ahead and develop this acreage on a
14 full-section basis, each bench; agree?

15 A Yes. Both parties agree that's optimal.

16 Q Okay. So on the BLM APD side --

17 MR. RANKIN: Ms. Hardy, if you would go
18 to the slide that has the permits filed, 17, maybe.

19 MS. HARDY: The Avant slide?

20 MR. RANKIN: Yeah. No, not 17.

21 MS. HARDY: Here it is, this one.

22 MR. RANKIN: Yeah. What is that slide?

23 MS. HARDY: A-13.

24 MR. RANKIN: A-13, okay. Thank you.

25 //

1 BY MR. RANKIN:

2 Q Now, this slide has a list of all 18 of the
3 wells that Avant would propose to drill; correct?

4 A Yes.

5 Q And it shows the date that Avant submitted
6 each APD for approval with the BLM; correct?

7 A Yes.

8 Q And the earliest that were filed were in
9 February of '24. Is that right?

10 A Correct.

11 Q And the most recent were only just back in
12 April of '24; correct?

13 A Correct.

14 Q Now, on that time line, the -- and I'll just
15 recite to you, and you maybe can see it if you have it
16 in front of you.

17 But Avant won the federal lease sale in May
18 of 2023; agree?

19 A Agreed.

20 Q And then Avant begins proposing its Grayling
21 wells in June of 2023; correct?

22 A Correct.

23 Q Now, on that time line, it states that Avant
24 proposed these as a 1280 nonstandard spacing unit.

25 But is that actually what you proposed?

1 A I believe that it was -- it had the wells.
2 I don't know that it captured the specific language
3 around it being a 1280-acre spacing unit.

4 Q Do you recall -- I think it was actually --
5 and I'll get to this later -- but basically, didn't
6 Avant propose an east half development and a west half
7 development separately?

8 A I recall there -- there being language
9 around the JOA on that proposal letter, but not in
10 terms of that being the set unit.

11 Obviously, whenever these things get
12 proposed, you don't yet know what the NMOCD will
13 approve. And so that -- you want to maintain some
14 flexibility there just because you want to -- they
15 need to fit with the plans that get approved.

16 Q I may address that when we get to the well
17 proposals.

18 But the point here, I guess, is that Avant
19 was in a hurry and proposed its wells even before the
20 BLM issued the leases the next month in July; correct?

21 A That may be correct.

22 Q Yeah. Well, at least according to your time
23 line.

24 A I'd need to pull up our proposals.

25 Q Yeah. And this is the Exhibit A-29 --

1 A Correct. We had -- we had won the tracts,
2 though. So I don't understand how that's relevant.

3 Q Well, I guess, so the time line here is that
4 you guys won the lease; as soon as you won the lease,
5 you issued your well proposals, even before the leases
6 were issued, and that's back in June of 2023.

7 But then it wasn't until February of '24
8 that you first filed APDs for this acreage; correct?

9 A Correct.

10 Q Okay. Did you know about Apache's term
11 assignment when you acquired those federal leases and
12 issued the well proposals?

13 A I personally did not.

14 Q Okay. When did you become aware of Apache's
15 term assignment?

16 A Later when we were working through title.
17 'Cause there's a lot going on behind the scenes in
18 this time line with title being run. We were closing
19 deals October, November, December.

20 There -- there's a lot of behind-the-scenes
21 not captured here to bring this together.

22 Q Sure. So sitting here today, you're not
23 sure exactly when you personally first became aware of
24 Apache's term assignment?

25 A I would say as we were getting closer to --

1 after we had filed our initial application. Sometime
2 between then and now, whenever we were really digging
3 into the title here.

4 Q And you filed your applications in February?

5 A That sounds right.

6 Q Okay. So sometime after February, you
7 became aware of Apache's term assignment?

8 A Me personally. I have landmen who do a lot
9 of this work who were probably aware of it before me.

10 Q Okay. Are you aware of anybody at Avant who
11 was aware of the term assignment before you? Was that
12 something that the company had awareness of prior to
13 your awareness?

14 A I would have to ask them when exactly they
15 knew about it.

16 Q Yeah, understand. Okay. So I guess my
17 question is, so while Avant was in a hurry to issue
18 its well proposals even before the leases were issued,
19 it waited -- let's see, June, July, August,
20 September -- five or six months before it started
21 filing its APDs.

22 Is there a reason that Avant didn't file all
23 of its APDs at one time?

24 A That's a little bit outside of my
25 wheelhouse. I don't file the permits. So I'm sure

1 there's an explanation that I'm not equipped to
2 provide.

3 Q And now, your understanding of the timing
4 for BLM's approval here, is that based on your direct
5 communication with the BLM in terms of when they
6 expect to approve those APDs?

7 A Not my direct communication, but based on
8 our -- we have a director of regulatory that
9 communicates these kinds of things out to the team on
10 a regular basis. So I'm aware of it through here
11 communication.

12 Q So the expectation based on that
13 understanding is that these permits would be approved
14 hopefully, potentially by the end of this year;
15 correct?

16 A I would say at the latest. Again, we've
17 seen, on average, permits that on our high-priority
18 list getting turned around in six to seven months.

19 Q Okay. Well, that was one of my next
20 questions. You mentioned six to seven months based on
21 wells that are on the high-priority list. Avant has
22 had actual experience with federal permits being
23 approved in that time frame?

24 A Yes.

25 Q And then Ms. Hardy asked you whether Avant

1 would be prepared to expeditiously drill its wells.

2 Are these wells on a rig schedule at this time?

3 A Yes.

4 Q What's the date of that?

5 A I mean, we have our anticipated spuds here.
6 But it's all subject to a pooling order and permit
7 approvals. We're --

8 Q What is --

9 A It's on Slide -- the one you were just
10 referencing that has the time line of submittals.

11 Q A-13?

12 A Indeed, yes.

13 MS. HARDY: I need to get there.

14 MS. ALBRECHT: Second-to-last column on
15 A-13, which is page 50 of 344.

16 MS. HARDY: Fifty, thank you. I'm not
17 as good at driving this as Mr. Rankin.

18 BY MR. RANKIN:

19 Q On that Slide A-13, the earliest spud date
20 here is the 600 series wells. Are those the Third
21 Bone Spring?

22 A Correct.

23 Q Okay. And you've got them slotted here.
24 Are these on your rig schedule, subject to all
25 approvals, for February '25? Is that right?

1 A Yes.

2 Q In terms of sequencing, what would Avant's
3 plans be after drilling those six wells? Would it
4 complete them all at one time right after drilling
5 them?

6 A This is probably a question for our
7 engineer. But yes, I believe so.

8 Q I mean, your understanding --

9 A Just in terms of batches and the different
10 benches?

11 Q Yeah.

12 A Typically yes, we'll drill the batch,
13 complete them, and then move up hole through the
14 shallower benches.

15 Q So the plan would be to drill the Third Bone
16 Spring wells first, and before drilling any other
17 wells, would be to complete them. Is that your
18 understanding?

19 A I believe so. That is a question for Shane,
20 though.

21 Q Okay. I will ask Shane. Now he knows I'm
22 going to ask him.

23 On the ownership issue, do you agree that
24 Southwest Royalties, because it has signed a JOA with
25 both parties and has not indicated a preference one or

1 the other, that it should be treated as neutral as
2 between the two parties?

3 A That seems reasonable. It's a very small
4 interest, so I don't think it really moves the needle
5 either way.

6 Q On the term assignment, you became aware, I
7 guess, personally sometime after February. Do you
8 have a copy of that term assignment? Have you
9 reviewed the conditions and terms of that term
10 assignment yourself?

11 A Yes. It's public record.

12 Q Yeah. So you have an understanding of what
13 the requirements are, then, for Apache to maintain and
14 hold that interest?

15 A It's somewhat irrelevant to Avant, but I've
16 read it, yes.

17 Q Well, I think we agree that it is irrelevant
18 to Avant. And I think that's Apache's concern, is
19 that Avant doesn't care too much about what happens to
20 Apache's interest. And they're, for that reason, I
21 think, motivated to be the operator here.

22 In your statement that you submitted, in
23 paragraph 17, you state that Avant has a frac crew
24 currently on site in the Cutbow unit. Is that still
25 the case?

1 A I believe so. Shane can confirm. But yes,
2 I believe so.

3 Q Do you happen to know what interval they're
4 completing right now?

5 A I believe it's the Second Bone -- First
6 Bone. It came to me.

7 Q I'll ask Shane when he gets up. No problem.
8 Is Shane also the right person to ask about
9 midstream capacity issues and how that relates to
10 Cutbow development in the Grayling?

11 A Yes.

12 Q Okay. On the Northern agreement, you
13 mentioned that you've entered into a number of
14 different agreements with Northern over time,
15 different types of trades. Have any of those deals
16 ever not gone to completion or followed through with
17 Northern?

18 A No.

19 Q How many, to your knowledge, have you
20 completed with Northern?

21 A Say at least ten.

22 Q Ten, okay.

23 A That's an estimation.

24 Q And the agreement with Northern, is it a
25 trade? Is that right?

1 A That's correct.

2 Q Okay. Is it a straight acreage trade?

3 A Correct.

4 Q Just making sure -- I think I covered a lot
5 of what I want to cover. You see, I had a lot of
6 questions. But I'm just making sure I got everything
7 covered.

8 I do want to talk about the well proposals,
9 though.

10 MR. RANKIN: Maybe, if Ms. Hardy
11 wouldn't mind bringing up the well proposals, Exhibit
12 A-24?

13 If you would just scroll up?

14 BY MR. RANKIN:

15 Q So this was dated September 1st. And now,
16 you didn't prepare these well proposals; did you?

17 A I did not.

18 Q Okay. But if I flip through -- first of
19 all, I just want to make the point, I guess, that the
20 TVDs for each of the benches here are -- I think we
21 discussed this already through separate testimony.
22 But the proposals here don't align with your exhibits
23 as you understand them. Is that correct?

24 A Yes. And that's been addressed. You're
25 correct.

1 Q Right. Now, the third page of the well
2 proposal identifies that it will be subject to a
3 contract area of the west half and then a separate
4 contract area subject to the east half.

5 Now, since the well proposals went out,
6 Avant has decided to develop this acreage as a 1280
7 instead of as separate west half and east half
8 developments. Is that correct?

9 A Yes.

10 Q Okay.

11 MR. RANKIN: Ms. Hardy, if you would
12 flip through the next few pages until you get to the
13 first page of the AFE.

14 BY MR. RANKIN:

15 Q Ms. Albrecht, I'll just note that the front
16 page of the AFE that I reviewed, it doesn't identify
17 the footages for the location of the well or any of
18 the laterals. Is that correct?

19 In other words, if I'm looking at that front
20 page, I don't know where any of these wells are going
21 to be located. I know the depths. I know the
22 section. But I don't have any footages; correct?

23 A It looks like it was omitted.

24 Q Okay. And if I go to the front page of the
25 AFE for this well -- each well has a separate AFE

1 cover page like this; correct?

2 A Yes.

3 Q And when I look at the top, it identifies a
4 surface hole location and a bottom hole location at
5 the front page of the AFE, and it gives sections and
6 townships.

7 But as to the surface hole location and the
8 bottom hole location, I don't have footages for any of
9 these wells. Is that right?

10 A That looks right. And we have no
11 questions --

12 Q Okay. And the Division generally requires
13 proposals to include exact footages as part of a valid
14 well proposal. Is that your understanding?

15 MS. HARDY: I'm going to object to the
16 extent that calls for a legal conclusion.

17 THE HEARING EXAMINER: I didn't hear
18 the basis for the objection.

19 MS. HARDY: Calls for a legal
20 conclusion.

21 THE HEARING EXAMINER: Mr. Rankin?

22 BY MR. RANKIN:

23 Q Ms. Albrecht, do you have an understanding
24 of what the Division's requirements are for valid well
25 proposals?

1 THE HEARING EXAMINER: Mr. Rankin?

2 MR. RANKIN: Yeah?

3 THE HEARING EXAMINER: I don't see how
4 that addresses the objection.

5 MR. RANKIN: Okay. I guess I was
6 rephrasing.

7 THE HEARING EXAMINER: Oh, I didn't
8 understand.

9 MR. RANKIN: I'm sorry. Sorry.

10 THE HEARING EXAMINER: Okay. So I
11 sustain the objection.

12 Would you like to rephrase the
13 question?

14 BY MR. RANKIN:

15 Q Ms. Albrecht, do you have an understanding
16 for what the Division requires for valid well
17 proposals?

18 A Yes. I don't have the rules committed to
19 memory to recite right now, but yes.

20 Q And is it your understanding that the
21 Division requires exact footages for well proposals?

22 MS. HARDY: It --

23 MR. RANKIN: I'm just asking what her
24 understanding is.

25 //

1 BY MR. RANKIN:

2 Q Do you have an understanding of what the
3 Division's requirements are for well proposals?

4 A Generally, yes. I don't -- I can't say
5 specifically what the footage requirements are in the
6 well proposals. But we acted in good faith when we
7 sent these out.

8 Q Now, I guess, I can go through, but I think
9 each one of these is missing the footages for each of
10 the wells. So an operator who receives this well
11 proposal wouldn't be able to discern where these wells
12 are proposed to be located, their first take point,
13 last take point, the surface location, the bottom hole
14 location; agree?

15 I know there's 18 of them. Did you go
16 through them?

17 A [No audible response.]

18 Q Did you answer my question? I couldn't hear
19 if you did. I'm sorry. I think I asked --

20 A I said I agreed.

21 Q Yeah, you did agree? Okay. I couldn't
22 hear. I'm sorry. I didn't mean -- I'm sorry.

23 Now, looking at the main text in the top of
24 each of these AFEs, it states that the well is
25 proposed to be a three-string casing design.

1 I mean, I can ask -- I'm not sure if you're
2 the right person, but maybe you know. If you don't
3 know, that's fine. But is it Avant's intent to drill
4 these as three-string casing wells?

5 A Yes. They're outside of the Capitan and the
6 Potash boundary where that's required.

7 Q Thank you. On the timing -- let's see.

8 MR. RANKIN: I guess, Ms. Hardy, if you
9 would -- sorry, I don't have the exact slide here --
10 A-22, Ms. Hardy, if you wouldn't mind?

11 MS. HARDY: A-22?

12 MR. RANKIN: Yeah.

13 MS. HARDY: Which exhibit is that,
14 Mr. Rankin?

15 MR. RANKIN: Oh, it's Avant A-22. It's
16 the direct testimony.

17 MS. HARDY: A-22 is Ms. Albrecht's
18 testimony?

19 MR. RANKIN: I think so. A-22 is the
20 original time line of events. I'm not sure what page
21 that is.

22 PDF page 64. It should be the first
23 one.

24 MS. HARDY: Got it.

25 MR. RANKIN: Sorry.

1 MS. HARDY: It's okay. No problem.
2 There we go.

3 BY MR. RANKIN:

4 Q So I'll draw your attention to that first
5 bullet underneath the time line where it says that
6 Apache has been reactionary to Avant as it relates to
7 well proposals and development timing.

8 So I'm just going to walk through a moment
9 just to kind of understand the basis for that
10 statement.

11 So first of all, there are two federal
12 leases that expired during COVID, as we've
13 established. And then no one drilled any wells in the
14 acreage from late 2019 to early 2021, okay.

15 Now, your time line here does not include
16 the fact that Apache nominated the federal leases in
17 August of '22, but you agree that's the case; right?

18 A I agree that's the case. Nominating leases
19 is not unique to one company.

20 Q No, not at all. But it's necessary in order
21 to make the lease available to be leased; correct?

22 A Correct. Multiple companies will nominate
23 open fed tracts. They get nominated several times.

24 Q Did Avant nominate the leases?

25 A I don't recall. Typically, we do or we have

1 partner companies that do it in coordination with us.

2 Q But you don't know whether you nominated
3 these specific leases?

4 A It's irrelevant. We knew it would get
5 nominated because anything that's open fed in New
6 Mexico gets nominated many times over.

7 Q Okay. Then Avant did propose your Grayling
8 wells in this acreage in June '23 before even the BLM
9 leases were issued; correct?

10 A Correct.

11 Q Okay. Now, in the well proposal that we
12 reviewed, the wells were initially proposed to be
13 drilled from north to south. Is that correct?

14 A Yes.

15 Q And now you're proposing to drill them from
16 south to north?

17 A Correct.

18 Q And Avant did not file its pooling
19 application until after Apache first proposed a
20 1280 unit and filed its pooling application; correct?

21 A We proposed before Apache.

22 Q I guess my question was, Avant did not file
23 its pooling application until after Apache filed its
24 pooling application for a 1280 unit; correct?

25 A Correct.

1 Q Okay. Now, the pooling application that
2 Avant filed departed from its well proposal by seeking
3 a full 1280 unit as opposed to a west half and east
4 half development; correct?

5 A -- see that as a departure. A JOA could be
6 set up on halves, and you still could pool a full 1280
7 unit.

8 MS. HARDY: Can you speak up,
9 Ms. Albrecht, a little?

10 MS. ALBRECHT: Oh, sorry.

11 MS. HARDY: Thank you.

12 MS. ALBRECHT: I don't see it a
13 departure from the well proposals.

14 BY MR. RANKIN:

15 Q Well, I mean, isn't it important to Avant in
16 terms of development to drill full benches across full
17 sections? That's better for proposal; correct?

18 A It is, yes.

19 Q Okay. So it's important to an operator
20 who's receiving a well proposal whether it's a 1280
21 proposal or a west half or east half proposal only;
22 agree?

23 A Yes.

24 Q Okay. And so when Avant filed its pooling
25 application, it's changed its approach from being west

1 half and an east half to a 1280 after Apache filed its
2 application for a 1280; agree?

3 A I wouldn't say we changed it. We were
4 working multiple paths. Our -- the optimal plans
5 would be a 1280, but in communication with Apache, we
6 kind of foresaw that as an option to avoid conflict.
7 So it was an option that was entertained by Avant.

8 Q I guess, if I'm a third-party operator and I
9 see a well proposal come in for a west half and an
10 east half development, that's a different proposal
11 than for a full 1280 development.

12 A You're referring to the JOA language. In
13 the proposals, that doesn't say that the spacing unit
14 is a 1280.

15 Q Well, very good. That's fine. And then you
16 also changed in your application to drill from the
17 south to the north rather than from the north to the
18 south; right?

19 A Yes. And that was due to discovery of dune
20 sand lizard -- dune sage lizard habitat that caused us
21 to flip our locations from the north to -- to the
22 south after our BLM on-sites and getting approval from
23 the BLM on locations that would work for our
24 development.

25 Q And then the depths that Avant initially

1 proposed for each of the two benches were changed in
2 the application and the exhibits now to match what
3 Apache had proposed; agree?

4 A The footage question has come up several
5 times. I thought we were going to defer this to
6 Shane.

7 Q Okay. I can ask Mr. Kelly.

8 So I guess my point is, though,
9 Ms. Albrecht, that your assertion that Apache has been
10 reactionary to Avant, I'm not sure I quite follow that
11 assertion, where it appears, at least as often, that
12 Avant has responded to Apache's proposals and Apache's
13 approach through this time line.

14 A Well, the reason that we highlight that is
15 because this private contract that is between Marathon
16 and Apache seems to be a guiding force for Apache.
17 That was signed way back in 2020. Well proposals went
18 out in '19. You have this big gap in activity.

19 You take a look at the activity of Avant on
20 that same time line. And it's -- it's very sequential
21 in a tighter time frame.

22 Once we proposed the wells -- like I said
23 before, there's a lot going on behind the scenes.
24 We're doing on-sites. We're running title.
25 We're -- we're doing -- we're closing acquisitions.

1 So there's a lot not reflected here.

2 But you just look at the -- on an
3 apples-to-apples comparison of well proposals and
4 filings, you can see ours is much more condensed.
5 Once we got interest in the unit, we -- we got to work
6 to get it drill-ready.

7 Q That was possible once the federal lease was
8 nominated and leased; correct?

9 A We -- we had paid for the lease when we had
10 proposed the wells.

11 Q Yeah. In other words, though, I mean, once
12 those federal leases were released and it was possible
13 to go ahead and plan for development?

14 A Sure, yes.

15 MR. RANKIN: I think, Mr. Examiner,
16 that's all my questions for Ms. Albrecht.

17 THE HEARING EXAMINER: Mr. McClure?

18 MR. MCCLURE: Thank you, Mr. Hearing
19 Examiner.

20 CROSS-EXAMINATION

21 BY MR. MCCLURE:

22 Q Ms. Albrecht, let me squared up in the
23 exhibit.

24 If I may direct your attention to page 15 of
25 344, Avant's exhibits. This is paragraph 30 of your

Page 257

1 affidavit, I believe.

2 A Okay.

3 Q Within this paragraph, you state that it's
4 your opinion that Apache failed to meaningfully engage
5 with Avant and that that demonstrates a lack of good
6 faith negotiation. Can you please provide more
7 details regarding that?

8 A I would say the detail there is that we were
9 the ones that were consistently proposing ideas to
10 come to a resolution. And they were never one to
11 initiate any solution suggestions. It was simply
12 shutting down our ideas or sending us trade proposals
13 that were not equitable.

14 Adding to that, if I may, you know,
15 splitting a 1280-acre unit would not be optimal for
16 either side. I think both parties would prefer to
17 develop the full two sections.

18 But as a concession and, again, in the
19 spirit of compromise, we proposed splitting it down
20 the middle so that each operator could have
21 operatorship over a given 640, stand-up 640. And they
22 also declined to entertain that.

23 Q Thank you. And Ms. Albrecht, if I can draw
24 your attention to page 54 of 344 of Avant's exhibits.
25 This is the lease tract ownership slide.

1 A Okay.

2 Q Was this slide, in addition to the next
3 slide that has the uncommitted owners, either produced
4 by yourself or under your supervision?

5 A Yes.

6 Q How were the persons and their percentages
7 in these two tables derived?

8 A Based on title. We -- we initially had
9 broker title, and then we confirmed it with a title
10 opinion from our title attorney.

11 Q Do you believe these persons and percentages
12 to be accurate?

13 A The only exception I would note is that we
14 had rolled Rock Products into our interest on Slide 22
15 because, at the time, they had committed to selling
16 their interest.

17 Later, it was discussed, which is reflected
18 in the rebuttal slides, that they preferred to sign an
19 operating agreement with us. And we were happy to
20 accommodate either way. So that -- that's the path we
21 will be moving forward with them.

22 Q Now, you reference an Ellipsis Oil and Gas,
23 Incorporated. Is it your understanding that this is
24 the same person that Apache is referencing as Westlawn
25 Fortuna, Incorporated?

1 A Yes, that's correct. They neglected to note
2 that Westlawn Fortuna had a name change filed with the
3 SEC -- or Secretary of State, not SEC -- changing the
4 name from Westlawn Fortuna, Inc. to Ellipsis Oil and
5 Gas, Inc., which is now the correct entity.

6 Q Earlier, you heard testimony from Apache
7 stating that the -- paraphrasing -- that the
8 percentages -- the difference in percentages between
9 Apache and Avant is normal. Is that your
10 understanding as well?

11 A It happens often. You can have different
12 interpretations of title, especially in New Mexico
13 where the title can be old and you can have deviations
14 from the federal records and the county records in
15 what's filed.

16 So yes, that's somewhat customary to have
17 differences in opinions from attorneys on how the --
18 the title should be set out.

19 Q Would it be typical for that percentage to
20 vary by as much as 5 percent?

21 A Sure, it can happen, especially, Dean, if
22 you run into situations where there are off-record
23 agreements. There may be one party that's
24 knowledgeable to those off-record agreements, and the
25 other party is not.

1 Q Thank you. Earlier, Apache referenced a
2 dispute between the -- or let me backtrack.

3 The -- the percentages that Avant has listed
4 for Wadi, Red Bird, Minoco, Roy, and McKay -- or let
5 me backtrack on McKay -- you're confident of the
6 percentages that you have listed here. Is that
7 correct?

8 A Well, we acquired the McKay interest. And
9 he had been in communication with Apache. And on that
10 interest, he said -- well, what he had provided us
11 appeared to align with what Apache had.

12 Why they rolled up the others, I'm not sure.
13 But we do feel confident that they -- they can be
14 broken out.

15 I know in Mr. Johnson's testimony, he
16 referenced a stipulation that they had circulated. I
17 did see a copy of that through Mr. McKay. And it was
18 not signed by all the parties, so it didn't seem like
19 it was a binding stipulation, not that it had any
20 impact that we could see to the way we set out title.

21 Q Okay. Thank you. If I can draw your
22 attention to Avant's rebuttal exhibits, page 3 of 14.
23 This is the CXA letter.

24 Is it your understanding that CXA has -- has
25 signed a joint operating agreement with both Apache

1 and Avant?

2 A I haven't seen anything to verify that they
3 signed with Apache. But based on the communication
4 with CXA, that does seem like a valid situation that
5 they signed with both.

6 Q Now, is it your -- is it your understanding
7 that, once a JOA is signed, that a working interest
8 owner can withdraw from that JOA?

9 A I think that's a question for a title
10 attorney, not suited for me.

11 Q To your understanding, did -- did CXA seem
12 to indicate to you that they wished to withdraw from
13 the JOA that they signed with Apache?

14 A Yes. I mean, that's -- that could only be
15 surmised from the communication where they said,
16 "Hopefully this isn't a problem," and they followed up
17 with a letter of support to us.

18 Those weren't their exact words, but
19 they -- they wanted to make clear that they supported
20 Avant by following up with this letter of support.

21 Q Were their exact -- was the entirety of
22 their exact words on the subject included in this
23 email that's in this exhibit?

24 A No. There were phone conversations that
25 were had with my landman, Tiffany Sarantinos, and

1 Mr. Youngblood that I wasn't a part of.

2 Q To your understanding, was there ever any
3 indication that Mr. Youngblood and CXA -- CXA was
4 going to be in communications with Apache in regards
5 to that JOA?

6 A Can you repeat the question, please?

7 Q To your understanding, was there any -- any
8 indication from CXA that they were going to discuss
9 their JOA with Apache?

10 A That they signed with Avant?

11 Q The JOA that they had signed -- that they
12 signed with Apache.

13 Do you want me to re-ask my question?

14 A Well, if I'm understanding, you're saying,
15 was CXA going to discuss the JOA that they signed with
16 Apache with them after their signed the JOA with
17 Apache?

18 Q Let me rephrase my question. After this
19 communication that Avant had with CXA and CXA signed
20 the JOA with Avant, did CXA give Avant any indication
21 that they would have further communication with Apache
22 in regards to the JOA they had signed with Apache?

23 A I'm not sure.

24 Q Okay. Thank you. Let me draw your
25 attention to the next slide up, page 2 of 14 of

1 Avant's rebuttal exhibits.

2 There's reference to the agreement between
3 Avant and Northern Oil & Gas, Incorporated here. Is
4 there currently a written agreement in regards to
5 this?

6 A There's a written agreement, yes, signed by
7 the parties.

8 Q Based upon your earlier response to
9 Mr. Rankin, would it be fair to say that Northern Oil
10 & Gas, Incorporated's working interest does not, as of
11 the date of this hearing, actually belong to Avant?

12 A Yes, that's probably correct.

13 Q Would it be fair to say that Northern Oil &
14 Gas, Incorporated's working interest is somewhere
15 between 10 and 16 percent, somewhere in that order of
16 magnitude?

17 A Yes.

18 Q As of now, what -- let me backtrack.

19 Has Northern Oil & Gas, Incorporated signed
20 a JOA in regards to this area?

21 A No because they plan to trade out of it.

22 Q To your understanding, what percent -- what
23 percent of the working interest does Avant currently
24 control in this proposed unit?

25 A Based on our title?

1 Q Yes, based on your title.

2 A It's -- it is somewhere around just under
3 50 percent.

4 Sorry, owner committed.

5 Q No, excuse me. I stated controlled. I
6 guess maybe a better terminology would be committed, I
7 guess. That should be --

8 A Okay. So what's on our Exhibit A-17
9 captures that interest at 49 point almost 8 percent as
10 committed.

11 You -- if you want to back out the Southwest
12 Royalties because you consider that neutralized, you
13 know, that could drop it to 49 -- we'll call it 49.5
14 and change.

15 Q Now, have -- has any of the deals and JOAs
16 signed as referenced in Avant's rebuttal exhibits,
17 does that affect the percentage on this Exhibit A-17?

18 A No. The only thing that has changed, which
19 I noted earlier, is Rock Products. We had previously
20 planned to acquire them. We had an agreement to
21 acquire.

22 And then they requested to sign a JOA
23 instead. And so we've since broken that interest out
24 to reflect it under JOA versus in our title interest.
25 It's very small.

1 Q In regards to committed working interests,
2 though, does that cause this percentage to change?

3 A No.

4 Q If I may direct you to page 64 of 124 in
5 Apache's exhibit.

6 A Okay.

7 Q Apache references a committed working
8 interest of 51.96 percent. Do you agree with this
9 value?

10 A No. It's also difficult to judge what's
11 going on with the interests that are rolled up as the
12 4.6875 percent.

13 Q And Ms. Albrecht, if I can direct your -- I
14 apologize for going back and forth between exhibits.
15 But if I can direct your attention to Avant's exhibit,
16 page 65 of 344.

17 A Okay.

18 Q The fifth bullet point down references
19 communications with uncommitted working interest
20 owners. Do you see that?

21 A You said the fifth bullet down?

22 Q Yes, the fifth bullet down. Yes, ma'am.

23 A Uh-huh.

24 Q It references a chart on the following
25 slide. Am I missing that chart, or is it later in the

1 exhibit packet?

2 MS. HARDY: Mr. McClure, I can probably
3 clarify that. I believe that that refers to the chart
4 that you were just discussing. We had reordered the
5 exhibits to match the affidavit testimony. So I think
6 that's the --

7 MR. MCCLURE: Which page is that,
8 Ms. Hardy?

9 MS. HARDY: Well, it's Avant
10 Exhibit A-18 and 17. I think it was referring to the
11 two charts on the committed interest owners and
12 uncommitted.

13 MS. ALBRECHT: We had a general time
14 line of communication that must not have -- with other
15 parties outside of Apache.

16 BY MR. MCCLURE:

17 Q Yeah, reviewing what Ms. Hardy had directed
18 me to, I'm not seeing a summary of communications
19 here, I guess. Do you believe maybe it's not
20 included, Ms. Albrecht, then?

21 A I do.

22 Q To your understanding, did Avant proceed in
23 good faith negotiations with all the uncommitted
24 working interest owners?

25 A Yes.

1 Q Okay. Thank you. We will -- we will also
2 need that exhibit submitted, by the way.

3 MR. MCCLURE: Okay. Thank you. I
4 believe I have no additional questions for
5 Ms. Albrecht at this time.

6 THE HEARING EXAMINER: Okay.
7 Mr. McClure, what exhibit do we need?

8 MR. MCCLURE: Well, it's referenced in
9 Exhibit A-23. I guess I do not -- I don't know what
10 the exhibit number would be for it, though. It's
11 their -- it's their summary of contacts with their
12 uncommitted working interest owners.

13 THE HEARING EXAMINER: And are you
14 asking Avant to amend an exhibit, or are you asking
15 them to submit a new exhibit?

16 MR. MCCLURE: Well, conceivably, it
17 would be an amendment to their overall Exhibit A to
18 include the missing slide. But I guess I could also
19 see where maybe it would be a new exhibit since it's
20 not included here.

21 THE HEARING EXAMINER: All right.
22 Thank you, Mr. McClure. We'll work it out.

23 Ms. Hardy, how do you want to address
24 that?

25 MS. HARDY: I think I could submit it

1 as a second page of Exhibit A-23, which I think is
2 what was intended.

3 THE HEARING EXAMINER: A second page of
4 A-23.

5 MS. HARDY: Yes.

6 THE HEARING EXAMINER: Any objections,
7 Mr. Rankin?

8 MR. RANKIN: I haven't seen it yet, but
9 I doubt I will.

10 THE HEARING EXAMINER: Okay. So
11 Ms. Hardy, what will be on the second page of A-23?

12 MS. HARDY: I believe it would be a
13 chart of contacts with the uncommitted working
14 interest owners.

15 THE HEARING EXAMINER: And Mr. McClure,
16 is that what you're looking for?

17 MR. MCCLURE: Yes, sir, Mr. Hearing
18 Examiner, exactly so.

19 THE HEARING EXAMINER: All right. So
20 that's the second amendment to your exhibit packet
21 that I understand. Is that correct?

22 MS. HARDY: That's correct.

23 THE HEARING EXAMINER: All right. So
24 we have A-28, which is going to be amended as we
25 discussed earlier. I'm not going to go back over

1 that. And we have A-23, which is going to have a
2 second page.

3 And I'll ask you at the end of the
4 hearing, probably tomorrow -- I'm gathering at this
5 point, this is not going to end today.

6 And I think we need to talk about this.
7 I presume that you're going to want to do redirect for
8 this witness on the cross-examination questions.

9 I know you have two other witnesses
10 from Denver. But we're not going to be able to get to
11 all of it today. So I think we need to decide how
12 we're going to proceed after you do your redirect.

13 So why don't you do that? We can all
14 think in the meantime. And we'll talk about it after
15 you're done.

16 MS. HARDY: Okay.

17 THE HEARING EXAMINER: So please
18 proceed.

19 MS. HARDY: Thank you.

20 THE HEARING EXAMINER: And Mr. Jones, I
21 suspect that you'll interrupt if you have a question
22 for a witness. I'm not going to keep asking you.

23 MR. JONES: Yeah, that works for us.
24 Thank you.

25 THE HEARING EXAMINER: Okay. Thank

1 you, Mr. Jones.

2 Ms. Hardy?

3 MS. HARDY: Okay. Thank you.

4 REDIRECT EXAMINATION

5 BY MS. HARDY:

6 Q Ms. Albrecht, Mr. Rankin questioned you
7 earlier and expressed concern about whether Avant is
8 motivated to drill these wells because it doesn't have
9 a term assignment that Apache has. Do you recall
10 those questions?

11 A I do.

12 Q Okay. And is it Avant's intent to drill
13 these wells in accordance with the time lines that are
14 set out in your hearing exhibits, and specifically
15 your Exhibit A-13, which includes the spud dates for
16 the wells?

17 A Yes.

18 Q And are the spud dates for those wells,
19 assuming you receive operatorship, do they meet the
20 term assignment deadline of March 25th that Apache is
21 concerned about?

22 A To clarify, I think it's March 31st on their
23 term assignment.

24 But yes, we would endeavor to drill those as
25 soon as possible. What's reflected in the time line

Page 271

1 is the latest.

2 Q Okay. And with respect to the term
3 assignment, Apache certainly could've pooled its
4 acreage earlier; couldn't it have?

5 A Correct.

6 Q And it could've accepted a trade from Avant?

7 A Yes.

8 Q It also could've drilled in part of the
9 acreage where the leases weren't expired. Is that
10 correct?

11 A Correct.

12 Q Mr. Rankin asked you a number of questions
13 about the well proposals and AFEs. Do you remember
14 those questions?

15 A I do.

16 Q And he pointed out several pieces of
17 information that he identified as not being included
18 in the well proposals.

19 A Yes.

20 Q As reflected on your slide that sets out
21 your negotiations with Apache -- and I believe that
22 that's A-25 -- did Avant have extensive discussions
23 and negotiations and proposals that it made to Apache?

24 A Absolutely, yes.

25 Q And during those discussions, did Apache

1 ever indicate that it did not have sufficient
2 information to evaluate Avant's proposal?

3 A That was never communicated, no.

4 Q And if Apache had indicated that it needed
5 more information, would Avant have provided it to
6 Apache?

7 A Absolutely, yes.

8 Q And based on your discussions with Apache,
9 was it your understanding that they felt they had
10 sufficient information to evaluate?

11 A Yes.

12 Q With respect to some of the questions about
13 Northern's interest and whether it's owned by Avant,
14 let me ask you this, based on the agreement between
15 and Northern, do you believe Northern's interest is
16 committed to Avant's unit?

17 A Yes.

18 MS. HARDY: Those are all of my
19 questions. Thank you.

20 THE HEARING EXAMINER: Mr. Rankin, any
21 cross-examination on those specific questions?

22 MR. RANKIN: Just one point,
23 Mr. Examiner.

24 //

25 //

1 RE CROSS-EXAMINATION

2 BY MR. RANKIN:

3 Q Ms. Albrecht, Ms. Hardy asked you about
4 whether or not the spud dates would satisfy the
5 conditions of the term assignment. Do you recall the
6 testimony you just gave in response to that question?

7 A Uh-huh.

8 Q Now, you also told me that you have a copy
9 of the term assignment and you've reviewed it;
10 correct?

11 A Uh-huh.

12 Q Are you aware that the term assignment
13 requires not only that a well be spud and drilled, but
14 that the last well drilled commence production? I'm
15 sorry. Not commence production, that the last well
16 drilled be completed within 30 days of drilling?

17 A If I recall, the definition of "completed"
18 meant to read TD of drilling.

19 Q That's your understanding based on your
20 review of that TA?

21 A I believe so.

22 Q So based on that understanding, do you
23 believe that Avant will satisfy the terms of the TA by
24 drilling to the total depth for each of the wells
25 identified on its exhibit showing the spud dates?

1 A We're going to drill these wells as soon as
2 we have the authority to do so. So I -- unless there
3 were some holdup that we would experience from this
4 pooling order delay, I don't -- I don't foresee us not
5 being able to drill sooner than the dates that were
6 listed on our exhibit and fully satisfying the terms
7 of that term assignment.

8 Q Okay.

9 A Again, I don't have the term assignment in
10 front of me. I'm going off of memory. And it's --
11 that's my understanding. Because I did look at the --
12 what constituted satisfaction of that. And I remember
13 it kicked into, like, a CDC period.

14 Q When you say a CDC period, what do you mean
15 by that?

16 A Continuous development.

17 Q Continuous drilling -- what was it?

18 A Yeah, it was a continuous development
19 clause.

20 Q Clause, yeah.

21 A So completion -- the -- the time between the
22 completion and abandonment of one well and when you
23 have to commence operations on the -- the next well.

24 MR. RANKIN: Thank you. No further
25 questions.

1 THE HEARING EXAMINER: Mr. McClure?

2 MR. MCCLURE: No further questions,
3 Mr. Hearing Examiner.

4 THE HEARING EXAMINER: Okay.

5 Ms. Hardy, this witness may be excused.

6 You have two other witnesses. Is that
7 right?

8 MS. HARDY: That's correct.

9 THE HEARING EXAMINER: And now, do you
10 expect that your witnesses will stay the night in
11 Santa Fe tonight and be available in person tomorrow
12 morning, or do you not?

13 MS. HARDY: I believe they are
14 scheduled to leave this evening. But I can consult
15 with them regarding a plan.

16 THE HEARING EXAMINER: I don't have a
17 problem with their appearing virtually, obviously.
18 Apache's witnesses appeared virtually.

19 Why don't we get each one on the stand,
20 get them to adopt, make any corrections they need to
21 while they're here in person.

22 And then we'll handle the continuance
23 of this. What time tomorrow morning are the parties
24 prepared to -- counsel will be here. Witnesses will
25 be virtual. What time tomorrow do counsel agree to be

1 here in the morning?

2 MS. HARDY: Can I just confer with my
3 witnesses very quickly?

4 THE HEARING EXAMINER: Sure. I want to
5 take a break. I'll be back in five minutes.

6 It is 3:29. I'll be back at 3:35.

7 Thank you.

8 (Off the record.)

9 MS. HARDY: So they can be here in the
10 morning.

11 THE HEARING EXAMINER: We have about
12 half an hour left for today. How do you want to use
13 that time?

14 MS. HARDY: I'm fine to put them on, or
15 at least one of them on.

16 And actually, maybe if we're going to
17 stop in 30 minutes, then maybe we should just start
18 tomorrow morning.

19 THE HEARING EXAMINER: Well, I don't
20 know how long we're going to go tomorrow. And I'd
21 like to make use of the time. So we have about
22 25 minutes left before I'd like to quit at four
23 o'clock. Unless there's a really good reason not to.

24 MS. HARDY: I think that if we're going
25 to stop at four, we can just start tomorrow at 8:30.

1 I mean, I think it might make sense to have them just
2 start fresh tomorrow.

3 Or I could have Mister -- you know, my
4 geology witness verify his testimony. But I don't
5 know that it makes sense to have them address
6 substantive issues if we're starting tomorrow and we
7 only have 30 minutes, 25 minutes.

8 THE HEARING EXAMINER: Mr. McClure, how
9 do you want to proceed?

10 MR. MCCLURE: I have no preference in
11 the matter, Mr. Hearing Examiner.

12 THE HEARING EXAMINER: Ms. Hardy,
13 normally, I would acquiesce to just starting fresh
14 tomorrow with the two witnesses. But by the way this
15 hearing has gone so far, I don't know how long it's
16 going to take tomorrow. And I'd like to make use of
17 the time.

18 I still have a good half an hour in me
19 that I can concentrate. So why don't you call your
20 next witness?

21 MS. HARDY: Sure. Our next witness is
22 Mr. John Harper.

23 THE HEARING EXAMINER: Mr. Harper, I'll
24 remind you you're under oath.

25 //

1 DIRECT EXAMINATION

2 BY MS. HARDY:

3 Q Good afternoon, Mr. Harper.

4 A Good afternoon.

5 Q Your testimony and exhibits have been
6 admitted into evidence in this matter. And that is
7 Avant Exhibit B and subparts B-1 through B-17. Is
8 your testimony and the accompanying exhibits still
9 true and correct, and do you verify them today under
10 oath?

11 A Yes.

12 Q And then we had also submitted rebuttal
13 exhibits. And let me just pull those up.

14 And the rebuttal exhibits that you have
15 sponsored are Exhibits B-19 through B-22. Are those
16 rebuttal exhibits true and correct, and you verify
17 them?

18 A I believe I also included B-18, summary of
19 APA's inaccurate depth argument.

20 Q Yes, yes.

21 A Yes, B-18 through B-22 responding, yes.

22 Q Okay. And let me share my screen here.

23 Mr. Harper, I wanted to go through first
24 with you your rebuttal exhibits since those weren't
25 addressed, obviously, in your direct testimony.

1 So can you please look at -- and I'm pulling
2 up --

3 THE HEARING EXAMINER: Ms. Hardy?

4 MS. HARDY: Yes?

5 THE HEARING EXAMINER: Could you ask
6 your witness if he will adopt his exhibits under oath?

7 BY MS. HARDY:

8 Q Will you adopt your exhibits under oath?

9 A Yes.

10 Q Yes, thank you. If we look at Exhibit B-18,
11 that exhibit deals with Apache's depth argument. Do
12 you have anything to add, or do you feel like that's
13 been sufficiently addressed today?

14 A I -- I do feel like it's been sufficiently
15 addressed. Just want to reiterate that, you know, if
16 there were questions or concerns about the TVD depth
17 in proposals, no communication, to my knowledge, was
18 brought to our attention to ask for clarification.

19 I also want to show that it is very common
20 that the TVD depths do vary across the basin. You
21 know, we don't have an infinite amount of data points
22 to know exactly where the target interval is going to
23 be. So we -- best-guess scenario.

24 And we use, just, an example from Apache
25 themselves to show that their permitted TVD depth was

1 211 feet below their actual -- or sorry -- above their
2 actual landing depth.

3 So it is obvious and commonplace that, you
4 know, TVDs are an estimate.

5 Q And do you adjust them as you're preparing
6 to drill and drilling based on the best information
7 that you have?

8 A Yes, ma'am. We prepare those as -- as we
9 are drilling the wells themselves.

10 Q Okay. Then let's look at the next rebuttal
11 exhibit, which is B-19. Can you please explain what
12 you're trying to show on that exhibit and what points
13 you are rebutting provided by Apache?

14 A This is in contrast to what Apache brought
15 up referencing their Salt Fork, in this case, 3BS
16 wells versus Avant's 3BS wells.

17 You can see the second log from left to
18 right labeled number two as the type log from the Salt
19 Fork area versus the third log from the left --
20 sorry -- as the Cutbow type log.

21 Going down to the bottom of the screen,
22 seeing the Third Bone Spring sand, which is like for
23 like in terms of the horizontal targets were drilled
24 in.

25 Based on the overall porosity and reservoir

1 quality indicators, the Salt Fork wells that Apache
2 reference are in far thicker, far better reservoir
3 quality than Cutbow's Third Bone Spring sand wells.
4 So making that analogue is not applicable in this case
5 given that the Salt Fork wells are in much better rock
6 than ours.

7 Q And let me just find the Apache exhibit that
8 you were referring to. Do you happen to know which
9 Apache exhibit that is?

10 A I do not. But I -- here we go. No, those
11 are rebuttals.

12 It's their Apache page 19. But I don't have
13 the PDF.

14 Q Of their original exhibits; correct?

15 A Correct.

16 Q Yes.

17 THE HEARING EXAMINER: It's easier when
18 you know the page number just to put it in to where --

19 MS. HARDY: Up here?

20 THE HEARING EXAMINER: Up there, yes.
21 It's much faster. You can get to where you want to go
22 very quickly.

23 MS. HARDY: Thank you. That's very
24 helpful to know.

25 //

1 BY MS. HARDY:

2 Q I think we've got the wrong page number.
3 Well, it's their slide. I believe it's Slide 19. Is
4 that right?

5 A In the bottom right-hand corner, it just
6 says, yeah, page 19. It's historical well
7 performance.

8 Keep going. Keep going. Black map on the
9 right. It's -- left.

10 Q This one?

11 A Nineteen. Keep going.

12 Q Okay. So in this slide, they're comparing
13 Cutbow to their Salt Fork wells?

14 A Correct. And they state that their Salt
15 Fork wells greatly outperforms Avant's Cutbow wells.

16 Q And so in your exhibit, you're providing the
17 type log that shows the Salt Fork wells were drilled
18 in very different rock?

19 A Correct.

20 Q And so is it your testimony that they are
21 not an appropriate analogue for comparison?

22 A That is correct.

23 Q Okay. And what else are you intending to
24 show with this exhibit?

25 A This just kind of goes over the First,

1 Second, and Third Bone Spring sands across Apache's
2 acreage position and well references versus Avant's as
3 well, just to show that there is high variability in
4 depth, thicknesses, reservoir quality.

5 So making assumptions basin-wide or
6 county-wide or, you know, not specific to the area is
7 very dangerous as the geology changes significantly
8 and should be treated as such.

9 Q And in Apache's comparisons in their
10 exhibits, do they generally or frequently refer to the
11 entire basin or the larger geographic area?

12 A Generally -- generally, yes, a larger
13 geographic area than what I think is geologically
14 applicable.

15 Q And then can you explain what you were
16 showing on Avant Exhibit B-19?

17 A Yeah. B-20?

18 Q Yes. Sorry.

19 A B-20 is a rebuttal slide that we put
20 together in response to Apache's Slide 26. We can
21 look at it later.

22 But basically, this slide shows every single
23 well that Apache referenced on their Slide 26
24 showing -- or indicating that we were out of
25 compliance with the NMOCD by not having approved

1 C-104s and also that, you know, Avant has 30 well
2 completions producing without said C-104s, even though
3 in a previous slide, they stated that they -- we've
4 only produced -- or drilled 13 wells.

5 So regardless of the well count completions,
6 this slide was meant to show that, yes, these are the
7 exact same wells that Apache referenced seen here, but
8 here -- here are our submittal dates of all the
9 C-104 RTs that were submitted that they did not
10 reference or show as well as the C-104 NWs as well to
11 show that we are in compliance regardless of their
12 statements.

13 The next two slides reference communications
14 with the OCD as well regarding the C-104s.

15 Q In those communications, did OCD advise
16 Avant that they were authorized to proceed because
17 there was a backlog of approval on the C-104s?

18 A Yes, ma'am.

19 Q Okay. And then Apache had raised the issue
20 in their direct slides of Avant flaring. And so can
21 you tell me what this slide discusses?

22 A Sure. Yes, this is a rebuttal slide, a
23 screenshot of an article that the Department of
24 Justice put together in February of this year showing
25 Apache's poor stance on flaring and venting, so much

1 so, it outlines the \$4 million fine as well as an
2 addition five and a half million dollars for future
3 preventative measures to address said issue.

4 So this is just going to show that, yes, you
5 know, Avant has had gas flaring issues that we have
6 addressed since this statement, but Apache has not,
7 you know -- in terms -- when it comes to terms of gas
8 flaring and venting in New Mexico.

9 Q And is the document shown on the right side
10 of the slide -- well, is it your understanding that
11 that's a public record?

12 A Yes, it is.

13 Q And where did you obtain it?

14 A I Googled it and acquired it from the
15 Department of Justice website.

16 Q And it's labeled at the top A Press Release
17 From the US Department of Justice?

18 A Yes, ma'am.

19 Q And did Apache mention that settlement and
20 lawsuit in any of its slides?

21 A Absolutely not. They would not talk about
22 it.

23 Q And then let's look at your next slide,
24 which is Exhibit B-22. Can you explain what you are
25 showing here?

1 A This is public data on Apache's total spills
2 dating back to 1999. This was just to further show
3 that Apache is not a prudent steward of the lands in
4 New Mexico, not only on the air, but also on the
5 ground, showing that they have had 441 reported
6 spills, even dating back to this '94.

7 128 of those are still active to this date.
8 This is inclusive of crude oil spills as well as
9 produced water.

10 Q I think those are all of your rebuttal
11 slides.

12 A Yes, ma'am.

13 Q And let's look at Apache's rebuttal slides.
14 And I'm looking at their Slide 32.

15 A Yes, ma'am.

16 Q Do you have that?

17 A Yes, ma'am.

18 Q Okay. Can you provide a response to what
19 they are showing on that slide?

20 A It seems that this is a slide on the First
21 Bone Spring sandstone, which is Avant's Grayling 300
22 series. They show a cross section going from the Dust
23 Bowl unit to Cutbow all the way down to Ghost Rider
24 and then Golden Tee.

25 The map on the left is a structure map. It

1 looks like it's on the top of the Second Bone Spring
2 carbonate, which is below the First Bone Spring sand.

3 The type log or the cross sections show
4 the -- what looks to be the gamma-ray log and a
5 resistivity log. It shows some spacing assumptions
6 for what they plan to do at Dust Bowl, what we plan to
7 do at Grayling, what we've done at Cutbow, Golden Tee,
8 and then what they've done at Ghost Rider.

9 One thing that I will note -- two things
10 that I want to make on record of this slide is, in the
11 bottom left-hand corner underneath the structure map,
12 it says, "Apache developed Ghost Rider at four wells
13 per spacing. Apache will develop their Dust Bowl unit
14 at four wells per spacing due to similar thickness and
15 target quality."

16 I -- I disagree wholeheartedly on the target
17 quality correlation between their Dust Bowl unit and
18 their Ghost Rider unit.

19 Their Ghost Rider unit is roughly 1300 feet
20 deeper, higher pressure, and significantly higher
21 porosity, which they don't show on any of these logs,
22 which is a reservoir quality indicator.

23 So making the comparison that the Dust Bowl
24 and Ghost Rider have similar target quality, in my
25 opinion, is inaccurate.

1 I'd also like to show that the Avant Cutbow
2 six-well spacing, it's -- we -- we did do six-well
3 spacing on the east half, and we'll -- and we're
4 pleased with the results on those spacings.

5 At one point in time -- or at the same
6 development, we will drill six wells for spacing in
7 the First, Second, and Third as well.

8 Q And is Cutbow the closest development to
9 this proposed development in this case?

10 A It is. I would also like to note that
11 Apache, for whatever reason, left out Avant's Speyside
12 unit that is in between the Golden Tee and Ghost
13 Rider, so much closer to Cutbow than the Golden Tee or
14 Ghost Rider.

15 In our Speyside unit, we drill the 301 and
16 302H spaced endzone at 660 spacing, which is eight
17 wells per section. And we're extremely pleased with
18 those results.

19 Q Is it your testimony that the results you've
20 seen at Cutbow and at Speyside would be more similar
21 to the results you expect at Grayling than the other
22 analogues Apache has listed here?

23 A Absolutely.

24 Q And let's look at Apache's Slide 33 on
25 rebuttal. Do you have comments, or would you like to

1 respond to this?

2 A Not at this time.

3 Q It similarly includes the Ghost Rider unit
4 27 miles away.

5 A Correct, yes. It has the same -- same type
6 log, same general showing in terms of data. I don't
7 have any great comments on this slide.

8 Q And what about Slide 34, which is the Third
9 Bone Spring spacing?

10 A The only thing that I will note is that we
11 also did two Third Bone Spring sand wells at our
12 Speyside unit, which is, again, closer to Cutbow than
13 the Golden Tee or Ghost Rider is.

14 Those two Third Bone Spring sand wells are
15 also spaced at 660 or eight wells per section. And we
16 are pleased with those results as well.

17 Q So this slide has the same issues as the
18 first slide?

19 A First one.

20 Q And did you have anything to address on this
21 four-string casing slide?

22 A Only that it was a little confusing as to
23 the addition of this slide. Our well proposals and
24 AFEs that were sent out in September say and show both
25 three-string designs for our Grayling development. So

1 I'm not sure why the four-string rebuttal slide was
2 needed.

3 Q And this one, I believe, will be addressed
4 by Mister --

5 A Mr. Kelly, yes.

6 Q Yeah, Mr. Kelly. Okay. And then with
7 respect to Apache's initial slides, were there
8 specific slides that you wanted to point out that you
9 disagreed with or had concerns about?

10 A None on the geology side that I don't think
11 we've already addressed.

12 Q That we addressed in our rebuttal?

13 A Yes, ma'am.

14 MS. HARDY: Okay. Thank you. Those
15 are all of my questions, Mr. Harper, for now.

16 THE HEARING EXAMINER: Okay. And so
17 you're done with your direct and your rebuttal case
18 with this witness. And we will begin tomorrow morning
19 with cross-examination by Mr. Rankin and then
20 Mr. McClure.

21 So did you say 8:30?

22 MS. HARDY: That would be great.

23 THE HEARING EXAMINER: Does that work
24 for your witnesses, 8:30? Okay.

25 Mr. Rankin, does that work for you?

1 MR. RANKIN: It works for me.

2 THE HEARING EXAMINER: 8:30, okay.
3 Because the doors open here at eight o'clock. You
4 can't get in before that.

5 Mr. McClure, are you okay with 8:30 for
6 tomorrow?

7 MR. MCCLURE: Yes, sir, Mr. Hearing
8 Examiner. That works for me.

9 THE HEARING EXAMINER: Okay.
10 Mr. Cogsgrove [sic], 8:30 is good for you?

11 Thank you, sir.

12 And Mr. Jones?

13 MR. JONES: Yeah, 8:30 works for us.

14 Thank you.

15 THE HEARING EXAMINER: All right. Then
16 we will go off the record now. It is 3:56 p.m. on May
17 29, 2024. And we will come back tomorrow and
18 continue. Thank you.

19 (Whereupon, at 3:56 p.m., the
20 proceeding was concluded.)

21

22

23


24

25

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

CERTIFICATE

I, JAMES COGSWELL, the officer before whom the foregoing proceedings were taken, do hereby certify that any witness(es) in the foregoing proceedings, prior to testifying, were duly sworn; that the proceedings were recorded by me and thereafter reduced to typewriting by a qualified transcriptionist; that said digital audio recording of said proceedings are a true and accurate record to the best of my knowledge, skills, and ability; that I am neither counsel for, related to, nor employed by any of the parties to the action in which this was taken; and, further, that I am not a relative or employee of any counsel or attorney employed by the parties hereto, nor financially or otherwise interested in the outcome of this action.

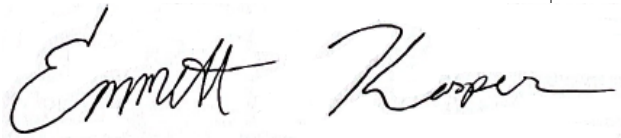


JAMES COGSWELL
Notary Public in and for the
State of New Mexico

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

CERTIFICATE OF TRANSCRIBER

I, EMMETT KASPER, do hereby certify that this transcript was prepared from the digital audio recording of the foregoing proceeding, that said transcript is a true and accurate record of the proceedings to the best of my knowledge, skills, and ability; that I am neither counsel for, related to, nor employed by any of the parties to the action in which this was taken; and, further, that I am not a relative or employee of any counsel or attorney employed by the parties hereto, nor financially or otherwise interested in the outcome of this action.



EMMETT KASPER

[& - 18-24]

&	102s 7:21 69:3 69:5 107:3	1280 44:9 234:23 235:6 237:24 238:3 247:6 253:20 253:24 254:3,6 254:20 255:1,2 255:5,11,14 258:15	146 5:4 15 8:7 10:18 12:12 22:8 23:4 151:17 153:12,18 174:24 175:3,6 179:21 180:16 218:23 257:24
& 2:19 3:4 13:8 16:20 100:12 112:12 196:5 196:10,18 218:21 219:1 227:17 229:5,8 264:3,10,13,19	104 285:9,10 104s 52:8 285:1 285:2,14,17 105 42:14 107 4:10 11 7:22 10:10 12:6 44:11,19 58:23 206:2	12:22 186:5 13 8:4 10:14 12:9 78:1 106:20 171:22 220:24 221:4 236:23,24 242:11,15,19 271:15 285:4	15.7 232:14 15.71 124:18,22 125:4 150 78:19 155 60:23 61:15 16 8:8 10:20 14:4 23:17 24:14 218:24 264:15
0	110 2:20 113 4:16 114 4:20 117 5:3 11:51 166:7 11:56 166:8	1300 155:6,9 288:19 135 48:24 138 4:17	17 8:10 10:22 14:6 22:8 23:1 229:7 236:18 236:20 244:23 265:8,17 267:10 279:7
087 105:18	12 7:23 10:12 12:7 59:17,18 83:6 131:19 133:1 136:2 151:16 152:17 153:17 174:20 174:22 175:5 179:21 180:16 192:4 199:1	14 8:6 10:16 12:10 20:7 23:13 29:12,13 44:11,18 72:17 72:21 74:2 75:12,13,14,21 75:22,23,25 76:15,17,21 153:17 174:24 175:3,5,22,23 180:16 197:22 199:1 261:22 263:25	1780 3:5 18 8:13 13:12 14:8 23:16,17 24:10,15 45:2 45:12 47:6 58:23 94:20,21 237:2 250:15 267:10 279:18 279:21 280:10
1	125 93:15,21 126 93:15 225:10 128 287:7	14.9 181:8	18-24 1:6
1 2:20 7:6 9:14 11:4 12:16 22:7,8,8 41:21 42:14 55:10,20 56:12,13 57:7 57:10 69:3 81:16 115:14 279:7 1.61221 105:18 1.8 178:2 202:1 10 7:21 10:8 12:4 48:3 55:10,20 56:13 57:10 78:25 79:1,2,3 83:17 86:9 87:15,17 227:19,19 228:16 229:1 232:14 264:15 10,000 159:14 100 78:17,19 180:8			

[18.83 - 25]

<p>18.83 126:22 18/18 6:6,8,11 6:14,17,19,21 188 4:12 19 8:16 13:14 44:11 64:17 82:12 108:6,16 256:18 279:15 281:11 282:12 283:3,6 284:16 1900s 87:19 193 5:6 195 4:18 197 4:14 198 5:7 1980 98:15 1999 287:2 1:15 186:12,13 187:17,20 1:30 186:10 1bss 14:17 1h 53:4 86:9 1st 246:15</p>	<p>2016 147:19 2017 147:19 2018 148:2 2019 51:2 69:4 69:10,14 107:25 108:3 148:2 172:6 234:15 252:14 2020 89:13 148:2,18 220:5 234:5,15 256:17 2021 7:19 52:23 89:8,13 148:12,17 252:14 2022 68:17,22 89:15,19 117:18,24 148:12 234:12 235:10 2023 51:3 69:1 69:19 70:2 89:21 91:9,13 91:16 108:3 148:12 161:10 163:1,11 237:18,21 239:6 2024 1:12 12:23 87:18 91:9,14,17 121:15,16 136:11 163:20 164:13 187:20</p>	<p>193:2,5 292:17 2025 48:23 51:1 193:6 220:5 203 5:5 203-5730 3:8 205 5:9 21 8:21 13:19 81:4 114:2 115:3 210 4:4 211 281:1 218 2:5,12 22 8:23 13:21 23:16 24:11 64:17 83:3 84:22,23 117:19 123:6 251:10,11,15 251:17,19 252:17 259:14 279:15,21 286:24 22.91 124:19 125:2 22/22 7:5,6,8 7:10,11,12,14 7:16,19,20,21 7:22,24 8:5,6,7 8:9,12,15,17,20 8:22,24 9:5,8 9:10,11 226 5:10 23 9:4 62:20 66:9 84:5,21</p>	<p>117:25 139:22 253:8 268:9 269:1,4,11 270:1 23/23 9:13,14 9:15,16,18,20 9:22,24 10:5,7 10:9,11,13,15 10:17,19,21,23 10:25 11:4,6,9 11:13,16,18,21 11:23,25 12:5 12:6,8,9,11,13 12:15,17,19,21 12:23 24 9:6 86:24,25 88:3 139:22 150:8 168:2,3 168:5,14 237:9 237:12 239:7 246:12 24.399738 105:17 24/218 13:8 24/24 13:6,9,13 13:16,18,20,22 14:5,7,9 24141 1:9 6:19 6:21 16:5 24254 1:9 16:6 25 9:9 88:19,21 116:23 117:11 225:6,10 242:25 272:22 277:22 278:7</p>
2			
<p>2 7:7 9:15 11:5 12:18 56:13 126:12 167:3 191:10,20 263:25 20 8:18 13:17 80:7 151:17 284:17,19 2015 81:17 115:14 116:1,3 147:19</p>			

<p>257 5:11 25th 271:20 26 9:11 22:7,23 104:19 284:20 284:23 26th 163:4 27 13:5 23:15 24:4 90:9 195:19,24 207:10 227:6 229:21 290:4 27.48 125:22 126:22 271 5:9 274 5:10 279 5:13 28 13:7 23:20 23:23 24:3,8 29:5 91:18 209:1 218:10 218:13,15 269:24 281 3:8 28537 294:14 29 1:12 13:9 16:3 23:15 24:5 66:9 87:18 187:20 219:19 233:5,6 233:12,13 238:25 292:17 2bss 14:19 2h 53:4 86:9</p>	<p style="text-align: center;">3</p> <p>3 7:9 9:16 11:7 12:20 23:21 26:5,6 128:5,6 149:20 153:12 180:3 182:2,4 194:3,4 201:21 261:22 3.6 182:3 3/26 60:14 30 14:12 29:17 30:5 86:22 105:15 120:15 120:19 189:3,6 189:6,7 222:15 222:17,24 257:25 274:16 277:17 278:7 285:1 30/30 14:13,14 14:18,20,22,23 15:5,7,9,10,12 300 154:25 287:21 300,000 201:8 301 140:5 164:3,21 289:15 302 140:5,6 164:4,21 302h 289:16 303 164:18,21 304 140:7 172:4</p>	<p>305 172:4 306 172:4,11 31 14:14 29:17 30:6 105:15 120:16 189:25 197:23 31st 271:22 32 14:17 29:17 30:9 44:12 82:12 138:24 139:2 195:15 287:14 32311 293:17 33 14:19 138:24 195:22 289:24 34 14:21 53:4 82:11,13 86:8 138:24 141:25 196:15 206:13 290:8 344 22:3 93:15 100:9 206:5 225:10 229:8 242:15 257:25 258:24 266:16 35 14:23 29:18 30:10 138:24 196:21 36 15:4 29:18 30:14 129:3 146:25 147:6 193:21 37 15:6 146:25</p>	<p>38 15:8 146:25 153:2 199:2 38.62 124:15,16 124:18 39 15:10 146:25 156:5 3:29 277:6 3:35 277:6 3:56 292:16,19 3bs 281:15,16 3bss 14:21 15:10</p> <hr/> <p style="text-align: center;">4</p> <hr/> <p>4 7:11 9:17 11:10 12:22 22:8 23:7 52:5 91:2 149:20 156:13 158:9 160:15 164:21 169:19 233:19 286:1 4.6875 98:8,18 266:12 40 15:11 29:18 30:14 86:22 146:25 151:22 160:17 400 174:9 41442 106:25 44 4:5 441 287:5 45 52:23 60:13 61:23 62:8 46 126:15</p>
---	---	--	---

[46.01 - ability]

<p>46.01 126:4 198:5 46.1 126:21 46.31 126:17 197:25 198:6,7 47 47:25 61:22 62:9,19 48 206:5 48.85 126:6 49 4:6 265:9,13 49.5 265:13 49.78 125:13</p>	<p>505 2:8,15,23 51.96 99:9 266:8 52 47:25 103:15 198:2 53 4:10 54 100:9 229:8 258:24 57 4:16 59 56:20,21 57:3 5th 81:25</p>	<p>6700 169:6 6716488 1:19 68 4:12</p>	<p>292:10,13</p>
		<p>7</p>	<p>9 7:20 10:6 11:24 83:6 95:2,8 152:17 154:13 224:15 9.9 180:19 182:14 900 155:10 172:13 900,000 177:17 177:19,22 178:21 92 4:13 94 287:6 95 154:13 96603 106:21 97 42:2,4 982-4554 2:8 2:15 988-4421 2:23 9:54 87:14</p>
<p>5</p>	<p>6</p>	<p>7 7:15 9:23 11:19 72:13 75:7 129:10,17 154:17 7.2 178:22 70 128:20 700 157:3,24 160:7 750 3:5 154:25 201:2 750,000 201:3 7500 159:15 76 4:13 77 4:18 77380 3:6 78 150:23</p>	<p>8</p>
<p>5 7:12 9:19 11:14 12:23 19:5,10 21:2 47:23 68:5,12 72:15,21 73:7 73:17,24 74:4 74:5,9,15,23 75:20,21 76:1 76:14,16,20 149:20 164:21 170:5 197:21 260:20 5.4 177:23 5.57 105:18 5/24 141:9 230:2 5/9/2019 69:8 50 46:4 50:18 151:22 157:5 174:14 183:17 228:17 229:2 242:15 265:3</p>	<p>6 7:13 9:21 11:17 71:14,18 99:22 128:6 151:16 154:17 164:21 6.3762 100:13 229:9 6.6 180:20 181:22 182:4 600 242:20 601 161:22,23 162:25 602 162:25 603 162:25 63 4:20 64 97:8 150:23 251:22 266:4 640 258:21,21 65 5:3 151:16 266:16 660 289:16 290:15</p>	<p>8 7:17 10:4 11:22 192:3 265:9 80 4:21 151:17 84 5:6 60:10,20 61:15 86 133:6,7,10 135:6,8,11,15 87501 2:6,13,21 87505 1:17 8:30 1:13 16:3 277:25 291:21 291:24 292:2,5</p>	<p>a</p>
			<p>a.m. 1:13 87:14 87:15,17 166:7 166:8 abandonment 275:22 abbey 208:6 abbreviated 31:18 ability 26:25 108:4,9 122:8 136:20 141:17</p>

[ability - actual]

<p>150:3 168:23 202:24 208:3 293:10 294:7 able 47:9,19 51:16 59:24 87:10 109:3,4 115:4 123:7 127:10 131:14 136:7 157:8,11 160:10 187:3 191:22 250:11 270:10 275:5 abnormal 149:23 above 125:19 136:19 281:1 absolutely 94:18 147:10 149:16 153:6 167:18 168:20 170:9 172:1 178:10,19 179:8 209:11 231:18 272:24 273:7 286:21 289:23 academic 154:1 183:3,14 academics 183:15,18 accept 21:7 28:12 60:14 62:3,5 76:2 93:10 110:20 182:7</p>	<p>acceptable 43:24 187:14 216:25 217:1 accepted 38:10 40:19 41:3 54:7 64:13 272:6 accommodate 47:10 186:1 259:20 accompanying 279:8 accomplish 186:25 accordance 271:13 account 47:7 159:16 172:25 182:16 accounted 208:11 accounting 182:22 accuracy 181:11 accurate 43:1 50:16 59:6 60:17 70:24 99:23 111:18 151:3,4 226:11 226:15 227:10 227:12 259:12 293:9 294:5 accurately 87:11 103:12</p>	<p>104:7 acknowledged 133:15 acquiesce 278:13 acquire 223:19 265:20,21 acquired 100:1 103:21 125:6 208:20 239:11 261:8 286:14 acquisition 118:6 acquisitions 50:22 256:25 acre 44:9 238:3 258:15 acreage 44:14 45:17 48:7,17 48:21 49:14,24 50:1 51:5,25 52:25 53:9 79:12 82:5,24 83:18 108:2,5 108:9,10,23 109:1,5,20 118:7,19,23 122:10,12,13 122:17 123:10 123:25 131:15 131:24 132:14 132:24 134:14 139:8,9 140:22 141:20 145:4,9 161:3 179:7</p>	<p>185:21 192:12 195:20 196:6 222:7 224:6 234:6 236:3,13 239:8 246:2 247:6 252:14 253:8 272:4,9 284:2 acres 48:24 227:24 acronym 200:2 act 21:11 acted 250:6 action 51:3 293:12,16 294:8,12 actions 162:20 active 7:15 118:12 129:21 133:6,7,10 135:6,8 192:8 192:11 287:7 actively 96:6 activity 7:23 9:24 10:11,19 14:4 133:21 165:12 234:10 234:15,16 256:18,19 actual 45:21,23 112:22 113:9 125:18 158:2 170:3 185:11 217:10 229:14 241:22 281:1,2</p>
---	--	---	--

[actually - affidavit]

<p>actually 25:18 67:5 76:13 78:24 82:10 89:9 91:12,20 125:15 136:17 138:14 139:14 139:15 148:17 156:22 157:23 158:17 159:23 162:23 170:11 170:24 175:21 177:15 179:1 179:17 196:5 198:16 199:10 217:9 220:21 237:25 238:4 264:11 277:16</p> <p>adam 2:18 16:14 57:25 189:13</p> <p>add 42:25 174:9 192:19 202:6 219:8 224:10 280:12</p> <p>added 105:11 125:19 147:8 180:17 223:2</p> <p>adding 60:13 105:17 181:23 258:14</p> <p>addition 55:3 127:22 165:14 166:19 259:2 286:2 290:23</p>	<p>additional 78:12 110:4 118:19 127:23 135:22 146:1 147:4 169:17 169:20 202:7 209:17 268:4</p> <p>additions 147:10</p> <p>address 22:17 32:9 51:12,16 55:10 57:14 59:1 70:17 81:6,10 84:24 85:4 86:5 91:8 106:10 110:15 113:14 123:17 124:6 125:8,9 128:6 137:23 144:9,11 146:1 147:2 166:3 169:13 174:21 174:22,23 219:7 220:1 238:16 268:23 278:5 286:3 290:20</p> <p>addressed 120:24 123:20 146:3 183:7 210:11 224:11 246:24 279:25 280:13,15 286:6 291:3,11 291:12</p>	<p>addresses 55:4 55:9 249:4</p> <p>addressing 59:23 146:20</p> <p>adds 105:15</p> <p>adjacent 52:25</p> <p>adjust 103:11 172:24 281:5</p> <p>adjusted 159:16 170:20</p> <p>adjustments 59:3 148:11 163:10</p> <p>administrative 25:8,11 214:14</p> <p>admissible 25:11 214:14</p> <p>admission 55:19 210:10</p> <p>admit 21:6 121:5</p> <p>admitted 22:9 22:22 24:2 28:25 30:7,11 30:15 42:9 43:19 205:13 206:13 209:3 218:10,13 279:6</p> <p>admitting 18:15 59:2</p> <p>adopt 31:2 33:4 56:2,8 64:20 66:12 187:10 206:24 207:3</p> <p>276:20 280:6,8</p> <p>adopted 46:23</p> <p>adopting 226:21</p> <p>adoptions 57:13</p> <p>advance 54:17 58:14 59:2 64:6</p> <p>advanced 116:2</p> <p>advertised 227:13</p> <p>advisable 176:19</p> <p>advise 285:15</p> <p>afe 84:6 86:16 88:13,14 247:13,16,25 247:25 248:5</p> <p>afes 51:21 84:10 144:16 145:16 196:22 250:24 272:13 290:24</p> <p>affairs 108:4</p> <p>affect 108:9 161:21 231:20 265:17</p> <p>affected 108:4 161:20</p> <p>affidavit 6:18 6:20 12:22 35:2 55:1 78:25 79:1</p>
--	--	---

[affidavit - analysis]

<p>94:24 258:1 267:5 affidavits 31:19 affiliated 71:21 71:25 affiliation 71:22 affirm 37:10 39:10 56:11 205:14 affirmed 6:4,9 6:12,15 7:4 9:12 10:24 12:14 afternoon 31:24 205:10 279:3,4 ago 59:7 102:6 169:3 agrarkin 2:22 agree 34:15 35:15,17 59:8 60:10 73:2 76:18 79:11 103:16 110:25 111:1,5 154:6 157:21 183:15 183:18 217:11 217:12 223:12 236:14,15 237:18 243:23 244:17 250:14 250:21 252:17 252:18 254:22 255:2 256:3</p>	<p>266:8 276:25 agreed 52:5 91:2 227:8 237:19 250:20 agreement 99:19 104:1,2 104:22 110:6 112:11,13,15 112:22 113:5 191:2 209:20 219:1 223:18 224:23 225:15 227:23 229:11 229:16 230:2 231:1,4,7,16,19 232:7,16,17,18 232:23 245:12 245:24 259:19 261:25 264:2,4 264:6 265:20 273:14 agreements 50:22,23 51:11 51:19,20 70:5 104:11 109:12 109:19 127:10 190:3,15,23 230:23 245:14 260:23,24 agrees 202:11 ah 39:3 ahead 36:24 138:21 141:1 141:12 235:2 236:13 257:13</p>	<p>air 90:15 287:4 albrecht 3:19 4:3 5:8 7:5,6 25:14 26:23 28:4 37:14,20 37:20 38:6,11 190:22 205:5 205:10,12,23 205:25 206:5 206:20 207:3 209:9 210:18 212:25 213:3 213:23 214:2 214:22,25 216:18 217:1,4 217:9 219:18 222:13 224:9 225:19 226:8 232:24 233:17 234:4,20 242:14 247:15 248:23 249:15 254:9,10,12 256:9 257:16 257:22 258:23 266:13 267:13 267:20 268:5 271:6 274:3 albrecht's 190:15 233:15 251:17 align 46:13 246:22 261:11 allow 28:10,19 137:17</p>	<p>allowed 52:14 alternative 226:24 amend 268:14 amended 216:5 218:10 269:24 amendment 268:17 269:20 amount 47:11 157:7 171:11 172:18 176:11 280:21 amounts 182:24 anaconda 171:4 analogous 14:9 176:21 analogue 176:1 176:15 282:4 283:21 analogues 46:1 153:16 156:22 156:23 158:12 158:21,25 159:2,11,14 171:3 175:20 176:18 182:20 182:21 183:22 185:3,5,7,7,8 185:13,16,18 185:20 289:22 analysis 13:15 46:3 53:6 82:22 83:4,11</p>
--	--	---	--

[analysis - apache]

<p>178:15 203:23 analyze 148:10 angry 81:19 angus 81:19 announce 31:23 answer 25:10 28:5 33:15 67:2 74:16 80:21,21 92:4 152:8 214:20 232:3 250:18 answered 101:8 198:14 203:21 anticipate 166:1 232:11 anticipated 242:5 anticipating 225:11 anticipation 95:3 120:5 219:12 anybody 109:4 158:3 240:10 anymore 190:8 anyway 144:21 aoi 144:23 147:16,24 179:9 apa 26:9,13,14 26:18 60:19 206:9 213:10 213:10,11</p>	<p>215:22,23 apa's 26:16 213:13 279:19 apache 2:17 6:3 9:10,20 11:8 11:20 13:19,21 14:11,16,18,20 14:22 15:3 16:15 17:17 18:22 19:13 21:16 27:17 30:5,9,13 31:12 36:19 38:23 44:15,23 45:5 46:15,19 47:12,20,25 48:19,19,22,25 49:4,9,14,23 50:4,14 51:1,4 51:18 52:3,4,9 53:1,5,8 54:4 55:10 58:3,24 60:7,19,24 63:20 64:8,16 65:9,16 66:23 68:25 69:9,18 70:1,5,8,13,21 71:1 82:4,10 82:17,23,25 83:10,16 84:6 84:11 86:8 87:7 89:15,18 90:14 91:2,20 92:25 93:20 94:7,13,16</p>	<p>95:18 96:3,4 97:18 98:23 99:1,10,19 101:10,14 103:2 105:25 108:1,17,22,25 109:3,12,18,19 109:25 110:16 111:14,15 112:1 115:22 116:12 117:19 118:1,18 119:1 120:18 121:2,6 121:7,11,12,17 121:20,23 122:1,7,16 123:6 124:4 126:5,20 127:19 128:9 128:16,18,20 129:18,19,21 129:25 130:3 130:22 131:13 132:14 134:5 134:14,20 136:6,12 137:4 145:2 149:2 152:1,2,4,15 161:1 166:10 168:19 177:20 181:3,13 182:2 182:6,7,10 184:6,17,24 185:4,15,18 187:21,22</p>	<p>189:19 192:25 193:1 194:5,16 198:4,12 199:12 203:18 207:22,23 209:12,15,20 210:3,25 211:8 211:14 212:14 214:3,4 215:1 215:2,16 217:18,21 220:2 221:10 223:12 225:4 226:10,13 227:13 228:23 230:18,20 233:1,8,9 234:4,11 235:9 236:10 244:13 252:6,16 253:19,21,23 255:1,5 256:3 256:9,16,16 258:4 259:24 260:6,9 261:1 261:9,11,25 262:3,13 263:4 263:9,12,16,17 263:21,22 266:7 267:15 271:9,20 272:3 272:21,23,25 273:4,6,8 280:24 281:13 281:14 282:1,7</p>
--	--	---	---

[apache - approved]

<p>282:9,12 284:23 285:7 285:19 286:6 286:19 287:3 288:12,13 289:11,22 apache's 13:9 13:12,14 14:4 18:3 20:13,16 21:3 29:10 32:5,5,13 35:1 44:21 45:14 48:10,13 49:13 50:11,19,25 51:7,20 52:22 53:11,19 57:17 67:8 83:12 84:10 89:9,12 92:6,18 93:6 94:20,22 95:3 96:19 105:5 106:10 107:10 108:4,9 110:10 117:15 126:3 126:14,15 128:22 129:10 129:12 130:19 160:20 184:25 185:2 194:21 196:5 197:22 198:2,4,7 199:1 204:7 206:14 210:7 211:13 217:19 220:9,23</p>	<p>222:14,20 224:10 226:17 226:21,23 227:4 228:8,15 233:10 236:12 239:10,14,24 240:7 244:18 244:20 256:12 256:12 266:5 276:18 280:11 284:1,9,20 285:25 287:1 287:13 289:24 291:7 apart 104:6 apd 236:16 237:6 apds 51:25 121:11 122:4 122:21 136:6 136:22 137:5 137:11,14,18 192:22 221:5 239:8 240:21 240:23 241:6 apologies 21:10 77:6 80:23 85:20 156:23 apologize 21:14 55:22 114:12 114:17,24 157:20 167:1 266:14 apparently 26:23 27:14</p>	<p>appear 101:14 101:20 164:23 appearance 16:7 appeared 261:11 276:18 appearing 16:15 276:17 appears 74:24 129:18 208:24 256:11 apples 60:8,8 61:2,3 173:9 257:3,3 applicable 199:7,17,20 282:4 284:14 applicant 34:8 applicants 44:8 application 7:7 17:18 19:11 30:21 34:9 35:1,6,10 49:13,15 51:7 53:11,12 54:9 58:4 69:15 79:8 96:4 122:6 193:2,4 194:21,22 240:1 253:19 253:20,23,24 254:1,25 255:2 255:16 256:2 applications 19:7 34:4</p>	<p>63:21 65:18 240:4 applied 121:11 121:14 applies 175:3 179:21 apply 89:22 appreciate 167:13 226:4 approach 15:12 37:6 46:7 160:24 176:20,20 178:14 179:20 254:25 256:13 approaches 183:9 appropriate 79:11 158:15 283:21 approval 237:6 241:4 255:22 285:17 approvals 220:19 242:7 242:25 approve 35:3 49:13 238:13 241:6 approved 34:10 49:8 136:22 160:21 192:22 221:24 238:15 241:13 241:23 284:25</p>
---	---	---	--

[approving - attorneys]

<p>approving 44:9 approximately 201:2,8,21 april 121:16 136:11 161:10 225:11 237:12 arbitrary 116:4 area 11:6,12 45:21 46:20,24 47:5,8 50:10 50:12,13 51:9 51:15 58:8 64:1 82:16 118:24 119:3 123:3 128:13 145:4 148:10 148:13,23 149:9,11 171:2 185:18,20 192:8 200:14 228:1 234:23 247:3,4 264:20 281:19 284:6 284:11,13 areas 130:17 134:6 argue 132:8 argument 13:13 279:19 280:11 arrival 225:1 arrive 46:4 arrived 151:9 article 285:23</p>	<p>artificial 168:4 173:11 artificially 176:10,15 ascertain 127:11 212:18 asked 56:2 67:1 107:23 111:7 115:12 116:10 203:17 209:13 241:25 250:19 272:12 274:3 asking 74:8,18 90:19,21 114:1 114:4 115:7 134:16 143:18 249:23 268:14 268:14 270:22 aspects 183:20 assert 26:20 141:24 asserted 212:12 212:17 asserting 100:19 103:14 assertion 135:13 256:9 256:11 assertions 128:7 assessing 46:14 assessment 43:2 71:6,8,9 115:19 175:3 179:20 199:13</p>	<p>asset 65:17 assigned 132:5 assignment 13:9 48:20 49:2 50:25 51:6,6 108:10 122:17,19 123:4 131:15 131:23 132:1,2 132:4,7,9,16,18 132:20,24 133:15 134:1 134:13 193:1,6 220:2,3,6,16,18 232:25 234:4 235:13 236:4 239:11,15,24 240:7,11 244:6 244:8,10 271:9 271:20,23 272:3 274:5,9 274:12 275:7,9 assignments 100:4 104:12 230:17 assume 110:14 140:19,21 assuming 88:12 201:2 226:23 271:19 assumption 151:1 assumptions 98:8 175:13 180:12 183:4,5</p>	<p>184:3 204:13 284:5 288:5 asterisk 88:11 attached 40:11 41:9 54:25 56:12 58:22 66:4 attachments 19:15,16 55:20 attain 47:19 attempted 179:16 183:21 225:14 attempting 150:10,11,19 172:1 attempts 224:22 attention 97:7 100:9 128:4 129:15 180:7 197:21 198:25 252:4 257:24 258:24 261:22 263:25 266:15 280:18 attorney 20:11 101:25 102:21 228:7 232:2 259:10 262:10 293:14 294:10 attorney's 228:14 attorneys 260:17</p>
--	---	---	---

[attributed - avant's]

attributed 207:17 219:3	13:17 14:3,6,8 14:18,20,22	126:21 127:1 127:19 128:23	240:17,22 241:21,25
attributing 102:3	16:10 18:8 20:21 22:23	131:18 132:7,8 133:2 135:5	244:15,18,19 244:23 247:6
audible 58:9 68:18 72:8 80:20 82:7 206:19 250:17	23:1,4,7 24:4,8 24:10,14 26:18 27:10 35:1,4 36:15 44:25	138:18 142:13 142:25 143:1,6 143:14 145:12 146:16 148:15	251:15 252:6 252:24 253:7 253:18,22 254:2,15,24
audio 293:8 294:3	45:9,24 46:16 46:18 47:16,25	148:22 150:1 151:7 153:6,14	255:7,25 256:10,12,19
august 68:16 123:6 240:19 252:17	48:9 49:6,9,22 49:24 50:2,24 51:3,10,14,23	156:12 158:13 159:7,8 160:22 162:16 166:21	258:5 260:9 261:3 262:1,20 263:10,19,20
authority 275:2	52:3,9,11,13,16	167:3,16	263:20 264:3
authorizations 9:7	52:23 53:7,8 71:21 72:4,7	169:19 170:5,7 170:9 171:1,10	264:11,23 267:9,22
authorized 53:10 285:16	83:10 88:13 91:8 92:19,25	173:17 178:15 182:9 183:6,20	268:14 271:7 272:6,22 273:5
authors 199:10	93:10,19 94:13	184:18 185:6	273:13 274:23
available 25:9 31:5 38:23 45:21 55:24 61:25 65:4 66:19 80:18 130:15 141:4 141:18 190:11 225:22 252:21 276:11	94:17 99:5,7 99:19,25 100:9 100:19 101:10 103:14 104:12 104:13,16 105:7,9,10 106:1 110:16 110:19 111:14 111:16 112:1 112:13 121:1,5	185:19 187:21 189:18 192:13 198:11 203:18 207:17 209:22 218:15,25 219:9 220:17 221:15,18,23 222:6 224:3,19 227:5,6,14 228:17 230:2	279:7 284:16 285:1,16,20 286:5 289:1 avant's 7:9 11:14,22,24 12:4,6 13:5 15:11 21:17 27:14 30:24 31:13 36:22 44:21 46:7,21 47:2,6 49:15 50:6,8,19,21 52:8,17 53:11 60:7 61:18 78:2,5 79:8 82:6 89:8
avalon 78:8	121:19,22,22 121:24 123:13 123:19 124:3,7 124:9,10 125:4 125:11,11,23 125:24 126:5	231:24 232:5 233:11,12,12 233:13 236:19 237:3,5,17,20 237:23 238:6 238:18 240:10	
avant 2:2 7:3 7:11,12,13,23 8:3 9:3,9,18 10:3 11:3,5,7 11:10,19 12:3 12:9 13:4,11			

[avant's - based]

90:11 91:12 93:14 100:24 101:15 102:2 103:13 105:2 107:23 116:15 120:4,12 121:13 122:14 124:16,17 126:1,20 127:14,16,25 128:5,7 129:13 129:17 135:24 141:5 146:2 149:16 154:7 158:8 160:21 165:15,17 166:18 171:24 183:10 185:1,4 187:5 190:2,19 191:9,14,19 192:1,7,17 194:3 195:1 196:4,22 207:10,22 210:6 219:4 224:5 227:20 228:22 229:4 236:5 243:2 251:3 257:25 258:24 261:22 264:1 265:16 266:15 271:12 273:2,16 281:16 283:15 284:2 287:21	289:11 avenue 2:5,12 average 83:6 154:24 157:2 159:10 201:1 241:17 avoid 236:2 255:6 awarded 134:15,21 221:18 aware 84:9 91:1 94:5 137:16,19,21 142:25 144:22 239:14,23 240:7,9,10,11 241:10 244:6 274:12 awareness 240:12,13 axis 89:5 158:10	22:7 23:1,1,16 24:10,11 37:21 39:21 41:1 55:5,8,11,20 56:20 57:4,10 58:24 64:17 66:9 120:16,19 224:16 279:7,7 279:7,15,15,18 279:21,21 280:10 281:11 284:16,17,19 286:24 back 33:18,19 87:7,14,18,19 88:6 100:22 110:9 114:16 117:25 123:5 132:4,12,15 139:22 145:2,7 146:12 163:12 165:3 166:7 169:3 171:8 174:19 176:17 178:16 179:17 180:3 183:1 186:10,11,19 187:7 199:5 218:19 220:4 222:20 235:9 237:11 239:6 256:17 265:11 266:14 269:25 277:5,6 287:2 287:6 292:17	backbone 175:7 background 7:10 80:6 144:7 backlog 285:17 backtrack 261:2,5 264:18 baked 104:3 184:4 balance 221:11 bam 178:21 band 160:23 barrel 9:17,19 barrels 169:6 172:13 174:9 177:17,19,22 177:24 178:2 178:21,22 180:19,21 201:2,3,8,21 bars 89:7 234:15 base 10:20 based 25:16 27:23 50:12 62:1 69:7 83:2 88:4,6,8,12,13 88:14 90:18 97:18 100:7 110:10 116:3,5 119:16,19 121:14 122:24 124:2,25 125:5 125:19,21
	b		
	b 6:1,7 7:1 8:1 9:1,12,14,15,16 9:17,19,21,23 10:1,4,6,8,10 10:12,14,16,18 10:20,22 11:1 12:1 13:1,2,2 13:12,14,17,19 13:21 14:1,1 15:1,1 19:13 19:23,25 20:3		

[based - better]

126:4 129:20 133:1 135:20 136:10 139:5 141:3,17 147:9 149:15 153:4 155:20,21 158:13 159:11 162:18 163:24 164:2 170:3 182:10,11,11 192:14 201:22 201:24 202:2 209:24 213:18 215:22 216:8 216:12,15 241:4,7,12,20 259:8 262:3 264:8,25 265:1 273:8,14 274:19,22 281:6,25 basically 57:5 75:20 98:5 172:25 175:7 238:5 284:22 basin 7:18 46:17 52:19,24 61:4,5,5 81:13 83:15 115:24 118:2,8,14 130:1,5,6,9,17 131:11 154:2 155:20 199:8 199:12 280:20 284:5,11	basins 130:8 basis 25:23 27:2 51:7 105:22 127:18 149:6 159:10 159:20 185:12 200:12 212:9 212:18 226:11 227:18 228:18 229:6 236:14 241:10 248:18 252:9 batch 243:12 batches 243:9 battery 52:2 beat 155:18 began 68:25 70:1 109:15 beginning 118:7 begins 68:16 237:20 behalf 2:2,17 3:2 16:10,15 16:21 127:1 beholder 93:3 behoove 132:19 believe 17:25 34:8 38:25 42:21 46:12 55:8 58:18 60:10 61:14,19 62:7,9 69:12 69:13 73:16 76:11 77:20	79:25 82:13 92:13,21 93:18 94:13,16,24 95:15 98:11,14 99:18,23 100:6 100:16 102:19 104:16,19 105:14 107:19 108:18 110:18 110:21 111:18 113:18 114:1 114:11 115:9 115:11 116:18 116:22 117:11 118:6 124:23 126:16 131:1,6 138:22 157:5 167:18 170:19 177:13 182:16 189:2 191:8 193:21 197:22 198:8 199:25 199:25 201:22 202:2,4 203:6 205:20 211:10 214:20 221:19 223:4,5 225:6 234:13 236:11 238:1 243:7,19 245:1,2,5 258:1 259:11 267:3,19 268:4 269:12 272:21 273:15 274:21 274:23 276:13	279:18 283:3 291:3 believed 103:6 211:18 belittle 176:4 belong 264:11 bench 8:9 15:11 160:24 161:3 181:9,10 182:15 194:15 236:6,14 benches 45:6 143:2,15 165:13 243:10 243:14 246:20 254:16 256:1 benchmark 155:21 170:23 best 34:24 50:7 86:3 128:2 160:24 174:10 179:13,18 187:5 196:3 204:6 208:2 226:9 227:10 280:23 281:6 293:10 294:6 better 28:20 35:10 48:16 85:23 96:1 122:13 160:3 175:24 176:13 180:19 185:18 236:6 254:17 265:6 282:2,5
---	--	---	---

[bias - broker]

<p>bias 152:10 204:1</p> <p>biases 152:19 184:8</p> <p>bid 123:12</p> <p>big 180:7 225:3 256:18</p> <p>bigger 178:18 182:13</p> <p>biggest 223:16</p> <p>binder 222:21</p> <p>binding 261:19</p> <p>bird 97:22 208:16 261:4</p> <p>birthday 87:20</p> <p>bit 21:13 34:17 44:2 85:7 96:1 99:3 102:6 109:17 114:18 124:25 131:13 131:17 144:6 147:17 170:18 208:14 224:7 240:24</p> <p>black 174:14 196:5,10,18 283:8</p> <p>blake 3:3,15 4:9 6:5 16:20 39:21 53:19 54:1 119:25</p> <p>blake.jones 3:7</p> <p>blank 141:10</p> <p>blm 52:1,1 122:5 123:10</p>	<p>136:9,23 137:14 144:24 145:3,7 192:21 221:9 236:16 237:6 238:20 241:5 253:8 255:22,23</p> <p>blm's 145:4 241:4</p> <p>block 20:17</p> <p>blue 74:8 157:21,23 158:22 159:6 160:2,10,11 161:10 170:2 172:15</p> <p>bodies 171:16 171:17</p> <p>boil 202:20</p> <p>bone 9:21,23 10:4,6,8,10,12 10:14,16,18,20 10:22 11:15 12:8,11,13 44:10 45:6,6,7 45:10,11,11,12 45:20 49:25 50:3 78:6,7 81:8,16,22 82:11 85:5,5 95:4,12,16,23 95:25 96:5,7 96:13,20,20,21 96:22 106:21 106:24 139:7</p>	<p>141:5,20 142:2 142:5,14 155:4 156:20 161:8 163:13,22,23 164:5,6,9,17,24 165:2,4,7 171:10 180:9 181:4,13,23 182:3,3 193:25 194:6,17 196:7 196:10,13 199:7,20 242:21 243:15 245:5,6 281:22 282:3 284:1 287:21 288:1,2 290:9,11,14</p> <p>booth 38:21</p> <p>border 118:3</p> <p>born 87:21</p> <p>bottom 20:11 29:6 44:18 57:8 79:7,16 81:14 85:11 125:14 137:11 155:4 159:3,24 159:25 160:11 176:8 224:19 248:4,8 250:13 281:21 283:5 288:11</p> <p>boulevard 3:5</p> <p>boundary 251:6</p>	<p>bowl 69:10,18 82:24 83:3,7 83:18 116:11 119:3 131:2,3 131:4,23 133:4 134:12,13,14 134:20,23 135:1 139:9 142:5,8 156:17 162:18 185:21 287:23 288:6 288:13,17,23</p> <p>box 220:4</p> <p>break 87:13 88:6 124:22 166:6 185:25 186:1,6 277:5</p> <p>breaks 200:3</p> <p>briefly 110:15 136:4</p> <p>bring 163:14 164:3 226:2 239:21</p> <p>bringing 93:18 131:6 246:11</p> <p>brings 214:18 235:18</p> <p>broad 199:15</p> <p>broaden 101:13</p> <p>broke 195:2</p> <p>broken 261:14 265:23</p> <p>broker 102:1 259:9</p>
---	--	---	--

[brought - case]

<p>brought 122:15 163:3,5,19 169:25 175:16 218:13 280:18 281:14 budget 81:1 build 84:11 97:2 building 1:15 bullet 25:24 26:2,7,10,17 125:3 137:11 211:5,13 212:2 212:6 215:7 216:6 218:6 252:5 266:18 266:21,22 bullets 26:20 224:20 bundle 227:1 bundled 97:21 97:25 burden 33:25 34:5,9,13 business 25:6 busy 230:13 bys 143:10,10</p>	<p>22:8 23:4,4,17 24:14,15 37:21 40:3,17 41:1 52:8 58:18,19 69:3,5 107:3 149:20,20,20 153:12,12,17 156:13 158:9 160:15 167:3 169:19 170:5 171:22 174:20 174:22,24,24 175:3,3,5,5,6 175:22,23 179:21,21 180:3,16 182:4 194:3,4 285:1 285:2,9,10,14 285:17 cabin 71:21 105:11 calculate 150:10,11,13 150:19 152:22 232:15 calculated 181:24 182:14 calculating 151:23 calculation 175:9 calculations 42:22 156:9 178:3 183:25</p>	<p>calculator 105:16,19 call 31:1 35:19 36:24 38:20 53:18 57:17 103:3 119:25 138:9 153:15 161:14 205:4 219:15 265:13 278:19 called 1:6 114:16 234:9 234:14 calls 248:16,19 camacho 118:25 130:25 131:4 camera 67:3 campaigns 131:10 134:6,7 canceled 234:21 cand 167:6 capability 51:9 106:3 capacity 47:8 47:10 54:3 58:2 63:19 65:15 70:15 71:4 245:9 capital 46:25 80:25 86:13 96:14 capitan 14:23 251:5</p>	<p>capture 47:15 captured 149:18 225:5 229:21,21 238:2 239:21 captures 224:22 265:9 carbonate 139:8 288:2 carbonates 78:8 care 106:15,16 132:8,13 244:19 carrying 148:22 cartman 156:24 case 1:9 6:19 6:21 16:15 19:12 21:1 34:3 35:4 36:15 44:3 45:24 53:16 65:3 69:12 91:2 100:22 105:25 112:25 119:2,23 122:6 138:6,18 150:20 165:18 179:4 183:6,23 186:23 187:8 187:21,23 190:14 191:7,8 195:5 203:19</p>
<p>c</p>			
<p>c 2:1 3:1,3 6:9 7:21 10:24 11:4,5,7,10,14 11:17,19,22,24 12:4,6,7,9,10 12:12 14:4,6,8 16:1 19:13</p>			

[case - claims]

<p>204:25 208:24 225:12 226:25 227:11 244:25 252:17,18 281:15 282:4 289:9 291:17 cases 16:5,21 30:23 44:8 49:21 54:10 58:5 63:23 65:19 casing 144:8,13 144:15,23 145:5,8,13,18 145:18 196:21 196:23 250:25 251:4 290:21 catch 129:14 cause 47:3 48:11 157:9,12 202:5 239:17 266:2 caused 255:20 causes 131:21 caveat 62:4 206:11 cdc 275:13,14 centennial 52:19 center 147:11 147:13 153:24 154:21 156:12 176:10 certain 26:20 26:24 55:4</p>	<p>147:15 150:10 150:15 153:8 certainly 56:22 86:20 191:21 272:3 certificate 293:1 294:1 certification 69:8 certified 12:20 certify 293:4 294:2 chain 102:20 chakalian 1:14 chance 16:24 18:11 29:20 32:1 change 61:8 118:22 119:4 150:3,6 151:20 171:14 216:22 260:2 265:14 266:2 changed 60:16 85:21,24 108:22 254:25 255:3,16 256:1 265:18 changes 34:20 55:15 61:9 63:3 64:24 66:16 99:13 284:7 changing 260:3</p>	<p>characterized 167:20 chart 12:18 72:5,11 74:25 75:8 85:11 89:11,14 91:10 111:9 147:11 147:13 149:5 155:4 159:24 159:25 162:12 218:20 266:24 266:25 267:3 269:13 charts 267:11 chat 89:17 check 58:18 168:23 170:14 221:15 checked 100:3 104:10 checking 36:5 checklist 19:8 32:13 106:19 107:2 checklists 19:11 chenoweth 3:17 4:15 6:10 39:16 40:16,16 40:21 57:17,20 57:23,25 58:10 58:12 59:1,13 59:21 61:22 62:7,11,16,17 62:21,24 63:2</p>	<p>63:6 77:21,24 79:22 113:18 113:21,24 114:16,25 138:10,11,14 138:21 139:3 142:24 144:1 145:22,25 146:7,8,9 193:12 195:10 195:13 197:4 cherry 45:25 50:14 chicken 47:5 chief 53:16 187:8 child 200:16 chime 219:15 chino 1:15 choice 48:14 chose 203:22 chosen 45:17 circling 219:23 circulated 261:16 claim 103:21 125:5 133:2 134:2 135:13 135:15 claimed 125:20 139:17 claiming 104:13 143:1 claims 52:3</p>
--	---	--	--

[clarification - commonplace]

<p>clarification 19:21 20:2 74:20 157:25 194:9 205:19 206:7 218:6 228:10 229:17 280:18 clarifies 216:20 clarify 74:8,9 75:4 104:21 207:24 208:19 209:14 210:3 218:9 267:3 271:22 clarity 109:22 120:23 classical 150:22 classically 161:18 194:11 classify 200:10 clause 25:20 27:21 275:19 275:20 clear 34:4 48:2 48:15 60:22 71:20 89:2 99:14 115:18 117:13 118:17 123:5 141:11 145:2 149:4 154:18 155:14 155:15 157:17 159:12 161:8 168:6 173:12 174:5 181:13</p>	<p>181:21,22 220:13 223:25 262:19 clearly 35:25 48:9 67:3 161:5 162:15 205:24 210:5 clerk 3:13 climb 173:17 close 86:1 101:6 113:11 126:12 158:10 163:5 214:8 218:3 231:24 closed 219:10 229:15 231:2,3 232:19,20 closer 37:19 82:16,24 196:6 229:1 239:25 289:13 290:12 closest 83:16 289:8 closing 104:1 183:8 231:21 239:18 256:25 closure 232:15 code 32:13 106:24 cogsgrove 292:10 cogswell 1:18 35:20,21,22 188:2 293:2,18</p>	<p>color 109:21 column 150:8 229:22 242:14 columns 124:9 combination 176:6 combined 81:9 98:8 come 25:13 33:17 34:17 67:2 87:14 97:1,3 100:24 102:16 130:10 133:3 153:4 161:9,13,15 165:3 166:7 172:3,16,16 178:16 179:24 186:9,11,19 187:7 212:22 225:15 234:1 255:9 256:4 258:10 292:17 comes 35:10 38:22 63:7 152:6 156:12 180:15 220:14 286:7 comfort 148:3 comfortable 184:21 231:15 231:16 coming 35:25 47:11 118:20 118:23 122:25</p>	<p>159:1 commence 274:14,15 275:23 commenced 49:2 comment 36:9 56:23 90:17,25 91:3 136:2 168:24 224:12 commentary 27:13 commented 191:9 comments 36:11 165:16 169:14,20 170:6 222:16 223:1 289:25 290:7 commitment 96:15 committed 8:11 50:19 207:16 232:17,18 249:18 259:15 265:4,6,10 266:1,7 267:11 273:16 common 72:3 208:13 280:19 commonly 169:1 190:5 commonplace 190:7 281:3</p>
---	---	--	---

[communicated - conclude]

<p>communicated 145:3 211:9 273:3</p> <p>communicates 241:9</p> <p>communication 94:1,2,5 224:13,18,21 225:5 241:5,7 241:11 255:5 261:9 262:3,15 263:19,21 267:14 280:17</p> <p>communicati... 52:11 92:18 209:24 263:4 266:19 267:18 285:13,15</p> <p>community 169:5</p> <p>companies 47:24 52:20 70:2,6,9,14 71:10,10,21,23 72:2 84:12 94:6 104:12 108:12 109:11 109:15,23 110:4 115:23 168:1 169:4 225:12 252:22 253:1</p> <p>company 46:17 102:25 113:5 128:19 132:15</p>	<p>140:3 143:6 162:23 168:12 178:10 179:11</p> <p>179:13 204:14 215:16 235:24 240:12 252:19</p> <p>comparable 50:12 81:11 83:12 86:6 90:2 173:14</p> <p>compare 60:8 83:9 173:10 181:9</p> <p>compared 46:19 101:18 153:10 154:14 159:8 169:23 172:22</p> <p>compares 156:22 172:5 184:25 185:2,7</p> <p>comparing 11:10 91:15 169:2 172:9 185:16 283:12</p> <p>comparison 8:18 11:7,19 45:9 86:25 173:9 177:24 195:17 234:14 257:3 283:21 288:23</p> <p>comparisons 50:11,15 152:3 284:9</p>	<p>competing 34:4 35:6 46:14 49:15,21 54:10</p> <p>complacent 220:14</p> <p>complete 48:22 117:19,20 118:2,4 231:3 232:10 243:4 243:13,17</p> <p>completed 52:23 112:18 113:9 127:11 141:7 166:16 245:20 274:16 274:17</p> <p>completely 184:3</p> <p>completing 245:4</p> <p>completion 11:20 82:21 116:6 118:15 234:14 245:16 275:21,22</p> <p>completions 117:17,23 285:2,5</p> <p>compliance 13:17 52:4 284:25 285:11</p> <p>compromise 225:4 258:19</p> <p>compulsory 19:7,11 26:15</p>	<p>96:3 121:18 122:22 135:18 136:16 213:12 214:5 215:3</p> <p>computer 87:12</p> <p>conceivably 268:16</p> <p>concentrate 278:19</p> <p>concern 25:23 131:21 133:17 134:3 172:8 204:10 211:12 211:13,15,21 212:1 214:9,10 215:15,24 217:23 244:18 271:7</p> <p>concerned 132:21 136:19 271:21</p> <p>concerns 22:15 46:11 49:9 52:15 133:1 135:4 136:3 151:7 171:23 175:15 180:1,4 193:1 216:10 280:16 291:9</p> <p>concession 258:18</p> <p>conclude 204:25</p>
---	--	---	--

[concluded - control]

<p>concluded 187:23 292:20</p> <p>conclusion 34:18 154:22 160:20 201:15 201:16 248:16 248:20</p> <p>conclusions 139:4 147:9 149:15 153:4 179:24 184:11</p> <p>concurrent 200:17</p> <p>concurrently 161:4 162:7,22</p> <p>condensed 257:4</p> <p>conditions 112:17 231:20 231:23 244:9 274:5</p> <p>conducted 54:12 58:7 64:3 65:21 200:13</p> <p>conducting 217:6</p> <p>confer 277:2</p> <p>confident 261:5 261:13</p> <p>confirm 30:24 96:2 138:23 145:3,12 201:18 226:14 245:1</p>	<p>confirmed 52:11 174:3 259:9</p> <p>confirms 45:22</p> <p>conflict 255:6</p> <p>confrontation 25:17,20 27:20</p> <p>confusing 290:22</p> <p>confusion 59:22 144:11</p> <p>conjecture 174:2</p> <p>connected 120:8</p> <p>connection 54:23 84:11</p> <p>conscious 163:13</p> <p>consequence 108:16</p> <p>conservation 1:3,6 3:12,13 16:4 38:5 40:19 42:7 43:20 225:13</p> <p>consider 25:7 28:6 95:18 147:14 169:24 224:2,4 265:12</p> <p>considerably 47:3</p> <p>considered 49:20</p>	<p>considering 1:8</p> <p>consistency 159:13</p> <p>consistently 51:24 258:9</p> <p>consolidated 21:21 71:14 97:8 105:5 111:9</p> <p>constituted 275:12</p> <p>constraints 47:8 96:18</p> <p>consult 276:14</p> <p>cont'd 3:1 5:1 7:1 8:1,3 9:1,3 10:1,3 11:1,3 12:1,3 13:1 14:1 15:1</p> <p>contact 93:20</p> <p>contacts 9:4,9 225:8 268:11 269:13</p> <p>contents 19:4</p> <p>contest 35:4</p> <p>contested 16:5 16:15 30:23 35:1 44:3,8 63:22 119:10 139:9 187:21 225:12</p> <p>context 25:19 44:2,6</p> <p>continuance 276:22</p>	<p>continuation 19:23 20:1</p> <p>continue 76:24 77:14 140:22 141:22 155:18 165:4 292:18</p> <p>continuing 173:17 174:14</p> <p>continuous 275:16,17,18</p> <p>continuously 148:24</p> <p>contract 47:9 103:20 109:12 232:21 247:3,4 256:15</p> <p>contracts 70:20 71:1 72:2 84:7 91:20</p> <p>contractually 106:7</p> <p>contrary 103:11 121:24 221:9</p> <p>contrast 44:25 47:12 48:13 51:18 134:4 137:4 151:25 281:14</p> <p>contribute 101:7,9,22</p> <p>control 13:5 14:14 28:21 47:20,23 48:3 49:1 50:18</p>
--	--	---	--

[control - correct]

99:1,10 103:18	correct 17:8,19	112:19 113:1	211:3,4 212:24
104:7 105:14	17:23 18:9	115:15,16	212:25 216:17
122:9 123:24	19:14 20:8	116:8 117:22	216:18 217:25
125:5 126:21	21:22 22:5	118:13,21	218:25 219:2,5
131:14 264:24	35:13 42:10	119:3 120:14	222:2,3,8
controlled 72:4	43:6 54:21	120:16,17	226:14,21
104:15 105:9	55:1,2,5,11,12	123:8,9 127:12	228:9,15,18
113:13 124:3,4	58:15,16,20,24	127:13,20,21	229:2,14 230:3
125:12,15	58:25 60:21	129:22,23	230:4 231:3
224:5 265:5	61:7,7,10,11,17	131:12 134:8	232:16,19,22
controlling	62:8,21 64:18	137:6,8,9	234:6,12,21
48:4 132:22	64:19 66:3,10	138:19,20,25	235:7,10,16,22
controls 103:15	68:17,21 69:1	139:1 143:3,4	236:7 237:3,6
104:17 126:21	69:2,7,11,19,20	143:8,9,24	237:10,12,13
conversations	69:23 70:3,4	145:6,10,19	237:21,22
27:2 110:3	71:21 75:2,5	146:25 147:1	238:20,21
262:24	78:3,8,13,23	149:7,8,12	239:1,8,9
convince 103:8	79:9,12,17,18	157:4,21,22	241:15 242:22
convincing	80:19,23 81:17	166:22,23	246:1,3,23,25
48:10	82:6,15 83:1,8	176:20 181:15	247:8,18,22
coordination	83:18 84:8,9	181:16,20	248:1 252:21
253:1	84:13 86:6,7	182:1,5,18	252:22 253:9
copies 12:20	86:10,11,14,15	189:19 190:16	253:10,13,17
208:7	86:22,23 88:7	190:23 191:7	253:20,24,25
copy 21:2	88:16 89:10,13	192:12,23,24	254:4,17 257:8
244:8 261:17	89:20 90:15	193:3,8 194:6	260:1,5 261:7
274:8	91:22 95:9	194:7,18,19,23	264:12 269:21
corner 57:9	96:5,22 97:13	195:17,18,20	269:22 272:5
283:5 288:11	98:20,21 100:6	195:21,24	272:10,11
corporation	100:16,16	196:16,19	274:10 276:8
2:17 9:10 54:4	102:10 103:2,9	197:25 201:4,4	279:9,16
63:20 65:16	103:9 104:14	201:23 202:3	282:14,15
97:18 129:8	104:14 106:23	202:25 203:20	283:14,19,22
217:18	109:2,5 110:12	205:15,16	290:5
	110:14 111:14	208:2 209:4	

[corrected - curve]

<p>corrected 62:19 107:2</p> <p>correction 61:16,18</p> <p>corrections 33:5 55:14 57:13 59:3 60:4 61:14 62:23 63:2 64:25 66:15 187:11 205:17 206:17 276:20</p> <p>correctly 62:15 75:10 155:8 159:24 162:8 200:25 219:3</p> <p>correlation 80:10 288:17</p> <p>correlative 35:11 48:8,12 48:19 49:3 50:8</p> <p>corresponde... 210:23</p> <p>cosgrove 35:20</p> <p>cost 46:10 51:21 84:6,15 86:13 91:24 145:18</p> <p>costs 11:21 84:6 86:12,16 86:17</p> <p>could've 95:25 171:2 234:23 272:3,6,8</p>	<p>counsel 30:25 31:5 66:21 107:23 138:4 146:24 191:7 203:17 219:14 276:24,25 293:11,14 294:7,10</p> <p>count 7:16 17:25 52:22 62:6 154:23 155:6 285:5</p> <p>counter 92:24 110:21</p> <p>county 44:12 112:23 127:4 190:5 208:17 217:22 222:10 222:11 260:14 284:6</p> <p>couple 47:18 53:2 111:7 117:8 118:12 128:14,15 168:18 193:11 193:12,24 207:6</p> <p>course 31:19 33:10 34:2 119:1 151:1 188:11 202:13</p> <p>court 35:18,19 62:15 87:10 90:15 214:10</p>	<p>courthouse 100:3 127:4</p> <p>courtroom 28:22</p> <p>cover 20:18 57:7 147:4 216:5 246:5 248:1</p> <p>covered 246:4 246:7</p> <p>covid 108:6,16 234:10 252:12</p> <p>creation 144:10</p> <p>credentials 54:6</p> <p>credibility 128:12</p> <p>credited 224:3</p> <p>crediting 223:17</p> <p>crew 244:23</p> <p>criminal 25:19</p> <p>criticism 194:25</p> <p>cross 9:22 10:9 10:17 17:13 24:23 27:24 31:5 33:8,11 55:25 57:15 63:7 65:4 66:20 68:1 76:6,8 77:2,4,7 77:13,22 80:1 84:1 119:16,19 138:7 168:23</p>	<p>170:14 185:25 186:19 187:1,4 187:12,24 188:7 198:23 204:22 225:22 226:1,6 257:20 270:8 273:21 287:22 288:3 291:19</p> <p>crow 116:20</p> <p>crucial 175:13</p> <p>crude 287:8</p> <p>culminating 159:18</p> <p>cume 152:17,18</p> <p>cumulative 83:6</p> <p>curiosity 230:5</p> <p>curious 230:8</p> <p>current 7:15 69:22 99:17 107:25 123:23 129:20 199:11</p> <p>currently 32:5 32:6 50:4 53:7 107:4 129:23 129:25 222:3 244:24 264:4 264:23</p> <p>curve 12:7,10 12:12 46:3 150:22 157:11 157:18 170:21 171:12 174:8 176:2 177:18</p>
---	---	--	---

[curves - deals]

<p>curves 172:15 172:24 175:6 175:14,17 178:8 195:1,4 195:6 203:19 203:23,25 204:11</p> <p>customary 231:8 260:16</p> <p>cutbow 11:23 12:9 51:15 52:25 82:6 139:10,11,18 140:18 141:5 142:18 148:16 161:7 162:7,16 171:5 172:4,11 196:1 244:24 245:10 281:20 283:13,15 287:23 288:7 289:1,8,13,20 290:12</p> <p>cutbow's 282:3</p> <p>cv 40:9,11 41:7 41:20 42:13 43:4 64:12 66:5</p> <p>cx 4:8 5:1</p> <p>cx 13:7 26:9 26:13,15,17 27:8,9 72:6 99:4,12,18 100:11,19 101:11 105:1</p>	<p>105:12,25 125:25 127:14 127:15,19 198:9 208:21 209:12,24 210:23,23 211:14 213:9 213:12 214:3,4 215:1,2,22 217:18 223:22 224:1,4 228:19 228:22 229:4,8 261:23,24 262:4,11 263:3 263:3,8,15,19 263:19,20</p> <p>cx's 198:1 217:23</p> <hr/> <p style="text-align: center;">d</p> <hr/> <p>d 4:1 6:12 12:14,16,18,20 12:22 16:1 19:13 22:8 23:7,7 40:12 40:16 41:21 64:8</p> <p>daily 172:10,10 172:22</p> <p>dana 2:3 12:15 16:9</p> <p>dangerous 284:7</p> <p>dark 149:7 157:21,23 159:6 160:10</p>	<p>170:1 174:13 174:13</p> <p>data 15:7 45:22 45:24 48:15 50:15 52:22 61:24 79:15 88:4 89:15 91:16 100:3 114:5 115:8,13 117:13,16 147:22 149:4 151:24 152:2,6 152:16,19 156:9 158:2,24 159:13 160:19 163:24 168:13 170:3 172:10 172:10,11,14 172:15,21,22 173:1,4,4 175:16 178:3 184:6,10 185:11 201:5,9 201:14,22,24 202:2,13,17 204:2,2,3,8 280:21 287:1 290:6</p> <p>date 1:12 46:17 87:21 96:5 115:19,19 116:4 143:6 183:17 221:17 237:5 242:4,19 264:11 287:7</p>	<p>dated 69:4 246:15</p> <p>dates 87:5 136:10 177:4 183:1 271:15 271:18 274:4 274:25 275:5 285:8</p> <p>dating 287:2,6</p> <p>day 88:25 89:4 89:6 133:24 172:13 174:9 230:7,10</p> <p>days 88:10,13 88:13,15 150:1 153:22 172:17 174:14 274:16</p> <p>db 61:6</p> <p>dead 225:1</p> <p>deadline 123:7 231:10 271:20</p> <p>deadlines 45:13 131:23</p> <p>deal 16:17 18:5 21:15,16 23:10 29:7 32:14,17 41:12,15 119:23 163:18 230:19 231:21 231:25</p> <p>dealing 219:9</p> <p>deals 47:18 127:11 231:13 239:19 245:15 265:15 280:11</p>
--	--	--	---

[dean - determination]

<p>dean 3:11 31:23 76:19 260:21 december 239:19 decently 142:20 decide 48:5 270:11 decided 94:10 152:15 247:6 decides 28:6 decision 116:3 116:4 163:13 decisions 112:4 decline 46:2 96:21 118:10 150:22 158:14 173:23 declined 89:12 225:18 258:22 decrease 155:1 155:15 decreased 91:17 154:24 164:8 decreases 154:4 dedicate 44:15 dedicated 11:24 109:22 109:23 119:2 deem 82:20 115:25 214:16</p>	<p>deemed 48:3 111:21 116:6 deeper 288:20 defect 104:3 defer 256:5 defined 168:1 definitely 140:6 definition 274:17 defunct 98:15 degradation 15:8 140:7 154:15,19 155:15,24 156:3 176:25 179:5 182:17 182:22 183:19 202:12 degrade 200:19 degrees 153:7 delaware 46:17 52:24 61:5 81:13 83:5,15 115:24 118:2,8 130:5 131:11 delay 92:2 208:13 275:4 delays 51:22 190:5,9 demonstrate 48:10,15 149:2 204:7 demonstrated 152:24 203:24</p>	<p>demonstrates 152:14 258:5 denied 34:10 53:11 density 11:11 50:10 149:6 154:12,20 182:17 denver 270:10 deny 35:3 49:15 departed 254:2 department 1:2 90:13,14,22,23 285:23 286:15 286:17 departments 137:20 departure 254:5,13 depending 32:14 147:3 232:14 depicting 11:14 199:24 200:15 200:20 depiction 73:7 depletion 11:18 depth 13:13 274:24 279:19 280:11,16,25 281:2 284:4 depths 247:21 255:25 280:20</p>	<p>derive 88:9 derived 97:16 97:18 198:1 199:6 259:7 describe 75:18 124:14 199:23 described 76:12,13 125:19 description 6:2 7:2 8:2 9:2 10:2 11:2 12:2 13:3 14:2 15:2 75:9 deserve 29:1 deserves 28:14 design 90:6 144:13,15,17 250:25 designate 49:14 designs 144:16 290:25 destiny 132:22 detail 154:9 175:23 202:14 258:8 details 258:7 deterioration 153:9 163:17 201:16 202:5 determination 151:3,4 153:21 158:11 228:3 229:13</p>
---	---	---	--

[determinations - different]

<p>determinations 204:16</p> <p>determine 34:23 52:1 74:5 88:3 94:10 112:24 113:3 122:23 141:3,6 154:18 167:23 211:17</p> <p>determined 93:4</p> <p>deterministic 149:17 177:10</p> <p>develop 45:20 48:6 49:24 51:4 53:9 79:11 95:3 96:4,17 108:1 108:4,9,13,18 109:4,4 118:19 118:23 143:2 145:17 161:3,3 162:6,8,21 165:4,13 181:4 181:13 194:14 234:6 236:3,13 247:6 258:17 288:13</p> <p>developed 139:25 142:15 162:3,9,25 164:5 181:6 209:10 288:12</p> <p>developing 86:16 96:21</p>	<p>130:19 139:14 139:16 160:23 178:20 220:11 220:14 222:6</p> <p>development 8:4,20,23 9:17 9:19 11:8,9,16 11:23 14:12 15:4,12 44:21 45:1,8,17 46:14,22 47:3 48:6,11,16,16 49:1 50:9,11 51:24 68:6 80:8 95:25 108:17,19 116:19 122:9 122:13 127:16 130:24,25 131:14,22 133:4,22 136:8 142:14,22 145:21 147:15 147:21 148:11 148:14,22 153:8,17 156:14,15 157:14 158:18 158:20 159:5 159:20 160:20 160:25 161:7 162:5,16,17 163:1,7,21 164:10,14 165:3 167:17</p>	<p>169:2,11 170:10,16 171:4,25 177:21 178:7,8 178:13 180:9 180:18 181:10 181:10 182:15 182:17,18 189:2 200:17 210:7 217:20 223:3 234:23 235:14 238:6,7 245:10 252:7 254:4,16 255:10,11,24 257:13 275:16 275:18 289:6,8 289:9 290:25</p> <p>developmental 200:12</p> <p>developments 11:12 45:25 50:10 116:17 130:24 131:5 134:23 140:10 140:16 157:8 167:21,21 171:2 247:8</p> <p>deviations 260:13</p> <p>dhardy 2:7</p> <p>diagram 73:21</p> <p>diamondback 172:5</p>	<p>differed 79:7</p> <p>difference 47:22,24 48:2 101:9,24 102:3 102:4,18 103:5 103:6 111:6 126:22 150:13 150:14 151:15 155:14,25 159:17,20 167:19 168:8 172:2 184:15 219:25 225:3 260:8</p> <p>differences 44:20 100:24 101:1,20,23 102:23 126:8 230:20,21 260:17</p> <p>different 45:3 89:7 92:19,24 93:5 100:15 101:16 105:24 113:2 127:5 130:16 133:22 134:5 143:23 150:2,6 152:21 153:7,23 154:21 165:13 168:1,2 173:11 175:11 176:7 184:12,20 188:16 199:24 199:25 200:4</p>
---	---	---	---

[different - document]

<p>200:15 202:18 211:6 227:3 230:18 243:9 245:14,15 255:10 260:11 283:18 differentiate 162:20 differently 155:2 difficult 85:16 105:18 113:14 133:11 174:16 174:17 202:20 266:10 digging 240:2 digital 293:8 294:3 diligence 104:2 231:6,8,11 dire 4:3 210:13 direct 31:2,13 33:11 53:20 55:7 56:17 57:21 59:10 63:13 65:10 66:24 67:16 70:16 77:5 83:21 92:6 97:7,13 100:8 120:12 128:4 138:18 167:6 183:10 187:10 188:10 197:21 198:25 205:8</p>	<p>217:6 241:4,7 251:16 257:24 266:4,13,15 279:1,25 285:20 291:17 directed 114:7 115:1 169:10 267:17 directing 77:21 direction 121:22 153:25 directive 119:5 directly 31:3 61:4 101:9 124:10 156:12 165:17 166:20 171:21 183:11 director 241:8 disagree 103:15,17 161:1 177:16 181:1 182:12 183:24,24 184:1 227:21 288:16 disagreed 291:9 disagreement 103:4 disagreements 103:1 discern 250:11 discovery 255:19</p>	<p>discrepancies 207:21 226:12 discrepancy 223:21 discrete 152:5 discuss 114:3 171:21 263:8 263:15 discussed 30:19 202:9 246:21 259:17 269:25 discusses 285:21 discussing 267:4 discussion 196:21 210:22 212:5 218:21 222:1 discussions 27:17 70:1 92:23 109:15 227:22 272:22 272:25 273:8 disparity 224:20 displayed 199:23 dispute 46:9 98:12 99:16 127:18 261:2 disputed 46:12 disputes 102:15 distance 116:21 156:16 196:1</p>	<p>distances 116:10 distinguish 72:22 disturbance 14:7 47:4 dives 185:25 divided 159:5 172:18 division 1:3,7 3:12,14 7:22 16:4 18:20 25:7 27:8 28:1 28:5 31:6,15 34:22 35:3 38:5 39:24 40:6,20 41:4 43:20 44:1,8 48:5 49:13,20 54:6,20 58:14 59:4 64:9,13 66:13,20 101:4 102:13,14 111:23 138:4 146:17 171:18 225:13 248:12 249:16,21 division's 46:13 48:1 141:3 248:24 250:3 docket 1:5 document 20:6 20:17 22:3 23:14 25:10 29:12 41:19</p>
--	---	---	---

[document - e]

<p>46:16 104:8 190:8 286:9 documentation 178:11 documents 20:19 33:6 104:11 127:9 190:5,10 208:7 208:10 doing 21:8 141:22,23 150:9 152:2 162:23 164:23 256:24,25 dollars 286:2 doors 292:3 double 58:18 71:21 105:11 doubt 269:9 draining 162:2 drastically 184:16 draw 106:20 180:7 252:4 258:23 261:21 263:24 drawing 110:18 drawn 184:11 drew 3:17 4:15 6:10 40:16 57:17,25 113:19 201:16 drill 44:24 45:2 49:10 50:2</p>	<p>62:5 80:19 118:1,4 119:6 121:8 122:12 123:2,9 130:10 130:10 132:19 133:4 136:8,17 136:20 140:8 140:16,17,21 162:6 163:13 164:12 179:11 181:17 194:5 194:17 220:18 221:23 235:5 236:1,6 237:3 242:1 243:12 243:15 251:3 253:15 254:16 255:16 257:6 271:8,12,24 275:1,5 281:6 289:6,15 drilled 7:17 44:17 46:18,19 50:12 52:23 53:1 60:6,15 60:20,23 61:1 61:19 81:7,11 81:16 82:2 83:12 86:6,8 87:2,6 90:2 102:11 118:9 128:23 141:6 143:14 148:16 148:19 156:20 156:21 161:17</p>	<p>163:19 164:19 165:2 170:13 200:7 201:1,7 201:20,25 206:9,14 234:23 252:13 253:13 272:8 274:13,14,16 281:23 283:17 285:4 drilling 11:20 14:6 47:6,13 49:1 52:18 78:12,15 86:25 101:3 102:7 108:14 118:21 121:12 122:9 123:7,15 130:20,22 131:10 132:23 134:5,7,14,21 136:14 140:20 141:14,22 153:8 163:21 194:14 201:10 201:12 234:12 243:3,4,16 274:16,18,24 275:17 281:6,9 drive 1:16 80:17 233:3,22 driver 80:17 driving 242:17 drop 265:13</p>	<p>due 104:2 112:7 140:7 231:6,8,11 255:19 288:14 duly 293:5 dune 255:19,20 dust 69:10,18 82:24 83:3,7 83:17 116:10 119:3 131:2,3 131:4,4,23 133:4 134:12 134:13,14,20 134:23 135:1 139:9 142:5,7 156:16 162:18 185:21 287:22 288:6,13,17,23 dustbowl 9:20 11:9 dx 4:8 5:1</p>
			e
			<p>e 2:1,1 3:1,1 4:1 6:1,15 7:1 8:1 9:1 10:1 11:1 12:1 13:1,2,2 14:1,1 15:1,1 16:1,1 19:13 37:21,21,24 38:1,2 39:21 40:4,4,16,17,17 40:25 41:10,11 42:12,14 66:2 66:4</p>

[earlier - ensure]

<p>earlier 113:9 168:10 176:24 177:5 191:9 194:5 196:22 208:5 220:23 260:6 261:1 264:8 265:19 269:25 271:7 272:4</p> <p>earliest 121:13 121:15 237:8 242:19</p> <p>early 46:1 119:7 147:18 147:19 173:10 183:2 252:14</p> <p>earthstone's 170:10</p> <p>ease 226:22</p> <p>easier 282:17</p> <p>easily 211:10</p> <p>east 44:12 76:12,15,16 82:12 106:24 139:19,22 141:19,23 193:24 225:16 238:6 247:4,7 254:3,21 255:1 255:10 289:3</p> <p>easy 133:21 184:2</p> <p>economic 108:12</p>	<p>economically 179:12</p> <p>economics 84:6 108:17</p> <p>eddy 222:9</p> <p>education 66:6</p> <p>effect 202:5</p> <p>effective 45:19</p> <p>effectively 51:16 198:10</p> <p>efficiency 89:9 89:12</p> <p>efficient 45:19 47:10</p> <p>efficiently 48:6 51:16</p> <p>effort 62:2 118:18 152:5</p> <p>efforts 108:1 123:6</p> <p>eight 21:24 44:16,24 110:11 137:4 140:15 148:7 178:17,18,20 178:21 179:6 179:15 181:18 289:16 290:15 292:3</p> <p>either 35:9 85:3 97:12 98:15 103:8 112:3 147:20 192:22 231:23 244:5 258:16 259:3</p>	<p>259:20</p> <p>elements 24:21</p> <p>elicit 135:25 137:23 147:4 183:11</p> <p>elicited 111:12</p> <p>eliminates 215:24</p> <p>ellipsis 259:22 260:4</p> <p>email 209:16 209:23 210:24 211:9,11,16,17 211:22 212:1,4 213:4 262:23</p> <p>emissions 90:15</p> <p>emmett 3:16 4:19 6:13 39:15 40:3,3,7 41:20 42:6 63:11,15,17 64:6,20 65:3 79:25 80:3 83:21 114:11 114:24 116:9 116:25 117:3 294:2,15</p> <p>emmett's 40:11</p> <p>employed 54:2 58:1 63:18 65:14 293:11 293:14 294:8 294:11</p>	<p>employee 293:13 294:10</p> <p>employees 199:11,11</p> <p>enable 222:6</p> <p>endeavor 271:24</p> <p>ends 57:2</p> <p>endzone 289:16</p> <p>energy 1:2</p> <p>engage 258:4</p> <p>engineer 6:14 6:17 38:17 42:8,17,19,22 43:5,11,19 63:12,20 65:8 65:17,17 95:14 96:23,24 152:20 154:6 180:25 199:13 204:1 228:8 243:7</p> <p>engineering 13:15 15:3 29:19 30:13 40:4 41:1 43:9 46:8 64:3 65:21 96:12 146:16</p> <p>engineers 43:13 95:21</p> <p>ensure 49:1 86:1 122:8 123:6 136:7</p>
--	---	---	---

[enter - exact]

<p>enter 18:5,20 109:19</p> <p>entered 19:18 29:3 30:4 112:11,12 190:4,23 191:3 234:5 245:13</p> <p>entertain 258:22</p> <p>entertained 255:7</p> <p>entire 75:22 83:5 129:7 157:15 161:3 183:1 185:15 207:16 235:5 284:11</p> <p>entirely 88:14 117:16</p> <p>entirety 262:21</p> <p>entities 230:2</p> <p>entity 98:15 105:10 260:5</p> <p>entries 16:7</p> <p>enverus 81:23 100:3 158:7</p> <p>environment 90:14,23</p> <p>eog 52:19</p> <p>equal 34:12 227:24</p> <p>equally 34:13</p> <p>equation 150:5</p> <p>equipped 241:1</p>	<p>equitable 29:14 93:2,4,5,6,9,11 94:8,10,11 110:20,22 258:13</p> <p>equivalent 235:23</p> <p>eric 156:24</p> <p>error 150:3,15 151:17,17,23 153:19 164:7</p> <p>errors 150:21</p> <p>es 293:4</p> <p>escaping 134:11</p> <p>esp 173:6,17,23</p> <p>especially 172:21 174:7 204:2 260:12 260:21</p> <p>esquire 2:3,10 2:18 3:3</p> <p>essence 50:14</p> <p>essentially 107:1 110:23 116:1 139:21 150:9 167:24 200:1 207:15</p> <p>establish 28:1 28:11,20 33:25 34:9 128:12</p> <p>established 26:14 105:8 128:19 211:8 213:10,12</p>	<p>214:4 215:2,23 231:12 252:13</p> <p>estimate 174:11 281:4</p> <p>estimated 200:8</p> <p>estimates 88:17 110:10</p> <p>estimation 151:22 171:13 245:23</p> <p>eu 46:2</p> <p>eur 15:6 150:4 150:6,10,11,19 151:3,5,23 152:1 154:3,13 154:24 155:1 155:20 157:14 157:24 168:11 168:11 169:9 169:11 177:9 177:10,12,17 184:13 200:15 204:16</p> <p>eurs 149:18,18 152:9,22 182:23 204:11</p> <p>evaluate 27:3 27:15 273:2,10</p> <p>evaluating 49:21 169:2</p> <p>evan 3:18 5:2 6:16 40:25 65:8,13 142:21 193:15</p>	<p>evd 6:2 7:2 8:2 9:2 10:2 11:2 12:2 13:3 14:2 15:2</p> <p>evening 276:14</p> <p>event 25:7 220:17</p> <p>events 219:23 251:20</p> <p>everybody 130:12</p> <p>everyday 111:2</p> <p>evidence 18:6 18:16,20,24 19:6,10,12,18 22:9,22,25 23:3,6,9 24:3,7 24:13,17 28:21 29:3 30:4,8,12 30:16 34:3 35:8,9 47:17 48:10 50:7 51:11 52:10 70:13,16,18 103:10 121:24 125:16 205:13 209:3,17 218:16 279:6</p> <p>evidenced 121:18</p> <p>evolved 179:10</p> <p>exact 82:14 91:23 116:22 142:10 152:7,8 164:23 178:8</p>
---	--	--	--

[exact - examiner]

230:7,10	279:1 291:19	39:3,6,18,23	138:8 146:6
248:13 249:21	examinations	40:1,5,8,10,13	151:12 160:8
251:9 262:18	77:13	40:18,22 41:2	165:22,25
262:21,22	examine 17:13	41:6,8,11,22	166:5,10,11
285:7	24:23 27:24	42:3,4,10,11,15	185:22 186:3
exactly 17:25	188:7 211:16	42:18,24 43:3	186:11,14,18
88:3 100:23	212:4 226:1	43:7,10,14,15	186:24 187:6
151:14 167:7	examined 72:1	43:18,23 44:4	187:16,19
198:13 239:23	201:9	44:7 49:12,16	188:4,11,18
240:14 269:18	examiner 1:14	49:19 53:13,17	189:4,7,12
280:22	3:11 16:2,8,11	53:18 55:18,23	191:13,17
examination	16:14,16,19,23	56:1,5,15,16,19	197:5,11,14
31:5 33:8	17:2,5,9,12,15	56:22 57:6,11	203:8,9,13
53:20 55:25	17:20,24 18:4	57:16 59:9,12	204:21,24
57:15,21 63:7	18:10,14,19,25	60:3 61:13,17	205:1,2,4,6,23
63:13 65:4,10	19:2,9,14,17,20	62:14,18,22	206:3,22 209:2
66:20 68:1	20:4,9,15,20,22	63:5,8,10 65:2	209:5 210:9,12
76:6,8 77:4,5	20:24 21:4,9	65:5,7 66:18	210:14 212:2,8
77:22 80:1	21:15,23 22:2	66:22 67:7,10	212:21 213:1,7
84:1 92:16	22:6,13,18,21	67:13,15,20,23	213:24 214:7
107:16 113:22	23:10,19,22	68:9,19,23	214:12 215:5,9
114:22 117:4	24:1,18,20	71:17 72:9	215:11,14,25
119:16,19	25:3,5,12,15,25	73:12,19 74:7	216:3,11,17,19
120:2 138:4,7	26:4,7,10	74:14 75:3	216:24 217:2,5
138:12 146:10	27:18 28:8,16	76:2,5,6,23	218:2,12
186:19 187:4	28:17 29:15,23	77:1,6,10,17	220:25 223:8
187:12,24	30:2,17,20,22	87:8,17,20	225:21,24
188:21 193:16	31:9,11,20,24	92:8,13 106:9	233:7 248:17
195:11 197:17	32:7,17 33:2	106:12 107:9	248:21 249:1,3
198:23 203:15	33:22,24 34:7	107:11,14	249:7,10
204:22 205:8	34:14,16,25	113:15 119:13	257:15,17,19
210:16 225:22	35:16,22 36:1	119:15,17,18	268:6,13,21
226:6 257:20	36:7,12,16,18	119:21,22,24	269:3,6,10,15
270:8 271:4	37:1,5,17,22,25	120:1 129:11	269:18,19,23
273:21 274:1	38:3,9,14,18,25	129:15 138:2,5	270:17,20,25

[examiner - exhibit]

273:20,23	exchange 104:1	8:16,18,21,23	61:6,9 64:8,8
276:1,3,4,9,16	111:3 230:17	9:4,6,9,11,12	64:11,17 66:2
277:4,11,19	231:15	9:14,15,16,17	66:4,9 69:3
278:8,11,12,23	exclude 27:11	9:19,21,23	75:7 82:5,17
280:3,5 282:17	27:12 50:13	10:4,6,8,10,12	82:23 83:17
282:20 291:16	115:23	10:14,16,18,20	84:19 86:12
291:23 292:2,8	excluded 53:5	10:22,24 11:4	88:11 89:25
292:9,15	82:21	11:5,7,10,14,17	90:1,3 94:20
examiners 44:1	excludes 82:23	11:19,22,24	100:9 101:15
102:5 120:20	excluding	12:4,6,7,9,10	114:6 115:3
171:18 174:6	126:17	12:12,14,16,18	120:15,16,19
181:21	excuse 101:14	12:20,22 13:5	131:19,21
examining	191:17,18	13:7,9,12,14,17	133:1 137:10
33:11 77:2	265:5	13:19,21 14:4	145:23 147:6
100:25	excused 146:8	14:6,8,12,14,17	152:13 153:17
example 99:25	276:5	14:19,21,23	156:13,18,25
104:22 140:2	execute 99:13	15:4,6,8,10,11	158:9 160:15
140:23 143:7	102:13 110:6	18:22,22 19:23	167:3,3,14
150:17 161:19	112:4	19:25 20:3,18	168:9 170:5
173:8 184:17	executed 98:14	21:3 22:4,7,8	171:22 180:4,5
199:19 208:15	111:17 112:8	22:15,23,23	180:6 182:4
280:24	112:16 125:20	23:1,4,7,14,20	191:10,20
examples	127:1,9,12	23:20 24:4,5,8	198:4 206:2
173:14	230:6	24:10,11,14,15	207:10,11,13
exceeding	executing	24:21 25:1,13	210:10 211:5
47:14	125:24	28:18 29:4	212:7 213:6
exceeds 51:21	executive 7:9	30:5,6,9,10,14	215:7 216:5,12
excellent 39:7	128:10 191:15	30:14 40:11,12	217:10 218:10
40:1	exercise 228:10	41:10,21 42:12	218:13,15
except 41:16	exhibit 6:4,7,9	42:14 54:19,19	219:19,19,20
exception 24:3	6:12,15,18,20	55:5,8,11,16,19	220:24 221:4
25:6 29:3 32:4	7:4,6,7,9,11,12	55:20 56:8,20	224:16 225:5
76:17 143:10	7:13,15,17,20	56:20,25 57:4	226:1,17,19,20
148:15 187:24	7:21,22,23 8:4	57:10 58:13,17	227:2,6,9
259:13	8:6,7,8,10,13	58:18,19,24	229:7,21 233:5

[exhibit - explain]

238:25 246:11 251:13 257:23 262:23 265:8 265:17 266:5 266:15 267:1 267:10 268:2,7 268:9,10,14,15 268:17,19 269:1,20 271:15 274:25 275:6 279:7 280:10,11 281:11,12 282:7,9 283:16 283:24 284:16 286:24 exhibits 16:25 17:3,7,10,22 18:2,5,11,13,15 18:21 19:1,13 19:16,18,22 20:12,16,21 21:16,17,19 22:7,12,15,19 22:22 23:11,15 23:16,17,24 24:2 29:2,8,11 29:16,17,19 30:3,4 31:14 32:2,3 33:4,18 33:20 53:5 54:22 56:3,12 56:12 78:2,5,5 78:9 79:14 93:15 100:2	102:2 103:14 106:11 120:13 120:22 123:19 124:13,13 125:21 127:15 127:22 128:5,6 135:24 138:17 139:12,17 142:9,25 144:12 146:2 146:15,21 149:20 152:1 153:11 165:12 165:16,18,23 166:18,21 170:25 174:24 175:5,11 176:12,24 183:10 187:11 188:24 190:20 191:23 192:1 196:4 197:22 198:3 199:1 205:12,18 206:14,18,24 207:4,4,7 209:12 224:11 227:16 233:23 246:22 256:2 257:25 258:24 261:22 264:1 265:16 266:14 267:5 271:14 279:5,8,13,14 279:15,16,24	280:6,8 282:14 284:10 existed 52:7 exit 78:16 expect 163:23 164:8 176:16 177:1 179:1 241:6 276:10 289:21 expectation 241:12 expected 46:25 86:21 173:18 221:17 expeditiously 221:23 242:1 expending 225:13 expenditures 9:8 expensive 145:20 experience 11:22 46:16 49:4 52:18 59:5 61:2 66:6 78:21 104:5 128:8,21,22,23 129:3,4,8 136:21 153:9 165:10 190:12 208:14 241:22 275:3 experienced 52:16 53:9	220:8 expert 38:10,15 39:20,24 40:6 40:19 41:3 42:7 43:8,19 54:6 128:3 expertise 128:8 experts 38:4 expiration 49:2 expire 123:4 135:9,10,16,17 135:18 expired 234:22 234:24 235:4 235:16 252:12 272:9 expires 51:1 122:17 193:6 220:18 expiring 132:9 explain 52:13 60:3 75:7 109:17 115:18 121:25 122:7 128:6 131:20 135:4 144:7 147:7 149:14 153:3 160:18 162:19 167:15 171:22 174:17 180:4,12 203:22 209:9 219:20 221:8 223:15 281:11 284:15 286:24
---	---	---	--

[explained - file]

<p>explained 182:16 210:25</p> <p>explanation 25:22 31:15 241:1</p> <p>explore 230:24</p> <p>expressed 27:9 271:7</p> <p>extensive 272:22</p> <p>extent 28:22 123:20 169:15 248:16</p> <p>extrapolate 156:1</p> <p>extrapolated 160:2</p> <p>extremely 158:10 289:17</p> <p>eye 93:3</p>	<p>126:11 128:11 128:17 130:13 132:6 135:5,21 136:5 148:25 151:18 152:14 154:5 159:22 170:25 176:23 189:18 208:6 220:11 252:16</p> <p>factor 28:1 48:4 154:13 177:1 202:22 206:8</p> <p>factors 7:22 34:23 46:13 49:20 113:2 205:20 206:1</p> <p>facts 99:14</p> <p>failed 258:4</p> <p>fails 52:4</p> <p>fair 35:14 60:8 71:5,6,8,9 110:20,22 224:1 231:17 264:9,13</p> <p>fairly 143:6</p> <p>faith 94:14,16 110:16 250:6 258:6 267:23</p> <p>fall 104:6 222:4 229:2</p> <p>familiar 54:9 54:13 58:4 63:21,25 65:18 92:22,23 93:25</p>	<p>137:13</p> <p>fantastic 169:7 176:8</p> <p>far 36:10 84:9 150:8 156:1,16 168:18 183:17 278:15 282:2,2</p> <p>fashion 49:11 179:12</p> <p>fast 137:17 154:10</p> <p>faster 282:21</p> <p>favor 27:10 46:14 49:21 183:6 213:17 218:5,5</p> <p>favorable 46:5</p> <p>favoring 127:16</p> <p>fe 1:3,17 2:6,13 2:21 276:11</p> <p>february 121:15 136:10 136:11 163:20 237:9 239:7 240:4,6 242:25 244:7 285:24</p> <p>fed 252:23 253:5</p> <p>federal 48:20 49:5,7,8 53:4 86:9 90:15 109:1 122:3 234:20 235:4,7 235:15 236:2</p>	<p>237:17 239:11 241:22 252:11 252:16 257:7 257:12 260:14</p> <p>feedback 41:17</p> <p>feel 28:13 151:13 261:13 280:12,14</p> <p>feet 78:17 88:25 89:4,5,6 159:14 281:1 288:19</p> <p>fellow 26:21</p> <p>felt 94:7 273:9</p> <p>ferreting 230:21</p> <p>fewer 80:19</p> <p>field 38:15 39:20 41:3 43:7</p> <p>fifth 266:18,21 266:22</p> <p>fifty 224:7 242:16</p> <p>figure 116:22 181:22</p> <p>figures 207:23 226:14,21,23 227:1,4,9 228:20,23,25 230:18</p> <p>file 19:21 20:3 20:21 21:1,13 23:21 56:21 136:15,15</p>
f			
<p>f 6:18 19:13</p> <p>facilities 8:19 11:21 97:3</p> <p>facility 96:14 96:16 97:1</p> <p>fact 26:19 27:7 27:10 98:11 99:4,13 100:7 102:12 108:14 108:25 114:5 117:17,18 118:6 121:6,17 121:19 122:11 122:16 125:5,8</p>			

[file - focus]

<p>137:4 146:17 193:2 240:22 240:25 253:18 253:22 filed 17:17 19:6 19:10 20:10 21:20 30:21 35:5 49:5,6 54:10,20 56:8 58:5,13 63:22 64:7,9,21 65:19,24 66:12 69:15 112:14 112:22 120:22 121:18,19 127:4 136:3,6 146:23 190:10 193:4 195:5 208:7,12 221:12,14 229:12,15,16 229:18 230:14 230:15 236:18 237:8 239:8 240:1,4 253:20 253:23 254:2 254:24 255:1 260:2,15 files 82:2 filing 13:18 20:15 21:7 122:4,5 240:21 filings 82:1 257:4</p>	<p>filter 115:19 116:3 filtered 81:15 114:5 115:8,13 115:14 final 62:6 65:6 65:7 112:18 164:22 173:15 175:8 177:13 204:4 228:2,5 229:13 finally 40:24 52:16 financially 293:15 294:11 find 20:5 21:5 21:18 29:8 41:18 57:2 98:16 127:6 140:18 173:5 282:7 finding 86:16 228:9 finds 191:14,19 fine 29:6 33:23 52:5 105:21 216:2 251:3 255:15 277:14 286:1 finish 113:6,6 138:5 142:16 finished 76:10 76:25 77:2,12 first 9:21,23 10:4,6 12:8</p>	<p>17:18 25:24,25 26:2,7 30:18 30:21,21 31:12 33:8 41:20 44:23 45:6,11 50:3,5 53:19 77:8 78:6,7 81:9,15 85:4 85:11 91:14,16 91:16 109:21 119:25 121:1 121:11,12,19 122:2,5 128:4 131:25 141:23 142:17 156:8 161:16 163:13 163:22 164:3,6 164:9,17 165:9 168:2,3 172:9 175:19 181:23 182:3 193:13 193:14 205:5 207:9 212:2,6 217:14,17 239:8,23 243:16 245:5 246:18 247:13 250:12 251:22 252:4,11 253:19 279:23 283:25 287:20 288:2 289:7 290:18,19 fit 158:15 183:22 238:15</p>	<p>fits 179:13 five 21:14 87:13 139:23 139:23 140:1 140:12 143:10 143:14 157:9,9 159:9 160:16 164:9 166:6 169:3 172:17 220:6 234:5,7 234:8 240:20 277:5 286:2 flared 70:22 flaring 13:20 51:21 52:15 90:10 91:9,10 91:12 285:20 285:25 286:5,8 flashy 180:7 flatten 173:23 flawed 178:24 183:21 fleet 89:6 flexibility 227:25 238:14 flies 116:20 flip 246:18 247:12 255:21 floor 188:6 fluctuate 117:22 fluid 90:7 199:15 focus 134:6,12</p>
--	--	--	---

[focused - function]

<p>focused 116:18 117:24</p> <p>focusing 77:8</p> <p>foggy 170:18</p> <p>follow 118:15 157:3 204:15 256:10</p> <p>followed 245:16 262:16</p> <p>following 178:14 262:20 266:24</p> <p>foot 78:19,19 155:6,9,10 159:15</p> <p>footage 250:5 256:4</p> <p>footages 247:17 247:22 248:8 248:13 249:21 250:9</p> <p>footprint 96:16</p> <p>force 112:4 256:16</p> <p>forecast 83:7 152:18 160:7 183:16 184:18 184:19</p> <p>forecasting 182:23 184:13 204:11</p> <p>forecasts 46:3</p> <p>foregoing 293:3,4 294:4</p>	<p>foremost 172:9</p> <p>foresaw 255:6</p> <p>foresee 275:4</p> <p>forgets 184:3</p> <p>fork 281:15,19 282:1,5 283:13 283:15,17</p> <p>form 178:6 179:12</p> <p>formation 44:11 49:25 50:4 82:2 85:5 90:4 96:8 199:7</p> <p>formations 81:7 95:5</p> <p>forms 52:10</p> <p>forth 19:8 169:25 266:14</p> <p>fortuna 259:25 260:2,4</p> <p>forty 62:11</p> <p>forum 214:19</p> <p>forward 95:24 110:19 123:14 126:10 130:20 131:18 143:1 144:25 152:1 163:10 170:7 175:17,22 178:15 225:17 259:21</p> <p>found 29:10,11 57:3 99:11 170:15 206:2</p>	<p>218:7</p> <p>foundation 28:20 209:6</p> <p>four 14:23 18:3 39:4,5 44:24 45:15 46:23 50:4 69:21 70:2 109:16 110:9 129:2,5 144:8,13,15,17 144:19,23 145:5,8,13,20 147:21 148:13 148:19 149:25 153:10,22 154:12,23 155:6,9,12,13 155:15 156:1 170:10,12,15 170:21,23 171:1 176:25 177:19,20 178:7 179:18 193:25 201:1 201:12,19,20 277:22,25 288:12,14 290:21 291:1</p> <p>frac 11:17 89:6 89:18 90:6 161:18,19 162:9 163:6,10 163:15 164:4 164:16 165:5 244:23</p>	<p>fracked 88:25 89:4,23</p> <p>frame 120:21 148:2,8 231:10 241:23 256:21</p> <p>francis 1:16</p> <p>frequency 173:1</p> <p>frequently 284:10</p> <p>fresh 278:2,13</p> <p>freya 3:13 21:6 41:15 188:18 189:12</p> <p>front 23:12 67:3,21 68:7 105:16 234:16 237:16 247:15 247:19,24 248:5 275:10</p> <p>full 15:11 53:24 57:24 63:15 86:15 138:6 158:18 159:5 159:19 165:3 172:19 180:8 200:11 236:7 236:14 254:3,6 254:16,16 255:11 258:17</p> <p>fully 230:5,24 275:6</p> <p>fun 233:22</p> <p>function 86:13</p>
--	--	--	--

[fundamental - go]

<p>fundamental 178:4</p> <p>further 51:2 82:5,25 113:16 119:12,14 120:2 126:2 138:3,4,12 145:22 146:7 146:10 156:25 185:23 197:17 203:15 204:20 263:21 275:24 276:2 287:2 293:13 294:9</p> <p>furthermore 219:14</p> <p>furthest 116:20</p> <p>future 46:4 171:14 286:2</p>	<p>108:7,20 109:24 110:5 111:5 112:12 173:8 218:21 219:1 227:17 229:5,8 259:22 260:5 264:3,10 264:14,19 286:5,7</p> <p>gathered 149:25</p> <p>gathering 270:4</p> <p>general 7:20 152:9 179:9 201:14 202:11 267:13 290:6</p> <p>generally 80:13 109:19 248:12 250:4 284:10 284:12,12</p> <p>generate 117:14 176:1 194:22,24</p> <p>generated 175:6 195:4</p> <p>gentlemen 41:13</p> <p>geographic 85:1,10 284:11 284:13</p> <p>geologically 284:13</p> <p>geologist 6:11 58:3 95:15,21</p>	<p>geology 13:11 13:16 14:16 23:16 24:10 29:17 30:9 38:16 40:17 58:8 77:21 146:2 170:25 278:4 284:7 291:10</p> <p>getting 74:19 80:5 96:6 120:8 136:13 148:24 233:20 235:14 239:25 241:18 255:22</p> <p>ghost 118:23 130:24 131:4 139:10 140:14 142:3 195:16 195:23,25 196:6,17 287:23 288:8 288:12,18,19 288:24 289:12 289:14 290:3 290:13</p> <p>gist 217:13</p> <p>give 21:10 25:22 28:6,13 28:25 29:8 37:11 39:11 42:5 109:21 123:22 144:1,6 214:15 263:20</p>	<p>given 48:25 111:21 119:5 130:11 131:21 144:4 186:19 223:25 258:21 282:5</p> <p>gives 248:5</p> <p>giving 151:12 192:8</p> <p>glad 218:12</p> <p>go 17:21 30:18 30:21 31:3,16 31:22 32:9 33:16,19 35:1 36:24 76:5 102:19 111:3 113:2 124:1 127:5 132:12 133:8 138:21 140:11 141:1 141:11 145:25 151:16 167:1 174:19 180:2 193:13 199:3 202:6 206:20 206:23 207:7 218:19 233:20 233:21 235:2 236:13,17 247:24 250:8 250:15 252:2 257:13 269:25 277:20 279:23 282:10,21 292:16</p>
g			
<p>g 2:18 6:20 16:1 18:22 19:13</p> <p>gamma 288:4</p> <p>gap 47:22 107:25 220:9 256:18</p> <p>gas 3:2 11:24 13:8 16:22 47:8,10,14 51:12 70:22 71:5 84:7,13 90:10 91:19,21 91:24 96:17 98:15 100:12</p>			

[goal - group]

<p>goal 168:12 goes 20:18 108:20 111:4 132:4,15 283:25 going 21:18 30:18 31:12 32:10,11 47:16 59:21 61:24 62:1 67:5 86:19 87:21 106:6 107:18 110:7 121:19 123:7,16 128:2 128:4,5 130:20 133:3,11,18,25 134:6 135:16 135:17,19 140:2,6,21,25 141:13 143:20 144:9,14,19 145:20 147:2 148:25 151:5 151:14 152:20 157:8,11,14 160:10 161:13 162:14 164:4 164:16 165:1,5 166:2,24,25,25 169:12,13 170:24 173:24 174:9,19,21,25 175:19 176:3 176:12 177:9 177:12,14</p>	<p>178:3 179:17 180:2 184:15 186:5 187:7,13 198:14 215:13 225:25 227:5 228:3 239:17 243:22 247:20 248:15 252:8 256:5,23 263:4 263:8,15 266:11,14 269:24,25 270:1,5,7,10,12 270:22 275:1 275:10 277:16 277:20,24 278:16 280:22 281:21 283:8,8 283:11 286:4 287:22 golden 15:10 116:17,19,21 139:10,11,24 140:4,12,23 142:13 143:11 156:14,19 157:2,13,17 158:5 159:15 170:2 195:25 287:24 288:7 289:12,13 290:13 good 16:2,8,11 16:16,19,23 17:16 36:6,8</p>	<p>37:25 39:6,19 40:23 46:8 53:22,23 57:23 68:3,4 77:24 77:25 84:3 94:13,16 105:22 110:16 110:17 113:24 113:25 114:17 117:8 129:14 129:15 132:11 143:21 144:19 146:12 157:7 185:9 205:10 216:19 232:24 242:17 250:6 255:15 258:5 267:23 277:23 278:18 279:3,4 292:10 goods 111:3 googled 286:14 gordita 156:24 governed 112:2 grab 156:11 198:20 grain 148:25 157:3 grant 51:7 granted 53:12 134:25 graph 11:10,14 88:24 89:3,7,8 199:4,22 200:6 200:9,21,24</p>	<p>201:19 grayling 7:24 8:4,24 9:18 11:6,7,13 82:24 83:8,18 137:11 139:9 206:10 221:5 237:20 245:10 253:7 287:21 288:7 289:21 290:25 great 49:9 146:5 162:22 169:5,22 176:5 210:19 290:7 291:22 greater 47:19 193:25 greatly 115:25 283:15 green 157:6,11 157:18,25 159:21,22 160:4,12 161:14 172:12 174:13 gregory 1:14 gross 10:6,14 10:22 ground 287:5 groundbreaki... 149:25 group 32:23 33:3 37:2</p>
--	---	---	---

[grown - hardy]

<p>grown 115:25 guadalupe 2:20 guarantee 70:21 guaranteed 71:4 guess 25:19,19 35:19 36:1 55:21 76:11,25 89:21 92:22 94:12 97:15 101:13,13 102:2 143:13 143:13,17,18 143:20 179:3 182:13 188:16 197:23 198:14 200:6 201:18 202:4 211:12 211:25 219:8 226:19 229:13 229:25 230:25 234:19 235:2 236:1 238:18 239:3 240:16 244:7 246:19 249:5 250:8 251:8 253:22 255:8 256:8 265:6,7 267:19 268:9,18 280:23 guide 166:24 guiding 256:16</p>	<p>guinnup 126:16 guinnup's 198:8 gun 9:17,19 guys 118:11 231:14 239:4</p> <hr/> <p style="text-align: center;">h</p> <hr/> <p>h 6:1 7:1 8:1 9:1 10:1 11:1 12:1 13:1,2 14:1 15:1 37:21,21,23,24 38:1 39:22 40:17,17 habit 151:11 habitat 255:20 half 44:18,18 72:17,17,20,21 74:1,2,12,13,14 74:15 75:12,13 75:22,24,25,25 76:12,13,15,17 76:20,21,21 140:17,17,21 141:19,23,23 174:15 225:16 225:16 236:2 238:6,6 247:3 247:4,7,7 254:3,4,21,21 255:1,1,9,10 277:12 278:18 286:2 289:3</p>	<p>halfway 235:13 hall 1:15 halves 254:6 hand 109:16,20 173:1 199:4,21 283:5 288:11 handle 36:23 109:24 137:20 276:22 handled 110:5 handpicked 183:22 185:7 handpicking 171:4 hands 37:9 39:9 hang 233:18 happen 31:21 41:23 133:18 134:3 142:22 151:14 245:3 260:21 282:8 happened 102:9 108:3 117:24 162:19 170:17 211:7 happening 148:12 happens 158:17 161:12 165:12 244:19 260:11 happy 154:9 175:22 186:1 192:1 209:17</p>	<p>233:3 259:19 hard 27:25 98:17 108:20 128:3 154:18 hardy 2:3 4:6 4:12,18,21 5:6 5:9,13 12:15 16:8,9 18:7,9 18:12,17 20:20 20:22 21:18,20 21:22 22:1,4 22:22 24:2 25:4,5,14 27:18 28:4,18 29:20,22,25 31:10,11 32:20 33:8,19 34:14 34:15 35:15 36:16,20 37:4 37:7 38:20 43:16,17 49:18 49:19 53:14 62:9 67:12,13 67:18 68:2,14 68:15,24 71:17 71:19 72:12 73:10,12,15,19 73:23 74:12 76:25 77:2,6 77:12,14,15,19 77:23 79:21 80:2 83:20 84:2 85:22 86:4 87:23,24 88:1,20,23</p>
---	---	---	--

[hardy - hearing]

92:5,9 109:10 114:1 115:6 116:10 119:15 119:17 167:6 185:24 186:4,8 186:9,13,17 187:7,15 188:1 188:6,9,12,14 188:15,22 189:6,8,11,15 189:16,24 190:1 191:11 191:25 192:4,6 193:9,17 195:7 195:12 197:2,6 204:21,23 205:3,4,9 206:16,22 207:1,2 209:2 209:4,7,8 210:9 212:22 213:16,22 214:1,24 215:6 215:8 216:2,21 216:23 217:5,7 217:8 218:9,17 218:18 220:25 221:2,3 223:9 223:10,11 225:19,23 226:2 233:2,4 233:6,10,13,18 233:21,24 236:17,19,21 236:23 241:25	242:13,16 246:10 247:11 248:15,19 249:22 251:8 251:10,11,13 251:17,24 252:1 254:8,11 267:2,8,9,17 268:23,25 269:5,11,12,22 270:16,19 271:2,3,5 273:18 274:3 276:5,8,13 277:2,9,14,24 278:12,21 279:2 280:3,4 280:7 282:19 282:23 283:1 291:14,22 hardy's 33:16 227:8 harper 3:20 5:12 9:13,14 37:15,23,23 38:7,12,16 278:22,23 279:3,23 291:15 hart 2:19 head 82:15 137:18 172:6 header 74:24 75:5	heading 61:18 73:25 80:8 hear 35:23 44:22 58:10 67:4 72:10 80:3,21 82:8 84:3 85:16 87:9 96:10 113:20 120:8 187:20 193:18 208:5,8 215:14 225:14 248:17 250:18,22 heard 36:10 85:15 136:25 260:6 hearing 1:5,11 1:14 7:8 16:2,5 16:11,16,23 17:2,5,9,12,15 17:20 18:4,10 18:14,19,25 19:9,17 20:4,9 20:20,24 21:4 21:9,15,23 22:2,6,18,21 23:10,22 24:1 24:18 25:3,12 25:15,25 26:4 26:7,10 27:18 27:19 28:8,17 29:15,23 30:2 30:17 31:9,20 32:7,17 33:2 33:24 34:14,16	34:25 35:7,12 35:16,22 36:1 36:3,7,12,18 37:1,5,17,22,25 38:3,9,14,18 39:3,6,18,23 40:1,5,8,13,18 40:22 41:2,6 41:11,22 42:4 42:11,15,18,24 43:3,7,10,15,18 44:4 49:16 53:5,13 54:17 56:1,16,22 57:11 58:15 59:9,12 61:13 62:14,18,22 63:8 64:7 65:5 65:25 66:22 67:10,15,20,23 68:9,19,23 71:17 72:9 73:12,19 74:7 74:14 75:3 76:2,5,23 77:1 77:10,17 85:7 85:13 87:8,17 87:20 92:8,12 106:9,12 107:8 107:11 119:10 119:15,18,20 119:22 120:1,6 122:23 127:25 129:11,14 138:5 165:22
---	--	---	---

[hearing - hung]

166:5,10,17 186:3,11,14,18 187:6,16,19 188:4,11,18 189:4,7,12 191:13,17,22 197:5,11,13 203:8,9 204:21 204:24 205:2,6 205:23 206:3 206:22 209:2,5 210:12 212:8 212:21 213:1,7 213:24 214:12 214:14 215:5,9 215:14,25 216:3,11,17,19 216:24 217:2,5 218:2,12 220:25 223:8 225:17,21,24 233:7 248:17 248:21 249:1,3 249:7,10 257:17,18 264:11 268:6 268:13,21 269:3,6,10,15 269:17,19,23 270:4,17,20,25 271:14 273:20 276:1,3,4,9,16 277:4,11,19 278:8,11,12,15 278:23 280:3,5	282:17,20 291:16,23 292:2,7,9,15 hearings 16:3 25:8 hearsay 24:21 25:6,8,16 27:20 212:11 212:17 213:18 213:20 214:13 215:24 hello 195:13,14 help 31:14 183:6 helped 191:22 helpful 43:25 44:5 56:24 189:25 210:5 282:24 helps 96:17 221:10 hereto 293:15 294:11 hey 102:19 hidden 204:18 high 135:1 137:12,13 221:6,14,21 241:17,21 284:3 higher 89:9 124:25 157:14 170:11 173:19 182:17 202:12 228:20,23	288:20,20 highest 135:1 157:24 highlight 126:24 256:14 highlighted 220:3 highlighting 112:12 highlights 7:12 highly 152:23 hinkle 2:4,11 16:9 hinklelawfir... 2:7,14 historical 81:5 283:6 history 13:19 13:22 219:9 hit 135:7 161:18,19 162:9 163:6,6 163:6,15,16 164:4,16,21 165:5 168:18 hits 11:17 136:18 163:11 hold 20:5 59:9 59:10,13 68:9 87:8 191:18 213:7 236:4 244:14 holding 100:12 232:6	holdings 13:8 229:5,8 holds 100:19 holdup 275:3 hole 44:18 79:7 79:7,16,16 243:13 248:4,4 248:7,8 250:13 holland 2:19 hollandhart.c... 2:22 honestly 142:8 honor 133:16 hook 114:14 hope 209:22 hopefully 186:25 187:3 241:14 262:16 horizontal 7:15 7:17 44:10,16 82:11 281:23 horizontals 60:7,20,25 61:19 hour 277:12 278:18 hours 168:2,3,5 168:14 houston 39:2 huge 224:20 hughes 3:5 huh 266:23 274:7,11 hung 184:2
---	---	--	--

[hurry - indicator]

<p>hurry 238:19 240:17</p> <p>hurt 162:8</p>	<p>impacts 79:16</p> <p>importance 147:13</p> <p>important 34:1 143:2 149:22 162:11 163:25 173:16 217:10 217:16 254:15 254:19</p> <p>impossible 135:12</p> <p>impression 211:1</p> <p>improve 165:1</p> <p>inability 25:21</p> <p>inaccurate 13:13 14:5 52:22 74:25 152:24 168:16 170:3 177:12 279:19 288:25</p> <p>inactivity 112:7</p> <p>include 24:21 51:15 61:3 64:12 66:5 72:24 73:4 75:17 76:1,16 76:20 87:4 106:23 189:17 193:24 196:22 204:1 213:20 248:13 252:15 268:18</p> <p>included 64:11 69:3 72:21</p>	<p>73:25 81:20 82:17 96:3 107:4 109:1 139:10,20 140:14 147:8 181:5,8 194:20 195:16,25 196:17 209:25 262:22 267:20 268:20 272:17 279:18</p> <p>includes 18:1 19:6 50:22 73:6 75:22 82:25 98:19 195:23 271:15 290:3</p> <p>including 17:2 19:7 30:3 32:2 50:20 52:19 116:17 122:2 130:1 144:23 176:14 184:21 206:25</p> <p>inclusive 287:8</p> <p>inconsistent 46:22</p> <p>incorporate 86:17</p> <p>incorporated 98:19,22 154:7 259:23,25 264:3,19</p> <p>incorporated's 264:10,14</p>	<p>incorrect 32:13 106:10</p> <p>incorrectly 162:3 164:5</p> <p>increase 84:10 154:3,20 174:12,14 176:15</p> <p>increases 84:15 154:23 176:11</p> <p>independently 127:10</p> <p>index 22:7 23:14</p> <p>indicate 71:24 72:2 129:18 262:12 273:1</p> <p>indicated 97:4 99:25 111:22 115:13 117:11 121:1 129:6 145:15 163:2,7 211:18 243:25 273:4</p> <p>indicating 128:18 144:24 215:18 284:24</p> <p>indication 89:22 121:21 263:3,8,20</p> <p>indicative 117:18 168:11</p> <p>indicator 288:22</p>
<p>i</p>			
<p>i24 167:25</p> <p>idea 204:17</p> <p>ideas 258:9,12</p> <p>identification 18:23 22:24 23:2,5,8 24:6,9 24:12,16 30:7 30:11,15</p> <p>identified 70:8 70:10,12 82:4 83:16 272:17 274:25</p> <p>identifies 247:2 248:3</p> <p>identify 72:16 72:19 247:16</p> <p>ignores 13:16</p> <p>iii 98:15</p> <p>illustrates 175:24</p> <p>illustrative 31:15</p> <p>image 158:13</p> <p>immediate 51:15</p> <p>immediately 172:12 225:18</p> <p>impact 11:17 48:12 80:24 108:7 261:20</p>			

[indicators - interests]

indicators 282:1	170:7,15 184:24 190:3	181:13,17 intended 19:22	123:24 124:15 124:17,18,25
individual 103:2	200:21 209:10 220:22 223:2	89:3 269:2 intending	125:1,18,23 126:3,14 132:8
individually 154:8 187:13	227:15 272:17 273:2,5,10	283:23 intends 194:5	132:18 133:19 134:1,10,12
188:8,10 229:23	281:6 infrastructure	194:16 intent 20:3	149:10 184:7 189:23 191:6
industry 108:7 116:5 168:8	12:5 91:19 inherent 204:1	123:17 202:10 223:25 251:3	198:2,5,6,7,8 202:15 208:20
169:1 202:11 inefficient	204:10 initial 48:11	271:12 intention 60:25	218:22,23 219:4 223:7,17
217:21 inequitable	69:22 110:11 181:18 224:10	61:1 145:17 181:3	223:20 224:2,4 224:5 226:10
225:1 infill 45:8	240:1 291:7 initially 44:15	intentional 160:6	227:16 228:3 228:18 229:2,5
181:17 194:8 194:11,13,14	44:23 45:2,7 45:10 51:1	intentionally 158:10	232:14 234:17 244:4,14,20
infinite 280:21 influence 80:14	165:18 166:3 181:14 253:12	interact 178:5 interaction	257:5 259:14 259:16 261:8
81:2 information	255:25 259:8 initiate 134:21	199:16 interest 8:11,14	261:10 262:7 264:10,14,23
9:11 28:7 50:20,20 73:5	258:11 initiated 123:6	8:16 9:5 13:6 14:14 47:20,23	265:9,23,24 266:8,19
75:2 78:13 81:15 84:19	input 30:24 178:3	48:2,23 50:17 71:14 72:20	267:11,24 268:12 269:14
87:1,5 88:9 90:18,20,21	ins 221:15 inset 149:7,10	97:9,21 98:6,7 98:9,10,18	273:13,15 interested
91:25 115:20 131:18 139:3,5	insignificant 47:22 48:4	99:1,10,21 100:6,13,15	12:17,19 230:1 293:15 294:12
140:19 141:4 141:18 147:9	installed 173:6 instance 122:2	101:10,16 103:11 104:8	interesting 29:12
152:4 153:3 157:1 158:3	122:5 176:22 intend 96:4	104:15 105:2,5 105:24 111:8,9	interests 44:14 50:18 73:21
160:19 167:16	131:10 145:13	113:12 123:24	74:6,10 101:2

<p>111:20 207:16 207:21,24 208:2 226:13 227:1,5,20 229:14 266:1 266:11 interference 177:1 interject 157:16 internal 178:11 interpret 200:11 interpretation 152:10 200:9 201:5 interpretations 260:12 interpreted 75:10 200:5 interrupt 270:21 interval 45:7 95:13 245:3 280:22 intervals 45:21 78:6 95:4 invalidates 160:14 investment 169:5 involved 184:8 ip 172:21 173:18</p>	<p>ip24 167:20,22 168:7,25 ips 161:11 ironed 102:8 irrelevant 244:15,17 253:4 isopach 10:7,15 10:23 issue 31:12 48:19 51:9 65:22 87:1 98:2,5 140:9 144:4,4 153:20 214:8 232:4,25 240:17 243:23 285:19 286:3 issued 238:20 239:5,6,12 240:18 253:9 issues 46:11,13 51:8,17 52:4 69:25 80:24 219:13 232:5 245:9 278:6 286:5 290:17 issuing 122:3</p>	<p>january 81:16 115:14 193:2,4 jmclean 2:14 joa 26:9,13,16 26:18 72:6 98:23 99:5,13 104:22 105:25 106:3 111:14 112:1,7 125:21 125:24 126:16 126:25 198:11 209:13,15 210:25 211:20 211:23 212:13 213:9,13 214:3 215:1,22 238:9 243:24 254:5 255:12 262:7,8 262:13 263:5,9 263:11,15,16 263:20,22 264:20 265:22 265:24 joas 105:24 111:22 112:3 126:18 208:15 208:19,23 265:15 job 1:19 110:17 191:21 joel 216:15 john 3:20 5:12 9:13,14 37:23 278:22</p>	<p>johnson 3:4,15 4:9 6:5 16:20 39:14,21,21,25 53:19,22,24 54:1,16 55:13 55:24 56:2,7 67:19,20,22 68:3,10,16,20 68:21 72:9,11 73:16 74:17,19 75:6,11 76:10 77:8 92:14,15 93:23 94:25 97:7 105:4 106:14,16,18 107:15,18 113:16,19 119:25 120:4 120:11 121:25 126:7 127:8 129:17 130:19 134:4 135:3,22 136:21 137:22 138:3 188:13 188:14,19,23 189:17 191:15 193:10,15 197:16 198:17 198:20,22 208:5 johnson's 261:15 johnson.com 3:7</p>
	j		
	<p>j 37:23 39:22 jackie 16:9 jaclyn 2:10 james 1:18 35:20,21 293:2 293:18</p>		

[joint - knowledge]

<p>joint 50:23 99:18 261:25</p> <p>jones 3:3 16:19 16:20,24,24 17:1,4,8,11,14 33:9 36:9,11 67:6,6,7,11 197:7,9 270:20 270:23 271:1 292:12,13</p> <p>judge 266:10</p> <p>judgement 28:19</p> <p>juggle 133:11</p> <p>july 238:20 240:19</p> <p>jump 143:25</p> <p>june 145:3 237:21 239:6 240:19 253:8</p> <p>justice 90:13,22 285:24 286:15 286:17</p> <p>justification 180:22</p> <p>justify 174:17</p>	<p>kelly 3:21 10:25 11:4 37:16 38:1,1,8 38:13,17 256:7 291:5,6</p> <p>kicked 275:13</p> <p>kind 72:1 98:17 101:8 102:24 105:9 110:17 111:10 114:3 125:14 128:12 129:6 139:23 140:1 151:8 156:12 169:24 175:10 180:17 180:17 183:13 200:3,20 202:8 230:8 252:9 255:6 283:25</p> <p>kinds 241:9</p> <p>knew 125:25 126:19 240:15 253:4</p> <p>know 17:5 20:13 43:24 49:7 56:17 57:1 70:11,16 70:17,18,24 71:6,7,9,10,11 72:22 82:14 84:14,15,17 85:14 91:23 92:1,4 93:7 95:23 96:25 98:7,13 99:5,6</p>	<p>99:15,24 102:1 102:17 103:3 103:19,24 104:6,24 110:7 110:18 111:15 112:15,16,24 121:13 123:2 123:17 124:3 124:13,18 125:3 126:10 126:12,14,19 127:1,2 128:11 128:15 129:7 130:11,21 132:1,7,13 133:2,14,16,22 135:4,8 136:4 137:19 141:13 142:16 143:16 147:20 150:21 151:14,18 154:17 157:8 157:13 159:1 160:11 161:2 161:20 163:8,8 164:19 165:1,7 167:10,12,25 168:14,22 169:3,4,11 170:20 171:7 171:10,14 172:8,23,25 173:13,21 174:1,2,4 175:1,2,15</p>	<p>176:3,7,11,19 176:23 177:25 178:1,12,20,23 180:25 181:1,5 181:7 182:11 183:15,16,21 184:3,5,9,23 185:8,24 186:4 186:25 190:17 192:24 193:13 194:2 200:10 200:18 202:24 203:1 204:12 214:13 220:8 221:13 226:2 227:4 230:9 232:2 234:9 236:2 238:2,12 239:10 245:3 247:20,21,21 250:15 251:2,3 253:2 258:14 261:15 265:13 268:9 270:9 277:20 278:3,5 278:15 280:15 280:21,22 281:4 282:8,18 282:24 284:6 285:1 286:5,7</p> <p>knowing 204:17</p> <p>knowledge 70:7 71:3,24 72:3 92:20,22</p>
<p>k</p>			
<p>k 38:2 39:21 41:1</p> <p>kasper 294:2 294:15</p> <p>keep 31:17 140:25 164:12 228:9 270:22 283:8,8,11</p>			

[knowledge - levels]

<p>93:1 94:12 168:25 226:9 245:19 280:17 293:10 294:6 knowledgeable 71:23 260:24 known 161:18 202:22 knows 130:12 243:21</p>	<p>85:10 175:6 281:2 landman 6:6 54:4 94:4 105:17 262:25 landmen 98:3 240:8 lands 54:13 63:25 65:22 223:20 287:3 language 238:2 238:8 255:12 lapse 69:21 112:7 large 167:8 200:13,14 larger 189:13 284:11,12 lastly 121:17 225:3 late 70:2 109:14 112:10 121:16 146:23 172:16 252:14 lateral 88:25 89:4,5,5 159:15,15,17 laterals 247:18 latest 241:16 272:1 latitude 28:11 law 3:13 lawsuit 90:23 91:5 286:20</p>	<p>lawyer 106:6,6 lea 44:12 217:21 222:10 222:11 lead 201:11 leading 202:18 learn 148:24 163:9 learned 112:10 164:25 165:7,9 lease 8:6,7,8,10 8:13 123:13 235:20 237:17 239:4,4 252:21 257:7,9 258:25 leased 109:6 235:20 252:21 257:8 leases 109:1 121:10 122:3 234:20 235:4,7 235:15 236:2 238:20 239:5 239:11 240:18 252:12,16,18 252:24 253:3,9 257:12 272:9 leave 276:14 led 220:8 left 73:17 74:22 74:23 81:14,20 85:11 88:24 89:3 124:9 139:6 150:8 153:23 154:11</p>	<p>156:12 162:12 166:15 172:17 172:25 199:4 199:21 211:6 277:12,22 281:17,19 283:9 287:25 288:11 289:11 legal 90:16,24 212:9 232:1 248:16,19 legality 106:5 legion 71:20 105:9 length 89:6 159:15,16,17 lens 227:3 lesser 47:4 202:19 lesson 164:25 165:6,8 letter 9:6 13:7 26:22 27:8,11 56:25 99:6,12 105:13 127:16 209:25 210:3 216:5 217:11 217:13,14,17 217:24 223:25 238:9 261:23 262:17,20 letters 12:16 level 96:16 levels 200:4</p>
l			
<p>l 13:2 14:1 15:1 37:21,21,21 38:2,2 39:21 40:3 l.p. 100:12 labeled 93:17 93:19 197:23 281:18 286:16 lack 28:20 51:20 80:13 258:5 lacking 51:10 laid 108:12 land 13:4 14:11 23:15 24:4,8 29:16 30:5 39:22 54:7 67:19 75:9 77:9 80:25 120:4 135:24 218:15 224:11 228:20,23 landing 3:5 81:24 85:1,4</p>			

[life - look]

<p>life 111:2 235:23 lift 168:4 173:9 lifting 173:5 lifts 173:11 light 111:19 131:15 lightest 172:12 likely 92:14 97:22 112:6 173:4 177:6 183:5 221:20 limitations 92:2 limited 15:7 line 8:23 68:6 68:16,22 70:1 92:14 95:20 107:19,24 113:6,7 116:12 137:18 157:3 158:9,22,23 159:6,21 160:10,11 161:14,24,25 173:18 174:14 189:3 219:23 220:9 223:3 229:9 233:5,15 234:3 237:14 237:23 238:23 239:3,18 242:10 251:20 252:5,15 256:13,20</p>	<p>267:14 271:25 linear 151:20 179:4 lines 94:1,2 161:11,15 271:13 list 19:5 73:24 137:12,13 176:14 221:6 221:10,21 237:2 241:18 241:21 listed 72:25 73:3 74:4,22 81:23 100:13 107:5 117:18 135:5 141:21 208:15 261:3,6 275:6 289:22 little 21:12,14 34:17 37:19 44:2 46:16 68:19 85:7 86:2 96:1 99:3 109:17 124:24 131:13,16 144:1,6 147:17 170:18 218:23 224:7 240:24 254:9 290:22 lizard 255:20 255:20 llc 2:2 16:10 llp 2:4,11,19</p>	<p>locate 208:6 located 82:24 247:21 250:12 location 1:15 7:20 53:3 79:16 84:25 85:1,2 86:10 89:23 133:9 170:13 247:17 248:4,4,7,8 250:13,14 locations 44:19 52:2 79:7,7,16 130:16 133:12 255:21,23 locator 9:15 log 224:13,21 281:17,18,19 281:20 283:17 288:3,4,5 290:6 logic 46:8 178:19,23,24 182:11 logical 148:9 164:20 logs 288:21 long 28:24 47:12 49:8 57:5 128:16 133:24 136:9 136:21 168:11 168:11 177:9 219:9 232:9,11 277:20 278:15</p>	<p>longer 137:3 174:15 look 68:5 69:5 71:13 72:13 73:20 78:1,2,4 80:7 81:4 83:3 84:5 86:24 87:7 88:6,19 90:9 91:18 100:11 111:24 121:9,17 124:5 126:2 128:9 139:18,24 151:15 152:7 152:11 155:25 157:1 158:2,4 159:4 160:10 162:11 164:1 169:12 170:1 170:24 175:23 177:9 179:9 180:2,18,20,25 182:10 184:9 184:10 185:9 185:11 189:1 189:24 193:20 194:3 195:15 195:22 196:3 202:13 204:4,5 208:25 229:7 248:3 256:19 257:2 275:11 280:1,10 281:10 284:21 286:23 287:13</p>
--	---	--	--

[look - make]

<p>289:24 looked 71:22 100:20 116:16 151:6 203:2 looking 18:25 21:25 25:23 27:11,12 42:12 72:14 75:7 91:13 93:14,16 99:22 101:14 115:3 117:11 118:19 120:18 129:17 133:13 134:5,18 147:6 147:20 148:2 151:13 158:8 160:9,17 167:2 167:14 168:19 169:19 173:3 188:16 220:23 221:4 222:14 227:4 247:19 250:23 269:16 287:14 looks 17:17 20:6,25 21:23 29:11,16 39:4 43:4 69:6 72:19 73:23 75:15,16 81:12 81:19 113:4 142:19 161:21 170:6 172:21 173:3 199:2 224:15 247:23</p>	<p>248:10 288:1,4 loop 218:3 loose 153:15 lose 48:23 lot 104:5 108:11 113:2 113:10 115:22 129:3 135:17 141:14 145:20 162:12 168:1 176:22 179:6 194:25 196:3 225:14 234:10 235:19 239:17 239:20 240:8 246:4,5 256:23 257:1 loud 26:13 louder 68:19 86:2 lower 11:11 46:25 50:10 73:17 81:20 161:17 lp 13:8 lucas 3:16 4:19 6:13 40:3 41:20 63:11,17 luke 114:19 lunch 185:25 186:1,6,8 210:21 lusk 53:4 82:13 86:8 106:24 206:13</p>	<p>m m 2:10 40:4,4 ma'am 71:16 78:4,9 79:5,10 79:13 80:4,12 81:2,18,21 82:9,19 83:19 196:14 266:22 281:8 285:18 286:18 287:12 287:15,17 291:13 made 24:23 26:21 27:25 51:23 95:3,10 99:14 112:4 118:6 125:24 152:5 163:12 173:12,16,21 212:23 227:2 233:1,17 234:10 235:25 272:23 magenta 161:14 magnitude 264:16 mail 12:20 main 44:20 232:4 250:23 maintain 221:9 221:16 238:13 244:13 maintains 137:14</p>	<p>major 51:9 154:15 majority 45:16 46:24 227:5 make 20:2 21:1 31:4,7 33:5 36:3 42:22 43:25 45:24 48:18 55:24 56:23 58:18 61:8 64:25 66:19 95:22 111:10 112:21 113:5,6 115:17 117:9 122:18 122:21 123:22 134:2 135:13 135:15 136:2 143:16 144:21 148:10 152:11 152:11 155:8 157:18 158:11 160:2 163:10 164:2 169:17 174:5 180:18 180:20 182:10 183:3 185:9 187:11 189:13 194:9 204:4,16 204:16 205:17 205:19 215:12 231:15 246:19 252:21 262:19 276:20 277:21 278:1,16</p>
--	---	---	---

[make - meant]

<p>288:10 makes 48:1 170:9 179:10 278:5 making 132:23 133:2 153:20 156:9 159:13 213:1 246:4,6 282:4 284:5 288:23 management 7:11 52:17,20 119:6 manages 130:4 manner 142:9 map 7:20 8:6,7 8:9 9:15,16 10:5,13,21 81:20 139:7 149:7,10 170:12 179:15 193:23 283:8 287:25,25 288:11 maps 10:7,15 10:23 marathon 220:2 256:15 march 12:23 48:23 51:1 81:25 136:11 163:1 220:4,5 271:20,22 mark 19:22,25 20:1 142:20</p>	<p>marked 18:23 22:24 23:2,5,8 23:20 24:5,9 24:11,15 29:5 30:6,10,15 40:12 41:9,21 42:13 54:19,25 55:4,8 56:24 57:1,4 58:17 58:19 64:8,17 66:2 120:15,18 131:19 138:24 146:24 167:3 171:20 207:9 markings 69:7 massively 184:20,20 match 74:23 84:22,23 256:2 267:5 material 149:16 150:1 151:13 203:25 math 177:15,15 177:18 179:25 182:12 201:22 202:2 mathematical 179:4 matter 1:5 32:9 90:16,24 99:15 122:11 212:12 212:17 278:11 279:6</p>	<p>matters 16:18 36:15 46:9 54:7 maximum 168:5 mbo 154:25,25 mcclure 3:11 4:13 5:7,11 31:23 32:1,4,8 32:11 33:9 76:7,9,23 77:2 77:11 92:10,12 92:17 93:21,24 94:21,23 105:20 106:9 106:14,17 107:8,12 110:17 111:7 111:12 119:18 119:20 123:21 124:7 125:10 126:8 186:21 197:12,13,18 198:16,21,24 203:5,10 214:15 257:17 257:18,21 267:2,7,16 268:3,7,8,16,22 269:15,17 276:1,2 278:8 278:10 291:20 292:5,7 mckay 261:4,5 261:8,17</p>	<p>mclean 2:10 16:9 18:7 20:25 34:19,20 mean 17:6 22:19 25:18 34:1,25 61:5 93:11 95:8 101:7 102:12 115:22 118:17 119:9 127:8 128:19 133:14 133:24 135:7 135:10,16 142:24 143:16 149:14,18 150:24 151:25 171:17 174:10 178:15 179:8 181:6 183:15 184:9 194:11 199:19 223:21 230:16 233:12 242:5 243:8 250:22 251:1 254:15 257:11 262:14 275:14 278:1 meaningfully 258:4 means 41:13 44:4 48:5 162:1 194:14 233:7 meant 233:11 274:18 285:6</p>
--	---	--	--

[measures - monthly]

<p>measures 286:3 meet 123:7 271:19 meeting 47:14 meets 25:6 memory 170:18 249:19 275:10 mention 52:4 91:4 183:12 286:19 mentioned 49:23 134:4 145:11 163:4 179:2 181:2 190:2 191:6 207:19 210:24 241:20 245:13 message 169:24 method 162:9 173:5 methodology 170:22 179:24 methods 150:22 metric 167:23 169:1 metrics 183:22 mexico 1:1,3 7:18 52:24 53:2,8 60:24 61:2 81:12 83:5,15 90:14 90:22 117:15 117:16,20 118:11,20,23</p>	<p>129:19,20,24 130:5,20 131:7 131:11 134:7 192:18 222:5 225:13 253:6 260:12 286:8 287:4 293:20 mic 86:1 microphone 16:13 37:6,19 38:22 85:18 205:24 microphones 41:16 middle 200:21 200:24 258:20 midstream 51:9,17,19 52:14 69:25 70:1,6,8,14,20 80:14,18 84:12 92:2 109:11,15 109:22,23 245:9 mile 12:7,10,12 206:10 235:6 miles 53:3 83:17 86:9 116:23 192:12 193:24 195:19 195:24 290:4 million 52:5 91:2 177:23 178:2,22 180:19,20</p>	<p>182:2 201:2,21 202:1 286:1,2 mind 75:20 175:21 176:17 233:4 246:11 251:10 mine 62:1 minerals 1:2 105:11 minimize 14:7 miniscule 168:13 minoco 97:22 98:14 261:4 minus 75:22 124:18 150:7 minute 21:10 47:18 85:23 87:13 166:6 218:19 minutes 277:5 277:17,22 278:7,7 miscalculation 160:6,13 171:7 miscalculations 180:13 mishap 164:10 misled 211:18 mispronounc... 97:22 misrepresent... 178:4 211:14 misrepresented 178:25</p>	<p>missed 56:1 missing 74:6 222:19,22 250:9 266:25 268:18 misspoke 76:12 76:19 misstep 162:4 mistake 157:22 mister 278:3 291:4 misunderstood 226:16 230:25 modern 82:20 116:6 modifications 55:15 60:4 64:24 66:15 moment 29:9 40:14 42:1,5 55:9 57:18 167:1 212:22 235:1 252:8 monitoring 16:21 17:6 montezuma 2:5 2:12 month 83:6 142:16 152:17 152:17 172:17 172:17,19 174:15 208:11 238:20 monthly 172:10,14,15</p>
---	--	--	---

[monthly - new]

<p>172:21,24 173:4,4 months 59:7 118:20 150:8 150:18,20 151:16,16,19 152:17,23 157:4 158:6 160:7 163:12 184:14 189:18 221:22 240:20 241:18,20 morning 16:2,8 16:11,16,19,23 31:24 37:25 53:22,23 57:20 57:23 68:3,4 77:24,25 84:3 113:24,25 146:12 276:12 276:23 277:1 277:10,18 291:18 motivated 122:1,8 123:14 244:21 271:8 move 55:19 62:2 77:16 79:23 113:16 114:2 118:14 118:15 123:14 123:16 126:10 130:7,15,16 133:22 135:19 144:25 153:1</p>	<p>154:9 155:11 175:21 193:23 210:9 225:16 243:13 movers 121:2 moves 244:4 moving 95:24 129:10 147:5 155:23 163:10 169:13 259:21 multiple 92:24 122:16 153:6 160:22 162:5 162:17 181:3 224:22 228:7 252:22 255:4 multiplied 128:22 170:20 multiply 157:9 157:12 177:19 177:23 178:21 mute 41:16</p>	<p>natural 1:2 nature 24:19 98:4 103:19 104:4 110:23 111:2 121:3 132:2 212:5 navigate 128:2 nearby 117:2 185:8 necessarily 27:19 116:4 155:5 200:16 necessary 31:25 33:5 49:5 155:17 252:20 need 28:11 60:15 96:25 98:10 107:1,1 110:4 112:17 186:7 213:5 216:5 230:24 235:6 238:15 238:24 242:13 268:2,7 270:6 270:11 276:20 needed 59:7 117:23 120:24 211:23 273:4 291:2 needle 244:4 needs 106:15 212:19 negative 108:21 202:6</p>	<p>negatively 48:12 neglected 260:1 negotiated 94:13 negotiating 104:1 negotiation 111:5 113:4 258:6 negotiations 94:17 99:15 110:16,24 267:23 272:21 272:23 neither 60:17 293:11 294:7 net 48:24 neutral 111:21 244:1 neutralized 198:10 223:22 224:2 265:12 never 140:17 258:10 273:3 nevertheless 25:21 236:3 new 1:1,3 7:18 46:17 52:24 53:2,8 60:24 61:2 81:12 83:5,15 90:14 90:22 104:11 104:11,12 107:3 117:15</p>
	n		
	<p>n 2:1 3:1 4:1 16:1 37:23 38:1 39:22,22 40:17,25 154:12,12 name 37:18,21 39:20 53:25 57:24 63:16 65:12 67:17 260:2,4 named 26:19 217:19</p>		

[new - numbers]

<p>117:16,20 118:11,19,23 129:19,19,24 130:5,20 131:7 131:11 134:7 143:6 192:18 222:5 225:12 253:5 260:12 268:15,19 286:8 287:4 293:20 night 21:13 99:11 100:2 103:22 111:16 112:10 276:10 nine 151:19 152:23 158:6 179:6 184:14 nineteen 87:18 283:11 nm 1:17 2:6,13 2:21 nmocd 62:2 139:20 210:5 229:7 238:12 284:25 noise 80:6 nominate 108:25 123:11 123:14 235:7 252:22,24 nominated 109:7 121:10 235:20 252:16 252:23 253:2,5</p>	<p>253:6 257:8 nominating 122:3 252:18 non 8:20,21 140:3 noncomparable 116:1 nonstandard 44:9,16 237:24 nontransparent 46:2 normal 198:2,4 260:9 normally 278:13 north 2:20 44:19 45:1 156:23 253:13 253:16 255:17 255:17,21 northeast 75:14,23,23 76:18,18 northern 3:2 16:21 67:7 105:8,10 112:10,11 124:23,23,24 125:6 191:6 197:9 218:21 219:1,9 223:17 223:19 224:5 226:11 227:17 227:21,21 228:11,17,19</p>	<p>228:22 229:1 229:11,16 230:1,1 231:2 231:14,24 232:4 245:12 245:14,17,20 245:24 264:3,9 264:13,19 273:15 northern's 112:24 124:21 125:1 191:5 230:13 273:13 273:15 northwest 75:14 nos 1:9 notary 293:19 notated 125:23 notation 125:25 note 109:14 144:24 149:22 173:6 215:9 224:18 247:15 259:13 260:1 288:9 289:10 290:10 noted 265:19 notes 79:6 93:13 216:4 notice 6:18 7:8 12:16,18 novel 165:12</p>	<p>november 239:19 null 169:9 number 2:20 16:5 56:25 57:9 59:8,15 60:9,14,20,22 61:25 62:7,19 68:5,12 71:14 72:13 75:17 78:1 80:7 86:24 88:3 90:9 118:5 124:21 147:6 148:7 150:24 151:18 154:3 157:9 159:5 160:17 161:22 164:8,20 167:4 177:17,25 178:18 180:7 180:16 181:8 181:25 182:6,7 182:9 198:5 199:10 204:4 206:4 222:2 245:13 268:10 272:12 281:18 282:18 283:2 numbered 153:13 numbering 206:6 numbers 20:1 59:6 62:3</p>
---	---	---	---

[numbers - okay]

84:22,23 100:24 101:6 103:12 124:8 147:17 149:14 151:7,9,23 154:7 168:20 168:21 175:8,9 180:13,23,24 184:4,20 192:13 199:24 200:1 226:23 228:8,9,14,16 nws 285:10	214:13 215:10 216:1 218:3,7 219:16 248:18 249:4,11 objections 17:7 18:15 22:14 29:24 30:1 43:16 269:6 obtain 286:13 obtaining 49:4 obvious 281:3 obviously 70:11 94:3 100:1 102:9 103:12 106:2 108:23 112:5 128:19 131:3 145:19 151:20 152:20 182:6 238:11 276:17 279:25 occur 84:16 occurred 106:4 163:9,11 172:18 190:16 199:18 occurs 158:9 168:14 ocd 13:17 52:11,11 122:24 206:6 225:10 285:14 285:15 ocd's 21:3 82:1	october 49:6 119:7 136:7 137:7 161:15 163:4 239:19 offer 135:23 215:13,20 offered 212:11 212:16 offers 217:14 office 39:1 officer 293:2 offset 8:22 9:23 10:10,18 11:18 156:22,23 158:21 173:8 173:18 offsetting 45:25 116:16 oftentimes 208:12 230:22 oh 26:10 79:3 97:9 114:8 133:3 141:1,11 157:20 172:6 179:8 197:19 197:23 199:3 229:18 249:7 251:15 254:10 oil 1:3,6 3:2,11 3:13 12:6 13:8 13:21 16:4,21 38:4 40:19 42:7 43:20 51:12 84:7,12 98:15 100:12	108:7,20 109:24 111:4 112:12 115:23 155:20 158:20 168:12 177:17 218:21 219:1 225:13 227:17 229:5,8 259:22 260:4 264:3,9 264:13,19 287:8 okay 17:9,12 17:15,20 18:4 18:10,19 19:9 19:17 20:6,9 21:9,20,23 22:6,21 23:13 23:22 24:1 25:3,12,15 26:12 28:8,17 29:6 30:2 31:9 32:7,16 33:2 34:16 35:16,17 35:23 36:1,7 36:14 37:5,8 37:17 38:3,14 39:3,7,18 40:8 40:13,22 41:6 41:18 42:5,6 43:11,21 57:12 59:12,20 60:6 61:8,12 62:22 66:23 67:10,18 73:9 74:15,15 75:3 76:5,22
o			
o 16:1 37:23 39:22,22 40:17 41:1 o'clock 277:23 292:3 oath 33:5 56:3 190:22 205:7 206:24 207:3 278:24 279:10 280:6,8 object 214:7 248:15 objected 28:18 objecting 213:14 objection 18:18 22:11,19,20 23:18,23 24:19 25:16 27:7,20 27:21,23 43:17 212:9 213:17			

[okay - operators]

77:10,19,19,20	200:6,20 203:5	283:12,23	operating 2:2
78:2,24 79:19	204:24 205:2	285:19 287:18	16:10 34:2
79:21,24 80:5	207:13 211:25	291:6,14,16,24	50:23 52:18
80:7,24 83:20	213:14,24	292:2,5,9	59:6 99:18
84:5 85:6	215:5,15,25	old 260:13	110:2 209:20
86:15,19 87:23	216:3,19	older 82:20	210:4 259:19
88:8,14,17,19	217:13 218:1	115:23	261:25
91:1,4 92:10	223:1 224:17	omitted 206:14	operational
92:15 93:1,14	226:16,19	247:23	7:14 86:17
94:12,19,19	229:18 231:6	once 45:12 57:1	168:15
95:17 96:2	231:13,19	78:12 140:9,16	operations 7:10
97:5 99:21	232:9,13,21,24	140:17 142:15	14:6 117:15
100:8 101:7,22	233:19 235:9	142:23 187:5	118:10 275:23
102:6 103:13	236:16,24	221:24 230:17	operator 7:16
106:8,12,14,18	239:10,14	256:22 257:5,7	7:19 26:14,19
106:23 107:7	240:6,10,16	257:11 262:7	47:13 49:14
107:23 113:21	241:19 242:23	ones 41:16	52:17 59:5
114:13 116:9	243:21 245:12	153:12 157:25	61:1 78:12
119:12 121:9	245:22 246:2	258:9	80:19 110:7
133:14 137:16	246:18 247:10	online 47:11	122:23 128:18
138:11 139:6	247:24 248:12	161:10,13,15	148:9 202:25
140:25 145:11	249:5,10	163:1,3,3,5,14	204:7 211:8,23
146:9 149:9,13	250:21 252:1	163:20 164:3	212:14 213:11
163:18 166:5	252:14 253:7	172:3,16 190:8	213:12 214:4
167:13 186:13	253:11 254:1	208:13	215:2,23
187:16 188:15	254:19,24	op 140:3	217:15,19
188:23,25	256:7 258:2	open 23:11	244:21 250:10
189:1,11,22	259:1 261:21	252:23 253:5	254:19 255:8
190:14 191:5,9	263:24 265:8	292:3	258:20
192:4,11,17	266:6,17 268:1	opening 4:5,6	operators
193:9,20,23	268:3,6 269:10	43:25	45:16 46:20,24
194:16,20,25	270:16,25	operate 50:13	108:11 136:22
196:15,17,20	271:3,12 272:2	82:10 118:1	147:15,20
196:25 197:4	275:8 276:4	operates 51:14	148:7 161:1
198:13 199:21	279:22 281:10	52:24 53:3	

<p>operatorship 109:20 112:6 134:15,21,25 221:18 258:21 271:19 opinion 34:19 46:1,7 47:7 93:6 97:17,19 97:19 100:22 100:23,25 101:25 102:4 102:22 103:5,9 103:9 111:6,19 112:20 258:4 259:10 288:25 opinions 228:7 260:17 opportunities 220:15 opportunity 24:22 144:3 169:18 204:6 oppose 210:3 opposed 254:3 opposes 217:18 opposing 66:20 opted 204:8 optimal 236:15 255:4 258:15 option 255:6,7 orange 159:21 160:3,12 172:15 oranges 173:9</p>	<p>order 32:18 44:9 45:13 97:1 101:4 109:3 121:7 122:18 136:7 170:20 174:8 174:15 175:12 176:1 180:11 181:14,19 192:23 211:2 220:19 231:24 242:6 252:20 264:15 275:4 ordered 112:5 orders 102:13 102:14 122:24 135:9,18 organization 129:7 organized 21:13 orientation 9:16 79:12 original 22:14 120:21 123:18 124:13 125:21 165:23 209:11 220:21 224:10 251:20 282:14 originally 69:9 120:25 124:7 212:13 218:4 outcome 236:6 293:16 294:12</p>	<p>outline 19:1,6 outlined 73:7 147:11 150:17 outlines 66:5 286:1 outperforms 14:8 50:9 283:15 outside 144:22 206:15 240:24 251:5 267:15 overall 200:6 202:6,19 268:17 281:25 overbuild 97:2 overlap 200:19 overperformi... 185:14 overriding 8:16 overruled 27:22 overview 7:13 own 17:10 34:8 34:18 100:13 103:7 126:5 132:22 183:6 184:19,24 203:18 204:14 owned 113:13 124:15 125:18 273:13 owner 262:8 265:4 owners 8:12,15 8:17 9:5 72:16</p>	<p>72:20 97:21 111:8 259:3 266:20 267:11 267:24 268:12 269:14 ownership 8:6 8:10,13,22 9:11 13:6 50:19 71:14 72:15 73:4,6 73:21 74:6,10 74:17,20,22 75:1 80:25 97:9 100:22 111:9 189:23 190:2 207:16 226:25 243:23 258:25 owns 234:5</p>
p			
<p>p 2:1,1 3:1,1 16:1 37:24 p.m. 21:2 186:5 187:20 292:16 292:19 packet 54:20 56:20 58:14 64:8,11 167:4 216:5 235:20 267:1 269:20 pad 52:2 pads 44:17 page 4:2 17:25 19:1,5,10 20:18 22:3</p>			

<p>23:13,21 26:5 26:6 29:6,12 41:23 42:2,12 42:14 56:20,21 56:24,25 57:3 57:9 59:10,21 79:1 93:12,15 93:21 94:20,21 95:2 97:8 100:9 106:19 106:20 167:4,7 167:9,15 197:21 199:1 206:4,5 225:7 225:10 229:8 233:19 242:15 247:1,13,16,20 247:24 248:1,5 251:20,22 257:24 258:24 261:22 263:25 266:4,16 267:7 269:1,3,11 270:2 282:12 282:18 283:2,6 pages 17:23 20:7 21:24 29:13 57:5 247:12 paid 257:9 palmillo 118:24 pandemic 220:8 panel 33:9,14 33:14 36:23</p>	<p>57:14 63:7 67:6 77:3,17 77:19 92:11 188:7 paper 199:6,11 202:24 203:2 par 159:1 160:3 paragraph 78:25 79:2,3,6 95:2,8 217:18 244:23 257:25 258:3 paramount 134:12 paraphrased 209:23 paraphrasing 102:8 260:7 parent 140:7 200:16 part 55:16 64:15 74:4,15 118:10,17 162:11 181:7 184:5 213:13 217:9 220:9 228:21 231:19 234:19 248:13 263:1 272:8 participate 102:14 140:6 particular 66:25 67:16 116:19 130:6</p>	<p>131:17 169:16 parties 12:17 12:19 18:6 32:3 35:8 50:22 92:25 98:5,10,12,13 100:1 102:13 103:20 110:24 111:21,23 125:20,24 129:2 186:7 191:23 208:23 236:15 243:25 244:2 258:16 261:18 264:7 267:15 276:23 293:12,14 294:8,11 partner 253:1 partnered 219:11 partners 98:3 parts 23:19 139:25 163:25 167:2,8 217:17 party 30:17 63:22 84:12 102:17,19 103:24 112:3 113:13 121:10 126:15,17 132:4 168:19 191:6 192:23 255:8 260:23 260:25</p>	<p>party's 112:6 pass 113:19 passing 234:24 past 38:5 53:2 100:21 199:11 206:12 207:20 231:14 path 259:20 paths 255:4 pattern 45:16 46:23 patterns 80:14 pay 10:7,15,23 52:5 paying 129:15 pdf 19:5 23:21 41:23 42:2,14 56:20 167:5,7 167:9 251:22 282:13 pdfs 167:7 pe 42:15 peak 167:23 174:16 pecos 1:15 penalty 37:12 39:12 pending 119:7 137:14 190:24 191:1,4 220:18 232:15 people 33:10 93:5 179:14 percent 47:23 47:25,25 48:3</p>
--	--	--	---

[percent - pipeline]

50:18 98:8 99:9 100:13 103:15 104:19 105:15 124:15 124:16,19 125:2,4,13,22 126:4,6,12,12 126:15,17,21 126:22,23 150:6,14,23 151:17,17,22 180:8 197:25 198:2,5,6 218:23,24 224:7 227:19 228:16,17 229:1,2,9 232:14,14 260:20 264:15 264:22,23 265:3,9 266:8 266:12	perform 160:3 performance 7:14 12:9 13:14 15:8 80:11 81:5 83:10 88:12 154:19 155:14 156:19 158:4 159:4 163:17 167:19 168:9 172:2,4 184:25 185:1,2,4 202:21 283:7 performed 154:1 155:19 158:12 performing 171:6 174:10 185:12 performs 185:4 185:18,19 period 104:3 142:16 150:4 152:12 177:7 177:11 202:10 204:3 231:6,9 234:18,21 235:13 275:13 275:14 periods 156:10 168:10 perjury 37:13 39:13 permian 7:18 52:19 118:14	130:1,5,9,17 154:2 155:20 199:7,12 permit 121:13 121:15 135:16 221:11 242:6 permits 49:5,7 49:8 121:12,16 133:6,7,10,12 135:6,8,9,11,15 135:17 136:4,6 136:9,12,15 192:8,11 220:19,20,21 221:14,18,20 221:24 222:7 236:18 240:25 241:13,17,22 permitted 280:25 permitting 8:5 192:21 perpetuate 122:18 132:3 132:13,14,20 132:23 133:16 133:25 135:11 perpetuated 132:10 perpetuating 134:13 person 24:23 27:25 36:2,23 66:24 105:23 184:7 213:21	214:10 245:8 251:2 259:24 276:11,21 personally 82:3 239:13,23 240:8 244:7 persons 97:15 101:17 103:2 259:6,11 perspective 158:19 183:3 223:23 persuasion 34:1 petroleum 6:5 6:10,13,16 15:3 30:13 54:7 65:8 phase 163:1 phases 165:13 phone 262:24 physical 106:3 pick 222:4 picked 50:14 picking 45:25 85:18 picks 62:15 picture 73:8,13 74:3,21,23 pictures 73:14 piece 168:13 pieces 272:16 pipeline 70:22 84:11
--	---	---	--

[piqued - porosity]

<p>piqued 234:17 piques 202:14 place 51:12,19 84:7 91:21 109:13 118:15 118:15 122:21 165:9 219:1 placed 182:9 placement 8:8 plan 9:17,19 11:8,9 14:13 31:17 44:21 46:22 47:3,7 48:6,11,13 50:6 68:6 78:16 95:24 96:19,24 122:13 127:16 130:22 131:2 142:5,7 144:25 148:14 160:20 189:2 221:23 222:12 243:15 257:13 264:21 276:15 288:6,6 planned 130:23 265:20 plans 130:19 136:13 192:18 210:7 217:20 220:17 222:4 238:15 243:3 255:4 plat 72:14</p>	<p>plats 69:1 227:15 played 224:24 please 16:7 17:14 39:9 40:15 43:23 44:7 53:24 57:23 63:15 65:12 72:13 76:14 80:8 81:5 85:9 90:9 114:20 117:1 120:1 167:15 176:17 188:19 195:22 214:21 214:23 219:20 221:8 258:6 263:6 270:17 280:1 281:11 pleased 289:4 289:17 290:16 pllc 3:4 plus 105:18,18 125:23 126:15 157:3 169:3 182:3 183:17 198:7 235:22 podium 187:14 point 19:19,21 30:22 48:18 60:4 91:23 92:1 98:17 99:24 105:2 111:25 121:25 123:12,22</p>	<p>125:3 126:7 127:8,19 128:11,17 129:1 136:5 141:8 142:24 143:5 153:24 155:18 159:18 164:22 168:17 173:2,15,16,22 174:2 175:19 176:4 177:4,13 181:12 183:13 184:18,19 186:2 194:9 202:4 203:4 204:22 206:7 215:7 216:6 218:6 229:17 233:1,17 234:11 235:18 235:22,25 238:18 246:19 250:12,13 256:8 265:9 266:18 270:5 273:22 289:5 291:8 pointed 107:24 234:3,8 272:16 points 91:16 121:24 147:22 149:5 164:2 171:8 174:24 280:21 281:12</p>	<p>pool 32:13 44:13 106:10 106:23,24 107:2,3,4,5 254:6 pooled 8:15,17 26:15 112:4 152:4 209:19 211:20,24 213:13 214:5 215:3 272:3 pooling 7:22 19:8,11 32:13 45:13 49:21 69:15 79:8 96:3 106:19 107:2 121:18 121:20 122:5 122:22 135:9 135:18 136:16 181:14,19 192:23 193:2,4 211:2 220:19 242:6 253:18 253:20,23,24 254:1,24 275:4 pools 81:8 poor 171:14 178:2,3 285:25 poorly 185:19 population 177:6 200:14 porosity 281:25 288:21</p>
---	---	--	---

[portfolio - priority]

<p>portfolio 118:13 portion 48:20 75:21 105:1 124:9 portions 25:1 portray 158:16 portrays 151:8 position 27:9 34:6,12,22 49:10 60:7 111:11,23 112:25 171:24 210:4 228:1 236:5,10 284:2 possibility 202:17 possible 32:12 119:7 176:21 236:1 257:7,12 271:25 possibly 135:11 173:15 posted 21:3 208:18 posting 208:13 potash 251:6 potentially 95:4,13,18,19 131:7 133:8 144:4,11 215:17 236:4 241:14 practice 130:4 149:17 171:15</p>	<p>172:23 prairie 47:5 pre 56:8 64:7 64:21 65:24 66:12 146:17 precedent 48:1 preclude 209:21 predict 150:3 178:12 prediction 15:6 prefer 32:21 185:25 258:16 preference 30:25 236:12 243:25 278:10 preferred 170:22 259:18 prehearing 17:21,22 18:2 19:3,5 21:21 preliminary 16:17 32:9 36:14 premature 77:11 preparation 14:13 65:25 68:6 prepare 54:22 203:23 207:10 246:16 281:8 prepared 54:16 58:12 64:6 65:24 120:11</p>	<p>127:23,25 138:16,18,23 143:22 146:19 149:16 151:8 165:16 166:17 180:11 203:18 203:25 242:1 276:24 294:3 preparing 165:14 281:5 preponderance 34:3 35:9 present 3:10 47:16 50:7 51:11 108:1 187:8,9 210:5 presentation 184:22 presented 32:19 115:20 165:18 175:14 187:2,5 192:14 226:25 234:14 presenting 36:21 presents 32:21 34:21 press 286:16 pressure 288:20 presume 270:7 pretty 126:12 156:16 174:7 177:15 190:13</p>	<p>prevail 119:1 prevent 48:7 50:7 179:19 preventative 286:3 preventing 35:11 previous 87:7 94:4 98:3 285:3 previously 54:5 64:12 205:13 265:19 prewritten 58:13 primarily 116:18 219:23 primary 80:16 134:10 principal 98:16 principle 134:11 prior 125:16 227:22 240:12 293:5 priorities 221:16 prioritized 134:22 priority 134:17 134:18,20,25 135:1,2 137:12 137:13 221:6 221:10,14,21 241:17,21</p>
---	---	--	---

[private - propose]

<p>private 104:22 256:15</p> <p>privy 230:24</p> <p>probably 18:1 60:15 93:10 95:20 112:7 140:5,9 164:19 240:9 243:6 264:12 267:2 270:4</p> <p>problem 79:18 107:22 115:2 152:9 167:25 172:14 182:13 182:19,22 230:11 234:19 245:7 252:1 262:16 276:17</p> <p>problems 142:12 182:23 182:25</p> <p>procedure 102:24 110:3 147:15</p> <p>proceed 32:10 43:22 52:12 53:10 87:23 120:1 145:13 222:6 267:22 270:12,18 278:9 285:16</p> <p>proceeding 25:11 70:9,11 70:14 292:20 294:4</p>	<p>proceedings 293:3,5,6,9 294:6</p> <p>process 101:4,4 102:7 109:22 183:1 235:14</p> <p>produce 86:20 86:21 118:4 149:19 160:12 161:17 176:13 179:18 201:7</p> <p>produced 12:4 13:21 71:5 97:12 157:7 182:24 259:3 285:4 287:9</p> <p>producers 170:2</p> <p>producing 51:22,25 141:7 151:19 152:12 152:23 158:6 158:19,20 159:9 171:11 177:7,11 184:14 285:2</p> <p>production 11:5,11 15:7 45:22,24 46:2 46:3 83:6 84:18 86:14 92:3 96:21,23 96:25 97:3 110:10 150:4 150:19,20</p>	<p>151:2,12 152:16 159:19 160:1,9 161:6 161:7 168:3,4 168:5,10 170:23 172:18 173:10 174:12 183:17 202:6 202:19 204:3,8 274:14,15</p> <p>productive 95:4,13,18,19 95:24</p> <p>productivity 79:17 202:22</p> <p>products 259:14 265:19</p> <p>profess 106:6</p> <p>professional 42:17,19</p> <p>program 148:11</p> <p>progress 51:23</p> <p>project 96:15</p> <p>projected 83:4</p> <p>projections 84:18</p> <p>projects 169:2 219:12</p> <p>promise 31:21 184:14</p> <p>proof 34:5</p> <p>proper 122:20</p> <p>properties 199:15 203:1</p>	<p>220:11</p> <p>proposal 9:6 30:20 45:14 69:22,22 78:12 79:8 140:3 167:17 194:24 238:9 247:2 248:14 250:11 253:11 254:2 254:17,20,21 254:21 255:9 255:10 273:2</p> <p>proposals 51:19 70:2 94:8 96:7 109:16,18 110:9,19,21 122:4 145:15 196:22 219:24 238:17,24 239:5,12 240:18 246:8 246:11,16,22 247:5 248:13 248:25 249:17 249:21 250:3,6 252:7 254:13 255:13 256:12 256:17 257:3 258:12 272:13 272:18,23 280:17 290:23</p> <p>propose 69:13 96:13 121:6 144:15 224:24</p>
---	---	---	---

[propose - qualities]

<p>237:3 238:6 253:7 proposed 7:7 44:16 46:21 47:2,6 48:11 48:16,21 51:2 51:3 54:13 69:10,13 82:5 92:19 93:8 116:11 136:17 145:4 148:22 153:16 171:24 189:18,20 194:23 217:19 237:24,25 238:12,19 250:12,25 253:12,19,21 256:1,3,22 257:10 258:19 264:24 289:9 proposes 44:23 44:25 45:5 50:2,4 proposing 110:11 140:5 237:20 253:15 258:9 prospective 45:10 protect 48:7 50:8 protected 49:3 protecting 35:11</p>	<p>protest 35:5 protested 225:17 prove 160:15 183:21 184:18 184:19 proven 11:15 47:12 128:18 provide 31:15 51:6 79:15 83:11 84:19 86:25 103:10 127:24 128:10 145:17,18 154:9 170:21 209:6,25 226:24 227:15 241:2 258:6 287:18 provided 50:20 60:9 70:13 127:9 139:5 146:24 175:12 182:6 192:13 195:6 220:10 224:13,22 228:7 261:10 273:5 281:13 providing 52:10 149:17 166:16 283:16 provisions 112:2,3 prowess 168:15</p>	<p>proximity 162:18 proxy 168:15 prudent 47:13 52:17 108:18 287:3 public 61:24 90:18,19 152:5 158:3 161:6 170:4 173:4 244:11 286:11 287:1 293:19 publication 6:20 12:22 publicly 45:21 127:6 141:4,18 152:16 168:21 190:9,10 208:7 215:16 pull 105:4 107:18 207:8 209:1 219:18 220:21 238:24 279:13 pulled 81:25 101:19 117:13 153:22 184:7 184:24 222:15 pulling 172:14 202:9 207:18 223:6 233:4 280:1 purple 161:10 161:24,25</p>	<p>purpose 1:7 148:21 152:21 167:18 purposes 138:9 pursue 108:17 pursuing 108:22 push 172:20 put 44:6 53:15 60:23 68:11 70:22 99:3,8 102:1 103:5 110:13,19 120:25 121:3 128:11 129:7 130:9,14 131:18 133:2 142:20 143:1 152:1 156:3,15 168:4 170:7 171:12 178:8 178:15 180:6,6 187:22 191:22 277:14 282:18 284:19 285:24 puts 36:15 putting 176:25 177:10 235:20</p>
			q
			<p>qc 60:13 qualified 39:24 40:6 42:6,21 42:22 293:7 qualities 202:18</p>

[quality - rankin]

<p>quality 14:9 170:11 202:18 282:1,3 284:4 288:15,17,22 288:24</p> <p>quantified 171:16</p> <p>quarter 72:16 72:20 74:1,10 76:18 91:11,13 91:14,16,17</p> <p>question 19:20 26:25 27:6 33:11,13 36:21 66:25 67:1,2 70:24 72:18 73:20 74:17 87:3 89:1 92:13 94:15 101:12 114:25 134:17 136:14 141:2 142:20 165:8 174:7 190:18 193:14 197:15 198:9 198:14 203:19 210:15,22 214:17,20,23 223:9 227:8,14 228:24,25 232:3 240:17 243:6,19 249:13 250:18 253:22 256:4 262:9 263:6,13</p>	<p>263:18 270:21 274:6</p> <p>questionable 47:9</p> <p>questioned 109:11 271:6</p> <p>questioning 76:24,25 92:14 95:20 114:6 115:6 116:13 123:21</p> <p>questions 25:10 28:5 31:13 33:21 67:6,8 67:14,18 73:11 77:7,8,20 79:22,24 83:21 83:22 86:20 92:6,10 107:9 111:7 113:16 116:25 117:9 119:13 138:3 177:14 188:10 188:23 193:10 193:11 195:8 197:3,7,10 198:18 203:6 203:12 204:20 207:6 225:20 241:20 246:6 248:11 257:16 268:4 270:8 271:10 272:12 272:14 273:12 273:19,21</p>	<p>275:25 276:2 280:16 291:15</p> <p>quick 141:2 190:13 197:15 198:17 203:14 210:15 230:19 230:19</p> <p>quickly 136:14 210:7 277:3 282:22</p> <p>quit 277:22</p> <p>quite 25:20 208:14 235:12 256:10</p> <p>quote 137:12 137:12</p> <hr/> <p style="text-align: center;">r</p> <hr/> <p>r 2:1 3:1 13:2 14:1 15:1 16:1 37:21,24,24 40:16 41:1</p> <p>rack 140:15</p> <p>radius 206:10</p> <p>raise 37:9 39:8</p> <p>raised 46:9 52:9 285:19</p> <p>range 44:12 78:14 82:12 136:25 150:20 150:23</p> <p>ranging 46:10</p> <p>rankin 2:18 4:4 4:5,10,16,20 5:3,10 16:12 16:14,14 17:18</p>	<p>17:19,24 18:20 19:2,14,20 20:8,14 21:5 21:10,12 22:11 22:13,20 23:13 23:19,25 24:20 25:18 26:2,6,9 26:12 27:19 28:10,16 29:7 29:14 30:3,19 32:20,21,24 33:1,22 34:6,7 34:15 35:14 36:15 38:25 39:5 40:9,10 41:7,8,15,18,25 42:10,13,17,20 43:12,14,21,23 44:5 49:17,23 53:15,17,21 55:18 56:4,6 56:15,16,19 57:6,16,22 59:11,14 61:13 61:17,21 62:10 63:1,5,10,14 65:2,11 66:18 68:11 75:4,6 76:4 85:17,25 88:20 93:18,22 94:22 97:9 99:14 106:15 107:13,14,17 113:15,23 114:23 116:24</p>
---	---	--	---

[rankin - rebuttal]

117:5 119:12 119:23,24 120:3 127:7 129:11,13,16 138:2,8,13 146:6,11 165:21,25 166:11,12 167:10,11 185:22 186:23 186:24 189:8 189:10,13 191:11,13,19 191:25 192:3 199:22 203:11 203:13,16 204:19,25 205:1 210:14 210:17 211:25 212:10 214:7 215:11,15 216:7,14 218:2 225:24,25 226:4,7 233:2 233:9,11,14,16 233:19,22,25 234:1,2 236:17 236:20,22,24 237:1 242:17 242:18 246:10 246:14 247:11 247:14 248:21 248:22 249:1,2 249:5,9,14,23 250:1 251:8,12	251:14,15,19 251:25 252:3 254:14 257:15 264:9 269:7,8 271:6 272:12 273:20,22 274:2 275:24 291:19,25 292:1 rankin's 18:11 rate 161:17 167:23 rather 45:23 61:25 78:7 112:2,3 215:21 255:17 ray 288:4 rcx 4:8 5:1 rdx 4:8 5:1 reach 174:8,16 reached 209:12 225:4 reactionary 121:3,23 252:6 256:10 read 26:13 75:8 75:12 161:22 174:5 244:16 274:18 reading 31:18 32:5 159:24 ready 53:9 92:15 113:21 121:8 138:11 257:6	real 180:24 204:8 210:21 reality 151:15 realize 214:18 really 87:9 133:3 135:14 136:13 140:19 141:24 157:7 168:7 182:25 217:10 233:22 240:2 244:4 277:23 reason 24:25 45:18 85:17 114:17 124:21 132:8 133:19 149:22 151:6 159:6 161:5 164:20 175:10 180:10 184:6 185:15,17 212:14,18 230:15 240:22 244:20 256:14 277:23 289:11 reasonable 78:13 153:16 244:3 reasoning 125:9 reasons 96:12 110:8 130:13 179:2 rebut 123:18	rebuttal 13:4 13:11 14:3,11 14:16 15:3 17:3 19:21 20:3,12,16,21 21:16 22:16 23:11,14,15,15 23:24 24:2,4,8 24:10,14 29:8 29:11,16,19 30:4,5,9,13 31:4 32:2,5,6 33:18,20 50:21 55:6 90:11 99:2 103:14,21 109:9 111:16 119:23,25 120:12,18,20 124:12 125:17 126:1,20 127:15,22 135:23 137:24 138:6,9,16,24 146:3,20,24 153:2 156:8,8 165:23,24 166:1,4,16,19 168:9 169:15 169:23 171:9 176:12 177:5 183:2,9 185:10 185:23 186:20 186:23 187:2 187:11,22,23 187:25 188:24
--	---	--	--

[rebuttal - references]

189:1,3,4,6,25 193:21 195:15 196:20 197:8 197:22 199:1 206:25 207:4,7 208:25 218:15 219:19 220:1 222:14,17 223:7 226:17 226:20 227:2,6 229:21 233:5 234:11 259:18 261:22 264:1 265:16 279:12 279:14,16,24 281:10 284:19 285:22 287:10 287:13 289:25 291:1,12,17 rebuttals 282:11 rebutting 281:13 recall 114:6 115:6,11 116:12,15 192:8 195:1 203:19 230:10 238:4,8 252:25 271:9 274:5,17 recap 123:23 receipts 12:21 receive 271:19 received 18:24 21:1 22:25	23:2,5,8 24:6 24:12,16 126:1 218:16 224:1 receives 250:10 receiving 150:1 254:20 recent 48:1 50:21 97:19 118:10 237:11 recently 49:6 50:23 52:4 121:7 172:3 190:4 recite 237:15 249:19 recollection 211:22 recommend 149:3 record 25:2 47:13 57:24 63:16 71:20 75:8 87:15,16 87:18 100:5 103:18,23 104:20 112:14 112:23 113:4 115:18 124:2 127:3 145:16 166:9 187:18 188:2,3 190:8 190:13 208:12 209:18 212:20 215:12,17 218:10,11,14	229:12,16,17 229:19 230:14 230:15,23 244:11 260:22 260:24 277:8 286:11 288:10 292:16 293:9 294:5 recorded 100:4 112:23 113:14 125:7 293:6 recording 104:23 190:5 293:8 294:4 records 25:6 104:10 141:3 190:6 208:17 260:14,14 recover 162:1 179:1 recovers 161:25 177:20 recovery 11:16 47:1 83:4 178:12 200:1,4 200:8 201:11 201:20,25 recross 92:16 188:21 193:16 195:11 197:17 274:1 red 60:18 97:22 147:11 150:17 158:9,23 161:14 208:16	220:4 261:4 redirect 107:13 107:16 113:17 113:22 114:22 117:4 119:14 119:16,19 120:2 138:12 146:10 187:24 203:11,15 270:7,12 271:4 reduced 91:9 91:13 293:7 reduces 96:14 96:15 refer 58:23 64:16 66:8 149:9 284:10 reference 95:2 106:20 144:17 156:7 191:3 259:22 264:2 282:2 285:10 285:13 referenced 6:7 93:12 102:7 139:12 144:13 162:17 192:7 220:22 261:1 261:16 265:16 268:8 284:23 285:7 references 95:17 177:4 266:7,18,24 284:2
---	---	--	---

[referencing - required]

<p>referencing 106:21 242:10 259:24 281:15 referred 19:24 127:14 referring 20:23 55:6,7 59:16 60:1 73:13,16 73:22 82:13 95:6,13,16 255:12 267:10 282:8 refers 57:10 60:18,19 200:2 267:3 reflect 50:21 72:5 78:9 103:12 149:5 265:24 reflected 257:1 259:17 271:25 272:20 reflective 74:21 reformulate 213:19 regarding 50:25 52:8 72:15 84:6,18 84:19 87:1,5 90:22 190:14 258:7 276:15 285:14 regardless 227:23 285:5 285:11</p>	<p>regards 263:4 263:22 264:4 264:20 266:1 regional 9:15 regular 221:15 241:10 regulations 204:15 regulatory 46:10 137:20 241:8 reinitiated 235:14 reiterate 280:15 rejected 160:21 related 293:11 294:7 relates 57:7 90:10 245:9 252:6 relating 146:16 relationship 179:5 200:17 228:12 relative 83:9 154:13 158:12 171:6 200:8,15 293:13 294:10 release 164:18 286:16 released 257:12 relevance 28:24</p>	<p>relevant 239:2 reliability 27:24 28:1,11 28:24 relies 46:3 rely 45:23 remaining 231:7 remains 232:5 remarks 151:8 remember 272:13 275:12 remind 205:6 278:24 rendered 97:17 102:21 rendition 219:22 renominating 235:15 reordered 267:4 repeat 72:18 76:14 94:15 115:9 134:17 263:6 rephrase 249:12 263:18 rephrasing 249:6 replace 216:8 report 100:22 reported 1:18 62:2 104:9 287:5</p>	<p>reporter 35:18 35:19,21,24 36:5 62:15 87:10 188:3 represent 126:4 representation 211:6 representative 210:23 represented 74:20 114:5 115:8 124:3,4 124:7,10 125:12 126:5 191:7 219:16 223:13 226:10 226:13 227:9 representing 18:8 113:12 125:4 reproposed 69:18 request 53:10 requested 265:22 requests 221:11 require 78:21 231:23 required 52:10 70:19 84:11 144:22 145:5,8 251:6</p>
---	---	--	---

[requirements - right]

<p>requirements 13:18 47:15 112:17 244:13 248:24 250:3,5 requires 46:24 48:21 98:5 248:12 249:16 249:21 274:13 reserve 17:13 28:19 reserves 162:2 177:24 180:8 reservoir 14:3 23:16 24:14 38:17 41:1 42:8 43:5,9,10 43:13,19 63:11 63:20 64:3 65:16,17 95:14 96:11 154:5 199:13,14,16 202:18 281:25 282:2 284:4 288:22 reservoirs 199:17 resistivity 288:5 resolution 232:6 258:10 resolve 52:14 resorts 45:24 resources 1:2 225:14</p>	<p>respect 36:21 46:10 50:17 51:8 69:25 86:12 108:8 117:14 131:17 189:22 191:5 192:21 196:20 208:21 218:21 272:2 273:12 291:7 respond 146:2 165:15,17 166:4,20 208:9 290:1 responded 210:2 256:12 responding 279:21 response 25:4 28:3 58:9 68:18 72:8 80:20 82:7 120:12 127:24 128:7 138:17 145:7 146:19 166:17 167:16 170:7 171:23 175:2 180:5 206:19 209:16 222:16 223:2 227:7 250:17 264:8 274:6 284:20 287:18 responses 183:9</p>	<p>responsibility 34:22 restart 87:12 restate 85:8 89:1 214:22 restricted 47:5 resubmit 215:6 result 46:5 47:17 48:25 50:16 51:20 84:10 152:21 161:16 217:20 227:5 results 11:5 15:10 46:2 119:8,9,10 148:10 157:12 159:10 163:15 179:17 200:19 289:4,18,19,21 290:16 resume 7:6 9:14 11:4 64:12 66:5 resumed 108:1 returned 224:25 returns 12:21 reverse 228:8 review 16:24 18:11 29:21 32:2 42:5 82:1 94:9 115:20 120:19 138:22 139:3 141:18</p>	<p>170:6 180:3 202:9 274:20 reviewed 18:12 78:2 90:11 94:2 116:12 120:4 131:21 146:15 190:19 244:9 247:16 253:12 274:9 reviewing 267:17 rider 118:24 130:24 131:4 139:10 140:14 142:3 195:16 195:23 196:1,6 196:17 287:23 288:8,12,18,19 288:24 289:13 289:14 290:3 290:13 rig 7:16 131:9 134:24 135:5 135:11,20 217:21 242:2 242:24 right 17:13,18 20:4 22:1 32:8 35:17 37:9 39:9 41:17 42:9 57:8 59:20 60:12,24 61:22 62:11,19 71:2,2 72:15 73:1 74:21</p>
---	--	---	---

[right - sand]

80:25 88:17 91:10,14 96:9 112:18 114:12 116:7 117:21 119:22 126:3 130:23 132:17 140:20 143:4 145:14 149:7 153:24 155:4 155:13 158:18 160:11 161:8 162:7 163:7 164:14 170:12 175:25 176:10 182:4 187:6,19 188:4 193:7 200:9 221:13 222:10,14 224:19 231:5 232:7,7 237:9 240:5 242:25 243:4 245:4,8 245:25 247:1 248:9,10 249:19 251:2 252:17 255:18 268:21 269:19 269:23 276:7 281:18 283:4,5 283:9 286:9 292:15 rights 35:11 48:8,12,19 49:3 50:8	rigs 53:7 108:12 118:14 118:16,22 119:2 129:18 129:19,21,21 129:23,25 130:4,7,15 131:7 133:23 134:8 135:14 192:18 222:2,4 222:5,9,11 rise 27:5 risk 171:13,15 206:8,8 road 86:18 roadblock 228:13 roback 3:18 5:2 6:16 39:17 40:25,25 41:5 42:24 43:1,3,6 43:9,18 65:8 65:12,13 66:11 66:19 83:23 84:3 85:18,20 85:25 86:3 87:9 88:2 117:1,6,8 119:13 146:12 146:15 147:2 149:4 151:25 157:16 160:17 165:14 166:13 166:15 167:14 168:25 169:14	171:21 178:14 183:7 193:12 193:14 195:9 198:19,25 203:14,17 204:19 234:13 roback's 42:13 rock 14:9 50:13 81:11 83:13 86:6 90:2 123:3 148:1,4 170:11 200:18 202:18,25 259:14 265:19 282:5 283:18 roll 207:15,24 rolled 259:14 261:12 266:11 room 57:19 rough 174:11 roughly 47:24 69:21 105:15 288:19 round 163:21 roy 126:16 198:8 261:4 royalties 72:6 98:19,22 111:13,20 125:25 208:16 208:22 223:23 223:24 243:24 265:12 royalty 8:16 198:10	rts 285:9 rule 25:7 213:17 218:5 ruled 218:5 rules 28:21 204:15 249:18 run 217:21 229:23 239:18 260:22 running 53:7 101:24 129:24 129:25 192:18 222:3,5,9 256:24 ryan 26:21
s			
s 2:1,3 3:1 6:1 7:1 8:1 9:1 10:1 11:1 12:1 12:15 13:1,2 14:1 15:1 16:1 37:21 38:1 39:22 40:3 sage 255:20 saint 1:16 sale 237:17 salt 281:15,18 282:1,5 283:13 283:14,17 sample 9:6 sand 90:7 142:4 161:8 255:20 281:22 282:3 288:2 290:11,14			

[sands - see]

<p>sands 142:3 284:1</p> <p>sandstone 287:21</p> <p>santa 1:3,17 2:6,13,21 276:11</p> <p>sarantinos 262:25</p> <p>satisfaction 275:12</p> <p>satisfy 216:9 220:6,15 234:24 274:4 274:23</p> <p>satisfying 275:6</p> <p>saving 45:7</p> <p>saw 100:1 103:22 126:20 127:15 141:21 163:16,16</p> <p>saying 57:4 72:23 76:10 132:1 133:13 162:5,21 164:12 173:24 213:17 214:10 226:18 263:14</p> <p>says 22:6 45:9 60:19 61:19 70:1,4 85:11 89:11,14,17 137:11 163:3 173:17 191:1</p>	<p>217:18 230:1 252:5 283:6 288:12</p> <p>scatter 149:5</p> <p>scenario 280:23</p> <p>scenes 239:17 239:20 256:23</p> <p>schedule 8:5 118:21 131:9 134:24 242:2 242:24</p> <p>scheduled 276:14</p> <p>schedules 119:4</p> <p>screen 59:24 68:12 115:4 156:11 188:16 188:19 191:23 205:22 218:20 226:2 279:22 281:21</p> <p>screenshot 285:23</p> <p>scroll 19:3 136:1 246:13</p> <p>se 200:11</p> <p>seated 37:7 38:19 41:14</p> <p>sec 260:3,3</p> <p>second 10:8,10 10:12,14 12:11 20:5 26:17 45:6,11 50:3,5</p>	<p>59:10,13 81:9 81:15 85:5,12 87:9 139:7 141:5,20 155:4 156:8 157:24 163:5,23 164:23 165:2,4 171:9 173:2 181:23 182:3 191:18 196:7 196:10 206:8 213:8 225:7 242:14 245:5 269:1,3,11,20 270:2 281:17 284:1 288:1 289:7</p> <p>secondly 143:9 168:7,17 184:23</p> <p>secretary 260:3</p> <p>section 9:22 10:9,17 44:18 44:19,24 45:3 45:15 46:21,23 47:2 50:9 72:17,21 73:21 74:2,8,11 75:12,13,14,21 75:22,23,25,25 76:1,15,17,18 76:21 82:11 139:18,25 142:22 149:6 154:3 156:4</p>	<p>157:2,10,13,15 169:9 170:11 170:19,21 185:20 194:1 235:5 236:7,14 247:22 287:22 289:17 290:15</p> <p>sections 44:11 147:23 248:5 254:17 258:17 288:3</p> <p>secure 98:17 123:13 132:24</p> <p>see 18:4 19:9 21:7 22:2 23:13 26:11 29:2 41:22 46:6 57:4,8 59:24 69:6 72:23 73:13 75:16 81:14 93:23 95:5,10 100:4,5,10,12 100:18 101:1,5 103:24 105:1 106:21 114:18 115:4 116:24 117:1 120:11 125:6 126:3,25 127:17 137:10 141:19 147:16 147:22 148:4,6 148:12,16,23 150:15,16 153:11 154:13</p>
--	---	---	--

[see - shelly]

<p>155:11,22,23 156:3,11 157:23 158:15 158:17 160:1,8 161:9 162:24 163:24 169:6 172:10 175:25 176:10 179:6 179:14 180:22 187:17 189:13 192:17 197:23 203:4 204:6 211:20 219:8 222:1 223:23 227:3 228:12 229:22 235:2 237:15 240:19 246:5 249:3 251:7 254:5,12 255:9 257:4 261:17,20 266:20 268:19 281:17 seeing 93:12 150:5 159:10 221:20 230:20 267:18 281:22 seek 44:9,13 49:24 seeking 22:9 42:8 43:8 45:15 254:2 seeks 44:15 51:5</p>	<p>seem 85:18 101:15 261:18 262:4,11 seems 142:13 218:22 244:3 256:16 287:20 seen 104:11 105:13 112:14 112:15 179:16 185:6 241:17 262:2 269:8 285:7 289:20 select 33:14 67:2 176:21 selecting 182:21 selection 175:20 176:1 176:18 182:20 self 6:4,9,12,15 7:4 9:12 10:24 12:14 selling 259:15 send 102:13 sending 258:12 sense 123:22 179:10 227:2 278:1,5 sensitive 90:16 90:24 131:22 sent 96:7 99:6 100:2 105:13 250:7 290:24 sentence 213:14,19</p>	<p>217:17 separate 19:4 97:2 246:21 247:3,7,25 separated 98:1 separately 238:7 september 69:1 69:19 163:4,11 240:20 246:15 290:24 sequencing 144:4 243:2 sequential 256:20 series 242:20 287:22 serious 133:17 134:3 151:7 160:5,13 162:4 164:10 171:6 180:1 services 52:14 70:21 80:14,18 92:2 111:3 set 115:19 163:5 176:15 178:16 184:10 185:3,5,16 201:9,14 204:2 231:10 238:10 254:6 260:18 261:20 271:14 sets 204:15 272:20</p>	<p>settle 91:2 settlement 91:5 286:19 seven 62:11 178:17,18 179:6 205:20 206:1 221:22 241:18,20 several 52:20 73:13 92:19 97:20 190:3 207:19,20 217:22 219:10 219:11 252:23 256:4 272:16 severe 47:7 161:18 severely 51:10 shake 226:23 shallower 243:14 shane 3:21 10:25 11:4 38:1 243:19,21 245:1,7,8 256:6 shanor 2:4,11 16:9 shape 178:6 share 47:19 59:21 205:22 233:3 279:22 she'll 167:12 shelly 3:19 4:3 5:8 7:5,6 25:14</p>
--	--	--	--

[shelly - signing]

<p>37:20 205:5 shift 222:10 shifted 159:7 shocked 178:10 shoots 172:12 short 47:11 152:12 156:10 168:10 177:7 177:11 183:16 183:16 198:17 202:10 204:3 shortly 222:7 should've 75:1 114:25 show 28:24 35:10 61:1 78:5 79:15 80:10 82:2 88:20,24 89:4 90:1,4,6 139:13 142:1 143:5 144:18 147:14,23 149:13 150:20 152:22 154:2 156:6,13,18 158:1 159:21 160:18 167:19 168:8 169:4 170:12 171:5 172:2 183:2 185:17 202:11 204:8 210:6 229:4,8 280:19 280:25 281:12</p>	<p>283:24 284:3 285:6,10,11 286:4 287:2,22 288:3,21 289:1 290:24 showed 76:14 103:5 124:11 142:9 152:17 155:2,3 168:9 176:12 185:10 198:4 226:20 227:17 showing 141:19 148:21 153:5 155:13 169:22 170:1 200:21 201:14 226:25 274:25 284:16 284:24 285:24 286:25 287:5 287:19 290:6 shown 74:3 140:10 149:17 149:20 153:11 153:17,23 158:13 161:6 165:11 171:1 171:16 172:5 176:24 185:13 185:17,19 190:9 200:1 286:9 shows 86:13 89:8 91:10 120:20 125:3</p>	<p>129:19,21 139:4 142:3,4 142:7 147:7 150:2 153:6 154:11,21,22 155:5,20 158:6 159:20 170:21 171:22 172:7 180:5 184:25 185:2,3 190:3 207:14 219:20 226:12 237:5 283:17 284:22 288:5 shut 234:10 shutting 258:12 sic 76:1 124:17 216:15 292:10 side 35:9 46:9 62:19 81:6 96:12 101:19 101:19 118:3,5 118:8,12 139:22 172:11 236:16 258:16 286:9 291:10 sign 26:15 105:24,25 209:19 211:20 211:23 212:15 213:13 214:5 215:3 259:18 265:22 signature 20:11 20:17 293:17</p>	<p>294:14 signed 20:17 26:9,13,17,22 50:23 70:5,20 71:1 72:6 84:7 98:23 99:5,18 104:22 111:13 111:15,22,25 112:1 126:15 126:18 191:21 198:11 208:11 208:22 209:13 209:15 210:25 212:12 213:9 214:3 215:1,22 220:4 230:2 243:24 256:17 261:18,25 262:3,5,7,13 263:10,11,12 263:15,16,19 263:22 264:6 264:19 265:16 significant 84:16 118:5 150:24 153:19 153:20 154:25 169:22 171:11 174:12 182:24 significantly 174:7 180:19 180:20 284:7 288:20 signing 106:3</p>
---	--	--	---

[similar - slide]

<p>similar 44:25 88:12 170:6 196:1,2 199:14 199:16 200:20 288:14,24 289:20</p> <p>similarly 153:14 290:3</p> <p>simple 213:18</p> <p>simplified 184:2</p> <p>simply 118:11 121:4 123:2 170:3 173:20 179:4 258:11</p> <p>simultaneously 160:24</p> <p>single 91:15 94:9 160:23,23 202:21 204:2 284:22</p> <p>singling 56:23</p> <p>sir 40:7,21 41:5 43:6 54:11,15 58:11,21 59:10 59:19,25 60:2 62:17 63:4 64:10,23 66:22 67:22 76:22 92:18 94:19,19 95:1 97:5,6,11 100:8 102:6 103:13 106:8 107:7 114:9 115:5 116:14</p>	<p>116:18 117:3 119:11 145:24 160:22 165:19 171:19 175:4 188:5 191:24 197:20 198:21 199:9,21 200:23 202:8 203:5,7 269:17 292:7,11</p> <p>sit 38:21 56:7 66:11 67:21 232:13</p> <p>site 244:24</p> <p>sites 255:22 256:24</p> <p>sitting 130:13 239:22</p> <p>situation 34:11 36:23 262:4</p> <p>situations 260:22</p> <p>six 45:2 46:21 47:2 50:2,9 139:15,16,21 140:13 143:10 148:7 150:18 150:18,19,25 153:8,16 154:17,20,23 155:9,12,16 156:1,20,21 157:2,12,12 159:8 160:16 164:9,13 176:2</p>	<p>176:8,13,16,23 177:2,23 178:7 178:17 179:15 182:17 201:7 201:10,24 202:1 221:21 240:20 241:18 241:20 243:3 289:2,2,6</p> <p>sixth 142:17</p> <p>skewed 140:1</p> <p>skews 46:1</p> <p>skills 293:10 294:6</p> <p>skip 164:21</p> <p>slide 26:3,8 29:17 57:7,8 59:15,17,18 60:1,5,18 61:16 68:5,12 68:22 70:4 71:13,18 72:13 75:7 78:1 80:7 80:10 81:4,14 83:3 84:5,21 84:22,23,24 86:5,24,25 87:4 88:2,19 88:21 90:8,9 90:19 91:4,7,8 91:18 93:19 95:7 97:8,12 97:20 99:3,22 103:22 104:18 105:3,5 109:14</p>	<p>114:2,2 115:7 115:8,21 116:9 117:11,13 120:19,20,21 120:25 123:16 123:18 124:10 124:10 129:10 129:12,13,17 131:18 133:1,6 133:7 134:24 135:20 136:1,2 136:19 139:4 140:11 141:25 141:25 143:22 144:9,10 147:6 147:7,8,11 149:13 152:22 153:1,2,3 156:5,5,7,8 160:17 169:15 169:16,19,20 169:23 170:1,5 170:9 171:9,20 172:7,9 174:5 174:20 175:2 180:7,15 184:1 189:2,3,4,6,17 189:25 191:1 193:21 194:3,4 194:4 195:15 195:22,23 196:15,21 197:23 199:2 199:22 206:1 208:25 209:1</p>
--	---	--	---

[slide - spacing]

219:7,16 220:1 220:21 222:1 222:15,16,17 222:24 223:2,7 223:7 224:15 224:19 234:13 234:16 236:18 236:19,22 237:2 242:9,19 251:9 258:25 259:2,3,14 263:25 266:25 268:18 272:20 283:3,3,12 284:19,20,22 284:23 285:3,6 285:21,22 286:10,23 287:14,19,20 288:10 289:24 290:7,8,17,18 290:21,23 291:1 slides 6:7 19:23 20:1,3 29:18 55:4,6,8,9,10 55:20 56:12,13 56:17,18 57:10 58:23 64:16,17 66:9 70:17 90:11 92:7 105:3 111:16 120:12,15 121:14 124:8 125:12,17	126:1,20 127:25 128:5 138:16,22,22 138:24 143:5 146:4,20,24 149:1 151:10 152:7,25 154:7 165:15 166:16 166:19 174:19 174:23 177:5 180:11,15 183:2,6,8 184:25 185:11 192:14 193:22 222:14 259:18 285:13,20 286:20 287:11 287:13 291:7,8 slight 101:20 154:14 slightly 89:9 101:16 143:23 159:1 184:12 211:6 235:12 slots 234:22 slotted 242:23 small 101:1 126:8 147:17 189:10,11 244:3 265:25 smaller 96:14 solution 215:13 258:11 somebody 126:25 128:25	215:18 somewhat 31:18 244:15 260:16 soon 107:19 119:7 222:11 239:4 271:25 275:1 sooner 221:20 275:5 sorry 36:18,20 62:17 71:7 72:18 75:20 76:19 79:3 82:8 84:22 95:8 107:21 129:13 134:17 136:10 137:2 141:1,9,11 147:16 157:16 158:5 167:4 190:25 208:19 210:20 226:18 228:21 229:18 230:25 233:9 233:18,24 249:9,9 250:19 250:22,22 251:9,25 254:10 265:4 274:15 281:1 281:20 284:18 sort 34:11 101:8 112:11 112:13 150:15	158:11 171:13 173:21 176:25 181:10,11 228:13 229:13 232:5 sorted 101:3 126:9 227:24 sounds 17:15 211:13 240:5 source 81:25 173:22 sources 170:4 south 1:16 44:11,17,18 45:1 75:12,16 82:12 125:25 253:13,16 255:17,18,22 southeast 72:16 72:20,24,24 73:2,2 74:1,10 southwest 72:6 98:19,22 111:13,20 198:1,10 208:16,21 223:23,24 243:24 265:11 space 155:22 177:2 178:5 spaced 289:16 290:15 spacing 8:21 14:17,19,21 15:5,9 44:10
---	--	---	--

[spacing - standalone]

<p>44:16,25 45:3 45:15,20 48:21 54:14 80:9,11 80:14,17,24 81:3 116:11 118:18 139:16 139:21,23 140:1,12,15 148:8,13,19,24 149:6 153:8,10 153:15 154:12 154:14,17,20 155:5,6,7,9,9,9 155:10,12,13 155:21 156:20 156:21 160:16 160:16 176:9 176:13 177:20 178:7,8,18,20 179:18 193:25 237:24 238:3 255:13 288:5 288:13,14 289:2,3,6,16 290:9 spacings 148:4 156:2 176:7,8 179:9 183:19 200:16 202:12 289:4 speak 67:3 85:6 86:2 205:24 221:1 232:21 254:8</p>	<p>speaking 80:13 speaks 99:3 special 16:4 specific 33:12 70:18 93:25 94:1 104:7 151:10 165:15 178:12 183:8 203:12 238:2 253:3 273:21 284:6 291:8 specifically 25:23 49:25 55:9 72:1 73:20 74:18 93:7,14 95:12 95:15 96:12 100:11 101:11 101:18 105:8 108:8 110:2 114:4 118:24 155:3 186:20 203:3 250:5 271:14 spell 37:18 39:19 speyside 289:11,15,20 290:12 spill 13:22 spills 52:6 287:1,6,8 spirit 225:4 258:19</p>	<p>split 225:15 splitting 258:15 258:19 spoiled 36:2 spoken 110:1 sponsored 279:15 spring 3:6 9:21 9:23 10:4,6,8 10:10,12,14,16 10:18,20,22 11:15 12:8,11 12:13 44:10 45:6,6,7,10,11 45:11,12,20 49:25 50:3 78:6,7 81:16 81:22 82:11 85:5 95:5,12 95:16,23,25 96:5,7,20,20,22 96:22 106:21 106:24 139:7 141:6,20 155:4 156:20 161:8 163:14,22,23 164:5,6,9,17,24 165:2,4,7 180:9 181:4,14 181:24 182:3,3 193:25 194:6 194:17 196:8 196:10,13 199:7,20 242:21 243:16</p>	<p>281:22 282:3 284:1 287:21 288:1,2 290:9 290:11,14 springs 81:8 spud 48:22 88:9 122:22,24 139:20 142:17 242:19 271:15 271:18 274:4 274:13,25 spuds 62:1 242:5 squared 257:22 sr 199:24,25 200:2 sstvd 196:2 stages 96:17 stagger 142:5 staggered 139:23 140:12 stamp 157:24 158:8 stamps 150:7 162:13 stance 285:25 stand 33:7 42:16 79:12 114:17 146:13 187:12 258:21 276:19 standalone 147:21 148:19 153:15 176:9 176:11,14</p>
---	--	---	---

[standard - stuff]

<p>standard 8:19 8:20,21 34:3 102:24 110:2 126:10 147:14 147:20 172:23 176:19</p> <p>standpoint 106:5 128:21 183:14</p> <p>stands 61:6</p> <p>start 26:8 67:5 68:22 107:15 131:25 139:2 142:16 147:16 147:25 148:3 166:25 173:23 188:12 225:25 277:17,25 278:2</p> <p>started 163:21 235:15 240:20</p> <p>starting 37:18 56:19 123:5 131:11 139:6 278:6,13</p> <p>state 1:1 20:15 37:18 38:15 39:19 42:21 47:15 53:24 57:24 63:15 65:12 106:2 121:23 123:23 133:24 216:4 244:23 258:3 260:3 283:14</p>	<p>293:20</p> <p>stated 23:17 133:5 154:5 160:22 168:22 178:1 190:22 194:5,16 206:9 211:11 217:23 265:5 285:3</p> <p>statement 4:5,6 6:4,9,12,15 7:4 9:12 10:24 12:14 17:21,22 18:2 19:3,5 21:21 26:12 27:4,25 35:14 41:9 43:25 55:1 70:25 95:10,22 104:18 110:25 111:1 125:9 161:2 170:10 173:16,20 177:12 199:15 212:11,19,23 213:2,4,20 214:19 221:5 244:22 252:10 286:6</p> <p>statements 24:24 26:21 27:5 28:2,12 28:13 285:12</p> <p>states 68:25 88:12 90:13 130:7 192:15</p>	<p>192:16 213:9 237:23 250:24</p> <p>stating 200:25 260:7</p> <p>status 8:5 229:22</p> <p>stay 276:10</p> <p>stays 132:14</p> <p>step 148:3,9 150:8,10,15,18 150:25 151:15 154:8</p> <p>stepped 175:10</p> <p>steps 122:2,20 150:3 151:21</p> <p>steptoe 3:4,7 16:20</p> <p>steward 287:3</p> <p>stimulated 200:18</p> <p>stipulate 98:5 98:10</p> <p>stipulation 18:6 98:14,16 261:16,19</p> <p>stop 277:17,25</p> <p>stopped 87:22</p> <p>store 111:3</p> <p>story 158:15</p> <p>straight 246:2</p> <p>straightforward 177:15</p> <p>strategy 164:11</p> <p>stratigraphic 9:22 10:9,17</p>	<p>streamline 187:4</p> <p>street 2:20</p> <p>strength 204:7</p> <p>stress 9:16</p> <p>stressed 159:12</p> <p>stricken 25:1 212:7,19</p> <p>strike 213:5 216:7</p> <p>string 14:23 144:8,13,15,16 144:17,19,23 144:25 145:5,8 145:13,17,18 145:20 196:23 250:25 251:4 290:21,25 291:1</p> <p>strong 228:11</p> <p>strongly 122:8</p> <p>structure 10:5 10:13,21 139:7 287:25 288:11</p> <p>studies 153:23 154:1 199:18</p> <p>study 54:12 58:7 64:4 65:21 149:23 149:24 150:2 154:11,21,24 155:1,2,3,19 199:12</p> <p>stuff 142:11 235:19</p>
---	--	--	---

[sub - surface]

<p>sub 19:15 subject 48:7 64:1 211:2 228:2,5 229:13 242:6,24 247:2 247:4 262:22 subjects 77:4 submission 22:5 submit 141:15 144:16 209:17 268:15,25 submittal 285:8 submittals 242:10 submitted 19:7 22:16 27:8 51:25 52:9 55:13,16 58:14 59:4 63:3 64:16 107:3 120:5 121:14 123:19 125:17 127:15 136:11 142:8 145:16 146:17 166:21 208:17 219:21 237:5 244:22 268:2 279:12 285:9 submitting 122:4 subparts 279:7</p>	<p>subscript 154:12 subsea 10:4,12 10:21 139:7 subsequent 181:18 194:13 231:20 subsequently 163:20 194:17 substantial 108:6 substantially 46:25 substantive 278:6 subtle 101:1 subtract 124:17 subtracting 125:1 198:1 successful 47:14 successfully 219:10 sudden 85:19 sued 90:14 sufficient 273:1 273:10 sufficiently 280:13,14 suggesting 201:6,10 suggestions 258:11</p>	<p>suitable 43:24 suite 3:5 suites 95:21 232:2 262:10 sum 125:11,15 summarizing 213:2,3 summary 7:9 9:4,9 13:12 14:4 93:19 128:10 191:16 225:7 267:18 268:11 279:18 summation 104:14 summer 235:10 sundry 78:16 78:22 superior 160:16 supervision 97:13 259:4 support 13:7 99:6,10 127:16 148:5 153:7 167:17 210:3,4 210:6 217:11 217:15 262:17 262:20 supported 46:7 129:5 262:19 supporting 127:19 209:22 supports 160:19 171:24</p>	<p>supposed 88:24 sure 17:25 31:7 36:3,25 57:18 58:18 62:12 72:19 77:15,19 85:15 87:3 97:24 100:23 101:12 107:6 109:6 111:10 112:21 115:17 115:17 117:9 120:23 122:18 122:21 124:1 132:23 144:14 144:18,21 154:18 155:8 157:19 159:13 160:11 169:17 184:12 194:10 198:20 200:2 201:15 207:1 215:8 219:15 219:22 221:2 231:15 239:22 239:23 240:25 246:4,6 251:1 251:20 256:10 257:14 260:21 261:12 263:23 277:4 278:21 285:22 291:1 surface 8:18 9:11 51:8 79:6 79:15 91:18 96:16 248:4,7</p>
--	--	---	--

[surface - tell]

<p>250:13 surmised 211:10 262:15 surprise 100:18 surprised 101:5,21 surrounding 7:23 11:6,13 99:15 surveyor's 69:7 69:8 suspect 149:21 186:22 270:21 sustain 218:7 249:11 swapping 79:15 swear 32:22 33:3 37:2,10 39:10 switch 145:19 sworn 32:22 38:24 55:1 57:13 64:21 190:16 293:5 system 137:17 141:16 systems 51:12</p>	<p>150:15,18 151:15 t24 150:7,8,11 150:15 151:4 ta 274:20,23 table 19:4 72:14 73:1,3,4 73:6,24,24,25 74:5,20 99:22 207:18 229:10 tables 259:7 take 57:18 75:19 87:11,13 105:2 106:15 106:16 122:1 124:5,16 130:9 130:14 136:9 136:22,25 141:15 150:18 152:6,18 159:23 166:6 166:25 177:19 177:25 178:7 178:21 186:6 204:1 215:21 216:4 232:10 250:12,13 256:19 277:5 278:16 takeaway 11:25 12:6 47:10 51:13 71:5 84:8,13 91:19,21,24 110:5</p>	<p>taken 42:21 118:9 159:25 159:25 177:22 180:16 235:21 293:3,12 294:9 takes 49:7 57:2 235:25 236:10 talk 131:16 142:21 151:10 152:13 156:9 174:18 175:9 220:20 222:13 235:1 246:8 270:6,14 286:21 talked 126:9 131:13 136:4 180:15 183:13 196:4 talking 70:17 88:2 93:8 101:11 131:3 157:17 169:8 184:13 194:4 196:7 198:6 226:17 232:25 tan 196:5,11,18 tank 52:2 target 45:5,10 78:6 85:5 280:22 288:15 288:16,24 targeted 45:20 targeting 142:10</p>	<p>targets 45:4 281:23 td 88:10 274:18 teal 161:11 team 7:11,12 52:17,20 95:15 117:23 241:9 teams 109:23 118:15 technical 3:11 31:23 44:1 76:6 96:11 technically 156:8 194:12 212:10 technique 116:6 technology 116:2 tee 15:10 116:17,19,21 139:10,11,24 140:4,12,23 142:13 143:11 156:14,19 157:2,13,17 158:5 170:2 195:25 287:24 288:7 289:12 289:13 290:13 tees 159:15 tell 27:14 39:20 88:8 103:25 130:3 141:9 167:8 200:7</p>
t			
<p>t 6:1 7:1 8:1 9:1 10:1 11:1 12:1 13:1,2,2,2 14:1 14:1,1 15:1,1,1 37:21 40:4,4 40:17 150:8,10</p>			

[tell - thank]

<p>207:13 285:21 ten 53:3 57:5 100:21 130:2,3 192:12 206:10 206:12,15 245:21,22 tender 55:23 63:6 65:3 138:3 term 13:9 48:20 49:2 50:25 51:5,6 108:10 122:17 122:19 123:4 131:15,23 132:1,2,3,3,6,9 132:16,18,20 132:24 133:15 133:25 134:13 168:11,11 177:9 193:1,6 194:13,13 220:1,3,6,16,18 232:25 234:4 235:13 236:4 239:10,15,24 240:7,11 244:6 244:8,9 271:9 271:20,23 272:2 274:5,9 274:12 275:7,9 terminates 158:23 terminology 265:6</p>	<p>terms 45:13 130:22 171:7 231:16 238:10 241:5 243:2,9 244:9 254:16 274:23 275:6 281:23 286:7,7 290:6 test 42:21 148:3 tested 148:7 testified 38:4 54:5 77:5 192:25 226:8 229:12 testifier 24:23 testify 208:5 testifying 6:8 129:2 293:5 testimony 18:2 24:22 27:13 31:3 32:18 33:4 37:11 39:11 44:22 46:6 47:17 51:11 54:17,23 55:3,7,9,14,15 56:2,8,9 57:7,9 58:13,19,22,23 59:2,3 60:16 61:9 63:3 64:7 64:15,21,21 65:25 66:8,12 66:13,16 79:14 92:7 95:7</p>	<p>96:10 107:24 111:12 115:11 116:15 117:10 120:5,13 127:24 129:6 135:23,24 136:18 138:17 142:25 144:2 144:12 145:12 146:2,16,17,20 146:21 147:4 165:15,17,23 166:2,16,18,20 166:21 183:10 186:20 189:22 190:16,19 192:9,17 195:1 205:12,15 207:4,20 208:1 220:7,10 221:10 234:9 234:11 246:21 251:16,18 260:6 261:15 267:5 274:6 278:4 279:5,8 279:25 283:20 289:19 texas 117:24 118:1,3,5,8,12 130:1,4 220:11 234:12 text 250:23 thank 35:22 36:11 37:22</p>	<p>38:18 41:14 42:4 43:15,20 49:16,19 53:12 53:13 56:15 57:11 58:12 59:20 62:13,18 62:22 63:8,10 65:5 66:22 67:9,10,23 68:13,14,23 69:9 71:13,18 72:5 73:9 76:22 78:18 79:19 80:5 81:4 87:15,24 88:22 92:8,12 94:19 97:5 100:8 102:6 103:13 105:6 106:8,12,18 107:7,8,11,14 107:23 114:18 114:21 117:3 120:10 129:14 134:19 137:22 138:1 146:6,9 146:14 157:25 166:8,11 186:13 187:15 187:17 188:5,9 188:20 189:7 189:13,15 191:20,24,25 192:5 193:20 195:7 196:25</p>
--	--	---	--

[thank - thought]

197:4,5,10,11	135:3 139:25	130:12 133:8	244:18,21
197:13 198:13	140:12 164:23	135:3,7 136:18	246:4,20 250:8
198:17,21,22	183:12 223:16	136:24 142:10	250:19 251:19
199:21 203:5,6	234:9 265:18	142:15,21	257:15 258:16
203:8,9 204:19	288:9 290:10	146:4 155:17	262:9 267:5,10
204:23 207:6	things 26:24	157:17 160:5,6	268:25 269:1
217:7 218:14	42:23 60:6	160:13,14	270:6,11,14
218:17 219:6	81:1,2 141:15	161:22 163:9	271:22 277:24
225:20 233:25	142:8 171:13	168:15,15	278:1 283:2
236:24 242:16	238:11 241:9	169:3,8,22	284:13 287:10
251:7 254:11	288:9	170:1,17 171:6	291:10
257:18 258:23	think 20:14,24	171:14,20	thinking 34:17
261:1,21	21:2,20,24	172:8,23 174:1	77:12 133:18
263:24 268:1,3	22:2 23:17	174:13,16,22	third 10:16,18
268:22 270:19	25:5,10 27:23	174:22,24	10:22 11:15
270:24,25	28:4 29:1,10	175:2,23	12:13 45:7,12
271:3 273:19	31:14 32:12	178:15,24,25	50:3 81:9,16
275:24 277:7	33:22 34:1,11	180:2,6,23,23	84:12 95:16,25
280:10 282:23	34:20,21 35:7	180:24 181:8	96:4,7,13,22
291:14 292:11	44:1 60:8	183:7 184:1	142:2,5,13
292:14,18	67:18 71:23	186:9 188:10	155:19 156:20
thanks 36:5	72:3 73:10	191:1 192:7	161:7 164:5
theirs 20:25	75:19 80:16	202:16,16	165:7 168:19
thereabouts	88:5 93:3,4,9	203:24 205:21	171:10 181:4
174:10	95:23 98:9	212:19,21	181:13 194:6
thick 142:20	99:12,14 101:5	213:5,22,22	194:17 196:12
thicker 282:2	104:6,13	214:8 215:12	196:13 219:18
thickness	105:13 108:13	215:13 216:9	222:4 242:20
288:14	110:15,17	216:14,20	243:15 247:1
thicknesses	111:25 112:20	217:16 218:7	255:8 281:19
284:4	113:12 116:25	220:13,22	281:22 282:3
thing 32:12	120:23 121:21	222:19,20,22	284:1 289:7
33:17,24 59:2	122:11,15	224:1 225:19	290:8,11,14
75:19 111:4	123:17,20,22	228:14 233:7	thought 31:1
117:12 131:25	124:24 129:20	238:4 244:4,17	99:9 125:15,18

[**thought - today**]

<p>128:25 209:18 226:16 227:6 231:1 256:5 thoughts 235:3 three 37:4,5,6 45:3 131:7 134:5,6,8 139:19 140:4 141:21 142:16 144:16,20,25 145:17,18 150:21 153:22 154:14 155:23 156:22 158:21 158:25 159:14 161:9,12,16 163:5,13,19 175:5 179:23 179:25 181:9 189:18 196:23 222:11 250:25 251:4 290:25 tiers 200:1 tiffany 262:25 tight 14:17,19 14:21 tighter 15:9 148:4,4,24 156:2 183:19 256:21 time 1:13 8:23 15:5 22:10 36:24 38:20,22 39:19 46:1 47:4,11 49:8</p>	<p>53:18 55:19 57:2 63:6,7 66:19 68:6,16 68:22 69:16,25 70:21 71:11 76:11 87:11 98:17 99:8 101:2,2 102:16 104:23,25 107:9,18,24 108:1,13,15,19 108:23 111:25 115:25 117:23 119:5 120:21 126:20 130:8,9 130:11,14 133:23 136:9 136:23 137:5 138:14 139:14 139:15 141:15 141:15,24 143:3 147:18 147:19 148:1,2 148:8 150:2,7 150:16,24 152:13 156:10 157:24 158:8 161:2,4 162:12 162:15 164:13 169:25 171:11 173:22 174:23 177:7,11 179:10 182:24 185:23 186:7 186:19 187:9</p>	<p>189:2 197:10 202:10 204:3 210:20 219:23 220:9,12 223:3 231:10 233:5 233:15 234:3 234:17,21 235:19 237:14 237:23 238:22 239:3,18 240:23 241:23 242:2,10 243:4 245:14 251:20 252:5,15 256:13,20,21 259:15 267:13 268:5 271:13 271:25 275:21 276:23,25 277:13,21 278:17 289:5 290:2 timeline 14:13 timely 49:11 times 104:5 122:16 160:23 162:5,17 168:18 181:3 181:24 207:19 207:20 252:23 253:6 256:5 timing 131:22 241:3 251:7 252:7</p>	<p>tiny 168:13 title 97:17,19 97:19 98:2,4 98:11 100:20 100:21,23,25 101:24 102:2,4 102:21 103:4,9 104:3 124:2,2 124:20,25 126:4 207:21 207:22 226:12 226:14,21 227:4,8,15,17 227:24 228:6,7 228:14 229:4 230:18,22 232:1,5 239:16 239:18 240:3 256:24 259:8,9 259:9,10 260:12,13,18 261:20 262:9 264:25 265:1 265:24 titled 23:14 tk 150:7,7 today 16:5 43:8 44:22 47:17 56:7,9 64:20 64:22 66:11,13 87:21 120:6 121:19 129:2 130:13 169:1,9 186:15 190:8 194:25 207:3</p>
---	---	--	--

[today - true]

208:1 210:18 218:22 219:15 219:24 220:23 223:18 225:14 232:13 235:18 235:22 239:22 270:5,11 277:12 279:9 280:13 today's 54:17 64:7 65:25 166:17 together 21:11 97:21,25 99:4 99:8 102:1 103:5 105:11 110:13 114:3 121:3 128:12 129:7 130:9,14 133:2 152:4 156:16 164:1 180:6,17 184:24 202:9 207:18 231:14 235:21 239:21 284:20 285:24 told 26:14,24 27:14 111:16 211:7 213:10 213:11 214:3 215:1,21 216:8 274:8 tomorrow 270:4 276:11 276:23,25	277:18,20,25 278:2,6,14,16 291:18 292:6 292:17 tonight 276:11 tons 129:8 took 21:12 51:2 88:5 125:17 126:13 198:9 top 20:15 72:25 73:3 75:8 82:15 93:19 150:6 154:22 159:19 170:2 172:6 174:8 175:25 211:6 248:3 250:23 286:16 288:1 topic 109:10 112:9 143:23 total 44:24 83:4 84:6 104:15 126:13 167:9 179:10 180:8 274:24 287:1 totals 127:2 touch 109:8 220:10 touched 169:15 touchstones 28:23 tough 161:22 163:25 toward 51:25 114:7	towards 113:17 township 44:11 82:12,14 townships 248:6 track 47:13 137:17 tract 8:6,7,8,10 8:13 72:15,21 73:7,17,24 74:4,5,9,15,23 75:20,21 76:14 76:16,20 109:6 123:10 258:25 tracts 73:5 74:1 74:4 109:7 234:25 239:1 252:23 trade 93:7,8,10 94:8,9 104:2 112:11,13 113:6 192:2 223:19 224:23 227:22,24 228:2 231:2 245:25 246:2 258:12 264:21 272:6 traded 215:16 trades 47:18 92:19 93:1,4 104:6 245:15 trading 230:2 traditionally 204:14	transaction 113:8,9 transactions 190:15 208:20 219:10 229:15 229:20 transcriber 294:1 transcript 294:3,5 transcriptionist 293:8 transparent 48:14 treated 244:1 284:8 trend 148:23 173:24 201:14 tried 124:1 156:13,18 179:14 triste 106:20 trouble 16:12 85:7,13,14 true 47:21 121:4 143:10 171:1 182:21 190:4,11 192:22 194:1,2 205:15 215:19 226:11 227:9 227:12 228:4 279:9,16 293:9 294:5
--	--	---	---

[trump - under]

<p>trump 128:23 truth 37:11,12 37:12 39:11,12 39:12 212:11 212:16 216:25 217:3,4 try 31:17 105:19 121:22 128:3 152:18 161:2,3 162:14 162:18,19 163:9 171:5 173:10 178:17 trying 34:17 72:22 74:5,9 88:3 105:21 114:24 147:25 152:22 160:15 170:23 184:17 184:18 200:7 216:14 224:13 225:9 228:8 235:2 281:12 tschantz 3:13 21:8 87:19 turn 19:2 31:4 33:3 38:22 78:25 138:6 147:3 188:1 turned 221:21 241:18 tvd 139:7 280:16,20,25 tvds 78:11 246:20 281:4</p>	<p>twenty 104:19 two 12:7,10,12 26:20 28:23 43:12 44:17,20 47:24 53:3,7 59:6 60:6 61:14 82:10 91:15 93:20 96:20 97:2 105:24 108:25 109:7 118:22 131:7 133:20 134:7 139:20 139:25 140:10 140:20 141:4 150:6,12,14 153:15 155:21 155:23 156:22 158:18,25 161:25 163:12 163:22,22,25 164:2 165:2 170:19 173:10 173:11,14 176:9 177:4 181:10 182:15 185:13 192:18 194:15 222:4 224:7,19 234:20 235:6 235:22 244:2 252:11 256:1 258:17 259:7 267:11 270:9 276:6 278:14</p>	<p>281:18 285:13 288:9 290:11 290:14 tx 3:6 type 12:7,10,12 168:14 175:6 175:14,17 176:2 177:18 178:8 195:1,4 195:6 203:18 203:23,25 204:11 281:18 281:20 283:17 288:3 290:5 types 176:7 245:15 typewriting 293:7 typical 15:4 80:8 260:19 typically 102:15 243:12 252:25</p> <hr/> <p style="text-align: center;">u</p> <hr/> <p>u 13:2 14:1 15:1 40:3 uh 266:23 274:7,11 ultimate 168:12 177:12 200:8 201:11 201:20,25 ultimately 46:13 218:4</p>	<p>unable 26:22 27:3,5,15,24 112:24 160:8 166:2 173:5 unaware 99:4 uncertainty 149:18 unclear 20:10 232:9 uncommitted 8:14 44:14 259:3 266:19 267:12,23 268:12 269:13 under 25:13 33:4 34:2 37:12 39:12 45:13 56:3,8 61:18 74:5,22 77:5 97:13 108:10 120:16 120:19 124:9 131:23 134:13 181:14,18 185:13 190:22 205:7 206:24 207:3 211:1 227:19 228:17 229:2 231:4,7 231:11 232:21 232:23 259:4 265:2,24 278:24 279:9 280:6,8</p>
--	---	---	---

[underlying - using]

<p>underlying 49:25 84:20,21 151:1 175:13 180:12,12</p> <p>underneath 60:19 252:5 288:11</p> <p>underperform 46:18</p> <p>understand 27:1,9,16 60:7 75:9 87:3 101:12 106:7 117:9,12 130:18 144:3 162:15 164:1 167:22 175:13 190:17 212:5 213:15 214:12 216:21 227:7 228:24 236:5 236:12 239:2 240:16 246:23 249:8 252:9 269:21</p> <p>understanding 26:18 27:1,4 31:8 98:25 99:2,17 105:23 110:25 115:24 116:5 118:22 123:23 143:12 143:14 148:1 169:11 175:8 177:8 181:22</p>	<p>200:24 201:19 208:22 211:19 212:6 213:23 214:2,18,19,25 215:22 216:9 216:12,16 226:9,22 227:10 228:6 231:1 236:9 241:3,13 243:8 243:18 244:12 248:14,23 249:15,20,24 250:2 259:23 260:10 261:24 262:6,11 263:2 263:7,14 264:22 267:22 273:9 274:19 274:22 275:11 286:10</p> <p>understood 27:16 111:10 111:13 112:21 212:13</p> <p>unequivocally 210:6</p> <p>unilaterally 81:12</p> <p>unique 108:14 252:19</p> <p>unit 7:24 8:4,20 8:21,24 9:18 9:20 11:6,13 13:6 44:10,16</p>	<p>48:21 50:19 54:14 71:15 99:1 103:15 116:11 118:18 180:9 206:10 219:4 220:15 225:15 226:11 227:18 228:18 229:6 237:24 238:3,10 244:24 253:20 253:24 254:3,7 255:13 257:5 258:15 264:24 273:16 287:23 288:13,17,18 288:19 289:12 289:15 290:3 290:12</p> <p>united 90:13</p> <p>units 130:10,14</p> <p>unknowns 113:10</p> <p>unlawful 13:19 90:15</p> <p>unleased 109:7 123:10</p> <p>unmanipulated 48:15</p> <p>unproven 46:22</p> <p>unresolved 52:6</p> <p>unsuccessful 224:23</p>	<p>unsure 94:7</p> <p>update 59:7 60:13</p> <p>updated 14:12 69:1 75:1 120:21 233:15</p> <p>uplift 180:8</p> <p>upper 72:15</p> <p>use 60:9 61:25 88:9 124:21 152:1,2,5,15 168:13 194:12 194:13 227:20 228:15,25 277:12,21 278:16 280:24</p> <p>used 151:4 153:14 167:23 168:7 169:1 171:2 176:1,6 178:11 179:23 183:25 184:6 207:23,24</p> <p>uses 48:14 50:15</p> <p>using 15:6 41:17 79:12 83:6 150:21 151:11 152:9 153:19 156:14 167:17 173:4 176:7,9,24 178:19 192:13 199:14 204:10</p>
---	--	--	---

[usually - waste]

<p>usually 100:21 101:3,24 102:19 190:12 194:14 utilize 97:1</p>	<p>veracity 27:4 56:11 verbiage 147:12 verifiable 152:6,16 158:3 159:14 173:21 184:6 verified 170:4 204:9,12 verify 168:20 262:2 278:4 279:9,16 version 209:23 versus 91:16 120:24 207:22 265:24 281:16 281:19 284:2 vertical 158:23 vested 132:17 134:1 videoconfere... 3:3,12,15,16,17 3:18 view 48:9 110:18 179:3 226:24 viewing 171:16 171:17 vintage 83:2 115:23 virtual 32:25 276:25 virtually 276:17,18</p>	<p>void 169:10 voir 4:3 210:13 volume 200:18 221:11 volumes 83:7,7 90:7 110:11</p>	<p>158:1,16 162:6 162:6,21 164:12 169:17 174:18 183:12 185:17 186:15 191:20 206:11 206:12 209:5 210:12 215:10 215:12 238:13 238:14 246:5,8 246:19 263:13 265:11 268:23 270:7 277:4,12 278:9 280:15 280:19 282:21 288:10 wanted 31:7 36:3 59:1 60:4 131:14 135:4 139:13 144:21 174:5 185:13 193:20 205:14 207:7 219:7,25 220:1 222:13 224:10 226:24 235:5 262:19 279:23 291:8 wanting 134:2 wants 66:24 179:11 193:13 warranted 230:20 washed 223:22 waste 35:11 48:7,11 50:7</p>
<p>v</p>	<p>w</p>		
<p>v 14:18,20,22 40:25 valid 175:17 248:13,24 249:16 262:4 validity 168:24 171:7 180:1,1 value 182:14 266:9 values 117:14 150:14 181:24 variability 202:25 284:3 variable 202:21 variables 113:10 202:22 variation 201:13 variety 130:11 various 93:5 110:8 vary 184:15 260:20 280:20 varying 153:7 vast 45:16 vastly 128:22 venting 13:20 52:5,14 285:25 286:8</p>	<p>w 40:16,17 wadi 97:21 208:16 261:4 wait 71:18 96:19 97:3 waited 51:4 142:18 193:1 240:19 waiting 230:16 walk 162:14 174:19 252:8 walkthrough 179:21 want 30:24 32:8 33:11,14 36:25 42:25 43:21 48:18 67:15 70:18 76:24 105:19 106:10 110:15 111:10 112:20 115:17 117:9 117:12 122:12 123:2 128:10 130:18 133:4 134:23 138:14 143:19 152:11 155:8 157:18</p>		

[waste - wells]

57:2 90:10 178:2 179:19 217:20 water 12:4 13:22 51:12 84:8,12 109:24 110:5 287:9 way 21:6 28:6 32:20 46:14 66:23 106:2 127:5 132:2,11 152:7 153:2,12 154:16 157:3 168:20 176:19 176:20 177:8 178:6 179:18 196:3 211:12 213:18 218:8 220:4 224:24 244:5 256:17 259:20 261:20 268:2 278:14 287:23 ways 75:17 93:5 153:7 168:2 232:12 we've 55:21 105:8 109:23 119:5 123:1 128:23 129:3 136:25 164:25 185:19 203:24 219:11 223:17 224:21 229:15 241:16 252:12	265:23 283:2 285:3 288:7 291:11 website 21:3 286:15 wednesday 1:12 week 209:12 230:13 weekly 221:15 weeks 47:19 weigh 49:21 weighed 35:8 weighing 34:23 weight 28:13 29:1 214:15 weighted 183:5 welcome 33:12 36:13 62:24 79:20 146:12 197:1 wellbores 115:24 wells 7:17 12:8 12:11,13 44:17 44:24,24 45:2 45:12,15 46:18 46:19 47:11,14 48:22 49:10 50:3,12,13 51:2,3,14,15,22 52:18,23,25 53:1,3,4 60:13 60:15,23 62:5 62:8 69:10,19	78:7 79:17 80:19 81:6,8 81:10,16,19,22 82:4,6,11,14,16 82:17,23,25 83:5,12,14,16 84:20,21 86:6 86:9,16,20 87:1,6 89:19 89:23 96:20 102:11,14 110:11 116:11 117:19,20 118:2,2,5,9,9 118:14 119:6 121:6 122:22 122:24 123:2 128:23 130:9 130:11 131:9 136:17,20 140:4 141:5,14 142:14 143:15 144:15 147:21 147:23 148:17 148:18,20 149:6,19 151:11,14,18 152:11,23 153:14,15 154:3 156:4 157:2,6,9,12,18 158:4,5,12,14 158:19 159:5,8 161:9,13,16 162:1,10 163:3	163:6,14,14,16 163:19,22,23 164:9,13,21 165:2 169:2 170:2,11,12,15 170:19 171:5 171:10 172:3,5 172:16 173:6,7 173:8,10,17,18 173:22 176:9 176:11,13,14 176:21,23,25 177:6,9,11 178:5 179:1,6 179:11,15,15 181:18,18,25 182:23 183:17 184:18,19 189:18,21 193:24 194:1,6 194:8,11,12,15 194:17,18,20 195:16,19,23 196:3,5 200:17 201:1,11,12,19 201:21,24 202:1,7 206:13 221:24 237:3 237:21 238:1 238:19 241:21 242:1,2,20 243:3,16,17 247:20 248:9 250:10,11 251:4 252:13
--	---	--	--

[wells - working]

<p>253:8,12 256:22 257:10 271:8,13,16,18 274:24 275:1 281:9,16,16 282:1,3,5 283:13,15,15 283:17 285:4,7 288:12,14 289:6,17 290:11,14,15 wendell 1:15 went 59:20 81:23 170:14 180:10 247:5 256:17 west 72:17,17 72:20,21 74:1 74:2,12,12,14 74:15 75:13,22 75:24,25,25 76:13,20,21,21 141:23 225:16 238:6 247:3,7 254:3,21,25 255:9 western 75:21 westlawn 259:24 260:2,4 wheelhouse 240:25 wholeheartedly 177:16 181:1 288:16</p>	<p>wide 136:24 185:3,5,16 226:11 227:18 229:6 284:5,6 willing 215:6 win 35:12 window 78:15 78:16,17 206:15 wine 140:15 winnebago 156:24 wished 262:12 withdraw 262:8,12 witness 3:15,16 3:17,18,19,20 3:21 25:13 27:14 31:4 33:12 36:24 38:21 53:19 55:24 57:17 63:9,11 65:3,6 65:7 66:25 67:16 75:4 77:16 119:25 138:9 187:14 205:5 206:24 210:13 212:24 213:9 216:13 225:21 270:8 270:22 276:5 278:4,20,21 280:6 291:18 293:4</p>	<p>witness's 213:19 witnesses 4:8 5:1 6:8 17:10 17:13 18:3 19:24 25:9 31:2,13 32:18 32:22 33:17 36:22,22 37:2 37:6 38:23 39:4,5 57:12 66:23 67:8 77:4,7 85:15 92:6 96:11 107:10 119:14 185:23 186:16 187:5,9,23,25 188:7 197:8 205:7 220:23 270:9 276:6,10 276:18,24 277:3 278:14 291:24 wolfcamp 95:5 199:19 won 237:17 239:1,4,4 wondering 203:22 word 28:21 134:11,18 worded 96:1 words 162:20 166:3 247:19 257:11 262:18</p>	<p>262:22 work 54:4 66:6 66:24 71:10 102:24 103:7 106:7 153:2 224:22 229:4 231:14 232:12 240:9 255:23 257:5 268:22 291:23,25 worked 52:1 94:4 199:10 working 8:11 8:14 13:5 14:14 47:20,23 48:2 50:17 51:24 59:11 68:25 71:14 96:6,8 97:9,20 98:4,7,9,25 99:9,21 100:6 100:13,15 101:2,10,16 103:11 104:8 104:15 105:5 105:24 111:9 113:12 123:24 123:24 124:15 124:16,17,25 125:1,18,23 126:3,14 198:1 198:5,6,7,8 223:6 226:9 228:11,17 229:2,5 239:16</p>
---	--	--	---

[working - zooming]

255:4 262:7 264:10,14,23 266:1,7,19 267:24 268:12 269:13 works 102:17 109:18 132:3 270:23 292:1,8 292:13 world 108:3,16 128:24 129:9 worse 180:20 182:10 would've 142:9 163:11 230:18 236:1 wow 157:6 169:6 wrap 186:15,22 written 33:4 54:16 56:2 60:16 64:7,21 65:24 66:12,16 144:2 211:13 264:4,6 wrong 157:4 161:23 283:2	y	149:19 151:12 206:15 220:5 221:19 241:14 285:24 years 46:4 51:4 52:7,18 53:2 86:22 87:5 89:22 100:21 118:12 128:14 128:20 129:3 150:12 157:5 169:3 183:17 206:12 217:22 220:6 234:6,7 234:8 235:22 yesterday 19:22 146:23 youblood's 216:15 youngblood 26:22,25 27:1 27:6,13 211:16 212:4 263:1,3
x		z
x 4:1 6:1 7:1 8:1 9:1 10:1 11:1 12:1 13:1 13:2 14:1 15:1 xy 142:3,4,6,19	y 37:21 38:2 89:5 158:10 yeah 17:25 29:15 31:20 33:1 36:12 59:11 77:18 85:17,24 97:9 98:2 105:5,19 108:21 128:9 130:7,23 131:25 135:7 141:2,17 143:19 147:18 167:1 176:4 181:12 182:19 198:13,16,16 199:3 230:8 233:14 235:23 236:9,20,22 238:22,25 240:16 243:11 244:12 249:2 250:21 251:12 257:11 267:17 270:23 275:18 275:20 283:6 284:17 291:6 292:13 year 69:21 86:13 109:15 118:7,20 130:20,21 131:8,11 137:1 142:18 147:23	zero 129:18,19 129:21 zone 81:24 85:1 85:4,10 148:3 175:6 zones 45:11 zoom 147:18 zooming 176:17