1	STATE OF IOWA DEPARTMENT OF COMMERCE
2	BEFORE THE IOWA UTILITIES BOARD
3	X IN RE: : Docket No.
4	: HLP-2021-0001 SUMMIT CARBON SOLUTIONS,
5	LLC : ORIGINAL
6	
7	
8	TRANSCRIPT OF HEARING
9	VOLUME 11
10	PUBLIC TRANSCRIPT
11	
12	Cardiff Event Center at Fort Frenzy
13	3232 First Avenue South Fort Dodge, Iowa 50501
14	Tuesday, September 12, 2023
15	Met, pursuant to order, at 8:30 a.m.
16	
17	BEFORE: THE IOWA UTILITIES BOARD
18	ERIK M. HELLAND, Board Chair (Presiding) JOSHUA J. BYRNES, Board Member
19	SARAH M. MARTZ, Board Member
20	(5 0550)
21	(Pages 2750 through 3063)
22	
23	
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45	DARCI KRIENS - CEKIIFIED SHOKIHAND KEPOKIEK

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23	(phonetic) indicates a phonetic	gnelling	
24	<pre>(phonetic) indicates a phonetic spelling. {sic} indicates the text is as stated. Quoted text is as stated by the speaker.</pre>		
25	Anoted text is as stated by the	s pheaver.	

1	PROCEEDINGS
2	BOARD CHAIR HELLAND: Good morning.
3	It's 8:30, September 12, 2023. We will go back on the
4	record for HLP-2021-0001, Summit Carbon Solutions.
5	We need to pick up with Micah Rorie. I
6	have as of last week That's turned up very high. I
7	have as of last week Murray, Meyer and Taylor left in
8	that order for questions. So if anybody else has
9	questions, we can address that.
10	Do you have questions for Micah or anything
11	else, Ms. Ryon?
12	MS. RYON: For Mr. Rorie, but just very
13	few.
14	BOARD CHAIR HELLAND: Okay. Very good.
15	Okay. Let's get started, Mr. Dublinske.
16	MR. DUBLINSKE: Yes, Your Honor. I wanted
17	to give a heads-up. When we left on Friday, I had
18	said our order today, we intended to finish Rorie and
19	go Louque, Lumpkin, Muhlbauer.
20	I believe the Board is aware of Sierra
21	Club's motion regarding Mr. Taylor's unavailability
22	tomorrow. I think, because of the small number of
23	witnesses, it's unlikely that we can avoid both
24	Schmidt and Lumpkin with certainty tomorrow, but to
25	try and accommodate Mr. Taylor, we have agreed to call

1	Mr. Schmidt after Mr. Rorie.
2	So just to give everyone a heads-up so
3	there aren't any surprises, our plan is to finish,
4	call Schmidt and then Louque, Lumpkin, and Muhlbauer
5	as planned.
6	BOARD CHAIR HELLAND: Say that again?
7	Rorie, Schmidt
8	MR. DUBLINSKE: Louque, Lumpkin,
9	Muhlbauer.
10	BOARD CHAIR HELLAND: All right. Thank
11	you.
12	Mr. Taylor?
13	MR. TAYLOR: As a further heads-up, as I
14	mentioned previously, I have a witness from California
15	who will be gone from the country the 20th through the
16	27th, so I'm trying to get him here.
17	All the parties agreed and I have talked
18	to Mr. Dublinske, Mr. Whipple and Mr. Long. That's
19	Mark Jacobson. If we could do him very first thing on
20	Tuesday next week, I think that would work.
21	BOARD CHAIR HELLAND: Okay. Thank you. I
22	think that works. We'll plan on that. I appreciate
23	that.
24	MR. TAYLOR: Thank you.
25	BOARD CHAIR HELLAND: Okay. Any other
I	

1	announcements or questions before we finish up with
2	Mr. Rorie?
3	(No response.)
4	BOARD CHAIR HELLAND: Okay. Mr. Rorie,
5	please return.
6	Thank you, Mr. Rorie. Just a quick
7	reminder you are still under oath.
8	THE WITNESS: Understood.
9	BOARD CHAIR HELLAND: Thank you.
10	MICAH RORIE,
11	re-called as a witness by Summit Carbon Solutions,
12	LLC, having been previously duly sworn by Board Chair
13	Helland, was examined and testified as follows:
14	BOARD CHAIR HELLAND: I believe, according
15	to my list, Mr. Murray is next. Go ahead.
16	MR. MURRAY: Thank you, Mr. Chair.
17	CROSS-EXAMINATION
18	BY MR. MURRAY:
19	Q. Mr. Rorie, I'm over your right shoulder, so
20	let's logistically make sure we have something that
21	works here. Sometimes what we've found is when I'm
22	asking question, the tendency of the witness is
23	perhaps to miss that microphone.
24	So I just wanted to kindly inform you that
25	this has been a problem. Okay?

1	A. Okay.
2	Q. If we run into that problem, we'll just
3	stop and reposition. Okay?
4	A. Okay.
5	Q. All right. I represent a couple of
6	landowners in this case, and I've got quite a few
7	questions for you.
8	I'm going to start with where the Iowa Farm
9	Bureau had asked you about the temporary construction
10	easement. Okay?
11	A. Okay.
12	Q. As I understand it, Summit wants a
13	nonexclusive temporary construction easement; is that
14	correct?
15	A. Yes.
16	Q. And by "nonexclusive," would it be correct
17	to say that Summit cannot prevent a landowner from
18	coming upon their property while during a temporary
19	construction easement period by virtue of claiming
20	that the landowner's committing a trespass? Would you
21	agree that Summit cannot claim the landowner is
22	committing a trespass in that situation?
23	MR. LEONARD: Objection. Calls for a legal
24	conclusion.
25	BOARD CHAIR HELLAND: Mr. Rorie, you may

- 1 answer, if you know the answer; otherwise, Mr. Murray,
- 2 you can restate.
- 3 A. "Trespass" is a strong word there. The
- 4 rights that we're seeking involve non-obstruction
- 5 during construction, so I believe that if the
- 6 landowner was getting in the way during construction,
- 7 then that would be violating the rights granted or the
- 8 agreement that we reached. But in terms of accessing
- 9 that easement, temporary construction easement outside
- 10 of the construction to the extent it didn't affect
- 11 anything, I don't think we would have a huge problem
- 12 with that.
- 13 BY MR. MURRAY:
- 14 Q. I do appreciate how Summit is approaching
- 15 this issue in contrast to Dakota Access. For purpose
- 16 of this question, I'm not talking about landowners who
- 17 attempt to block work or create a safety hazard or
- 18 disrupt work in any way. I'm more interested in
- 19 landowners being freely able to inspect the work while
- 20 not being in the way.
- 21 So in that context, would you agree that by
- 22 including the word "nonexclusive," a landowner has a
- 23 right to go and inspect construction firsthand?
- 24 A. I would agree with some of the rules that
- 25 are in place about tile repair inspections, things of

- 1 that nature. It is complicated on a mass scale to
- 2 escort landowners into the construction footprint for
- 3 safety reasons.
- It puts us on everyone's property longer,
- 5 so I wouldn't agree that landowners hanging out in the
- 6 right-of-way during construction is a good idea, but I
- 7 would commit that we would comply with the rules about
- 8 certain types of inspection.
- 9 O. So in this example I'm going to provide
- 10 you, crews do work on the property, and those
- 11 construction crews have got to go home and get some
- 12 sleep, okay?
- 13 So they go. They're done for the day.
- 14 They'll come back tomorrow.
- 15 In that situation would it be Summit's
- 16 position that a landowner can go out on their property
- 17 and take a look?
- 18 A. That happens often. I don't think we would
- 19 have a problem with that. The caveat there is that as
- 20 long as they don't do anything that causes us to be
- 21 delayed as a result of their actions.
- 22 You mentioned the word "attempt." They
- 23 don't necessarily have to attempt to do that. That
- 24 can just happen by disrupting things.
- 25 So as long as they didn't do anything of

- 1 that nature, I don't see us having a problem with it.
- 2 Q. And there are personnel that address safety
- 3 issues with Summit and also, of course, with law
- 4 enforcement; right?
- 5 A. Yes.
- 6 Q. And so a landowner that might say to that
- 7 contact person, be it through Summit or law
- 8 enforcement, that says, "Hey, I just want to make sure
- 9 everybody knows, I'm going to go out and check this
- 10 out," that would be a pretty good measure of how to do
- 11 this sort of thing, isn't it?
- 12 A. That would be one of them.
- Q. Okay. Mr. Rorie, I recall some of your
- 14 testimony last week, but you're going to have to help
- 15 me out in characterizing your testimony correctly in
- 16 this regard.
- 17 A. Okay.
- 18 Q. I believe you were asked about whether
- 19 Summit would agree to -- I'm going to characterize it
- 20 as preconditions upon the requested permit approval
- 21 from this Board.
- Do you recall giving testimony in this
- 23 regard?
- 24 A. I'm not sure I understand the question.
- 25 Can you help me there? I'd appreciate it.

Well, stated specifically, the State 1 0. Yeah. 2 of North Dakota has not granted a permit, so an 3 example of a precondition on this Board granting a 4 permit might be to say, "This Board is not going to 5 grant a permit until North Dakota grants a permit." Would Summit -- Did you provide some 6 7 testimony in this regard last week? 8 I was asked a question last week about Α. 9 whether I thought we ought to get a permit without 10 other state permits in play, which I responded yes, I think we ought to. We ought to seek a permit in Iowa 11 12 regardless of how things are going in some other 13 states. 14 I think some other witnesses talked about 15 whether or not there would be preconditions of what 16 someone would agree to. 17 0. Now we're talking the same language about 18 what your testimony was last week. 19 So as I understand it, just very 20 straightforwardly, Summit wants to take the CO2 to North Dakota to store it within underground caverns; 21 22 correct? 23 Α. Yes. 24 And to get to North Dakota, we have to go Q. 25 through South Dakota; correct?

- 1 Α. Yes. 2 Now, we know that not only has North Dakota Q. 3 denied this permit, but now we learned over the 4 weekend or at least yesterday that South Dakota has 5 not granted its permit to Summit; correct? 6 Α. Not yet, yes. 7 Q. And you can affirm that that denial 8 occurred yesterday; correct? 9 That's my understanding. Α. 10 Is there anywhere else that Summit intends Q. to take this CO2 besides North Dakota? 11 12 Α. Not to my knowledge. I don't really make 13 those decisions, but not to my knowledge. 14 What does Summit know that would guarantee 0. 15 that South Dakota will eventually change its position
- 17 A. What does Summit know that would guarantee 18 we would get a permit in South Dakota?

and approve this pipeline in that state?

- 19 Q. I think that's a good characterization of 20 my question.
- 21 A. Well, we know what type of traction we've
- 23 that, and we're confident in our ability to obtain a

made in South Dakota. We understand the rules tied to

- •
- 24 permit in South Dakota.

16

22

As far as what we know, I don't know that

- 1 there's any guarantee.
- 2 Q. So isn't it possible South Dakota will not
- 3 grant Summit a permit? Isn't that a possibility?
- 4 A. I don't like to think that way, but I guess
- 5 it's a possibility.
- 6 Q. Lawyers -- I'm sorry. Lawyers have to
- 7 think that way, and I would suggest perhaps maybe
- 8 Summit might need to consider these, possibilities,
- 9 that you may not get that permit in South Dakota.
- I think you just affirmed that; right?
- 11 A. I think any pipeline project that needs a
- 12 permit considers a possibility of not receiving one.
- 13 Q. So, obviously, if I asked the same question
- 14 about North Dakota, you would similarly answer;
- 15 correct? There's no guarantee in North Dakota either;
- 16 correct?
- 17 A. I don't think there's any guarantee in
- 18 anything.
- 19 O. So since there's no quarantee and since
- 20 it's possible that these permits may not be granted in
- 21 these other states and since the only place to go with
- 22 the CO2 is North Dakota, isn't it a possibility you're
- 23 installing a pipeline to nowhere?
- 24 A. I don't see it that way. I don't think
- 25 about how things are going in other states as it

- 1 relates to what we're needing to get done in Iowa.
- 2 Yes, if we built a pipeline that didn't
- 3 have a terminus, it would be a pipeline to nowhere.
- 4 The way I see it, the time we're spending this morning
- 5 is to seek a permit in Iowa and make sure we
- 6 accomplish all of the criteria necessary to do so.
- 7 Q. It's always important to wear someone's
- 8 shoes when negotiating with them, Mr. Rorie. Would
- 9 you agree?
- 10 A. You'll have to elaborate for me on wearing
- 11 other people's shoes.
- 12 Q. Well, the golden rule, let's just say.
- 13 You're trying to build relationships, as
- 14 you stated in your testimony; right?
- 15 A. Yes.
- 16 Q. And you just said "the way I see it."
- 17 Well, if a landowner sees it that a pipeline is going
- 18 to be installed after adverse condemnation on their
- 19 property, they would see it a little differently than
- 20 you, wouldn't they?
- 21 A. They could. Landowners see things in many
- 22 ways. So do we.
- O. But it would be fair for them to say a
- 24 pipeline to nowhere, after having eminent domain
- 25 taken, that perspective, if you were to put yourself

in a landowner's shoes, is kind of an objectionable 1 2 thing; correct? 3 I don't agree with that. Α. 4 MR. MURRAY: If the technical -- the tech 5 expert or party can publish Murray Hearing Exhibit 1, I would appreciate that. 6 7 (Brief pause.) BY MR. MURRAY: 8 9 Okay. So on the screen there is Murray 0. 10 Landowners Hearing Exhibit 1. 11 Do you see that there? 12 Α. I do. 13 I'm going to represent to you that this is Q. 14 a final decision and order of the Iowa Utilities Board 15 March 10, 2016, concerning Dakota Access. Would you 16 agree this appears to be the caption, at least on the 17 screen; right? 18 It appears to be the caption, yes. Α. 19 The Dakota Access pipeline was an oil Q. 20 pipeline from the northwest corner of the state down to the southeast corner of this state; correct? 21 22 Yes, that's right. Α. 23 Coincidentally, it also involved a terminus 0. 24 in North Dakota [sic]; correct? 25 Α. It involved a terminus in Illinois.

1	Q. That's a terrible question. You're right.
2	The oil went to Illinois. It came from
3	where?
4	A. From North Dakota.
5	Q. I see. So I'm going to go to page 4 on
6	this exhibit, if I could, and down below the
7	introduction, I'm going to see that number there
8	that's six or seven lines down. And it appears to
9	show that we have an oil pipeline through Iowa as a
10	part of a 1,168-mile project to carry oil from the
11	Bakken area.
12	That would be the number of miles in Iowa
13	that were affected by the Dakota Access pipeline;
14	correct?
15	A. 346, I believe, if I'm reading that right.
16	346 are the miles that related to Iowa.
17	The entire project from North Dakota to
18	Illinois was 1168 miles.
19	Q. Thank you for that clarification. Your COO
20	correctly chastised me for my math, so I better write
21	it down.
22	A. That's okay.
23	Q. Okay. So let's compare.
24	Your pipeline in Iowa is how many miles?
25	A. 686 miles.

1	Q.	And total miles for the entire project?
2	A.	Just over 2,000.
3		
	Q.	Do you have a specific number?
4	Α.	2,060 miles.
5	Q.	All right. Last week you had clarified, as
6	a part of	your direct testimony, that there were a
7	certain nu	mber of holdout parcels at that time
8	concerning	Summit.
9		Do you remember that testimony?
10	A.	I don't recall calling them "holdout
11	parcels."	Are you talking about remaining parcels?
12	Q.	I suppose, yeah. Remaining parcels to be
13	signed?	
14	A.	That's right.
15	Q.	Okay. So with respect to the remaining
16	parcels, h	ow many were there last Tuesday [sic]?
17	A.	Last Tuesday?
18	Q.	I think you testified 892.
19	A.	I want to be perfect here. I don't recall
20	exactly on	Tuesday. I testified on Friday or
21	Thursday.	
22	Q.	No. I think it was Friday. I'm going to
23	help you.	It was Friday. Let's correct my question.
24		On Friday didn't you say it was 892
25	remaining	parcels?

Remaining parcels. That's right. 1 Α. 2 Q. How many is it today? 3 It's going to be right around there. Α. 4 There's a cancellation period in Iowa, so I would 5 still say 892, even though we reached agreements this weekend. 6 7 0. Okay. Now, if we go to Exhibit 1, which just came down -- we're going to go back there -- if 8 9 we go up to page 2 and we just scroll down a little 10 bit there to the bottom of that page, right there, it 11 says, "Individual Eminent Domain Parcels," and in the ruling it shows page 122 of that IUB ruling where it 12 13 addresses those eminent domain parcels. Okay? 14 Α. Okay. 15 0. And so below there we've got Mr. Burkett, 16 and he's got a parcel number, H-BO-001. That looks 17 kind of like the way you guys in Summit identify 18 parcels; correct? 19 It looks similar, yes. Α. 20 Now, if we scroll down in this to page 4, Q. you can just -- I'm not going to ask you to count 21 22 these, but if we could slowly go through that, let's 23 go up to page 3. We went through quite a few there. We're on page 3 now. Let's scroll down 24 25 page 3, and then we go on to page 4.

- 1 This listing of eminent domain parcels
- 2 appears to end around page 151 or 152. At least
- 3 that's what the Table of Contents shows; correct?
- 4 A. That's what the Table of Contents shows,
- 5 yes.
- 6 Q. I'm going to hesitate to say that I counted
- 7 this up over the weekend, and I'm going to say that
- 8 the number of eminent domain parcels was a little bit
- 9 below 50 parcels for Dakota Access. Okay?
- 10 A. I don't know if that was a question, but I
- 11 know your math is wrong there.
- 12 Q. What was it?
- A. Well, there's certainly more than 50
- 14 parcels that were being discussed as Dakota Access was
- 15 heading -- Well, I guess by the time they got their
- 16 permit, maybe it was 50 parcels. Maybe you're right
- 17 there.
- 18 Q. I'm just saying that ruling concerns less
- 19 than 50 parcels in Dakota Access. We can count that,
- 20 if you'd like, but that's what it says.
- 21 A. I think you may be right. I'll take your
- 22 word for it, but I think you may be right. By the
- 23 time they received an order and headed into
- 24 construction with final conditions, perhaps it was
- 25 that low, but I think there were hundreds of tracts.

Your Honor, if you may, we'll 1 MR. LEONARD: 2 stipulate this is the Board's final decision and order 3 in the Dakota Access case dated March 10, 2016. 4 think the Board's aware of its precedence, which if we 5 could ask the witness questions that aren't encapsulated in this document, I think that might 6 speed things up a bit. 7 8 BOARD CHAIR HELLAND: Okay. Thank you. 9 Go ahead, Mr. Murray. 10 MR. MURRAY: We'll offer Murray Landowners 11 Exhibit 1. 12 (Murray Landowners Exhibit 1 was offered 13 into evidence.) 14 BOARD CHAIR HELLAND: Is there an 15 objection? 16 (No response.) 17 BOARD CHAIR HELLAND: Seeing none, the 18 Board will admit Murray Hearing Exhibit 1. 19 (Murray Landowners Exhibit 1 was admitted 20 into evidence.) BY MR. MURRAY: 21 22 0. How many total parcels in Iowa are affected 23 by the Summit pipeline? 24 Α. 3,305. And I imagine you're not aware of the total 25 Q.

- 1 number of parcels that were affected by the Dakota
- 2 Access pipeline, are you?
- A. It was in the 1200 range, 1275, something
- 4 like that.
- 5 O. Okay. Did you testify during your --
- 6 During somebody's questions you threw out a number of
- 7 1200 landowners who have signed. Can you give some
- 8 context to that again? What are you talking about
- 9 there?
- 10 Did you say that?
- 11 A. I said 1210 landowners have reached an
- 12 agreement with us voluntarily in Iowa.
- 13 Q. Okay. So that I understand this, there are
- 14 3305 parcels in Iowa and 892 parcels yet to be signed;
- 15 correct?
- 16 A. There are 892 parcels yet to be signed
- 17 roughly. I believe we got a couple this weekend but
- 18 can't count them yet.
- 19 Q. Yeah, right. Roughly. So the differential
- 20 there is, again, challenging me. 2400 or so parcels
- 21 have been signed?
- 22 A. 2413.
- 23 Q. You would be a guy that would know that
- 24 number?
- 25 A. Right.

So of those 2413 parcels who have signed, 1 0. 2 it only took 1210 landowners to commit those parcels? 3 Α. That's right. 4 How many landowners do you need signatures 0. 5 from concerning the 892-or-so remaining parcels? Α. 469. 6 7 Q. Thank you. I wanted to explore a topic 8 about major versus minor route changes. Okay? 9 Α. Okay. 10 Can you define the factors which would Q. 11 characterize a major route change? 12 I'm not sure I understand that. Α. 13 factors that would -- Could you help me there? 14 Well, Summit has used the term "major route 0. 15 change" versus "minor" or "macro route change." trying to understand it, and I'm wondering how Summit 16 17 distinguishes between the two. 18 So in that sense I'm looking for factors 19 that Summit utilizes to make a distinguishment between 20 these two. 21 Well, a major route change would be a Α. 22 variety of things that would cause us to incumber a 23 significant amount of additional landowners. Maybe a 24 lot of additional pipe or just maybe a totally 25 different direction.

So what we cited were micro changes, which 1 2 would be the opposite of that, but there are plenty of 3 examples of all types of major route changes. typically don't do those. 4 5 I would imagine that if there were a route change which affected, for example, a previously 6 7 planned valve that caused a change to the valve, that 8 would be a major route change; correct? 9 That's a factor. Α. 10 You would say a strong factor, wouldn't Q. 11 you? Could be, depending on where we need to put 12 Α. a new valve as a result of that valve adjustment and 13 14 whether or not that fit all the criteria for our valve 15 spacing and other issues there. It could be a part of a major route change. 16 17 0. Other pipeline infrastructure might factor 18 into the distinction between these two 19 characterizations of major versus minor; correct? Other pipeline infrastructure could factor 20 Α. into either. 21 22 Physical characteristics of the land? Q. 23 Α. Yes. 24 Your COO, Mr. Powell, had testified -- I Q. want to make sure that I only say I'm paraphrasing his 25

- 1 testimony here, but I think he testified that, "I
- 2 don't intend on amending the application." I think
- 3 this had to do with route.
- 4 Today would you affirm Mr. Powell's
- 5 testimony?
- A. I'd have to listen to all of his testimony
- 7 to see how he elaborated on that or if he did. It's
- 8 hard for me to affirm his testimony, but I can tell
- 9 you that I report to Mr. Powell, so I'm going to do
- 10 what he directs me to do.
- I think his testimony would stand on
- 12 itself.
- 13 O. Very true. I had a five-minute
- 14 cross-examination to the tee of Mr. Schovanec. Is
- 15 that pronounced correctly?
- 16 A. Yes.
- 17 Q. Amazing. I think I established with him
- 18 that Summit isn't proposing any alternate routes to
- 19 the Iowa Utilities Board. Would you affirm that
- 20 testimony today?
- 21 MR. LEONARD: Objection, Your Honor.
- 22 BOARD CHAIR HELLAND: State your objection.
- 23 MR. LEONARD: Calls for a legal conclusion
- 24 and misstates the petition in this matter, including
- 25 an Exhibit F describing alternative routes.

BOARD CHAIR HELLAND: Will you reword it? 1 2 Mr. Rorie, you can answer the legal 3 conclusion component of it, if you know. 4 I really don't. THE WITNESS: BY MR. MURRAY: 5 Are there any other alternate routes that 6 Q. you could identify to the Iowa Utilities Board today? 7 Possible alternate routes? I don't know 8 Α. 9 that I can identify any of those today. I think part 10 of that is I don't route the pipeline. 11 Have you seen Navigator's easement Q. 12 documents that it negotiates with landowners? 13 Α. I have. 14 And you're aware that Navigator's easement 0. 15 has an option that envelopes their easement; correct? Help me understand "envelopes." 16 Α. 17 Well, as I understand it -- correct me if 0. 18 I'm wrong -- there's a document entitled something to 19 the nature of an easement, and then there's a separate 20 document that is entitled option. 21 Could you affirm that there appears to be 22 two different documents there? 23 I can't speak for Navigator and everything Α. 24 they're doing on their land acquisition side, so I'm 25 hesitant to do that. I work for Summit.

1	But the brief glance that I've had at
2	documents tied to that project, I've seen some that
3	are tied to options, if that's what you're describing,
4	but it's going to be hard for me to go into details of
5	a pipeline project I don't work for.
6	Q. So you've looked at the Navigator
7	documents, and you have knowledge that there is option
8	language in those documents?
9	A. I've seen some. The entirety of their
10	documents, I don't have a clue.
11	Q. So would you agree with me or at least do
12	you have knowledge as to the general nature of the
13	amount of the option payment?
14	MR. LEONARD: Objection, Your Honor.
15	BOARD CHAIR HELLAND: State your objection.
16	MR. LEONARD: I'm going to object to
17	relevance to the content of another pipeline
18	company's voluntary easements not involved in this
19	docket.
20	BOARD CHAIR HELLAND: Okay.
21	Mr. Murray?
22	MR. MURRAY: It's background information as
23	to the question of Summit's easement and how Summit's
24	easement appears to be locked in rather than including
25	option language.

1 BOARD CHAIR HELLAND: Okay. I appreciate 2 the background. If we can get to the question, 3 please. 4 BY MR. MURRAY: 5 0. You are aware that there is option language in those Navigator easements; correct? 6 The few that I took a look at, yes. 7 Α. By contrast, Summit does not have, employ 8 Q. 9 or use options; correct? 10 We employ options. We use options Α. sometimes when it comes to fee purchases. 11 12 Q. But not with respect to easement purchases 13 from landowners, such as the ones I represent? 14 I haven't to date, no. Α. 15 So rather than adopting this absolute Q. stance, wouldn't Summit have made it easier on itself 16 17 with routing by adopting Navigator's practice of 18 utilizing option language? 19 No, not in the least. Α. 20 I'd like to get into factors that go into Q. 21 Summit's determination of whether an alternate route 22 is possible. 23 Do cultural factors factor into that? 24 Indian bones are out there. Is that something that 25 affects alternate-route issues?

- 1 A. I don't use the term "Indian," but there
- 2 are a number of factors that play into altering the
- 3 route of a pipeline. Cultural resources could come
- 4 into play there, if they were a factor, but there are
- 5 a number of parameters and criteria you have to look
- 6 at when you're changing the route.
- 7 Q. There's other environmental factors that go
- 8 into play there, too, aren't there?
- 9 A. Could be.
- 10 Q. Would the willingness of a landowner to
- 11 give an easement be a factor as to whether an
- 12 alternate route is possible?
- 13 A. Could be.
- Q. And on the flip side of that, conversely,
- 15 the unwillingness of a landowner is also a factor that
- 16 affects the possibility or impossibility of an
- 17 alternate route; correct?
- 18 A. Could you frame that differently? I'm not
- 19 sure I understand.
- Q. Yeah. I'm just going to withdraw the
- 21 question.
- 22 A. Okay.
- O. Summit has the authority under Iowa law, as
- 24 I understand it, to perform surveys by giving a
- 25 notice, and then they're out there taking a look at

- 1 the ground.
- 2 So that's not a question. I'm just going
- 3 to frame it in a question to you.
- 4 Are you involved in decisions at Summit to
- 5 go ahead and perform those surveys?
- 6 A. I don't direct the survey activity, as far
- 7 as the decision to perform them. I'm involved in
- 8 procuring the permissions or the consent of the
- 9 landowner to survey.
- 10 Q. Even with an unwilling landowner, Summit
- 11 has had the opportunity to go out and survey property,
- 12 even though they're unwilling; is that correct?
- 13 A. That's true.
- 14 Q. So if you have the ability to survey
- 15 property upon an unwilling landowner, the willingness
- or unwillingness of that landowner really is not an
- 17 issue, is it?
- 18 A. It's certainly an issue.
- 19 I'm not sure I understand your definition
- 20 of an "issue" --
- 21 Q. Did -- I'm sorry. I cut you off.
- 22 A. I'm not sure I understand your definition
- 23 of an "issue."
- Q. Well, we're talking about the factors that
- 25 Summit uses to determine whether an alternate route is

So in that context, I'm trying to figure 1 possible. 2 out why the willingness or unwillingness of a 3 landowner has anything to do with Summit's 4 determination of a possible alternate route. 5 Α. Well, it has a lot to do with altering a route, especially in the event that neighboring 6 7 landowners may have been, as you're referring to, 8 willing. 9 So if we're being asked to consider 10 altering a route on a parcel that would transfer 11 impacts onto landowners that have already reached an agreement with us, then what we're being asked to 12 13 consider is to change the commitments that we made 14 with that particular parcel's neighbors in order to 15 accommodate that parcel. So that is always a factor that we have to look at to decide whether or not that 16 17 fits because what it does is it invites other people 18 into the conversation that puts us in a position where 19 we need to change our commitments and ask more of the 20 neighbors in order to accommodate that particular 21 parcel. 22 So it's a factor. 23 I was going there next, about adjacent 0. 24 landowners. It's amazing. Our minds think alike. 25 But let's go back to my question, which had

- 1 nothing to do with adjacent landowners. My question
- 2 was: Within the context of that parcel, assuming
- 3 there's no change in the entry or exit point upon that
- 4 parcel, why would the willingness or unwillingness of
- 5 a landowner affect the alternate route on that parcel?
- 6 A. There's just so many factors involved with
- 7 this, Mr. Murray. I mean, "willingness" and
- 8 "unwillingness," that's a broad word.
- 9 O. Why? "Why" is a broad word. You're right
- 10 about that.
- 11 A. Well, "willingness." There's a lot to
- 12 consider when it comes to changing the route of a
- 13 pipeline on a particular parcel.
- One of the things you talked about in the
- 15 first part of your question was the entry and exit
- 16 point. It is very rare to change a pipeline route and
- 17 not alter the point of terminus and point of
- 18 beginning. That's rare.
- 19 So that's not the most common outcome, but
- 20 unwillingness doesn't really create a big incentive
- 21 for us to go through a number of exercises; to your
- 22 point, cultural/environmental review, constructability
- 23 review, potential costs, potential additional impacts
- 24 on that parcel alone, timing, waterway crossings,
- 25 reclamation, et cetera.

So all of that goes into play in our 1 2 decision of whether or not it's feasible to change the 3 route, but if a landowner is unwilling, period, to 4 work with us, I don't know that it's reasonable to ask 5 us to make a number of exceptions like those I just cited to end up at the same point. 6 7 We're not going to be in agreement, which is driven by the landowner in the instance I think 8 9 you're describing. 10 Let's go back to the last point you just Q. mentioned in your answer. Here's my question, again, 11 12 as it relates to just that landowner, not adjacent landowners, okay? 13 14 What if a landowner, who is not willing to 15 sign an easement, but he tells Summit, "Don't put it there. Put it somewhere else on my ground"? Is that 16 17 a factor that Summit considers? 18 That's a part of the overall work view of Α. 19 the scenario, yes. 20 So even though the landowner may not sign Q. an easement, says, "I don't want any of your business, 21 22 but if you're going to put it somewhere," Summit will 23 have to consider that as a possibility, won't it? 24 Α. I don't know "have to," but we certainly 25 would take a look at every request a landowner gives

3

- 1 us. 2 Q. Now, let's go to these adjacent landowners.
- I think you had brought that subject up earlier.
- 4 What if a landowner is not willing to sign
- 5 an easement, but there's an adjacent landowner right
- next to him who says, "Yeah, sure. I want the 6
- pipeline on my property"? 7
- Is that a factor that Summit considers? 8
- Does it come up often? I guess it would be 9 Α.
- 10 part of the conversation.
- 11 And even extending this question a little 0.
- further, what if we have a landowner not willing to 12
- 13 sign an easement, but there's an adjacent landowner --
- 14 hang with me here -- who has -- on a different parcel
- 15 somewhere else, he's actually signed an easement
- somewhere else in that county. That's a factor that 16
- 17 also comes into play.
- 18 You have a willing landowner who has
- 19 already given you easement, and he's right next to
- 20 this unwilling landowner with another parcel. That's
- a big one, too, isn't it? 21
- 22 I don't know what you mean by "a big one."
- 23 It's very rare, and we look at the particular parcel
- 24 to be impacted, not the -- don't typically look at the
- idea that someone may have signed an easement 25

24

25

Q.

1 elsewhere. 2 We have landowners that own property in 3 multiple states on this project. I wouldn't -- If we 4 were looking at a route change, we would look at where 5 the pipeline is being proposed to go. I think also, perhaps, your definition of 6 7 "willing" is much different than mine. There's a lot 8 more that goes into it. 9 Thank you. 0. 10 Tech, can we publish Kracht MR. MURRAY: 11 Direct Exhibit 1? Wait a minute. Is it 1? Yeah. Kracht Direct Exhibit 1. 12 13 (Brief pause.) 14 BY MR. MURRAY: Okay. It appears we have on the screen 15 Q. Kracht Direct Exhibit 1. Do you have it in there in 16 17 front of you? 18 Α. I do. 19 I'm going to represent to you that this is 20 a map of a parcel owned by one of my clients, the 21 Kracht Trust. Kracht is K-r-a-c-h-t. 22 Are you familiar today with this parcel? 23 Α. I am.

you agree with me that this appears to be a map

So then as you look at this parcel, would

published by the county assessor in Lyon County? 1 2 It could be. Α. It certainly isn't a map that you publish; 3 Q. right? 4 5 Α. I don't think so. I don't control all of our maps, but I don't think so. 6 7 Q. "Publish" is the wrong word. Create? I don't believe we did. An engineer or 8 Α. 9 somebody created that. 10 Now, there is a white area on that map from Q. 11 the south that comes from what appears to be a road, 12 and it meanders from the central lower part and goes 13 upward to the northeast and exits out the east side of 14 this parcel. 15 Would you agree with my depiction of that white area? 16 17 Α. Yes. 18 That's a water area, isn't it? 0. 19 It appears to hold water outside of the Α. 20 thaw, yes. 21 Are you familiar with the topographical 0. 22 features of this parcel as it relates to elevation? 23 I don't know the exact elevations. Α. 24 see that there's an elevation change, but I couldn't 25 list the margins of topographical elevations there.

The Big Sioux River is our west boundary in 1 0. 2 Iowa as it relates to Lyon County; correct? 3 Α. Yes. 4 And how far is the Big Sioux River from 0. 5 this parcel? I couldn't tell you. Not terribly far, 6 Α. 7 depending on your definition of "far," but I couldn't 8 tell you the exact distance. 9 MR. MURRAY: I'm going to ask the Tech 10 Chair to publish an Exhibit H that was filed on September 12, 2022, concerning the Kracht parcel. 11 12 Okay. Before I do that, I'd like to enter 13 Kracht Direct Exhibit 1. 14 (Kracht Direct Exhibit 1 was offered into 15 evidence.) BOARD CHAIR HELLAND: Is there an 16 17 objection? 18 MR. LEONARD: No, Judge. BOARD CHAIR HELLAND: All right. Kracht 19 20 Hearing Exhibit 1, does that --21 MR. MURRAY: You know, it's Direct 22 Exhibit 1. It was attached to Mr. Kracht's testimony. 23 I'm fine with entering that as an exhibit when 24 Mr. Kracht testifies. 25 Is that what the Board's preference is?

1	BOARD CHAIR HELLAND: Yes.
2	MR. MURRAY: Sorry.
3	BOARD CHAIR HELLAND: No worries. Thank
4	you. I appreciate that.
5	So withdrawing that?
6	MR. MURRAY: I'm withdrawing it. We'll get
7	it on there with Mr. Kracht.
8	BOARD CHAIR HELLAND: Thank you.
9	BY MR. MURRAY:
10	Q. Okay. What we have on the screen now
11	appears to be a filing by Summit on September 12,
12	2022, and I'm going to suggest that the ownership
13	information references my client, Mr. and Mrs. Kracht,
14	trustees of their trusts; right?
15	A. Okay, sure.
16	MR. MURRAY: Let's go down to some page
17	that has a map, Tech. Okay. There we go. What page
18	is that? Is that I can't see it.
19	MR. FORS: Five.
20	MR. MURRAY: Thank you.
21	BY MR. MURRAY:
22	Q. So on page 5 of this thing, okay? Let's
23	get it on the screen. All right.
24	So you see there the This is a map that
25	was produced at the direction of Summit; correct?

ı	OR HEA	ARING 09/12/2023 Page 279
	1	A. It looks like that's the case, yes.
	2	Q. This is a map that was produced by Summit
	3	presumably following a survey that Summit conducted on
	4	this parcel; correct?
	5	A. Yes.
	6	Q. This is a map produced after a survey in
	7	which Mr. Kracht asked Summit to consider pushing the
	8	pipeline to a boundary; correct?
	9	A. That looks like that's the case, yes.
	10	Q. So that way what we can do is say this is
	11	what we would call the "boundary route." If I refer
	12	to the "Kracht boundary route," I'm referring to this
	13	route right here on the screen, okay?
	14	A. Okay.
	15	Q. All right. Take a look at how this comes
	16	in on the south side, all right? On the south side
	17	you see where it's located there?
	18	A. Yes.
	19	Q. Now, you testified earlier that it's
	20	extremely rare that we have a change that does not
	21	involve a change of an entry or exit point.
	22	Do you remember that testimony?
	23	A. It looks like the exit point I'm not
	24	sure I understand your question. You're talking about
	25	the entry point there?

- 1 Q. Well, when we have route changes on a
- 2 landowner's parcel, I think you testified that it's
- 3 extremely rare, when a landowner has a route change in
- 4 their parcel, where it doesn't also affect an entry or
- 5 an exit to that parcel; correct?
- A. I did testify to that, yes.
- 7 Q. All right. Thank you.
- 8 MR. MURRAY: Let's now publish another
- 9 Exhibit H for this individual on April 18, 2023. Go
- 10 to page 5, I guess. Okay. All right.
- 11 BY MR. MURRAY:
- 12 Q. So this is another map dated April 18,
- 13 2023. At least it was filed on that date concerning
- 14 this same landowner; correct?
- 15 A. I'd have to take your word for that. I
- 16 don't have evidence of the filing dates. It looks
- 17 like the same route to me.
- 18 Q. You know, that's a good -- that's what I
- 19 see. I see that this is the same route on April 18 as
- 20 it was on September 12th of '22.
- 22 A. It looks very similar.
- 23 MR. MURRAY: If the tech person could
- 24 scroll to the top of this page and look at the filing
- 25 date, that would help the witness.

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1
     BY MR. MURRAY:
 2
           Q.
                So you see it says "April 18, 2023," there,
 3
     okay?
 4
           Α.
                Okay.
 5
           0.
                All right. So Summit filed this on
     April 18, 2023, not changing the route; correct?
 6
 7
           Α.
                From what I can glance at, yes.
                                                   I don't
     know if there's some technical differences in those
 8
 9
           I didn't draw it, but it looks very similar.
10
                Look at that feature there.
                                              It says
           Q.
     "Pond" right there on the right-hand side;
11
12
     correct?
13
           Α.
                Yes.
14
                So there's that pond. Let's go to July 14,
           0.
15
     2023; another Exhibit H.
16
                Now, on page -- you see where it says,
17
     "July 14, 2023," Mr. Rorie?
18
           Α.
                Yes.
19
                That's when Summit filed this document;
           Q.
20
     correct?
21
                It looks like that's the case.
           Α.
22
                Okay.
           Q.
23
                MR. MURRAY: So is this also page 5? I
24
     think it is.
25
                THE WITNESS: Are you asking me?
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- 1 MR. MURRAY: No, I'm not.
- 2 BY MR. MURRAY:
- Q. I'm going to suggest to you this is page 5
- 4 of this document, Exhibit H. Would you agree with me
- 5 that this page depicts a much different route?
- 6 A. Certainly different, yes.
- 7 Q. Would you agree with me that as it comes
- 8 upon this property on the south side, it looks pretty
- 9 much the same, doesn't it?
- 10 A. The south side looks like a similar point
- 11 of beginning, yes.
- 12 Q. Okay. You are aware that Mr. Kracht has
- 13 advised Summit that this pipeline route is
- 14 objectionable, aren't you?
- 15 A. That's my understanding, that he prefers
- 16 the other route or --
- 17 Q. Are you -- I'm sorry. I cut you off. What
- 18 was your answer?
- 19 A. It's my understanding he prefers the other
- 20 route or your client does.
- 21 O. Mr. Kracht has made it abundantly important
- 22 to him that this route is on a ridge area. You would
- 23 affirm that fact, too?
- 24 A. I haven't stood out there to tell you
- 25 whether it's on a ridge area. I can tell you that

- 1 that route has a lot less trees in it and crosses a
- 2 drain once and still stays out of that pond that you
- 3 showed.
- 4 So I'm not a construction expert, but I can
- 5 speak to it in layman's terms that that's a more
- 6 practical route constructability-wise, impact-wise, et
- 7 cetera when it comes to the construction side of
- 8 things.
- 9 I'm not sure whether that's a ridge or not.
- 10 It may be helpful also -- I don't know if I can
- 11 request this -- if we could pull up the KMZ to
- 12 juxtapose what things look like on either side of that
- 13 tract as it relates to this route. I think that would
- 14 help as a picture for me at least.
- 15 Q. I'm going to rely on my client's testimony
- 16 to confirm that's a ridge. I want to push forward in
- 17 my questions.
- 18 A. Understand.
- 19 I may have a little difficulty answering
- 20 them if I can't see what's happening on the other side
- 21 of the property line, so I think a KMZ would be
- 22 helpful. I don't know who I request that from.
- Q. I'm sure you'll have an opportunity to do
- 24 that on other questions.
- 25 A. Okay, okay.

I think I can establish it through my 1 0. 2 witness. 3 Moving away from the topographical issue 4 here presented, as we go back to September 12, 2022, 5 at that time, if you know, was Mr. Kracht represented by counsel? 6 7 Α. I don't know. 8 Okay. Would you agree that in late June or 0. 9 early July of this year I communicated Mr. Kracht's 10 offer to Summit through its counsel? You can confirm 11 that; right? 12 That sounds correct. Α. 13 And prior to my involvement, communications 0. 14 were by and large between Mr. Kracht and right-of-way agents; correct? 15 It's my understanding, unless he had 16 Α. 17 previous counsel. I'm not sure. 18 And since late June and early July, Summit 0. 19 provided a responsive counteroffer not until 20 September 6th; correct? 21 I'm not sure of the exact date. Α. 22 But you can confirm that it was in early Q. 23 September; correct? 24 Α. Again, I'm not sure of the date there. I'm 25 not sure a counteroffer was presented.

I have a stipulation with 1 MR. MURRAY: 2 counsel, and maybe Mr. Leonard can help and stipulate 3 that, that the counteroffer responsively was given in 4 early September. 5 MR. LEONARD: So stipulated. 6 BOARD CHAIR HELLAND: Thank you. 7 BY MR. MURRAY: So to sum this up, shortly after my 8 0. 9 involvement in late June and early July when I 10 communicated an offer to Summit, Summit, instead of countering at that time, changed the route from the 11 12 boundary route to a route that he didn't want. 13 Would that be a fair and accurate 14 representation? 15 Α. If you're representing that the route we changed it to was one that he didn't want or the 16 17 original proposed route on that property prior to the 18 original Exhibit H being filed, I guess it would have 19 been September of last year. I think that's right. 20 Once we received the counteroffer from you, we went back to the more practical route. 21 22 MR. MURRAY: Okay. We're going to DAPEMA. 23 Let's put up DAPEMA Hearing Exhibit 2. Okay. 24 Can we go to the top of that thing? Let's 25 go to the bottom of that thing. Huh.

1	$\mathbf{B}\mathbf{Y}$	MR.	MURRAY:
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- Q. Well, DAPEMA Hearing Exhibit 2, this is an
- 3 overhead that I'm going to suggest to you is created
- 4 by the county assessor of Kossuth County.
- 5 Does this look like what this could be?
- 6 A. It's possible.
- 7 Q. For demonstrative purposes, I'm going to
- 8 suggest that DAPEMA's parcel is depicted on this
- 9 exhibit. Okay?
- 10 A. Okay.
- 11 Q. So are you able to, with firsthand
- 12 knowledge, confirm that this appears to be what it is?
- 13 A. I really couldn't confirm whether it
- 14 appears to be what it is. I've not seen this
- 15 rendering.
- 16 It's your map. It's not ours. It's my
- 17 understanding it isn't ours.
- 18 Q. Okay. Well, for demonstrative purposes,
- 19 I'm going to suggest that it is.
- 20 A. Okay.
- 21 Q. Now, do you see where the roads lie on this
- 22 assessor parcel map?
- 23 A. On the parcel map, yes.
- Q. There's a road on the south, which appears
- 25 to be, I'm going to suggest, a quarter-mile away from

that 40; correct? 1 2 Α. Could be. 3 And there's a road to the east that 0. 4 appears to also be a quarter-mile away from this 40, 5 okay? 6 Α. Okay. 7 Q. Would you agree that that's what this map appears to show? 8 9 I'd have to measure it out. I can see the Α. 10 roads, to answer your question, but hard to confirm measurements for you. 11 12 Q. Well, you see, these assessor parcel maps 13 have been a phenomenon in Iowa. People use them all 14 the time. 15 And you, as a land man, would know how many acres are in a section of ground? 16 17 Α. So the measurement you're talking Yes. 18 about, as far as the parcel itself, sounds right. 19 Where the pipeline is on the parcel, I 20 can't tell you exactly the proximity to the roads, so maybe I misunderstood your question. 21 22 A parcel rendered being one-quarter of a 23 mile or another, yes, seems right to me. 24 Q. These county assessor parcel maps start 25 with usually 40-acre parcels; right?

1	A. Right.
2	Q. We can agree to that?
3	A. Yes.
4	Q. And you can agree if you have one of these
5	sections in Iowa, you're going to see 16 of these
6	blocks in a section; right?
7	A. Sounds right.
8	Q. And each one has a width and a height of a
9	quarter-mile; correct?
10	A. Correct.
11	Q. And where I was coming from was: From that
12	general background, I'm saying this parcel is a
13	quarter-mile away from each road, whether it's south
14	or east. Wouldn't you agree with that?
15	A. That looks right to me.
16	Q. All right.
17	MR. MURRAY: Offer DAPEMA Hearing
18	Exhibit 2.
19	(DAPEMA Hearing Exhibit 2 was offered into
20	evidence.)
21	MR. LEONARD: No objection.
22	BOARD CHAIR HELLAND: Hearing no objection,
23	the Board will admit DAPEMA Hearing Exhibit 2.
24	(DAPEMA Hearing Exhibit 2 was admitted into
25	evidence.)

1 MR. MURRAY: Let's go to DAPEMA Hearing 2 Exhibit 3. Okay. 3 BY MR. MURRAY: 4 Now, this appears to be a similar map 0. 5 that's just another parcel located to the north of the one we previously looked at; correct? 6 7 Α. Looks similar to me, yes. MR. MURRAY: Now, if Tech can put the 8 9 little hand up in the upper left-hand corner -- no, 10 way up there in the upper left. There it is. 11 BY MR. MURRAY: Read where it says "Owner." Who is the 12 Q. 13 owner here? Go ahead and read it out loud. 14 You're suggesting me to read it out loud. Α. 15 Q. Yes. 16 Α. I don't know if I can pronounce that last 17 name correctly. I'll butcher it. 18 We've done Schanovec. 0. 19 Delores Roethler or Roethler Farm Trust. Α. 20 Roethler is spelled R-o-e-t-h-l-e-r; Q. 21 correct? 22 Α. Yes. 23 So this is a county assessor map that 0. 24 appears to depict an owner of Delores Roethler Farm 25 Trust; correct?

1	A. Yes.
2	Q. It appears to be on a 40-acre parcel
3	located directly north of where DAPEMA's parcel was;
4	correct?
5	A. Yes.
6	Q. Okay.
7	MR. MURRAY: Move to enter DAPEMA Hearing
8	Exhibit 3.
9	(DAPEMA Hearing Exhibit 3 was offered into
10	evidence.)
11	BOARD CHAIR HELLAND: Are there objections?
12	MR. LEONARD: No objections.
13	BOARD CHAIR HELLAND: The Board will admit
14	DAPEMA Hearing Exhibit 3.
15	(DAPEMA Hearing Exhibit 3 was admitted into
16	evidence.)
17	MR. MURRAY: I'd like to now go to DAPEMA
18	Hearing Exhibit 4.
19	BY MR. MURRAY:
20	Q. I'm going to represent to you
21	MR. MURRAY: Is there a marking of this
22	thing, Tech, on the upper left? It doesn't appear to
23	have a marking.
24	Mr. Chair, this exhibit is not marked. I
25	may have submitted an exhibit that was not marked

1	DAPEMA Hearing Exhibit 4. I'm asking the Chair for
2	some guidance on how to handle this.
3	(Brief pause.)
4	BOARD CHAIR HELLAND: Okay. No problem.
5	It appears that it's not labeled, so unless there's
6	objection, we'll get to that in just a moment.
7	We'll have you refile it labeled as DAPEMA
8	Hearing Exhibit 4. We want to make sure we aren't out
9	of sequence.
10	Are you moving to admit it?
11	MR. MURRAY: Well, before we do that, I
12	want to make sure that Summit sees that marked exhibit
13	before I file it, and with their stipulated consent
14	we'll do that. My promise to the Board is when I have
15	the ability to do that, I will do that.
16	BOARD CHAIR HELLAND: Okay. Is there an
17	objection?
18	MR. LEONARD: Candidly, Your Honor, I don't
19	know because I don't know what it is yet.
20	BOARD CHAIR HELLAND: Okay.
21	MR. MURRAY: Let's lay some foundation
22	maybe?
23	BOARD CHAIR HELLAND: Perfect. I
24	appreciate it.
25	BY MR. MURRAY:

Well, this document which is before you, 1 0. 2 Mr. Rorie, I'm going to have the tech --3 MR. MURRAY: I'm going to suggest to you it appears to be an easement agreement, and I'm going to 4 5 have Tech page through this slowly so the witness can look at it. Let's go to page 2. 6 (Brief pause.) 7 MR. MURRAY: Let's now go to page 3 and 8 9 Let's get to the bottom of that page. Now 10 And page 6. Okay. Now let's go to page 7. page 5. 11 BY MR. MURRAY: 12 Q. This appears to be, Mr. Rorie, on page 7 a 13 signature page. Would you confirm that for the 14 record? It looks like a signature page, yes. 15 Α. 16 0. It looks like a signature page of a person 17 under the title "Delores Roethler Farm Trust"; 18 correct? 19 That looks like the grantor, yes. Α. 20 Let's go down further to page 8. Now, Q. 21 another signature page of another, perhaps, trustee; 22 is that correct? 23 It looks like that's the case. Α. 24 So the Roethler Trust has apparently two Q. 25 trustees, it appears; correct?

- That's the way it looks to me. 1 Α. 2 Okay. Let's go to the next page. Q. Here's 3 an Exhibit A. That's page, I think, 9. 4 Let's go to the next page. Okay. That's 5 page 10, and now page 11. Okay. Now let's go back to the top on page 1. 6 7 on the top of page 1 of this document, which appears 8 to have some recording information in the top right, 9 you would agree that appears to be a county recorder's 10 doing; correct? 11 Α. Yes. 12 So as you've had a chance to scan this 0. 13 document and without commenting on the specific
 - 17 A. Yes.

14

15

16

18 Q. It was an easement agreement prepared by

language -- I know you're not a speed-reader,

Mr. Rorie -- can you confirm that this looks like an

- 19 your company, wasn't it?
- 20 A. It looks like one of our easement

easement agreement of your company?

- 21 agreements.
- Q. And, in fact, it looks like an easement
- 23 agreement that was secured [sic] by the Delores
- 24 Roethler Farm Trust; correct?
- 25 A. Secured by them?

1	Q. Excuse me. Given. Thank you. Given by
2	them to Summit?
3	A. Yes.
4	Q. And then Summit thereafter took this
5	easement that they signed, granted to Summit and filed
6	it of record on what's the date it was filed,
7	Mr. Rorie?
8	A. May 25th of last year.
9	Q. May 25th of 2022. So there it is.
10	MR. MURRAY: Mr. Chair, I'm going to ask
11	for this exhibit to be entered once it is marked as
12	DAPEMA Hearing Exhibit 4.
13	(DAPEMA Hearing Exhibit 4 was offered into
14	evidence.)
15	BOARD CHAIR HELLAND: Are there any
16	objections?
17	MR. LEONARD: I guess I have a question.
18	Mr. Murray, this easement agreement, which
19	will be marked Exhibit 4, is not for the parcel
20	directly north of the DAPEMA parcel?
21	MR. MURRAY: That is correct. I'm going to
22	concede that point and actually acknowledge that point
23	and stipulate to that point.
24	MR. LEONARD: No objection.
25	BOARD CHAIR HELLAND: Okay. Seeing no

objections, the Board will admit DAPEMA Hearing 1 2 Exhibit 4. 3 (DAPEMA Hearing Exhibit 4 was admitted into 4 evidence.) 5 MR. MURRAY: So now where we have to go, Tech, is with the Exhibit H filed on September 7, 6 7 2022, concerning DAPEMA. Okay. BY MR. MURRAY: 8 9 So on the screen there is September 7, 10 We have what appears to be an Exhibit H filed on that date; correct? 11 12 Α. Yes. 13 Q. And it does appear to concern DAPEMA, LLC; 14 correct? 15 Α. Yes. DAPEMA being a parcel in Kossuth County, 16 0. 17 Parcel No. IA-KO-102-0097.000; correct? 18 I would have to see the numbers you just Α. 19 listed, but I'll take your word for it. 20 Okay. Page 5, please. I overshot. Q. 21 Page 4. Okay. 22 Now, I'm going to suggest to you that on 23 page 4 of this Exhibit H there appears to be a survey proposing a route on this parcel owner. Does this 24 25 appear to be a route that has been prepared at the

1	direction of Summit?
2	A. It looks that way.
3	Q. And, of course, it would have been a route
4	prepared at the direction of Summit I just lost it.
5	This is a straight east/west route;
6	correct?
7	A. It looks that way, yes.
8	Q. And this straight east/west route appears
9	to be very close to the north boundary of this parcel;
10	correct?
11	A. Yes.
12	Q. And so if you can by recollection not by
13	visualization but recollection remember that the
14	route or rather, the parcel to the north of this
15	parcel is owned by the Delores Roethler Farm Trust,
16	understand what I'm saying?
17	A. I'd have to see something else to confirm
18	that.
19	Q. Okay.
20	A. This isn't going to show me anything about
21	the northern tract, and I don't want to misspeak. I'd
22	have to see who owns what's to the north.
23	And, again, a KMZ would be very helpful for
24	me here so I'm looking at one while talking about
25	another.

I'm sure you'll get a chance to answer with 1 0. 2 respect to your KMZ. 3 My client is going to testify that the 4 Delores Roethler Farm Trust owns that parcel to the 5 north, okay? 6 Α. Okay. 7 Q. All right. So, Mr. Rorie, has Summit 8 explored the possibility that this pipeline can be at 9 least moved upon the parcel to the north? 10 I don't know. Α. 11 Certainly with DAPEMA being an unwilling Q. 12 landowner, you could have minimized the impact on the 13 DAPEMA property by simply moving the route a little bit to the north, couldn't you have? 14 15 Α. Well, that word "simply" is your word, not I don't know that I fully understand your 16 17 question, but minimize the impact on a property by 18 getting off of it, obviously, that would minimize the impact of a property, if you weren't on it, but 19 20 "simply" is a bit of a keyword there. 21 MR. MURRAY: Let's take that one down off 22 the screen, Tech. Let's go back to Kracht, and I want 23 to talk about the filing on September 12, 2022; 24 Exhibit H, page 5. 25 There you are. Well, no. Right there.

- 1 Let's just stay right there.
- 2 BY MR. MURRAY:
- 3 Q. This one here on the screen appears to be
- 4 the Exhibit H filed on July 14, 2023. Do you see that
- 5 there?
- A. I don't see the date. Yep, that looks
- 7 right.
- 8 Q. So you would concede this is what we'll
- 9 call the current route on the Kracht property;
- 10 correct?
- 11 A. That's fair.
- 12 Q. This is part of the route that your COO,
- 13 Mr. Powell, had said there's only one route? This is
- 14 part of that one route; correct?
- 15 A. This is the route we're seeking.
- 16 Q. And then if Tech can now put on the screen
- 17 page 5, which was filed by Summit on September 12,
- 18 2022, this is the boundary route, okay? Do you see
- 19 that there?
- 20 A. Yes.
- 21 Q. Would you not concede that this boundary
- 22 route, as I've labeled it, was and continues to be a
- 23 possible alternate route?
- 24 A. I see it as a very unlikely route, but I
- 25 suppose anything's possible, given the reasonability

of both parties to find a way to reach an agreement. 1 2 But, again, to answer your question, you 3 conveniently mentioned the entry into the property, 4 but you didn't mention the exit, and so that property 5 to the north has reached an agreement with me to enter their property differently. So it falls back into 6 7 your term of what is simple and what isn't, but as far 8 as considering a route, I think that proves that we 9 considered this route a while ago. 10 There were factors that I believe we both 11 understand would have caused that to be unworkable, 12 period, so now what this is asking us to do is to go 13 back to the neighbor to the north, impact them 14 differently, change our tune with them in order to 15 accommodate what was not going to be a workable route, given all of the parameters of the discussion, which I 16 17 think it's best we not disclose those, but that route 18 right there is not workable, given the parameters of 19 the agreement. 20 And now we're in a situation where we're going to be impacting somebody to the north if we 21 22 agree to this. So we've provided the parties that 23 aren't talking to me right now about this, and to my 24 knowledge, you don't represent them. 25 So you mentioned earlier that at least on Q.

Friday there's 892 parcels yet to be signed. 1 Do you 2 remember that testimony? 3 Α. I do. 4 Of those 892 parcels yet to be signed, how 0. 5 many have had multiple Exhibit H surveys prepared? I don't know. I didn't prepare them, so I 6 Α. 7 really couldn't answer that. I couldn't even guess. 8 How many Exhibit H surveys have -- how many 0. 9 of those holdout parcels have multiple Exhibit H 10 surveys filed with the Iowa Utilities Board? 11 I have no idea, except for --Α. Same answer. 12 again, I don't refer to them as "holdout parcels," but 13 I don't know. I don't know the frequency of that. 14 So then Summit cannot identify the total 15 number of possible alternate routes? You don't even know how much of those parcels have even been surveyed 16 17 multipully? 18 Well, you're misrepresenting what I'm saying, Mr. Murray. 19 20 I'm not saying Summit can't identify that. I'm telling you I can't. 21 22 I don't issue the Exhibit Hs. I don't draw 23 I don't keep a tally of route requests. 24 I can tell you they're frequent across a 25 2,000-mile project, so I don't agree with your

1	statement that Summit can't produce that, and I
2	suppose if they had to, they could, but I can't.
3	I don't draw the Exhibit Hs, and I don't
4	track the reroute requests.
5	MR. MURRAY: Mr. Chair, I've only got one
6	more line of questions, and I suspect it will last
7	about five or ten minutes.
8	May I proceed? I think I'll wrap it up
9	here.
10	BOARD CHAIR HELLAND: Yes, of course.
11	MR. MURRAY: Thank you.
12	I'm going to have the Tech publish DAPEMA
13	Hearing Exhibit 2.
14	BY MR. MURRAY:
15	Q. We're back to this county assessor map for
16	DAPEMA Hearing Exhibit 2. It's on the screen there,
17	okay?
18	A. Okay.
19	Q. So I want to actually get some terminology
20	clarified here, okay? This is not the right exhibit
21	to do it in, but I'm just going to suggest to you that
22	with respect to the Exhibit H filing, what I see are
23	phrases that have these terms in it. "Permanent
24	easement" is one of them.
25	Do you recollect the use of the reference
1	

1 "permanent easement"? 2 Α. Yes. 3 And can we agree that the permanent 0. 4 easement is this usually 50-foot-wide area that is 5 more specifically described on Exhibit H; correct? That's right. 6 Α. Thank you. With respect to the temporary 7 Q. construction easement, that is another area that's 8 9 specifically described by metes-and-bounds, just like 10 the permanent easement; correct? 11 Sounds right. Α. 12 Thank you. We can go back to an Exhibit H, Q. 13 but I also recollect seeing a term titled "Property" 14 with initial caps "P" for property. I see that term 15 as referencing the overall parcel that the owner totally owns that's affected by this action. 16 17 Would that be a fair thing to say, or 18 should we put it up on the screen? 19 I'd have to look at one, but I think Α. 20 there's a parent parcel description is there and a metes-and-bounds of easements, but I'd have to look at 21 22 it. 23 All right. Let's go there. I think we've 0. 24 got one up. 25 Lyon County, April 18, 2023. Is it April?

Yeah, April 18, 2023, concerning Kracht's parcel. 1 2 Let's go up to page 1. All right. Let's go down a little bit. All right. 3 There you are on 4 the bottom of page 1. 5 It's entitled "Property Legal Description." "The following property may be referred to as the, 6 7 quote, Property, end quote." 8 Do you see that? 9 Α. Yes. 10 All right. Good. Now let's go to the next Q. 11 page. All right. 12 On the top of the page it does appear to 13 give a legal description of that parcel; correct? 14 Α. Yes. 15 0. Now, unfortunately, our tech chair couldn't read our mind and went to Kracht instead of DAPEMA, 16 17 but we'll just go ahead and use this as an example. 18 This is an example of how we define a 19 property; correct? 20 It's a parent parcel, like we refer to it Α. 21 as. 22 The parent parcel. All right. Q. 23 The parent parcel is what Summit defines 24 as, quote, property? 25 Α. Yes.

All right. Good. Now, you would agree 1 0. 2 with me that the property, being the parent property, 3 has greater area than the permanent easement; correct? 4 Α. Yes. 5 And it has greater area than the permanent Q. 6 easement and the temporary construction easement; 7 correct? 8 Α. Yes. 9 So if I were to refer to the remainder of 0. 10 that property as "the remainder of the property," you 11 would know what I'm talking about? 12 Α. I would. 13 I'm going to suggest to you Very good. Q. 14 that DAPEMA's Exhibit H has a similar 15 characterization; it's just a different legal description. Okay? 16 17 That's your suggestion. Α. 18 We're not going to go there. We're just 0. 19 going to go back to that map we had, which is Hearing 20 Exhibit 2. Okay. 21 So here we are. 22 MR. MURRAY: Now, Tech Expert, please go 23 back to the last one. I'm sorry. I'm very sorry. 24 Now, let's go down, and on page 3 under 25 "Easement Rights," let's go down to little number 4

1 and blow that up. 2 BY MR. MURRAY: 3 Do you see where it says, "The right Q. Okay. 4 of unimpeded ingress and egress into, on, over, under 5 and across the easement areas left (and in the event over such other portions of the property as may be 6 reasonably necessary), and then it goes on? Do you 7 8 see that? 9 I do. Α. 10 Would you agree with me that as it relates Q. to the remainder of the property -- not the property 11 12 but the remainder of the property. Would you concede 13 with me that the remainder of the property is affected 14 only in the event of an emergency? Unless there was an access easement area 15 Α. defined and depicted, that would be the exception to, 16 17 I believe, what you're pointing at. Does that work? 18 I just want to make sure that with respect 19 to the remainder of the property -- being that's 20 property that's not a permanent easement, not the 21 temporary construction easement. With respect to the 22 remainder of the property, the only use you get here 23 is an ingress/egress for emergent [sic] conditions; 24 correct? 25 Α. Emergency conditions.

- 1 Q. Emergency.
- 2 A. Unless there's an access easement further
- 3 defined in there, that would be the only exception, I
- 4 believe, to what you're asking.
- 5 Q. And the access easement that you're
- 6 referring to that could possibly be defined in there,
- 7 that would be those access easements described by
- 8 metes-and-bounds; correct?
- 9 A. Yeah. Typically they're a road.
- 10 Q. Right. For purposes of my question, I'm
- 11 not referring to those specifically worded "access
- 12 easements." I'm talking about this one that's on the
- 13 screen.
- 14 A. I understand, but you're talking about the
- 15 remainder of the property. That's an exception to
- 16 your question, so if there were no access easements on
- 17 this property shown on the Exhibit H, if the question
- 18 is: Would we need reasonable access in the event of
- 19 an emergency to get access to our pipeline on the
- 20 remainder of the property?
- 21 Q. No. My question is simply this: The only
- 22 right you're seeking here to affect the remainder of
- 23 the property is this unimpeded ingress/egress in
- 24 emergency conditions; correct?
- 25 A. That seems right. I just have to look at

- 1 the route and see if there's an access easement. I
- 2 feel like that's maybe the third or more time I've
- 3 said it.
- 4 There's an access easement. If it's in
- 5 play, I don't know. I'm not looking at it.
- If an access easement was in play, that
- 7 would be in addition to the remainder of the property.
- 8 If there isn't one, then we're talking about emergency
- 9 access only.
- 10 MR. MURRAY: If we could now, Tech Person,
- 11 go back to DAPEMA Exhibit 2.
- 12 BY MR. MURRAY:
- Q. As it looks here on DAPEMA Hearing
- 14 Exhibit 2, we have a parcel that I'm going to suggest
- 15 to you is the parcel that's described in your
- 16 Exhibit H as a 40-acre parcel. It has no roads
- 17 connected to it.
- 18 Do you see it?
- 19 A. I'm not zoomed in enough to see if there
- 20 were no access roads connected to it. Are you talking
- 21 about public roads?
- 22 Q. Public roads. There's no public roads
- 23 connected to this parcel; correct?
- 24 A. I don't see any in this map. It doesn't
- 25 look like it to me.

So your COO had mentioned -- and I asked 1 0. 2 him what it is that constitutes an emergency, and, of 3 course, he's very fair about it. He said, "Well, you 4 know, if we have things that affect the integrity of 5 the pipeline, we got to get out there." I mean, in an emergency do you think 6 7 anybody is going to look at a plat map or legal 8 documents to go out and address an issue? Do you 9 really think that's going to happen? 10 I don't understand your question. Α. 11 emergency are they going to look at a plat map? 12 Q. My question is this: Let's say you have a 13 leak on the north side of this parcel. Do you 14 actually think the Emergency Response Team is going to 15 come to the south road and not go across that parcel 16 to the south to get to the north? Do you actually 17 think that's the case? 18 I don't know what they would do. I think 19 they would get to it as fast as they could where they 20 could legally access it. 21 Does Summit know what they would do? 0. 22 That's a broad question. What they would Α. 23 do with what? 24 Q. With an emergency. 25 That's even broader. I don't know how to Α.

- IUB HEARING 09/12/2023 I'm trying my best, and you're 1 answer your question. 2 sort of hammering the same broad, global words that I 3 couldn't possibly describe that accurately for you. 4 So if there's an emergency on this 5 property, they're going to try to get to that pipeline as fast as they can. Do they have an idea well ahead 6 of time where there's legal access? Our ops group 7 8 certainly would. 9 That's the best I can do to answer your 10 I don't fully understand how to answer a question. question much broader than what I just described. 11 12 I'll do my best, but I don't know how to get better 13 than that. 14 MR. MURRAY: Mr. Rorie, I appreciate the 15 time with you today to discuss these issues. I have no further questions. 16 17 THE WITNESS: Thank you. 18 BOARD CHAIR HELLAND: Okay. Thank you, 19 Mr. Murray. 20 Mr. Meyer, you're up next; however, we're
 - going to take a very brief 15-minute break and be back 21
 - 22 at 10:15. So you'll be up at 10:15.
 - 23 We'll go off the record at this time.
 - 24 Thanks.
 - 25 (Recess taken.)

1	BOARD CHAIR HELLAND: Okay. 10:17. We're
2	running a couple minutes late there, so we will go
3	ahead.
4	I'll remind you, Mr. Rorie, you're still
5	under oath, and I believe Mr. Meyer is next.
6	MR. MEYER: Thank you, Your Honor.
7	CROSS-EXAMINATION
8	BY MR. MEYER:
9	Q. Good morning, sir.
10	A. Good morning.
11	Q. I'm going to ask you some questions
12	starting off with some of your direct testimony. If
13	we could have that on the screen, please.
14	We'll start on page 3 of 6 and the answer
15	portion to the question that began on line 15. Thank
16	you.
17	It appears tell me if I'm wrong but
18	your answer to the question at line 15 tried to
19	quantify the number of voluntary easements that have
20	been signed or, I guess, the progress that's been
21	made, and you tried to quantify it in terms of the
22	number of tracts or the percentage of parcels in
23	miles; correct?
24	A. Yes.
25	Q. Have the numbers been run on the actual

number of landowners? Has there been an expression 1 2 percentage-wise calculated? 3 What percentage of landowners of this 3,307 4 tracts or 685.5 miles have signed up? 5 Α. It's within a percent of the tract Typically mileage, tracts and landowners 6 percentage. 7 are all within a point or two of each other. 8 All right. So you think it's fairly 0. 9 similar, you know, in your answer with 68 percent of 10 the tracts and 69 percent of the miles? You think the number of landowners would essentially be -- give or 11 12 take, you know, deviate a percent one way or the 13 other? 14 That's right. Α. 15 Okay. Now, if I could have page 2 of your Q. 16 direct testimony on the screen, please, in your 17 response to the question posed at line 17, it says, 18 "I'm testifying in support of Summit's proposed 19 pipeline project regarding the permanent and temporary 20 easements that Summit requires for the project"; 21 correct? 22 Yes. Α. 23 And you've testified in these proceedings 0. 24 regarding some of the language in those easements; 25 correct?

1	A. I have.
2	Q. How did you gain your understanding of what
3	that language meant to Summit?
4	A. How did I gain my understanding of what the
5	easement language meant to Summit?
6	Q. Well, let me ask you a preliminary
7	question. Did you draw up those easements yourself?
8	A. I did not.
9	Q. Do you know who did?
10	A. I believe those easements were generated in
11	collaboration with counsel. They were generated prior
12	to my arrival on the project.
13	Q. Are they essentially a template?
14	A. Yes, there's a template easement. That was
15	part of my testimony there.
16	Q. So, again, you're testifying about what the
17	words mean, and how did you gain your understanding?
18	Are you just kind of winging it here?
19	A. Well, I'm certainly not winging it. I
20	think the driver behind my understanding of easement
21	terms comes from 15 years of land acquisition
22	experience and management along with thousands and
23	thousands of easement documents.
24	So certainly not my I'm certainly not
25	interested in winging anything, but my understanding

- of most of those terms is pretty basic because they're
- 2 general terms. There are some portions of that
- 3 easement, as I cited in my testimony, that have --
- 4 involve a little bit more legalese or legal opinion,
- 5 such as indemnity or insurance, but in general my
- 6 understanding of the easement comes with my background
- 7 and certainly the instructions I've received from the
- 8 folks that I report to here at Summit.
- 9 O. All right. I noticed in your answers in
- 10 your direct testimony you've got 15 years of
- 11 experience doing this sort of thing; correct?
- 12 A. That's correct.
- 13 Q. And you'd agree that in order for there to
- 14 be a binding agreement, there needs to be a meeting of
- 15 the minds; right?
- 16 A. A meeting of the minds?
- 17 Q. Between the two parties.
- 18 A. I think there needs to be an agreement
- 19 between the two parties, yes.
- Q. Do they disagree on what the agreement is
- 21 and still have an agreement?
- 22 A. They may have preferences and things that
- 23 are in there that they wish were different, but yes,
- 24 there's an agreement there.
- 25 I'm not sure I understand your question,

but I think I do. 1 2 Well, in your answers you've used the Q. 3 pronoun "I," you have used the pronoun "we" in 4 describing the meaning of the language, what these 5 easements mean. So when you say "we," do you mean Summit? 6 7 Α. That's right. When you say "I," do you mean Summit? 8 Q. 9 Α. Yes. 10 Q. Okay. MR. MEYER: Can we have Mr. Rorie's Direct 11 12 Exhibit 1, please? Thank you. 13 BY MR. MEYER: 14 Sir, there's the preparer information. 15 says Jennifer Hodge Burkett; is that right? 16 Α. Yes. 17 Do you know who that person is? Q. 18 That's an attorney that works for us. Α. 19 Is that the address there, 111 East Grand Q. 20 Avenue in Des Moines, where the attorney's office is? 21 Α. I believe that's the case, yes. 22 Did Ms. Burkett prepare these easement 0. 23 agreements or these easements? 24 Α. I believe she did or certainly collaborates with other counsel, and maybe she was the leader of 25

that effort. 1 2 Again, they were generated prior to my 3 arrival. 4 Do you know of any easement agreement that 0. 5 has been recorded that has some other preparer's information? 6 7 Α. I don't believe there is one. 8 Q. Okay. 9 MR. MEYER: Can we have -- is it pronounced 10 DAPEMA Exhibit 4? Thank you. Can we scroll down to Section 1(a), please? All right. You went a little 11 12 too far. Right there. Thank you. 13 BY MR. MEYER: 14 So 1(a) where it says "Pipeline Easement," 15 do you see where I'm at? 16 Α. Yes, sir. 17 Okay. Now, just looking at that Section 0. 18 1(a), there's a -- the first sentence begins, "A free 19 and unobstructed permanent nonexclusive pipeline 20 easement 50 feet in width," and then parenthetically in quotation marks "Pipeline Easement." 21 22 Do you see where I'm at? 23 Α. Yes. 24 And if you go down to the end of that Q. Section 1(a), it talks -- well, it closes in a 25

- 1 parenthetical and says, "Collectively the, quote,
- 2 'pipeline facilities,' quote, end parenthetical." Do
- 3 you see where I'm at?
- 4 A. Yes.
- 5 Q. So this Section 1(a), is it fair to say
- 6 it's describing two things here; one being the
- 7 pipeline easement, and then the various pipeline
- 8 facilities that are going to be, I guess, constructed
- 9 or operated within the easement?
- 10 A. Yeah. The general pertinences that are
- 11 cited there in that paragraph, yes, that's what
- 12 pipeline facilities covers.
- 13 Q. And would it be fair to say that after the
- 14 first parenthetical, 50-feet-in-width pipeline
- 15 easement, anything described after that is basically
- 16 relating to the pipeline facilities?
- 17 A. I don't necessarily agree with that. There
- 18 are references to the pipeline easement in our
- 19 documents talking about reclamation of the pipeline
- 20 easement.
- 21 You wouldn't reclaim the pipeline
- 22 facilities, so there's a difference there.
- 23 O. Well, that's one of my points. Throughout
- 24 the document there are distinctions, and the document
- 25 carefully distinguishes between the pipeline easement

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and the pipeline facilities; is that fair?
 1
 2
                Sometimes it does, yeah.
           Α.
 3
                Okay. And in this particular section --
           0.
 4
     that's all I'm concerned about right here -- where in
 5
     that Section (a) does it start to be -- start to
     identify what the pipeline facilities are? Can you
 6
 7
     point that out for us?
 8
                (Brief pause.)
 9
                It looks like whenever it would be talking
           Α.
10
     about the pipeline including the pertinent facilities.
     It talks about the pipeline not to exceed a certain
11
     diameter and then continues on talking about the
12
13
     product.
14
                Okay. Would it be fair -- You see where it
           0.
15
     says basically right in the middle there "abandoning
     in place or removing at-will, in whole or in part,"
16
17
     would you agree after that comma and after the word
18
     "part," the next parenthetical or the next phrase
19
     "(1): Pipeline not to exceed 24-inches," anything
20
     after that is referring to the pipeline facilities?
21
                Is that what I understand you to say?
22
                "Abandoning in place," I think, would apply
           Α.
23
     to the pipeline facilities.
24
                It may be a better question for counsel,
25
     the semantics there. I think the goal here is to
```

- 1 define there's a pipeline, and there's related
- 2 facilities tied to it to encapsulate both of those.
- 3 Q. Is it your understanding that an easement
- 4 creates an interest in land?
- 5 A. Yes.
- 6 Q. And the land is defined, the pipeline
- 7 easement in this Section 1(a) is defined as a
- 8 50-foot-wide piece of land; correct?
- 9 A. Yes.
- 10 Q. Okay. If we kind of scroll down a little
- 11 bit, under "Temporary Easement," the last few words
- 12 there where it says, "In part the pipeline facilities
- 13 in the pipeline easement" --
- 14 A. Yes.
- 15 Q. "In the pipeline easement," again, is a
- 16 distinction between the facilities and the easement;
- 17 correct?
- 18 A. Yeah. I think it's saying the pipeline
- 19 facilities are inside the pipeline easement.
- Q. Right. So there's a distinction being
- 21 drawn there between those two things; right?
- 22 A. I suppose.
- Q. Well, I don't want you to suppose. I mean,
- 24 it's your document. It's Summit's document.
- 25 A. I can give you better if you ask the

- 1 question different, but I suppose, if I understand
- 2 your question correctly, the pipeline facilities would
- 3 be within the boundaries of the pipeline easement.
- 4 That would be the case.
- 5 O. The word "in" is kind of critical there,
- 6 isn't it? There's something within something else?
- 7 A. Yes.
- 8 Q. There's facilities within an easement;
- 9 correct?
- 10 A. There are.
- 11 Q. And the easement is the land?
- 12 A. Yes.
- 13 Q. Okay. And if you could scroll down to
- 14 Section C. There you are. You're already there.
- 15 Good job.
- Right in the middle there after the
- 17 parenthetical that has "Access Easement" in
- 18 parentheses for the purpose of ingress and egress to
- 19 the pipeline easement.
- 20 Do you see where I'm at?
- 21 A. I do.
- 22 Q. Again, that would tend to connote that the
- 23 easement is a piece of land, it's real estate;
- 24 correct?
- 25 A. It's limited surface rights to ground, yes.

Okay. If we could scroll down 1 MR. MEYER: 2 to Section 5(a). I think it's on page -- it starts on 3 the bottom on page 3 of believe. There we go. 4 BY MR. MEYER: 5 0. In Section 5(a), the last sentence, "the use of the pipeline easement by the landowner shall be 6 regulated by all appropriate ordinances, regulations, 7 8 resolutions or laws of the governmental entity with 9 authority over the pipeline easement"; is that right? 10 Have I read that correctly? 11 I believe you did, yes. Α. 12 Okay. Again, the "pipeline easement" means Q. 13 land? 14 Α. Yes. So is it Summit's intent, its meaning, its 15 0. understanding of this language to mean that the 16 17 landowner -- that land, the easement, the ground that 18 the landowner owns is still subject to ordinances, 19 regulations, resolutions or laws of the governmental 20 entity with authority over that land? 21 I think "appropriate" is in there as well. Α. 22 To the extent they're applicable and 23 enforceable, I think what you're saying is right. 24 Q. Well, those -- that land -- Let's assume 25 that that land, the landowner's land was already,

1	prior to this agreement, subject to county ordinances,							
2	various permitting requirements of the county.							
3	You're basically saying the landowner is							
4	still bound by those things; right?							
5	A. I think this is referencing the pipeline							
6	easement, not what the landowner was bound to prior to							
7	the easement being present. It cites the pipeline							
8	easement at the beginning of the sentence.							
9	Q. So this Are you saying that this							
10	agreement relinquishes the landowner of all							
11	obligations owed under any local rules or pertinence?							
12	MR. LEONARD: Objection. Calls for a legal							
13	conclusion.							
14	MR. MEYER: Your Honor, it doesn't. I'm							
15	asking for his interpretation and his understanding of							
16	what Summit's intent is.							
17	BOARD CHAIR HELLAND: Can you restate the							
18	question?							
19	MR. MEYER: Can you have it read back,							
20	please?							
21	(The requested portion of the record was							
22	read.)							
23	MR. LEONARD: Same objection.							
24	MR. MEYER: I'll rephrase, Your Honor.							
25	BOARD CHAIR HELLAND: Thank you.							

- 1 BY MR. MEYER:
- Q. Sir, is it Summit's intent and meaning by
- 3 using this language that the landowner is no longer
- 4 obliged to follow local ordinances or permit
- 5 requirements for that land?
- 6 A. No. I think the intent of this sentence is
- 7 talking about the pipeline easement.
- 8 Q. And that's the land?
- 9 A. That's the land with the pipeline easement
- 10 on it.
- I'm not speaking to -- I don't think it has
- 12 anything to do with what the land was subject to prior
- 13 to the easement being there. There are several
- 14 examples as to why this is applicable; the One Call,
- 15 811 requirement per statute in Iowa, but there are
- other resolutions of law that would apply to the last
- 17 two words of that sentence, which is the pipeline
- 18 easement.
- We're not talking about the landowner's
- 20 obligation prior to it.
- 21 Q. Let me ask you about this. In this
- 22 50-foot-wide strip, when it butts up to a county road,
- 23 could the landowner put a driveway to the road without
- 24 getting county permits?
- 25 A. I couldn't speak for the County. I don't

- 1 work for them.
- Q. If there's a requirement that the landowner
- 3 would have to, is Summit intending to relieve the
- 4 landowner of that burden?
- 5 A. To relieve the landowner of the burden of
- 6 needing to get a right-of-way permit across the
- 7 easement? Is that your question?
- 8 Q. On that 50-foot piece of land.
- 9 A. Is it our intent to relieve them? I don't
- 10 think so.
- I think we're talking about ordinances and
- 12 regulations related to the pipeline easement; not to
- 13 what the County would require a landowner to do for a
- 14 road approach.
- 15 O. Well, you're obliging the landowner here to
- 16 still comply with appropriate ordinances and
- 17 regulations. Would it be Summit's intent and
- 18 understanding that it's referring to, for example,
- 19 County ordinances that would require a permit to be
- 20 obtained to put in a drive-through -- a right-of-way
- 21 drainage ditch?
- 22 A. I'm not sure. Was that a question? Help
- 23 me here.
- 24 If you could restate that, that would help
- 25 me.

- 1 Q. Let's just assume some information here.
- 2 Let's say there's an ordinance that requires if a
- 3 landowner wants to build a drive from their field to a
- 4 county road right-of-way, and the County requires a
- 5 permit -- we're kind of playing dodge-ahead here.
- 6 Sorry about that.
- 7 A. That's for clarifying, sir.
- 8 Q. If that requirement existed prior to
- 9 entering this easement, is it Summit's intention that
- 10 the landowner has to still comply with that or not?
- 11 A. I think so, that they would -- whatever
- 12 rules they need to follow to get a road approach, I
- don't know that we're affecting those or asking them
- 14 to do anything different.
- 15 O. Okay. When you obtain this easement, is it
- 16 Summit's intention to obtain any more rights than the
- 17 landowner has to grant?
- 18 A. Any more rights than the landowner has to
- 19 grant?
- 20 Q. Correct.
- 21 A. I think we're seeking limited surface
- 22 rights for a nonexclusive pipeline easement and the
- 23 related facilities' access, when appropriate or
- 24 accordingly.
- I don't know that they can grant us

- 1 anything that they can't grant us, but that may be a
- 2 legal conclusion there in terms of what may be in
- 3 play.
- 4 Q. I mean, I'm just asking if it was Summit's
- 5 intent that they were going to obtain more than could
- 6 be granted.
- 7 A. More than what could be granted via this
- 8 document? No, not my understanding.
- 9 O. Okay. Is it -- did you know that -- Who's
- 10 Bill Sullivan? Do you know Bill Sullivan?
- 11 A. It doesn't ring a bell.
- 12 Q. From Key [sic] Logistics. Do you know
- 13 those folks?
- 14 A. Key [sic] Logistics? Yes.
- 15 O. TurnKey?
- 16 A. TurnKey. I recognize that.
- 17 Q. Okay. But you've never heard of Bill
- 18 Sullivan or William Sullivan?
- 19 A. I don't manage Bill. I don't manage
- 20 TurnKey. It's not a part of my scope.
- 21 Q. What's your understanding of what TurnKey
- 22 does?
- 23 A. My understanding of what TurnKey does is
- 24 work to procure all of the non-environmental permits
- on the project, meaning road crossings, encroachments,

- 1 road approaches, temporary crossing agreements, et
- 2 cetera, things of that nature, is my understanding.
- 3 Q. And do you have any knowledge as to whether
- 4 or not -- well, let me ask you this way. Did you know
- 5 that TurnKey has submitted various permit applications
- 6 to Hardin County to, for example, build drives to
- 7 allow ingress and egress to the land easement? Did
- 8 you know that?
- 9 A. I don't know what they've done in Hardin
- 10 County.
- I know they've submitted a number of
- 12 permits, but the specifics of those, I don't know.
- Q. Did you know that they've also submitted
- 14 permit applications to cross and enter and cross over
- 15 the drainage pipelines in the drainage districts
- 16 affected by the project in Hardin County?
- 17 A. That sounds right to me. I don't know what
- 18 they're doing in Hardin County.
- 19 Again, I don't manage them at all in any
- 20 aspect, so I don't look at their reports and know what
- 21 they're up to.
- 22 Q. I'll ask another question in hopes that
- 23 maybe it will ring a bell.
- 24 Do you know that TurnKey has submitted
- 25 permit applications to build above-ground facilities

- 1 related to this project?
- 2 A. I think if that was an applicable part of a
- 3 permit, I'm sure they would be dealing with that. I
- 4 just don't know the specifics of whether they've had
- 5 to or if they've initiated that effort.
- 6 Q. Okay. Would you agree, though, that if
- 7 those things had taken place and given your testimony,
- 8 your understanding of what the language in 5(a) or
- 9 Section 5 that we've talked about, that would be
- 10 consistent? Those activities by TurnKey would be
- 11 consistent with your testimony today; that those
- 12 permits aren't environmental in nature and, therefore,
- 13 Summit needs to obtain them?
- 14 A. It's a function of a pipeline project to
- 15 obtain non-environmental permits, yes.
- 16 O. Okay. I'm not sure where in this
- 17 particular exhibit the language is about basically
- 18 decommissioning or removing the pipeline, but there's
- 19 language in these easements that speak to that;
- 20 correct?
- 21 A. There's general mentioning of abandoning,
- 22 if that's what you're referring to.
- 23 Q. Yes.
- 24 A. Decommissioning and abandoning the
- 25 pipeline.

All right. You're aware that the Iowa Code 1 0. 2 under 479B subsection 32 does require removal? 3 Α. I don't have the subsection memorized. Мy 4 understanding of the rules is that by default the 5 pipeline could be abandoned in-place, as long as it's done under certain regulations, but the landowner has 6 7 the discretion to request that the pipeline and its related facilities be removed. 8 9 All right. So do you know, have the 10 numbers been run in the event that 100 percent of the 11 landowners were to seek removal? Do you know if those numbers, the cost of that, has been run within Summit? 12 13 Α. Not to my knowledge. 14 But Summit's obliged to do that and bear 0. 15 that cost or whoever might stand if it's -- The successors of Summit Carbon Solutions would still have 16 17 that obligation; correct? 18 I think it depends on if there was 19 something individually worked out with the landowner. 20 If the landowner said, "Under no circumstances do I ever want it removed," I think that we would have to 21 22 look at that compared to what the rules say and see 23 which one of those controls, but I think in general 24 if -- as a company if the landowner has elected to 25 have the pipeline removed upon abandonment, then we're

- 1 typically okay with that.
- Q. Well, I get that. All the landowners could
- 3 just say, "We love it. Leave it," but you're saying
- 4 that Summit hasn't -- you're not aware that they've
- 5 run the numbers? They don't put this down as a zero
- 6 cost to them, do they?
- 7 A. I have no idea. I don't know how
- 8 applicable those numbers would be, given the cost of
- 9 what that would be would be completely different at
- 10 the time when we're running the numbers, but I have
- 11 nothing to do with forecasting hypotheticals decades
- 12 or centuries from now. I have no idea.
- 13 Q. And that's a problem for the landowners,
- 14 too, isn't it?
- 15 A. What is a problem?
- 16 Q. If they want it removed or no one has
- 17 calculated for the cost, how does it happen?
- 18 A. The landowners have to pay for the costs.
- 19 I don't know if the cost --
- 20 Q. Sir, they want it out and whoever has that
- 21 burden on your end of the stick doesn't have the money
- 22 to do it. If there's bankruptcy in the future, what
- 23 happens to that pipeline? It stays in the ground,
- 24 doesn't it?
- 25 A. I don't agree there. I think if the

- 1 pipeline system were abandoned and we were obligated
- 2 by law to remove it upon the landowner's request, then
- 3 we would.
- 4 Q. How does a bankrupt company do that?
- 5 A. You're venturing into things I have no
- 6 experience with. I've never worked for a bankrupt
- 7 company. I also don't deal with a whole lot of
- 8 abandoned pipelines.
- 9 So you're just asking something outside --
- 10 I'd like to finish if I could. You're asking
- 11 something outside of my scope.
- 12 Q. In your experience with these over the 15
- 13 years that you've been doing this, has -- have all
- 14 these years been with Summit, or have they been with
- 15 other outfits?
- 16 A. Other companies.
- 17 Q. Okay. And whether it's been Summit or
- 18 other outfits, has there ever been any kind of a
- 19 reserve -- are you aware of any reserve that's been
- 20 held in the event that these need to be removed?
- 21 A. I don't know how the dollars were held or
- 22 if "reserve" is the right way to do it or what to call
- 23 it.
- In the unlikely event that a portion of a
- 25 pipeline was abandoned, it was not an issue. We

- 1 pulled it up, if we needed to pull it up.
- 2 Again, very rare. Very rare situation,
- 3 unless for some reason that particular part of a
- 4 pipeline system was no longer in use or anticipated to
- 5 be in use. It's not common to abandon them and pull
- 6 them up.
- 7 Q. Do you know whether Summit has obtained or
- 8 attempted to obtain, other than permits from drainage
- 9 districts, any easements from drainage districts?
- 10 A. I really don't know.
- 11 Q. These easement agreements, would they allow
- 12 Summit to put a well on -- within the easement?
- 13 A. A well?
- 14 O. A well.
- 15 A. Like, a water well?
- 16 O. Yes.
- 17 A. Not to my knowledge. I can't imagine a
- 18 scenario in which we would need a water well.
- 19 Q. That's going to be my next question. For
- 20 what purpose would you need a well?
- 21 A. I mean --
- 22 Q. Is water part of this process, to your
- 23 knowledge?
- 24 A. It's not common for a pipeline company to
- 25 drill a water well, unless it's tied to some water

- 1 well we're replacing or something like that.
- Q. At the point where, let's say, like, an
- 3 ethanol plant, this point of conversion where the --
- 4 where it's captured before it's sent into the pipe.
- 5 Is there any water needed for that, their water part
- 6 of that process?
- 7 A. You're guess is as good as mine. I don't
- 8 deal with the inner workings of the carbon-capture
- 9 process or compression process.
- 10 I imagine if, tying back to your question
- 11 the best I can, we needed to drill a water well on the
- 12 landowner's property for some unforeseen extremely
- 13 rare reason, we would need to seek additional
- 14 permission to do that.
- 15 MR. MEYER: Okay. I don't have any other
- 16 questions. Thank you.
- 17 BOARD CHAIR HELLAND: Thank you.
- 18 Mr. Taylor, I believe you're up.
- 19 MR. TAYLOR: Thank you.
- 20 CROSS-EXAMINATION
- 21 BY MR. TAYLOR:
- 22 Q. I'm Wally Taylor. I represent the Sierra
- 23 Club.
- 24 Are you aware that this whole process
- 25 started about two years ago with what they called

1	informational meetings?					
2	A. I am.					
3	Q. Did you attend any of those?					
4	A. I did not attend those. I was not present					
5	at Summit at the time.					
6	Q. Okay. But you understand, though, that at					
7	those meetings Summit made a presentation about the					
8	project and instilling its virtues and so on and that					
9	the Board representative who was there explained the					
10	Board's procedure? Is that your understanding?					
11	A. That's my cursory understanding of them,					
12	yes.					
13	Q. Okay. And do you know that during that					
14	meeting the landowners who were there were told that					
15	at the end of the meeting, immediately at the end of					
16	the meeting before they even left the building that					
17	there were land agents there to negotiate easements					
18	with them?					
19	MR. LEONARD: Objection.					
20	BOARD CHAIR HELLAND: State your objection.					
21	MR. LEONARD: Calls for speculation. The					
22	witness testified he was not at any of those meetings					
23	and not with Summit at the time.					
24	BOARD CHAIR HELLAND: Thank you.					
25	Mr. Taylor?					

- 1 MR. TAYLOR: I asked if he understood that
 2 or it was his understanding.
 3 BOARD CHAIR HELLAND: You can answer, if
 - 4 you can.
 - 5 A. I have no idea.
 - 6 MR. TAYLOR: Can you bring up Sierra Club
 - 7 Hearing Exhibit 11? Can you move that so we can maybe
 - 8 get the whole thing in? There you go.
 - 9 BY MR. TAYLOR:
- 10 Q. Were you aware that Former Governor Terry
- 11 Branstad sent this letter attacking Sierra Club to
- 12 landowners along the Summit pipeline route on
- 13 December 10, 2021?
- 14 A. I'm not aware of this letter, and I really
- 15 am not aware whether or not it's attacking anybody.
- 16 It's pretty blurry, and I haven't read it, but I
- 17 certainly am not aware of it.
- 18 In September of 2021 I was not with the
- 19 company.
- 20 Q. Is that the kind of thing that you would
- 21 anticipate might be sent in order to persuade
- 22 landowners to sign easements?
- 23 A. Could you unpack for me what you mean by
- 24 "type of thing"? I'm not sure I can agree or disagree
- 25 there.

It's kind of hard to read up there, isn't 1 0. 2 it? 3 It's tough. Α. 4 Let me read some portions to you. Second Q. 5 paragraph. "Groups like the Sierra Club don't like 6 7 ethanol. In fact, they don't like any liquid fuels 8 and would be happy to ban all combustion engines. The Sierra Club is attempting to obstruct the bigger boost 9 10 to ethanol in decades, the Summit Carbon Pipeline 11 Sequestration Project." 12 Then on down a ways, "In truth, if the 13 Sierra Club gets its way, there will be nothing left 14 of Iowa's ethanol industry. It would be out of 15 business. Imagine what would happen to the price of corn and to the value of your land. It would be 16 17 devastating. 18 "As a landowner and potential partner of 19 the Summit Carbon Solutions Project, you are now a 20 target of the Sierra Club. In the weeks and months to come, you will likely hear from them making wild 21 22 claims about the pipeline and encouraging you to 23 oppose it. Please don't be intimidated." 24 So is that the kind of language in a letter 25 that would be sent, do you believe, to persuade

- 1 landowners to sign easements?
- 2 A. I have to believe that that's a valid
- 3 letter signed by Mr. Branstad, which I don't know that
- 4 to be the case, but it looks like it is. If those are
- 5 his words and information he wished to share with
- 6 landowners along the route, it's hard for me to
- 7 generalize as to whether this is the type of letter
- 8 that would be sent to landowners and, to put it the
- 9 way you phrase it, to pressure people into easements.
- 10 I think this is more of an awareness letter
- 11 and was, you know, Mr. Branstad's prerogative to send
- 12 that. He felt it to be necessary, if, in fact, he
- 13 did, but I don't know how to answer your question
- 14 about whether Summit would send this type of, as you
- 15 phrased it, thing to landowners to pressure them into
- 16 anything.
- I think we try to keep people informed and
- 18 give them a heads-up of what type of misinformation
- 19 may be out there, which there's plenty of it. We try
- 20 to at least have a seat at the table for a discussion
- 21 about that misinformation.
- 22 Mailings may be a way of doing that, but
- 23 beyond that, it's hard for me to speculate as to what
- 24 would and wouldn't be sent.
- 25 Q. For the record I said "persuade," not

1	"pressure."						
2	A. Okay. I stand corrected.						
3	Q. But from the letterhead, would you agree						
4	this was sent on behalf of Summit Carbon Solutions?						
5	A. I mean, I have to believe that's our						
6	letterhead.						
7	Again, Mr. Taylor, I was a long ways away						
8	whenever this was written, and so I really don't know.						
9	Q. Okay. Thank you.						
10	MR. TAYLOR: So we would offer Sierra Club						
11	Hearing Exhibit 11.						
12	(Sierra Club Hearing Exhibit 11 was offered						
13	into evidence.)						
14	MR. LEONARD: No objection.						
15	BOARD CHAIR HELLAND: Seeing no objection,						
16	the Board will admit Sierra Club Hearing Exhibit 11.						
17	(Sierra Club Hearing Exhibit 11 was						
18	admitted into evidence.)						
19	BY MR. TAYLOR:						
20	Q. Then about a year ago are you aware that						
21	Summit hosted, I think, six meetings around the state						
22	in the areas around the pipeline route and served nice						
23	lunches and suppers to landowners to try to, again,						
24	persuade them into signing easements?						
25	A. I don't know if the purpose of those						

- 1 One, I don't know if there were six of them. I'll
- 2 take your word for it. I don't know if it was lunch
- 3 or supper either, but I understand the nature of what
- 4 you're getting at.
- I don't think that those were in an effort
- 6 to solely get people to sign the easements. I think
- 7 those were informational community outreach types of
- 8 efforts, but I could be wrong.
- 9 I certainly didn't organize it, and I run
- 10 all of our land acquisition. I didn't organize any
- 11 lunches or suppers specifically in an organized
- 12 fashion to go around the state and try to get people
- 13 to sign easements at those lunches. I didn't do that,
- 14 but I imagine it's probably more of a community
- 15 outreach effort.
- 16 Q. So why were the land agents there?
- 17 A. They are the front and spearhead of our
- 18 community outreach. We have a few people at the
- 19 company that deal with some vendors that do community
- 20 outreach, and then at the height of this effort, I had
- 21 200-plus people in the field.
- 22 So we're the ones having the dialogue with
- 23 landowners and people in those surrounding
- 24 communities, so it's a symbiotic relationship there.
- 25 Q. Isn't it the job of the landowners [sic] to

1	get landowners to sign the easement?
2	A. Job of the landowners?
3	Q. Land agents. Sorry.
4	A. It's part of their job, yes.
5	Q. In testimony last week you said if a
6	landowner says they don't want to sign an easement,
7	the land agents or Summit representatives keep
8	contacting the landowner. Why doesn't no mean no?
9	A. Well, as I spoke about last week, sometimes
10	no has some motives behind it or some reasons, and we
11	try to find out those reasons.
12	So perhaps the landowner's heard some wrong
13	information about our project. Perhaps we've been
14	villainized by people that don't have all of the
15	facts. Perhaps they feel like, as some of the
16	scenarios that were presented last week, we could
17	change the product of the pipeline or that it could
18	combust or that it's unsafe. So there's a number of
19	reasons why a landowner would say, "No, I'm not really
20	interested in this."
21	So to answer your question, no meaning no,
22	we look at it as no meaning, "Okay. Do you mind
23	telling us why?" What we offer at the end of that
24	conversation, if the landowner is still opposed or not
25	interested, is to keep them updated on the progress.

- 1 So much of this, as I stated last week, has to do with
- 2 the evolution of this project gaining leaps-and-bounds
- 3 in terms of public acceptance.
- We've got well over 1,000 landowners, over
- 5 1200 of them that have reached an agreement with us.
- 6 We have over 2,400 parcels acquired. That's over 500
- 7 miles of right-of-way.
- 8 So as they -- as things progress, that
- 9 notion changes, but if the landowner is not aware that
- 10 things have progressed, we try to keep them up to
- 11 speed on that. So that has been a very fruitful
- 12 effort on our part.
- We continue to do that, and I think, by and
- 14 large, the landowners certainly that are having a
- 15 dialogue with us at all appreciate being kept abreast
- 16 of how things are going.
- 17 Q. Do you think maybe at some point they feel
- 18 like you just wore them down, and they're going to
- 19 sign an easement?
- 20 A. So I understand your question. I find it
- 21 almost insulting to an Iowa landowner to think that
- 22 that would happen.
- This is their ground. No one is disputing
- 24 that. They're extremely educated about their ground.
- 25 They're mindful people.

We enjoy meeting with all of the folks in 1 2 Iowa to the extent that we can. I think it discredits 3 the resolve of an Iowa landowner to think that they 4 could be worn down, but I can tell you as far as our 5 approach to this, the concept -- a concept that would even somewhat relate to that question has never come 6 7 up. 8 We don't approach this as wearing anybody 9 We approach this as critical infrastructure to 10 be installed, and we want to talk to folks about an 11 easement on their ground. 12 No, I don't see any scenario in which 13 someone has thrown up their hands and said, "Fine. 14 I'll just let an easement out here." 15 0. Do you recall during the first couple weeks of testimony when the landowners were testifying there 16 17 was a Mr. Konz who said that he didn't want the 18 pipeline; he didn't want to sign an easement but felt 19 he had no choice? Do you remember that? 20 I don't remember that specific man's name, Α. so I'll take your word for that. 21 22 I remember that topic being brought up. Ι 23 also remember that he hasn't signed an easement. That's right, but he was negotiating and 24 Q. 25 didn't want to. Remember?

1 Well, that's a part of any type of land Α. 2 acquisition project. I'm not saying that -- I think 3 we're jumping into two things. Wearing somebody's 4 resolve down and overwhelming them until they reach an 5 agreement with us is the way I think you presented it. Working through a negotiation that most 6 people would prefer to not have is different, very 7 8 different. One involves taking advantage of people 9 and wearing them down. The other involves the 10 necessary uncomfortability of the installation of 11 infrastructure, I think, in almost any case. 12 So I just want to distinguish between the 13 two things there. 14 So if a person, a landowner does not want 15 the pipeline on his or her land, you would keep trying 16 to get them to sign an easement; correct? 17 Α. I'd certainly try to keep a dialogue open 18 with them so that they were informed in hopes of 19 having continued conversations with them and eventually reaching an agreement, yes. 20 21 The fact that someone says, you know, 22 "Really not interested," that's not really an option 23 for me to walk away from in good-faith requirements of 24 trying to acquire that easement. 25 Last week you said that you would expect Q.

more easements to be signed after the Board issued a 1 2 permit. So in other words, at that point when eminent 3 domain is really staring them in the face, you're 4 saying that they would at that point sign the easement 5 because they had no other choice; correct? That is not what I'm saying. What I was 6 Α. talking about there -- I don't have the record in 7 8 front of me, but what I was talking about there is some folks are perfectly fine with the benefits 9 10 associated with this project. 11 They understand the viability of it. They understand how critical it is. They would simply just 12 13 prefer that we had a permit, and then they would 14 execute an easement with us. 15 0. Pardon me. That makes no sense at all. I believe it makes perfect sense, but I can 16 Α. 17 unpack it for you. So if you're a farmer and you're 18 selling to an ethanol plant, I'm asking to incumber 19 your ground with an easement. You may not want to go 20 through the process of incumbering your ground just to have to find a way to get that easement released if we 21 22 don't get a permit or ever build the pipeline. 23 So that makes perfect sense. Why go 24 through it unless it's a viable deal with a permit? So, again, we're talking about a minority 25

- 1 of landowners, a subset of the minority of landowners.
- 2 That's what I was referencing to.
- 3 The majority of landowners have reached an
- 4 agreement with us, obviously, prior to a permit, which
- 5 is unprecedented, by the way. 500 miles of
- 6 right-of-way in Iowa prior to a permit being received,
- 7 it borderline screams of the sense of this project.
- But 26 percent of the mileage remaining, I
- 9 would say a subset of that, as I cited last week, is
- 10 simply waiting to see if the permit is viable, and
- 11 then they'll go through working terms on an easement.
- 12 So perhaps it doesn't make sense to you or the Sierra
- 13 Club, but in the world that I live in on a daily
- 14 basis, it makes perfect sense. It's a very natural
- 15 thing.
- Any pipeline that requires a permit,
- 17 there's a subset of landowners that are simply waiting
- 18 on that permit to happen. It has nothing to do with
- 19 their opposition to the project.
- 20 Q. It has something to do with eminent domain,
- 21 doesn't it?
- 22 A. I don't think so. I mean, I think at the
- 23 end of the day, eminent domain is an unfortunate
- 24 circumstance but certainly a necessary function for
- 25 the installation of something this large. We

- 1 certainly can't have a minority of landowners holding
- 2 up or stopping or canceling the installation of
- 3 something this critical and this large.
- 4 So you have to look at the
- 5 majority/minority there, but I think, if I'm answering
- 6 your question correctly, the idea that everyone that
- 7 hasn't signed at this point is simply going to sign
- 8 because eminent domain is in play is very much
- 9 incorrect.
- 10 Q. Last week Mr. Dublinske mentioned that you
- 11 were in a mediation. That was with a landowner?
- 12 A. It was.
- Q. And who was -- I'll rephrase that. Without
- 14 mentioning any names, what -- who was involved in
- 15 that? I mean, you and a landowner, I assume?
- 16 A. Yes.
- 17 Q. And a mediator?
- 18 A. Yes.
- 19 O. Anybody else?
- 20 A. No, no. There's two parties and a
- 21 mediator.
- O. Okay. And is the mediation what the Board
- 23 suggested that landowners could engage in?
- 24 A. That's right.
- 25 Q. And how many of those have you done or has

1	Summ	i+	done?	
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- 2 A. I need to probably get some advice on how
- 3 much I can talk about that. The mediator has told me
- 4 specifically that the progress, the volume, the
- 5 contents of those mediations are strictly
- 6 confidential, as instructed by the Board.
- 7 You're welcome to ask the Board if I can
- 8 talk about that, but I need to follow the rules I've
- 9 been told.
- 10 Q. I wasn't asking the content. I want to
- 11 know how many mediations you have had.
- 12 A. How many is content. I would ask you to
- 13 ask the Board if I can answer that question.
- If they feel like I should, I absolutely
- 15 will. I don't want to break rules here.
- MR. TAYLOR: Mr. Chair, may he answer that
- 17 question?
- 18 BOARD CHAIR HELLAND: I think he can speak
- 19 to the volume, if Mr. Rorie knows.
- 20 A. Could you restate your question?
- 21 BY MR. TAYLOR:
- 22 Q. How many of these mediations have there
- 23 been?
- 24 A. Five or six.
- Q. Okay. Have any resulted in an easement?

- A. Well, we're right there again, Mr. Taylor.
- 2 I assume we can't answer that for you.
- 3 MR. TAYLOR: Mr. Chair, may he answer that?
- BOARD CHAIR HELLAND: Mr. Taylor, he really
- 5 can't be speaking about the outcome of the mediations.
- 6 MR. TAYLOR: Okay.
- 7 BY MR. TAYLOR:
- 8 Q. One final question. Last week I think you
- 9 said if a landowner doesn't want to sign an easement
- 10 and just says no that they're not making a good faith
- 11 effort to negotiate.
- 12 Why does the landowner have an obligation
- 13 to negotiate?
- 14 A. I didn't say it that way. If they were
- 15 not -- I wouldn't say they aren't negotiating in good
- 16 faith. I would just simply say they're not
- 17 negotiating.
- 18 Q. Well, you said "good faith" last week.
- 19 A. Good faith was my obligation, to continue
- 20 good-faith efforts to try to reach an agreement. I
- 21 certainly wasn't talking about the landowners. I was
- 22 talking about my folks.
- 23 O. The record will speak for itself.
- MR. TAYLOR: That's all the questions I
- 25 have. Thank you.

1 BOARD CHAIR HELLAND: Thank you, 2 Mr. Taylor. 3 Ms. Ryon, I think you're next, if you still 4 have questions. 5 MS. RYON: I do. Thank you, Your Honor. 6 CROSS-EXAMINATION 7 BY MS. RYON: Good morning, Mr. Rorie. I'm going to try 8 0. 9 not to be repetitive. Friday feels like a long time 10 ago, and so I apologize in advance if I cover territory already covered. 11 As an initial matter, I want to ask you 12 13 about the easement payments. I think you talked about 14 last week most of them are in a lump sum form to the 15 landowners; is that correct? 16 Α. Most of them are, yes. 17 And when landowners agree to a lump sum Q. 18 payment, is that payment paid 100 percent at the time 19 of signing? 20 Α. Most of the time. There are some scenarios in which the landowner asks for that to be split up a 21 22 little bit, but what we would typically do is make a 23 onetime payment all up front. 24 Q. And you may also recall from Friday that we looked at an image of one of the parcels where the 25

- 1 pipeline had been re-routed around a house because an
- 2 owner built some hog confinement facilities.
- 3 Do you recall that?
- 4 A. Yeah. It went around -- I guess the hog
- 5 barn was put in the original proposed route.
- 6 Q. Right. What would Summit do if -- on any
- 7 of the, you know, parcels that are still, you know,
- 8 not under an easement agreement, what would Summit do
- 9 if the landowners built additional facilities, you
- 10 know, since the last time you'd looked at that land?
- 11 A. Built additional facilities in the path of
- 12 the proposed route?
- 13 Q. Yes.
- 14 A. That's probably a question for counsel. I
- 15 think that we would be in a spot where we probably
- 16 would need to look at going around those, but that's
- 17 also very rare. I've not encountered that, actually,
- 18 in Iowa before, so I don't know exactly what the rules
- 19 would be then.
- 20 Certainly wouldn't want to invite everybody
- 21 to build things there in that proposed route.
- 22 Q. But they would have the right to do that
- 23 before signing an --
- 24 A. You'd have to ask our lawyers about that.
- 25 I don't know.

- I mean, we certainly presented for a
- 2 while -- If they're not signed by now, we've presented
- 3 for a while a proposed easement. Certainly it's our
- 4 intention and we filed exhibits with the Board, but I
- 5 don't know the Iowa rules or Board rules about that,
- 6 so I'm not equipped to answer that.
- 7 Q. And I have some additional questions about
- 8 the contact reports that Summit filed in July. You're
- 9 familiar with those, I assume?
- 10 A. Are you referring to, like, the L4, L5, or
- 11 L3, L4 testimony?
- 12 Q. I think these are the ones that contain the
- 13 lists of -- I would probably have to look more closely
- 14 at that. Give me a second.
- 15 These were filed on July 27th, and they
- 16 are -- yeah, per county they list how many contacts --
- 17 dates of contacts with the landowners and whether they
- 18 were in phone or in-person.
- 19 A. I recall that, yes.
- Q. Okay. I just want to ask some questions
- 21 about your procedures for maintaining those contact
- 22 lists.
- 23 Do you have a process in place to ensure
- 24 that there are no duplicate listings of contacts on
- 25 those lists?

I mean, it's pretty simple. We just don't 1 Α. 2 duplicate. 3 The only way that could happen is if a 4 landowner owned multiple parcels. Maybe those were 5 separated to where some of that content could be duplicated, but we have a team of folks that spend a 6 7 lot of time making sure that's rare or doesn't happen 8 at all. 9 And do you have a process in place for how Ο. 10 something would get recorded if, for example, a 11 landowner had been using a land line, and they decided 12 to disconnect that? 13 Α. I'm not sure I understand. If they 14 disconnected their land line and got a cell phone or 15 something, or their land line went away? They disconnected their land line, and the 16 0. 17 land agent calls, and the line is no longer in 18 Do you have a process for notifying that -service. 19 Well, we have a process for an attempted Α. 20 call. We also have a process to make sure we're operating in real-time and figure out alternate 21 22 numbers, if they existed. 23 I think if we went into a situation where a 24 landowner didn't have phone access at all, that would 25 be very rare, but if we called a land line that was

- 1 disconnected, it would tell us it's disconnected
- 2 typically. If it doesn't and we're not getting a
- 3 response from the landowner or able to engage in them,
- 4 we're always looking at alternate methods to attempt
- 5 to get the visit done.
- 6 Q. If a land agent makes that call and gets
- 7 the message that the phone line is disconnected, would
- 8 land agents then stop calling that number?
- 9 A. If the phone line was disconnected? They
- 10 should. It's not a good use of their time.
- 11 Q. What kind of process do you have to ensure
- 12 that land agents aren't trying to communicate with
- 13 people who are deceased?
- 14 A. Can you ask that again? That they aren't
- 15 trying to communicate with --
- 16 O. Correct.
- 17 A. Help me there. Can you ask me again?
- 18 Q. Ensuring that the people you are
- 19 communicating with are actually alive?
- 20 A. Well, we run lots of updates. They're not
- 21 every hour. It's a lot of work and records to look
- 22 through, but we update our title work.
- 23 We try to keep in contact with landowners.
- 24 In the unfortunate scenario that someone would pass
- 25 away, we typically are able to be aware of that within

- 1 weeks of that happening, if there was an obituary or
- 2 death record or probate filed or something in the
- 3 courthouse that would give us notice of that.
- 4 It's certainly possible that someone would
- 5 pass away unbeknownst to us, and we would continue to
- 6 try to contact someone that was actually deceased for
- 7 a matter of days. I would think that's the case,
- 8 unless there was something very obvious that we picked
- 9 up that would lead us to believe otherwise.
- 10 It's just a function of this many folks in
- 11 this many situations, unfortunately, folks passing
- 12 away is a small part of what we have to adjust around.
- 13 Q. But once your land agents were aware that
- 14 someone was deceased, then they would stop attempting
- 15 to contact that person?
- 16 A. I think that they would certainly stop
- 17 trying to attempt someone that was -- stop trying to
- 18 attempt to reach someone that was deceased, assuming
- 19 that it was proven or there was notice that they were
- 20 deceased.
- We would try to talk to the personal
- 22 representative or what alternate person we would need
- 23 to visit with.
- Q. What would be your process if someone
- 25 requested that you stop contacting, for example, an

25

elderly family member? 1 2 Α. That gets very specific. Here's why. is a -- not the most fun part of my job, but when it 3 4 comes to the law, if someone owns a property, we see 5 very often that perhaps their age is higher than what you would typically see in a landowner. 6 7 There may be children involved, other relatives, other interests involved, but legally that 8 9 person still owns the property and has a say over it, 10 to the extent that they're not incapacitated. We have to visit with those people because we have come across 11 12 so many situations -- I certainly have in my career --13 where relatives and other interests may have differing 14 opinions than the person that controls the property, 15 maybe trying to exacerbate a family situation that we don't want to insert ourselves into. 16 17 So it's uncomfortable. Certainly not very 18 good optics, but it's part of my requirement to talk 19 to the person that has control of the property unless 20 they direct us to a different representative. 21 In that case we would obey them or we 22 should, but elderly folks that control their family 23 ground control the direction of that easement, and I 24 have to give them the same due respect and treatment

and good-faith effort as any of their relatives that

- 1 may feel otherwise. That is not an uncommon
- 2 situation, very common, and so we have to err on the
- 3 side of what the law tells us to do.
- 4 Q. In that situation if the property were
- 5 owned by, say, a family trust and there were other
- 6 members of the family with equal responsibility for
- 7 the trust, would you reach out to the other family
- 8 members?
- 9 A. We should talk to anybody that has interest
- in the property, but on the flip side of that, we
- 11 would not exclude one particular trustee because they
- 12 were elderly either.
- Q. Do you have a process for how to respond
- 14 when someone requests that Summit make no further
- 15 contact with them?
- 16 A. Could you ask that again? I feel like it's
- 17 the same question I just answered.
- 18 Could you ask it again so I make sure I
- 19 understand it correctly?
- 20 Q. In this case instead of asking for somebody
- 21 else if a person says for themselves, "I'm the
- 22 landowner. I don't want Summit to contact me
- 23 anymore, "what's your process for handling that?
- A. Well, again, the first step is to figure
- 25 out what's driving that, and typically folks share

- 1 that with us. I'm trying to generalize on a wide
- 2 variety of conversations, but we would try to find out
- 3 why.
- 4 And if that wasn't successful or we
- 5 couldn't visit with the landowner anymore, we commit
- 6 to try to keep them updated on how things are going
- 7 with the project to continue to have a seat at the
- 8 table in terms of dialogue about the project.
- 9 O. So you would continue to try to communicate
- 10 with them, even if they have requested specifically no
- 11 contact with them?
- 12 MR. LEONARD: Objection. Asked and
- 13 answered by several attorneys several times.
- 14 BOARD CHAIR HELLAND: Ms. Ryon, can you get
- 15 to your point of your question, please?
- 16 MS. RYON: Sure.
- 17 BY MR. RYON:
- 18 Q. Do you make notes in your communication
- 19 logs if someone requested no contact?
- 20 A. Yeah, I think we do, or something
- 21 synonymous with that, that they're not interested or
- 22 opposed or something like that.
- 23 O. You think, but you're not certain?
- A. To the extent that I understand your
- 25 question, I'm certain that we document to the extent

- 1 that we follow instructions. We document whether or
- 2 not someone was opposed or preferred not to be visited
- 3 with at that time.
- 4 Q. Just to clarify, you would document if
- 5 someone was opposed, but you're not saying that you
- 6 would document that they specifically requested no
- 7 contact?
- 8 A. I think that we do document that. I don't
- 9 have a process for it.
- 10 Perhaps we're just speaking in a couple
- 11 different synonyms here, but if a landowner said, "I
- 12 prefer not to be contacted," then we would typically
- 13 write that down somewhere in our reports.
- 14 Q. Would you then stop contacting that
- 15 landowner?
- 16 A. It depends on why they didn't want to be
- 17 contacted. We would certainly try to follow up with
- 18 them and see if their mind had changed after a period
- 19 of time. In so many instances that's what happens.
- 20 O. So is that a no?
- 21 A. It's a circumstantial -- hard to give you a
- 22 yes or no there.
- 23 O. Do you have a process for noting when a
- landowner has told you to contact their attorney?
- 25 A. Yes.

1	MS. RYON: That's all my questions. Thank
2	you.
3	BOARD CHAIR HELLAND: Thank you.
4	Mr. Goodwin?
5	MR. GOODWIN: Thank you.
6	CROSS-EXAMINATION
7	BY MR. GOODWIN:
8	Q. Thank you. My name is Robert Goodwin, I
9	represent Mary, Jamie and Carmen Moser who own, rent
10	and farm ground in Palo Alto County where Summit
11	Carbon intends to have its hazardous liquid pipeline.
12	The land that they farm is actually four
13	four quarter-quarter sections in a row, so it's a
14	total of 160 acres in a row, and the land is in a
15	floodplain. I'll further represent to you that on
16	March 7th of this year, the Palo Alto County Board of
17	Supervisors voted to restrict Summit Carbon from
18	putting in a pipeline in this floodplain.
19	My question to you is: Do you have a
20	concern about proceeding with putting in a pipeline in
21	a floodplain and in an area where the Board of
22	Supervisors has restricted your company from doing
23	that?
24	A. Well, as far as a split concern there, I
25	don't have a concern about the pipeline being in a

- 1 floodplain. It's not my decision to put it there, but
- 2 I've certainly operated pipelines or worked on the
- 3 operation side of pipelines and the installation side
- 4 of pipelines that went through plenty of floodplains,
- 5 so that's not a rare instance.
- To also answer your question, the first
- 7 concern as the land person, I have no concern about
- 8 that. It would be up to our engineers to have more
- 9 concerns than I would, but it's very common in certain
- 10 parts of this country to be in a floodplain.
- 11 The second part as it relates to the
- 12 restrictions of that county, I have very little to do
- 13 with that. My opinion would be if it was reasonable
- 14 to install a pipeline subject to certain ordinances
- 15 and it makes sense, but if it's not reasonable or
- 16 overly restrictive or doesn't make sense, that's
- 17 between our company and counsel and the County to
- 18 figure out, not me.
- 19 O. I think you indicated that it is preferable
- 20 to have the liquid hazardous pipeline not be in the
- 21 floodplain?
- 22 A. I did not indicate that. My statement was
- 23 it makes no difference to me one way or another
- 24 because it's very common.
- 25 Q. I think maybe I misunderstood your

- 1 statement that you thought it would be better not to
- 2 be in a floodplain.
- 3 A. No, sir. That's the opposite of what I
- 4 stated. You asked if I was concerned about it, and
- 5 I'm not.
- 6 Q. Okay. In reference to the Board of
- 7 Supervisors restricting Summit Carbon proceeding in
- 8 the floodplain, what is your company's procedure to
- 9 address that issue?
- 10 A. I'm probably the wrong guy to speak to
- 11 that. I don't deal with the counties at all.
- I don't collaborate on plans forward in
- 13 that arena. I would be probably misspeaking if I
- 14 answered that at all.
- 15 Q. I'll also represent to you, then, that on
- 16 June 6th of this year, I filed on behalf of the Mosers
- 17 what we entitled "Inquiry re: Rerouting Location of
- 18 Hazardous Liquid Pipeline." We've had no response to
- 19 that.
- I'll represent to you that the Mosers'
- 21 concern is to move your proposed location of the
- 22 hazardous pipeline out of the floodplain, which is on
- 23 the north side of the Des Moines River, to the south
- 24 side of the Des Moines River, which is not in the
- 25 floodplain, and actually, one of the landowners is

Palo Alto County, which does not oppose the pipeline. 1 2 Is there a procedure in place where your 3 company considers these requests to, in this 4 situation, move the pipeline out of the floodplain to the south side of the river where it's not in a 5 floodplain? 6 7 Α. Well, to answer your question, there is a procedure of assessing those. I don't design that 8 9 procedure outside of land impacts as far as surface 10 I don't have any weight in that procedure. 11 It's probably a better question to a 12 decision-maker much higher than me that would decide 13 whether the County's preferences and the route of the 14 pipeline are workable and whether or not that transfer 15 impacts onto neighboring landowners. It sounds like it would, but I'm not looking at it with you. 16 17 That's something that I would weigh in on 18 to see, "Okay. What people are we affecting by this 19 move?" but the actual decision to move a pipeline is 20 almost never mine. 21 Is there, in effect, a procedure to Q. 22 consider a request to, particularly for the Mosers? 23 Α. Sure. 24 What is that procedure? Q. 25 Well, it's not a process flow. It's just Α.

- 1 our engineers and project managers look at the
- 2 request.
- 3 If that request would involve different
- 4 disciplines, whether it be environmental survey or --
- 5 there's a number of other disciplines that would
- 6 possibly need to look at that. We all collaborate,
- 7 and then a decision-maker makes a decision.
- 8 Q. As I said, we've had no response. Who is
- 9 the contact person that we should contact in regard to
- 10 this situation?
- 11 A. If you're talking about moving the
- 12 pipeline, I think the best person to talk to would be
- 13 Erik Schovanec. He testified earlier.
- 14 Please don't ask me to spell his name. We
- 15 can get it to you.
- 16 He's our senior project director and
- 17 typically spearheads those procedures, and then if it
- 18 needs to be elevated, it will go to Erik and my
- 19 superior, which is Jimmy Powell.
- Q. How do I get in contact with him, or will
- 21 he get in contact with me?
- 22 A. We can provide his contact information and
- 23 hope you guys could talk about it, however you want to
- 24 schedule that.
- Q. Okay. Hopefully you can get me the

1	information.
2	A. Sure.
3	MR. GOODWIN: I have no further questions.
4	Thank you.
5	THE WITNESS: Thank you.
6	BOARD CHAIR HELLAND: Okay. Before we go
7	to Board questions, did I miss any of the parties?
8	(No response.)
9	BOARD CHAIR HELLAND: Okay. We've crossed
10	a lot of these off, Mr. Rorie, so I'm looking for one
11	that's not crossed out.
12	Is there anything in Summit Carbon's
13	easement which would prohibit development for the
14	person's property as an industrial or commercial
15	property?
16	THE WITNESS: Only to the extent that it
17	would prohibit the permitted structures being placed
18	within the boundaries of the easement and the
19	workspace while it was in effect.
20	BOARD CHAIR HELLAND: On page 7 of your
21	direct testimony, you discuss needing four pump
22	stations in Iowa. Has Summit Carbon obtained all
23	necessary land rights for those, or is it requesting
24	eminent domain over those areas?
25	THE WITNESS: We have one left, so we have
1	

1	three of the four secured.
2	BOARD CHAIR HELLAND: Okay.
3	THE WITNESS: You'd have to ask counsel
4	whether they're seeking anything eminent domain-wise.
5	We feel like we're in the finishing stages
6	right towards the end of getting that last one
7	resolved. I expect that to be done in the next, if I
8	had to guess, three or four weeks.
9	BOARD CHAIR HELLAND: Do you know which
10	Exhibit H?
11	THE WITNESS: I don't have the Hs
12	memorized. It would be the pump station in Clay
13	County. It has a CL prefix there.
14	BOARD CHAIR HELLAND: Okay. I think we can
15	narrow that down.
16	How many acres are the pump sites?
17	THE WITNESS: They vary a little bit. In
18	general in between 4 and 6 acres, 4 or 5 acres.
19	BOARD CHAIR HELLAND: Do the pump sites
20	have different access requirements than the pipeline,
21	and will they each have different driveway access
22	requirements?
23	THE WITNESS: Yes. Typically there's a
24	permit access road that goes directly to the pump
25	station facility, and that's a part of the

1	transaction.
2	BOARD CHAIR HELLAND: You state Summit
3	Carbon will purchase the electricity from local
4	providers. Does Summit Carbon anticipate generating
5	some of its own electricity on-site?
6	THE WITNESS: Not to my knowledge, but I'm
7	probably not the guy to talk about that.
8	BOARD CHAIR HELLAND: Who would be?
9	THE WITNESS: I think Mr. Powell would be
10	the best guy to tell you whether they intend on
11	generating their own electricity. I've not heard of
12	that, but I just don't want to rule it out.
13	BOARD CHAIR HELLAND: No problem. Thank
14	you.
15	Are you familiar with OCA Bents Direct
16	Exhibit 1?
17	THE WITNESS: I would probably need to be
18	refreshed on it.
19	BOARD CHAIR HELLAND: Okay. We can get
20	that pulled up.
21	(Brief pause.)
22	BOARD CHAIR HELLAND: So while they're
23	pulling that up, we're going to be talking about
24	electrical network upgrades, okay? I apologize if
25	Mr. Schovanec already answered this, or if we need to

refer to him, let us know. 1 2 We have it up. Okay. I don't think we 3 have a specific page number here. 4 So OCA Data Response 66 states, "Summit 5 Carbon will pay for the necessary electrical network upgrades." 6 7 Do you know how many upgrades will need to happen? 8 9 I really have no idea. THE WITNESS: 10 way outside of my scope. 11 BOARD CHAIR HELLAND: So I suppose the 12 locations are outside of the scope, too? 13 Well, the locations for the THE WITNESS: 14 power coming into sites I deal with as far as working 15 together with the utility providers and the landowners to get that worked out. 16 17 As far as the rights to put the power in, 18 whether an upgrade is tied to that or how many of 19 those locations, I couldn't tell you. 20 BOARD CHAIR HELLAND: Okay. Will any new electric transmission lines need to be constructed or 21 22 upgraded? 23 I'm not sure. THE WITNESS: There's a 24 couple types of power required here. I don't know if 25 a transmission upgrade would be required.

1	BOARD CHAIR HELLAND: Is that a question
2	for Powell, too?
3	THE WITNESS: I bet it is. This is his
4	response to the data request. Jimmy or Erik speak
5	that language better than me.
6	BOARD CHAIR HELLAND: That says Summit
7	Carbon started the interconnection process discussions
8	with the relevant utilities?
9	THE WITNESS: I'm not sure.
10	BOARD CHAIR HELLAND: Okay. Has Summit
11	Carbon obtained all necessary land rights for the MLVs
12	or requested the right of eminent domain for those
13	remaining as well?
14	THE WITNESS: We're requesting the right
15	for those remaining.
16	BOARD CHAIR HELLAND: Do you know how many?
17	THE WITNESS: There's 23 remaining
18	stand-alone valves and 34 launch receiver sites.
19	BOARD CHAIR HELLAND: Do you know the
20	number of total valves?
21	THE WITNESS: The total valves outside of
22	an ethanol facility, of course, 64 valves. Forty-one
23	have been acquired, 23 we're working on.
24	BOARD CHAIR HELLAND: I might come back to
25	that.

1	We heard from several Exhibit H landowners
2	in their recent testimony that they received a verbal
3	offer from a Summit land agent but then never received
4	the written version of that offer.
5	Can you help us understand that?
6	THE WITNESS: Sure. So I don't want to
7	cite specific people, but there has been an instance
8	where there was a property that was not equitable to
9	some others. The impacts were different. We reached
10	an individual price for that impact.
11	Whenever we consented to that and it was
12	the landowner's price, it wasn't a counteroffer. It
13	was, "Yes, sir, we'll pay that." The comment was then
14	made, "Put it in writing. I'm going to put it in the
15	paper and make sure everybody gets paid what you just
16	offered me."
17	So those are not equal things at all in
18	terms of what we were looking to do. It was a totally
19	different arrangement.
20	So we refrained from putting that offer in
21	writing so that it didn't get advertised and create
22	more problems than good.
23	BOARD CHAIR HELLAND: Can you explain how
24	Summit Carbon has engaged the railroads to obtain
25	crossing agreements?

1	THE WITNESS: I can speak in generalities
2	there. I don't manage that group. That's the TurnKey
3	group, and I believe that falls under Mr. Schovanec's
4	scope.
5	That's technically a non-environmental
6	permit. I have a lot of experience dealing with
7	railroads. I can tell you that they just approach the
8	applicable department at the railroad and start
9	talking about either a license agreement or a crossing
10	agreement.
11	BOARD CHAIR HELLAND: During your testimony
12	you stated Summit Carbon is requesting eminent domain
13	for 892 parcels. Would Summit Carbon be willing to
14	file an updated list containing the parcels still
15	subject to Exhibit H?
16	THE WITNESS: Sure.
17	BOARD CHAIR HELLAND: Okay. Thank you.
18	That's the extent of my questions.
19	Board Member Byrnes.
20	BOARD MEMBER BYRNES: So I know it's been a
21	few days. Remind me, were you on when a picture of a
22	tire was presented?
23	THE WITNESS: I was.
24	BOARD MEMBER BYRNES: Okay. So I had some
25	notes here pertaining back to that moment.
I	

1	So I just want to be clear or clarify for
2	the record, because I just there were lots of
3	conversations taking place around this. If a farmer
4	were to be doing normal farming operations I think
5	Ms. Gruenhagen talked about normal farming operations
6	based on 352 of Iowa Code. If they're doing normal
7	farming operations and were to hit the pipeline and
8	cause damage, I believe you stated that is not on
9	them; correct?
10	THE WITNESS: Yes.
11	BOARD MEMBER BYRNES: So what if you have a
12	contractor, a landowner does not do a One Call and
13	were to hit the pipeline and cause damage? Who is
14	responsible for the cost of that damage to the
15	pipeline?
16	THE WITNESS: Well, I think it turns into a
17	little bit more of a legal question there, if they
18	violated the One Call requirements, and then I
19	admittedly don't know much about whether comparative
20	fault is in play here, but I'd be speculating as to
21	what direction that would go.
22	We would encourage people to use One Call
23	and hire contractors that do, but I don't know if that
24	would constitute negligence, gross negligence or
25	something willful there. It's just not my scope.

1	It is always encouraged that folks utilize
2	the One Call system for that type of a reason as well.
3	BOARD MEMBER BYRNES: And I believe there
4	was a conversation I maybe was the one that asked
5	this that normal farming operations do or do not
6	require a One Call?
7	THE WITNESS: I think, depending on your
8	definition of "normal," if installing tile would
9	require excavation or if they have to do a One Call
10	for that, that still might fall under the circle of
11	normal, but if they're not excavating or doing
12	anything prompted under definitions of the One Call
13	requirements, then that's just normal farming.
14	BOARD MEMBER BYRNES: That's all I had for
15	clarification. Thank you.
16	BOARD CHAIR HELLAND: Thank you.
17	Summit, do you have redirect?
18	MR. LEONARD: Very briefly, Your Honor.
19	We actually have a hearing exhibit, and it
20	was uploaded this morning. It's Summit Hearing
21	Exhibit 1, if we could bring that up.
22	If I might have a staff member come down, I
23	have the hard copies to be passed out.
24	BOARD CHAIR HELLAND: Thank you.
25	(Brief pause.)

1	REDIRECT EXAMINATION
2	BY MR. LEONARD:
3	Q. Mr. Rorie, during your testimony over last
4	Friday and today, you've been asked various questions
5	about the voluntary easement template referred to in
6	Exhibit C; is that right?
7	A. Yes.
8	Q. Is this a representative example of what
9	that Exhibit C looks like?
10	A. It is.
11	MR. LEONARD: Nothing further, Your Honor.
12	BOARD CHAIR HELLAND: Thank you.
13	MR. LEONARD: I'm sorry. I move admission
14	of this as Summit Exhibit 1.
15	(Summit Hearing Exhibit 1 was offered into
16	evidence.)
17	BOARD CHAIR HELLAND: Are there objections?
18	(No response.)
19	BOARD CHAIR HELLAND: Seeing none, the
20	Board will admit Summit Hearing Exhibit 1.
21	(Summit Hearing Exhibit 1 was admitted into
22	evidence.)
23	BOARD CHAIR HELLAND: I believe Mr. Jorde
24	has questions.
25	MR. JORDE: Yes. Thank you.

1	RECROSS-EXAMINATION
2	BY MR. JORDE:
3	Q. In regards to the exhibit offered and
4	admitted into evidence, you don't see the word
5	"normal" or "typical" or "farming activities" anywhere
6	mentioned or defined in there, do you?
7	A. No.
8	Q. And, in fact, your statements related to
9	that normal or regular farming activity can occur and
10	no liability would be incurred by the landowner are
11	not actually stated or warrantied anywhere in this
12	Exhibit C or the voluntary agreement that you and I
13	looked at; right?
14	A. Well, it depends on how you define what's
15	omitted there. I mean, you have the indemnification
16	language that talks about anything, other than gross
17	negligence or willful misconduct. It just stated
18	normal farming practices would not constitute willful
19	misconduct or negligence.
20	So we could state normal farming practices
21	or building a barbecue stand, and it would be the same
22	thing. Unless it was gross or willful misconduct,
23	they're indemnified.
24	Q. That's the whole point. It comes down to
25	which lawyers are better at persuading or convincing

- 1 what landowner activity that they might have thought
- 2 was normal could maybe actually arguably fall under to
- 3 a gross negligence or willful misconduct? Do you
- 4 agree it comes down to the facts of the situation and
- 5 analyzing each specific instance?
- 6 A. I think there are always facts involved,
- 7 and you could look at further explanations in the 811
- 8 piece that was brought up last week, I believe, by
- 9 Farm Bureau talking about farming practices.
- 10 I believe the Board just mentioned that as
- 11 well, but to answer your question, are facts involved
- 12 with cases? Sure.
- 13 Q. And because they're specific facts involved
- 14 with each individual case, you are not able to state
- 15 definitively here which, quote-unquote, normal farming
- 16 practices may or may not lead to liability because how
- 17 we define "normal" could vary; correct?
- 18 A. I can state a lot of them, but it would be
- 19 incorrect for me to state every hypothetical activity
- 20 of a landowner that would fall under normal farming
- 21 practices, but I could state quite a bit certainly,
- 22 including the picture that the Board just referenced
- 23 about just farming over an easement.
- Q. And so you can on behalf of Summit,
- 25 therefore, bind the company with your testimony and

- 1 warrant that if any farmer were driving a tractor,
- 2 combine or piece of heavy equipment across the
- 3 easement, it sunk and caused damage to the easement
- 4 and cost your company millions of dollars in shutdown
- 5 time and lost productivity, that Summit would not in
- 6 any event sue or seek any type of contribution from
- 7 the landowner?
- 8 A. That's a really long question, but I will
- 9 do my best here.
- I don't have the authority to bind us as it
- 11 comes to specifics on the indemnity. I think the law
- 12 would.
- What I can say is if someone is conducting
- 14 their normal activity, I don't see how that would
- 15 constitute willful misconduct or gross negligence.
- 16 Perhaps it calls for a legal conclusion, but my
- 17 statement is also backed with quite a bit of
- 18 experience talking to landowners about their activity
- 19 on top of a pipeline, and I can tell you if you're
- 20 running a combine, just like people run combines
- 21 across the 300-plus miles of right-of-way that I
- 22 helped to operate in Iowa, that is normal.
- 23 O. And would it also be true, sir, that you on
- 24 behalf of Summit cannot bind or warrant that your
- 25 insurer, who may pay out an insured loss of lost

productivity, lost profits, whatever the claim might 1 2 be if a pipeline is damaged, that you can't guarantee 3 that insurer, that insurance company wouldn't 4 independently go after a landowner to seek 5 contribution? I've never heard of that. You brought 6 Α. something up last week about that. I've never heard 7 8 of that. 9 I can't speak for the insurance company. 10 In talking about property damage or crop damage, it would come directly out of Summit. If there was 11 12 something beyond that and a claim needed to be made, I 13 can't speak to how insurance companies behave. 14 MR. JORDE: Thank you. Nothing further. 15 BOARD CHAIR HELLAND: Thank you. 16 Ms. Gruenhagen? 17 MS. GRUENHAGEN: Thank you, Your Honor. 18 RECROSS-EXAMINATION 19 BY MS. GRUENHAGEN: 20 I have one follow-up question regarding Q. Summit Hearing Exhibit 1 here. 21 22 This list of six things, is this all that 23 Summit typically negotiates with landowners, or can 24 this be a much longer list of items? 25 Α. It can be significantly longer.

- 1 case-by-case. This is just a generic form.
- 2 So you see in paragraph 4 there was this
- 3 insert to approve terms on that. That's where any
- 4 other specifics that are worked out with the landowner
- 5 as it relates to their ground are sited.
- 6 Q. Are there some typical provisions that
- 7 landowners are requesting that are being included in
- 8 this exhibit?
- 9 A. Some people ask a lot about abandonment, as
- 10 you can tell. So we tend to recite exactly what I've
- 11 testified to in the last couple of days, that if the
- 12 pipeline is abandoned for a consecutive period of five
- 13 years, et cetera, then it would be abandoned under CFR
- 14 195 and the Board rules -- or the Iowa law. Sorry.
- 15 So that's one example.
- 16 Some folks ask specific things about tile,
- 17 clarifications about rock removal. So many of these
- 18 are already sited in our mitigation plan, but the
- 19 landowners are also more comfortable with it being
- 20 also bound with the easement. And we're great with
- 21 that, so we put it in there.
- 22 Q. Would it include things like a trench plug
- 23 to access other parts of the property, crop loss,
- 24 pipeline depth, ingress/egress to the property? Are
- 25 there just a lot of different types of things that

1	might be included?
2	A. There's a lot, but yes, everything you just
3	cited is pretty common.
4	MS. GRUENHAGEN: Okay. Thank you.
5	BOARD CHAIR HELLAND: Thank you. Seeing no
6	other questions, you may step down.
7	Well, Summit, did you have anything to add?
8	MR. LEONARD: No. Thank you, Your
9	Honor.
10	BOARD CHAIR HELLAND: Thank you. Now you
11	may step down, Mr. Rorie.
12	We are going to break, but before we do,
13	let's just go ahead and bring Mr. Schmidt up. We'll
14	get him sworn in, and then we'll hit the ground
15	running right after lunch with questions.
16	MR. DUBLINSKE: Thank you, Your Honor.
17	Summit Carbon Solutions calls for its next witness,
18	Jon Schmidt.
19	BOARD CHAIR HELLAND: Good morning,
20	Mr. Schmidt. Can you hear me okay?
21	THE WITNESS: Yes, sir.
22	BOARD CHAIR HELLAND: There we go. Go
23	ahead and raise your right hand.
24	
25	

1	JON SCHMIDT,
2	called as a witness by Summit Carbon Solutions, LLC,
3	being first duly sworn by Board Chair Helland, was
4	examined and testified as follows:
5	BOARD CHAIR HELLAND: Okay.
6	Mr. Dublinske.
7	DIRECT EXAMINATION
8	BY MR. DUBLINSKE:
9	Q. Dr. Schmidt, are you the same Jon Schmidt
10	that caused to be filed in this matter direct
11	testimony?
12	A. Yes.
13	Q. And that was the only testimony that you
14	filed in this matter?
15	A. Correct.
16	Q. Did you have any exhibits?
17	A. I don't recall.
18	Q. Do you have any corrections before we begin
19	this morning?
20	A. No, sir.
21	Q. And if I asked you the questions in your
22	testimony on the stand today, would your answers be
23	substantially similar?
24	A. Yes, sir.
25	MR. DUBLINSKE: Your Honor, we would move

1	to admit the testimony of Jon Schmidt.
2	BOARD CHAIR HELLAND: Are there any
3	objections?
4	MR. JORDE: Foundation and relevance. Does
5	he have rebuttal? Yeah. And then my standing
6	objection on rebuttal. Thank you.
7	BOARD CHAIR HELLAND: Okay. Noted. Thank
8	you.
9	What was the name of that exhibit,
10	Mr. Dublinske?
11	MR. DUBLINSKE: We will confirm, but I am
12	only showing direct testimony.
13	BOARD CHAIR HELLAND: Hold on. We're
14	double-checking.
15	(Brief pause.)
16	BOARD CHAIR HELLAND: We don't have
17	rebuttal on this, so just direct. Just so we have it
18	nice and tight and clean, will you state exactly what
19	you like admitted, and we'll note Mr. Jorde's
20	objections to that?
21	MR. DUBLINSKE: Yes. The only thing we're
22	moving is direct testimony of Jon Schmidt.
23	BOARD CHAIR HELLAND: Okay. Thank you.
24	The Board will admit and give it the weight
25	due.

We'll break for lunch, but who will be 1 2 first when we get back from lunch so we have a name to 3 call to start? Mr. Taylor. All right. 4 We will back at 1 o'clock. Mr. Taylor will 5 lead us off. (A lunch recess taken from 11:55 a.m. until 6 7 1:01 p.m.) It's 1:01. We 8 BOARD CHAIR HELLAND: Okay. 9 will go back on the record. 10 Dr. Schmidt, just a quick reminder. You're 11 under oath. Make sure your green light is on. Make 12 sure and move that mic wherever you're comfortable, as 13 long as we can hear you. Thank you. 14 I believe, Mr. Taylor, you're first. 15 MR. TAYLOR: Thank you. 16 CROSS-EXAMINATION 17 BY MR. TAYLOR: 18 I'm Wally Taylor. I represent the Sierra 0. 19 Club. 20 It's my understanding from your written testimony you work for EXP Energy? 21 22 Correct. Α. 23 And from their website, I gathered that 0. 24 your company works for companies developing energy 25 projects?

	<u> </u>
1	A. Among other things, yes.
2	Q. Okay. Like, what other things?
3	A. They do hospital design, architecture.
4	They do entertainment centers.
5	There's over 3500 people, so it's a big
6	firm.
7	Q. Okay. But as far as your part of the firm,
8	so to speak, the environmental impacts, you work for
9	energy projects basically?
10	A. Correct.
11	Q. Has your portion of EXP ever worked for an
12	environmental organization or a citizens group wanting
13	to protect the environment?
14	A. In my 36 years I've done some work for The
15	Conservation Fund, Audubon. It just depends on the
16	projects and where they are.
17	Q. Is that a very small part of your work,
18	though?
19	A. Not many.
20	Q. Yeah. On page 3 of your direct
21	testimony
22	MR. TAYLOR: Can we bring that up, please?
23	BY MR. TAYLOR:
24	Q line 10, you say there that Summit
25	performed desktop and field surveys for a multitude of
I	

- environmental media. Did Summit do it, or did your 1 2 firm do it? 3 It was a combination of third parties and Α. 4 Summit. 5 0. Okay. What other third parties were there? Oh, a host of firms. Westech 6 Α. 7 Environmental, Emergent, Perennial. I can't remember all of them, but there 8 9 were different firms or different specialties or 10 requirements. 11 Did you supervise those other firms? 0. 12 BOARD CHAIR HELLAND: Hold on real quick. 13 We have some auditory or technical difficulties. 14 Looks like we're good again. 15 Sorry. Go ahead and repeat your question, 16 Mr. Taylor. 17 BY MR. TAYLOR: 18 Did you supervise those other firms? 0.
 - 19 A. So my role for Summit was environmental
 - 20 project management, so our company helped Summit,
 - 21 particularly in the early stages before they had a lot
 - 22 of staff, to help manage the environmental component
 - 23 of the project.
- 24 So they may not have been contractually
- 25 working for me, but we helped organize and schedule.

And would you describe what was done in 1 0. 2 those desktop surveys, first of all? 3 Α. Well, initially about two years ago we 4 reached out to the regulators; Fish and Wildlife, 5 Corps of Engineers, IDNR. They provided us with some guidance, so we did some desktop work with aerial 6 photography -- NWIs, NHD, soil surveys -- to try and 7 8 identify habitats or areas that they asked us to look 9 for. 10 In the field we actually went out and 11 walked and looked for, confirmed. 12 Q. I hadn't gotten to the field surveys yet, 13 but that's okay. 14 When you say you walked out into the areas, 15 how big of a job was it? I mean, this is quite a 16 massive project. Did you walk every inch of the 17 pipeline route? 18 We created a 300-foot survey Yeah. corridor, and teams walked the route basically. 19 20 We did 100 percent cultural resource. So we surveyed for cultural resources over 100 percent 21 22 where we had access; wetlands, water bodies, listed 23 species. 24 And how long did that take you? Q. 25 It's still going on. Α.

So we don't have any final survey report 1 0. 2 yet? 3 We've created survey reports by year that Α. 4 we submitted to the agencies. So the 2022 surveys 5 were submitted to IDNR, Fish and Wildlife Service, the 6 Corps. 7 SHPOs received reports, and then 23 survey reports will be completed this fall and submitted. 8 9 For the record, SHPO is S-H-P-O for State 10 Historical Preservation Office? 11 State Historical Preservation Office. Α. 12 And would Summit have those reports? Q. 13 Yes. Α. 14 I wonder, because when I asked for 0. 15 environmental reports from Summit, they said they didn't have any. 16 17 You'd have to ask counsel. I don't --Α. 18 I will. You said in your testimony at 0. 19 page 2 at the very bottom, line 22, that you oversaw 20 and participated in the preparation of Exhibit H [sic] -- I'm sorry. Exhibit F to the petition. 21 22 When you say you oversaw and participated 23 in the preparation of Exhibit F, what do you mean? 24 Α. Our company put together Exhibit F, but it 25 was a multi-disciplinary effort. So there were others

- 1 who wrote sections of it.
- Q. Well, let's look at Exhibit F, if we can
- 3 pull that up. At the bottom of the second paragraph
- 4 on 1.0, it says, "The project is necessary for these
- 5 ethanol plants because it provides a CO2
- 6 transportation solution which otherwise would not
- 7 exist and without which Iowa's ethanol plants would be
- 8 in a significant, long-term disadvantage to ethanol
- 9 plants in states like North Dakota and Illinois, which
- 10 contain proven subsurface geologic storage formation."
- 11 Was it part of your scope of work to make a
- 12 sales pitch for Summit?
- 13 A. No. I didn't write this section. Summit
- 14 wrote Section 1.
- 15 O. But you said you oversaw and were
- 16 responsible for the preparation of Exhibit F; correct?
- 17 A. Yeah. We helped make sure everybody stayed
- 18 on schedule, provided their sections when they were
- 19 needed. We put the document together and provided it
- 20 to counsel for filing.
- 21 O. Go to Table 1. I don't think there's a
- 22 page number on it. If you scroll down, that looks
- 23 like Table 1.
- It's labeled, I think, "Land Usage by
- 25 County"; is that correct?

1	A. That's correct.
2	Q. But that doesn't tell us where the
3	environmentally sensitive areas are, does it?
4	A. These are the subsurface areas required for
5	Appendix F, so that was created and included.
6	Q. In Section 2.1 so we'll back up you
7	state that there will be no significant
8	post-construction impacts to land use.
9	What did you go by to make that conclusion?
10	A. Well, over 95 percent of the route is
11	agricultural production, so either crop or hay or
12	grassland, and with the AMIP, as stated in that
13	paragraph, the measures that the State requires
14	pipelines to use in construction, those best
15	management practices result in no significant impact
16	post-construction.
17	Q. Are you an agronomist?
18	A. No, sir.
19	Q. So is it fair to say you just went by
20	Summit's statement that they would restore the land as
21	it was before?
22	A. Not just Summit's statement on their
23	commitment, but the AMIP is based on best management
24	practices, and those practices have been developed
25	through numerous pipeline projects throughout the U.S.

In fact, a lot of the components in there 1 2 are based on the Federal Energy Regulatory 3 Commission's plans and procedures, which are proven 4 measures to restore and protect land. 5 0. But the AMIP in here is Iowa-specific? 6 Α. Correct. Section 2.4. There's a Table 3, if we can 7 Q. 8 find that. It says, "Public Lands Crossed by the 9 Project Construction Footprint." 10 Are those, indeed, all of the public lands 11 that --12 At the time this was filed, yes. Α. 13 Has that changed? Q. 14 I don't recall. I do know that we avoid Α. 15 all IDNR lands and rivers through HDD or some other bore method, and some of these may have been addressed 16 17 as well. 18 Well, DNR has what they call sovereign 0. 19 lands, don't they? 20 Α. Correct. And what specifically are the sovereign 21 Q. 22 lands that this pipeline would cross? 23 There's four rivers and two State lands, Α. 24 one of which is a park. I can't remember the name. 25 They're all avoided by HDD -- I know

- 1 that -- so we worked that out with IDNR. We showed
- 2 them the crossing plans, and they accepted them.
- 3 Q. Are you going to horizontally direction
- 4 drill under the lands that are not rivers or streams?
- 5 A. I'm not sure of your question.
- 6 Q. Okay. You said that there were some public
- 7 lands and, I think you said, four rivers or streams?
- 8 A. Correct.
- 9 O. And then, what, two or three public lands?
- 10 Are you going to horizontally direction drill under
- 11 those, the public lands?
- 12 A. Correct.
- Q. Do you know what those are off the top
- 14 of --
- 15 A. I'd have to look.
- 16 Q. Would they be on this table, if you can see
- 17 it?
- 18 A. Most of those are scenic byways. There is
- 19 one state park there, Brushy Creek State Park, and
- 20 that's in HDD. There's another park up there near the
- 21 top that's also a bore.
- 22 Q. When you -- not "you" but when a pipeline
- 23 company puts horizontal directional drills under a
- 24 land like this or under a river, they have to start
- 25 the bore quite a ways back, don't they, in order to be

- 1 able to bore deep enough to go under a river, for
- 2 example?
- 3 A. Yes. The distance setback is based on the
- 4 depth of the drill.
- 5 O. And if the -- if it's a river, for example,
- 6 there's a large, wooded area on either side of the
- 7 river, which is not uncommon; correct?
- 8 A. Not as much here as there used to be, but
- 9 yeah.
- 10 Q. And so a lot of that -- the forested area
- 11 would have to be cut down in order to start the
- 12 directional drill; correct?
- 13 A. Not necessarily.
- 14 Q. Why not?
- 15 A. Just depends on how wide that forested area
- 16 is and where the drill starts and ends.
- 17 Q. Well, yes, but if the bore has to start in
- 18 the wooded area, that's going to take some trees out;
- 19 correct?
- 20 A. Only if it's designed that way. We try to
- 21 avoid wooded areas.
- 22 IDNR gave us a lot of guidance, and we did
- 23 a good job at avoiding forested areas. I think out of
- 24 the thousands of acres, we have about 30 acres of
- 25 wooded area on the whole project, so it's less than

- 1 .1 percent.
- Q. And the final, Section 3.0 of Exhibit F, it
- 3 talks about alternative routes but doesn't really
- 4 describe any alternative routes.
- 5 Did you supervise or have any input in
- 6 considering those alternative routes?
- 7 A. No. It was done before my firm was hired,
- 8 all that work.
- 9 O. Do you know who would have been supervising
- 10 the consideration of the alternative routes in terms
- 11 of the environmental impacts?
- 12 A. There was a data request that came after
- 13 this filing, and a table was provided of all of the
- 14 GSI lasers that were used in the routing exercises
- 15 before my time, but that had all the environmental
- 16 constraints in there.
- I don't know who would have oversaw that.
- 18 Q. And the GIS is what you call a desktop
- 19 survey; correct?
- 20 A. Correct, based on agency and publicly
- 21 provided data.
- 22 Q. So it would not have been a field survey
- 23 like you've described?
- A. No. You don't typically survey major
- 25 alternatives.

- 1 In 36 years I think I've done two projects
- 2 where we surveyed one alternative. Agencies don't
- 3 require you to survey those.
- 4 Q. Well, they may not require it, but isn't it
- 5 a good idea?
- A. Not necessarily. The desktop data is very
- 7 good to help you with the routing decisions.
- 8 Q. If you don't do the field surveys, how do
- 9 you know whether that route is really going to impact
- 10 environmental resources?
- 11 A. Well, there's a lot of data layers that
- 12 exist within environmental resources. Listed species,
- 13 list of species locations, cultural resource sites,
- 14 wetlands, water bodies, native prairies.
- 15 It's come quite a ways since when I first
- 16 started in this business when it was all paper.
- 17 Q. So why do you do the field surveys, then,
- 18 if you have all this other information?
- 19 A. For permitting.
- 20 Q. Just because the permit agencies require
- 21 it?
- 22 A. We have to do confirmation surveys based on
- 23 the desktop analysis, yes.
- Q. Well, if your field surveys would reveal
- 25 that there's a protected species or some critical

wetland or whatever in the chosen route, you don't 1 2 change the route at that point, do you? 3 Α. Yeah, we do. We did quite a few HDDs and 4 bores and route adjustments for cultural sites, tribal 5 sites. We had tribal interests that participated in surveys, and they identified sites important to them. 6 We avoided all those. 7 8 So yeah, we do. We do make those changes. 9 How significant were some of the route 0. 10 changes? The reason I ask is we've heard testimony 11 12 from some Summit witnesses that they might do a micro 13 change, I think is what they called it, but they would 14 not really change the route. So how -- what would 15 they do if there really was a cultural resource that required a major reroute? 16 17 MR. LEONARD: Objection. 18 BOARD CHAIR HELLAND: State your objection. 19 That question MR. DUBLINSKE: 20 mischaracterizes the record. It greatly oversimplifies a breadth of testimony about different 21 22 changes at different points in the development of the 23 route, and to simply say that Summit witnesses have 24 only said that micro re-routes have been made or are 25 feasible, I think, mischaracterizes the breadth of the

- 1 testimony.
- 2 MR. TAYLOR: I think the record speaks for
- 3 itself that they have said that numerous times, and
- 4 this witness has said that if there were some
- 5 environmental or cultural resource that were found,
- 6 they would re-route it, and I want to know, you know,
- 7 how significant the reroute would have been because
- 8 we've heard evidence that a significant reroute
- 9 wouldn't be done.
- 10 BOARD CHAIR HELLAND: Can you rephrase your
- 11 question to get to the point you're trying to make,
- 12 Mr. Taylor?
- 13 BY MR. TAYLOR:
- 14 Q. If a field survey revealed a significant
- 15 cultural resource or a significant environmental
- 16 issue, would or has the pipeline route been modified
- 17 beyond the chosen corridor [sic]? Pardon me. The
- 18 chosen easement?
- 19 A. I can't relate it to the easement. We do
- 20 surveys on a 300-foot corridor, so it doesn't equate
- 21 to the easement.
- I can tell you up to this point we've
- 23 surveyed in the high 90 percentiles for cultural
- 24 resource and biological resources, and up to this
- 25 point we've avoided sites. Most of those re-routes

- 1 are on the same property owner.
- 2 O. So there hasn't been a re-route that would
- 3 require going outside that 300-foot corridor?
- 4 A. There may have been some early on, but I
- 5 can't recall.
- 6 Q. You said you did desktop and field surveys
- 7 for protected species?
- 8 A. Correct.
- 9 Q. Was this in general, or was it pursuant to
- 10 the Corps of Engineers Nationwide 58 Permit?
- 11 A. It was for ESA consultation with the U.S.
- 12 Fish and Wildlife Service and IDNR consultation for
- 13 state-listed species.
- 14 Q. I guess my question is: Did you consult
- 15 with Fish and Wildlife Service generally or just in
- 16 connection with the Corps of Engineers permitting?
- 17 A. No. For the whole project.
- 18 MR. TAYLOR: Could we bring up Sierra Club
- 19 Hearing Exhibit 1?
- 20 BY MR. TAYLOR:
- 21 Q. Is the Western Prairie Fringed Orchid a
- 22 protected species?
- 23 A. Yes.
- Q. And this exhibit purports to show its range
- 25 in Iowa. Does that look accurate to you, as far as

- 1 the range?
- 2 A. That's the historic range, but that's not
- 3 the data that Fish and Wildlife uses for consultation.
- 4 Q. By "historic range," what do you mean?
- 5 A. Well, historically the species was much
- 6 more widespread than it is today.
- 7 So when you consult with the Fish and
- 8 Wildlife Service, you start what's called an IPAC,
- 9 I-P-A-C, consultation, and you send them the KMZ
- 10 files, and they'll tell you which species have to be
- 11 surveyed and where.
- 12 Q. So are you saying that none of the Summit
- 13 pipeline was in or through the range of the Western
- 14 Prairie Fringed Orchid?
- 15 A. I don't know what those yellow lines are
- 16 because that's not Summit's system. There's a lot of
- 17 lines there that don't connect. Some of them don't
- 18 look familiar.
- 19 MR. TAYLOR: Can you bring up Sierra Club
- 20 Hearing Exhibit 2?
- 21 BY MR. TAYLOR:
- 22 Q. Is the tri-colored bat a protected species?
- 23 A. It is now.
- Q. And do you agree that the area shows the
- 25 area for the bat?

- 1 A. Historic range, yeah.
- Q. By "historic range," exactly what do you
- 3 mean?
- 4 A. The species isn't found in every pixel of
- 5 that purple area. It's found in specific habitat
- 6 within that range.
- 7 Q. But certainly it would be something that
- 8 you'd want to survey for; correct?
- 9 A. Oh, yeah. We were given a full list of
- 10 species, yeah.
- 11 Q. And certainly the tri-colored bat does have
- 12 habitat within the area of the pipeline route;
- 13 correct?
- 14 A. Some.
- 15 MR. TAYLOR: Let's bring up Sierra Club
- 16 Hearing Exhibit 3.
- 17 BY MR. TAYLOR:
- 18 Q. Is the prairie bush clover a protected
- 19 species?
- 20 A. Yes. It was one of the ones we surveyed
- 21 for.
- 22 Q. Okay. Again, is their habitat for the
- 23 clover in the area of the Summit pipeline route?
- 24 A. The historic range covers the pipeline
- 25 route. There's very little optimal habitat along the

- 1 route.
- 2 MR. TAYLOR: Let's go to Sierra Club
- 3 Hearing Exhibit 4.
- 4 BY MR. TAYLOR:
- 5 Q. A Topeka Shiner is a fish; correct?
- 6 A. Correct.
- 7 Q. And this shows the range, and is it your
- 8 contention that that's a historic range again?
- 9 A. Yes, that's what it looks like to me. It
- 10 doesn't match the information Fish and Wildlife gave
- 11 us on where we had to focus our work.
- 12 MR. TAYLOR: Let's bring up Sierra Club
- 13 Hearing Exhibit 8.
- 14 BY MR. TAYLOR:
- 15 Q. Again, this is for the Topeka Shiner. Does
- 16 the purple line indicate a watershed, so to speak?
- 17 A. Well, it looks like a tracing of a river
- 18 system, yes.
- 19 O. And is that a critical habitat for the
- 20 Topeka Shiner?
- 21 A. I can't tell the name of that stream, but
- 22 we are boring or HDD-ing all of their habitat, and
- 23 Fish and Wildlife has agreed to that conservation
- 24 measure.
- 25 MR. TAYLOR: Let's go to Sierra Club

1	Exhibit 5.
2	BY MR. TAYLOR:
3	Q. Is the northern long-eared bat a protected
4	species?
5	A. Yes.
6	Q. And does it have habitat along the pipeline
7	route?
8	A. Yeah. There's some isolated woodland areas
9	that are found along the route that could be potential
10	habitat.
11	Q. Okay. And what is done to protect that
12	habitat?
13	A. Protect the habitat?
14	Q. Yes.
15	A. Fish and Wildlife allows us to remove the
16	habitat out of pup season. So the conservation
17	measures are to remove the trees during the winter and
18	not during pup season.
19	Q. Okay. And so in other words, the
20	construction would have to occur in the winter?
21	A. The tree removal would have to occur in the
22	winter.
23	Q. Do you control when the construction is
24	done?
25	A. That's not my responsibility.
1	

Let's go to Exhibit 7. This is the Indiana 1 0. 2 bat. 3 Again, did you find habitat for the Indiana 4 bat along the pipeline route? 5 Α. So all the bats were done at the same time. And, again, what's required is that the 6 Q. 7 nesting trees are only allowed to be removed during 8 the winter; correct? 9 Α. Correct. But doesn't that actually reduce the 10 Q. habitat for both of those kinds of bats because the 11 12 trees aren't there when they come back to nest again; 13 right? 14 Sure, but if you look at the scale of these Α. 15 range maps, the number of trees being removed, as I indicated, it's tens of acres compared to the 16 17 thousands that have been removed for whatever other 18 purposes in these states. 19 So the Corps and Fish and Wildlife looked 20 at the context of the impact, not just the absolute 21 impact. 22 Well, because a lot of trees have been 0. 23 removed in the past, that doesn't say that that was 24 the right thing to do at that time; correct? 25 Α. Probably not. It still occurs today.

1	Q. Let's look at Sierra Club Hearing
2	Exhibit 6. Is the Piping Plover a protected species?
3	A. Yes.
4	Q. And is there any habitat for the Piping
5	Plover that intersects with the pipeline route?
6	A. No.
7	Q. So you're saying this historic habitat, as
8	you call it, is all gone?
9	A. That's what Fish and Wildlife told us.
10	They said the nearest nesting area was 20 miles west
11	of us.
12	Q. And then let's go to Hearing Exhibit 9.
13	This is for the eastern massasauga rattlesnake.
14	Is the habitat for that species impacted by
15	the pipeline?
16	A. No.
17	Q. Why not?
18	A. Fish and Wildlife said there was no
19	suitable habitat.
20	I don't know what those yellow lines are.
21	I don't think they represent the pipeline, but I do
22	have correspondence with Fish and Wildlife saying we
23	don't have to survey for them because it's outside the
24	range.
25	MR. TAYLOR: I will offer Sierra Club
I	

1	Hearing Exhibits 1 through 9.
2	(Sierra Club Hearing Exhibits 1 through 9
3	were offered into evidence.)
4	MR. DUBLINSKE: I have an objection, Your
5	Honor.
6	BOARD CHAIR HELLAND: State your objection.
7	MR. DUBLINSKE: Foundation and relevance,
8	but mainly because it's been brought up so many times,
9	and Mr. Taylor hasn't clarified what all the yellow
10	lines are. Some of those may be this project, but a
11	lot of them are not.
12	For example, the Piping Plover, almost
13	everything that was covered by what was shown was
14	actually in Nebraska and was not jurisdictional to
15	this Board's decision. So without some additional
16	explanation, I just want to lodge the objection to the
17	nature of the material until we can get a little more
18	information.
19	BOARD CHAIR HELLAND: Mr. Taylor, can you
20	explain what the yellow lines are?
21	MR. TAYLOR: I thought they were the
22	pipeline route. You can see it goes across the main
23	line and comes down to Story County and goes up into
24	Minnesota in that one little finger. That's exactly
25	the route, it seems to me.
I	

1 MR. DUBLINSKE: I can quarantee you -- and 2 I think the Board is well aware of this from the maps 3 in its own possession -- no part of this pipeline runs 4 from the Cedar Rapids/Iowa City area up towards 5 Dubuque. There is no portion of this pipeline that 6 7 starts between Mason City and the endpoint shown to 8 the east and runs in sort of a hook-shaped direction 9 down inside that sort of H-shaped cluster there. 10 Those are not part of this pipeline. 11 BOARD CHAIR HELLAND: Okay. Mr. Taylor, do 12 you have --13 MR. TAYLOR: Well, this witness has 14 testified about what is or is not in the pipeline 15 route using these maps. 16 BOARD CHAIR HELLAND: Okay. What were the 17 numbers again, Mr. Taylor? 18 MR. TAYLOR: One through 9. 19 BOARD CHAIR HELLAND: Okay. The Board will 20 admit Sierra Club's Hearing Exhibits 1 through 9 and give them the weight due. 21 22 (Sierra Club Hearing Exhibits 1 through 9 23 were admitted into evidence.) 24 BY MR. TAYLOR: 25 Are you familiar with Iowa's Wildlife 0.

1	Action Plan?
2	A. I'm sorry?
3	Q. Are you familiar with Iowa's Wildlife
4	Action Plan?
5	A. I've heard of it.
6	Q. Okay. And did you consult with DNR about
7	areas that they feel should be preserved for at
8	least reviewed for species protection and preservation
9	of natural areas?
10	A. Yes. So our initial consultation was for
11	them to conduct an environmental review, which
12	included all of that, and they have not provided us
13	with any of those areas.
14	Q. What areas?
15	A. On that map that was part of your exhibit
16	that you filed, I think, Friday.
17	Q. Yeah. Do you deny that those are areas
18	that the DNR thinks are at least worth observing and
19	in need of more investigation before there's any
20	development?
21	A. I can't speak for IDNR.
22	Q. Did Fish and Wildlife give you any
23	documents supporting what you've been testifying about
24	as to what they told you about the impact of habitats?
25	A. Well, they gave us correspondence on
l	

25

Q.

species lists and approvals of survey protocols and 1 2 things of that nature, yes. 3 But those weren't filed with your Q. 4 testimony? 5 Α. No. Are you familiar with Summit's 6 Q. Environmental Construction Plan? 7 8 Α. Yes. 9 Did you have a hand in preparing that? 0. 10 We helped put the document together, but Α. 11 not all the sections are written by us. 12 MR. TAYLOR: Could we bring up Farm Bureau 13 Hearing Exhibit 5? 14 BY MR. TAYLOR: 15 0. In the exhibit, page 3, in the upper right-hand corner, does that look like the 16 17 Environmental Construction Plan? 18 Α. Yes. 19 Let's go to exhibit page 9 under 1.1. 0. 20 talks about an environmental inspector. 21 As I understand it, that environmental 22 inspector would be employed by Summit; correct? 23 That's for Summit to decide. I don't hire Α. 24 them.

Well, it says, "SCS" -- that's Summit --

- "will employ at least one environmental inspector."
- 2 A. Yes, but that's not my responsibility.
- 3 Q. So you have nothing to do with the
- 4 environmental inspector?
- 5 A. Not at this time, no. There's no
- 6 construction plan. There's no hiring of inspectors.
- 7 We're a ways away from that.
- 8 Q. At some point, if there is an environmental
- 9 inspector, would you be overseeing that person or at
- 10 least be in consultation with that person?
- 11 A. It's up to Summit to decide.
- 12 Q. Well, I think you said you were still doing
- 13 some environmental surveys; is that correct?
- 14 A. Not at the moment, but we have been up to
- 15 the summer, yes.
- 16 Q. So are you done with all the environmental
- 17 surveys and studies?
- 18 A. If we have tracts that we are still looking
- 19 for access, we'll complete those as we get access.
- Q. Well, if you don't know, you can tell me,
- 21 but what do you envision the environmental inspector
- 22 would actually do?
- 23 A. Well, normally environmental inspectors
- 24 monitor construction for compliance with permit
- 25 conditions, environmental permit conditions.

Let's go to exhibit page 15, Section 2.12, 1 0. 2 "Cultural Resources." In the first paragraph it says, 3 "Culturally or historically important areas will be avoided to the extent practical." 4 5 What does that mean, "to the extent practical," in your mind? 6 7 Α. Well, at the present time we avoid all eligible sites. So this is generic language written, 8 9 you know, before the surveys were completed. 10 But would you agree there is some, I'll 0. call it, wiggle room there that if Summit were to say, 11 12 "Well, it's just not practical, so we'll go over the 13 cultural resources anyway"? 14 MR. DUBLINSKE: Objection. 15 BOARD CHAIR HELLAND: State your objection. MR. DUBLINSKE: Asked and answered. 16 The 17 witness already said we have completely avoided those 18 places, so the suggestion of wiggle room after that 19 answer is irrelevant. 20 BOARD CHAIR HELLAND: Mr. Taylor? 21 MR. TAYLOR: He said "at this point," if I 22 recall his answer correctly. So I'm asking what if in 23 the future, as they're doing construction, for 24 example, they come across cultural resources. 25 BOARD CHAIR HELLAND: Okay. Let's try to

- 1 narrow our questions to new topics. He may answer
- 2 this question, but let's try to not tread where we've
- 3 already been.
- A. We surveyed over 97 percent of the route
- 5 for cultural resources. We avoid all eligible sites.
- 6 If during construction a site is found as
- 7 described there, there's an unanticipated discovery
- 8 plan. We just can't go through sites. That's not how
- 9 the law is written.
- 10 BY MR. TAYLOR:
- 11 Q. Did you have input in using that language
- 12 "to the extent practical"?
- 13 A. I don't recall.
- 14 Q. The next paragraph talks about an
- 15 unanticipated discovery plan and then that the
- 16 construction workers will be trained to, I guess,
- 17 recognize an unanticipated discovery of a cultural
- 18 resource.
- 19 What kind of training is that?
- 20 A. Typically it's done by an archaeologist,
- 21 and they have lots of pictures. They create cards for
- 22 them on what to look for.
- 23 O. There's some training. You think the
- 24 construction workers are really going to be able to
- 25 recognize something when archaeologists sometimes have

- 1 trouble?
- 2 A. I've seen it done before in construction of
- 3 other projects where this has worked very
- 4 successfully.
- 5 Q. Give me some examples where it's worked
- 6 successfully.
- 7 A. Missouri on the Keystone main line. There
- 8 were buried remains found. The UDP was implemented.
- 9 Construction avoided the area.
- 10 The first thing is the sheriff is called to
- 11 make sure it's not a murder scene. Once he clears it,
- then the archaeologists come in, and the tribal
- 13 representatives, they do their excavation.
- In this case there was a tribal ceremony
- 15 and the graves were relocated into another area with
- 16 the landowner's consent.
- 17 O. In that case were there Native-American
- 18 burial sites -- First of all, there's a special law on
- 19 that, isn't there?
- 20 A. Yes, NAGPRA.
- 21 Q. And do you call in Indian representatives
- 22 to examine that and approve of moving the bones?
- 23 A. That's part of 106 Consultation.
- Q. But 106 Consultation just means it's
- 25 consultation. It doesn't really require much, does

1 it? 2 Oh, it requires quite a bit. Α. 3 So are you saying the Native-Americans will Q. 4 allow those bones to be moved? 5 Α. It's a case-by-case situation. I've seen it happen in Louisiana. I've seen it happen in other 6 states, and I've seen it where they wouldn't allow it, 7 8 and the pipeline had to be moved. 9 So it depends on the situation. 10 Let's go to page 20 of Exhibit 5 on Q. wetlands, 5.0. It says, "Wetland delineations will 11 occur before construction." 12 13 What delineation guidance would be used? 14 The U.S. Army Corps of Engineers with the Α. 15 Midwest Regional Supplement. 16 Okay. Is that the 1987 guidance? 0. 17 Correct. Α. 18 Okay. I wondered because, you know, it's 0. 19 been a bone of contention for the past several years; 20 is that right? 21 It's gone -- It's gone back and forth a Α. 22 couple times, but we entered this project assuming all 23 water bodies and wetlands were Corps jurisdiction. 24 We did not make a jurisdictional 25 determination. We mapped them all and let the Corps

- 1 decide.
- 2 Q. On page 21, Section 5.3.2, it talks about a
- 3 dry crossing of a wetland. Can you explain exactly
- 4 how that's done?
- 5 A. Depending on the year and the rainfall,
- 6 there's a lot of what we call upland wetlands,
- 7 wetlands perched up high on the topography so that the
- 8 headwaters of some ephemeral streams will be
- 9 completely dry, the soil will be dry, and the Corps
- 10 lets us use a modified method to cross those.
- 11 Q. Is that basically an open trench?
- 12 A. Correct.
- 13 Q. Would there be lack of fen, for example?
- 14 A. No. Fens are special situations. They're
- 15 not -- they've have some kind of carbonated rock
- 16 associated with them, so they would be a different
- 17 story.
- 18 Q. You've mentioned the Corps of Engineers,
- 19 and for the record is it correct that the Corps is
- 20 acting pursuant to Nationwide Permit 58 in this case?
- 21 A. That's what they've indicated, yes.
- 22 Q. For the record, can you explain what
- 23 Nationwide Permit 58 is and what the Corps's process
- 24 is regarding that?
- 25 A. Well, the Corps of Engineers regulates

- 1 waters of the U.S. They issue either an individual
- 2 permit or nationwide permit, and the nationwide permit
- 3 program was developed because over the decades of
- 4 their regulation, they realized there were a lot of
- 5 activities that were repetitive and also minor in
- 6 impact.
- 7 So they created 60-some-odd nationwide
- 8 permits specific to discreet activities that they deem
- 9 to be minor in their extent of impact. So 58 is for
- 10 pipelines that are not oil and gas. Those are
- 11 Nationwide Permit 12.
- 12 Q. And what a pipeline company would do is
- 13 submit what's called a pre-construction notice;
- 14 correct?
- 15 A. Correct.
- 16 Q. And the Corps of Engineers reviews that
- 17 and, in consultation with other agencies, either
- 18 issues a verification or not; correct?
- 19 A. Correct.
- 20 Q. One of the conditions of Permit 58 involves
- 21 endangered species; correct?
- 22 A. Yes.
- Q. We've talked about that a little bit, but I
- 24 want to talk about it maybe more in connection with
- 25 the Corps, I'll call it, committing, but they're not

1	really committing.
2	Do you have any special consultation with
3	Fish and Wildlife Service regarding Nationwide Permit
4	58 or
5	MR. DUBLINSKE: Objection.
6	BOARD CHAIR HELLAND: State your objection.
7	MR. DUBLINSKE: Relevance, Your Honor.
8	We've let this go quite a bit, and
9	obviously, if the Board wants to hear it, the Board
10	can overrule and hear it.
11	An awful lot of questions of this witness
12	has been about things that are in IDNR jurisdiction.
13	We're in a line of questioning now about the
14	nationwide permit process.
15	Obviously, this Board is not the authority
16	for the federal nationwide permit process. It doesn't
17	have a extensive role with IDNR.
18	A lot of these things are questions
19	specific to the jurisdiction and the ambit an
20	unrelated agency, which is where that particular
21	subject matter lies. Just in the interest of moving
22	things along, I don't know how much time we want to
23	spend before this body talking about what the U.S.
24	Army Corps of Engineers does as part of its
25	decision-making.

1 MR. TAYLOR: They presented the evidence 2 with this witness, and he mentioned the Corps of 3 Engineers. He mentioned DNR, and certainly, given the 4 balancing test that the Supreme Court of Iowa has 5 given to this Board to undertake, I think that it's appropriate to ask about these environmental issues. 6 7 That's one of the issues that the Board needs to consider, and, in fact, it did in the Dakota 8 9 Access case. 10 You know, to the extent MR. DUBLINSKE: 11 that there's been a lot of mentions of these, many of 12 those mentions have been either at a general level, 13 "Here's how we complied with something else we were 14 required to comply with," or in response to questions 15 from Mr. Taylor. There is a balancing test, but I don't know 16 17 that that means that this Board could choose to say 18 that, you know, "We don't think the U.S Corps did 19 their job, " or, "We don't think Iowa DNR did their 20 job, and we're going to hold that in some adverse way in the balance." 21 22 There's a division of labor here, and I 23 think it ought to be observed at least for the most 24 part. 25 BOARD CHAIR HELLAND: Okay. Thank you.

1	We've provided pretty wide latitude and
2	will continue to, but if we can continue to try and
3	narrow our question down and make our points, please.
4	BY MR. TAYLOR:
5	Q. So has the Fish and Wildlife Service issued
6	a biological opinion?
7	A. A biological opinion comes after a
8	biological assessment.
9	Q. Have they done the biological assessment?
10	A. No.
11	Q. Okay. So is it fair to say you have a ways
12	to go yet in getting the verification from the Corps?
13	A. "Ways to go" is a broad term.
14	Q. I understand.
15	A. I don't think so. We assume the end this
16	year, early next year.
17	MR. TAYLOR: Okay. I think those are all
18	the questions I have.
19	BOARD CHAIR HELLAND: Thank you.
20	Mr. Meyer, I have you next.
21	CROSS-EXAMINATION
22	BY MR. MEYER:
23	Q. Good afternoon, sir. How are you?
24	A. Good.
25	Q. Mr. Taylor covered a lot of ground. I'm

- 1 going to plow a lot of new earth here.
- 2 Looking at your direct testimony on page 3,
- 3 your answer at line 4 says, "Summit Pipeline Project
- 4 is subject to a number of state and federal
- 5 regulations."
- Is your testimony to mean that that's at
- 7 the exclusion of any other sort of statute or code or
- 8 local regulation?
- 9 A. I'm not sure of the question. This is just
- 10 an overview of what's applicable, and then there's a
- 11 table that lists all the permits required.
- 12 So I'm not sure of your question. I'm
- 13 sorry.
- 14 Q. Well, so is your testimony, then, if --
- 15 What state permits would be required?
- 16 A. Well, IDNR. If you look at the table in
- 17 Exhibit F, there's --
- 18 Q. So is your testimony, then, that they don't
- 19 need -- so long as they get those permits, they don't
- 20 need even a permit from this Board?
- 21 A. No, no. These are environmental permits
- 22 above and beyond what the Board has to do.
- O. I maybe asked it in an awkward way, but
- 24 that was the purpose of my question. You're just
- 25 talking about environmental permitting; right?

1	A. Right. That's what it says there,
2	"environmental permits and reviews."
3	Q. You're not saying Summit is not subject to
4	other code sections of the Iowa Code?
5	A. No.
6	Q. Does any of your work involve addressing
7	the requirements under Chapter 331 of the Iowa Code?
8	A. Not me, no.
9	Q. How about Chapter 335?
10	A. I'm not familiar.
11	Q. 468?
12	A. Not familiar.
13	Q. Okay. Fair enough.
14	On page 7 of your direct testimony at
15	line 12, the question was: "Will the pipeline
16	interfere with water body drainage patterns along the
17	route?" and your answer is "No."
18	Does that include When you talk about
19	water body drainage patterns, does that include open
20	drainage ditches and public road used right-of-ways;
21	the ditches you see along the county roads?
22	A. Any conveyance.
23	Q. Okay. Does the DNR regulate that?
24	A. Not for our ditches, but they would
25	regulate in floodplains, so major rivers. They have a

- 1 permit specific to that, which would talk to them
- 2 about their reviewing body of the Corps of Engineers
- 3 permit under 401 Water Quality Certificate, yeah.
- 4 Q. I'm just trying to get it down to a real
- 5 granular kind of level here. Do the federal
- 6 regulations address road right-of-ways on secondary
- 7 roads in the county, the drainage?
- 8 A. It would have to be connected to a water of
- 9 the U.S. to be considered jurisdictional, but no,
- 10 typically not.
- 11 Q. Okay. So in order -- when you say "no" in
- 12 your answer, is that assuming that there will be local
- 13 county engineers that would make sure that the
- 14 drainage is going to flow properly in all other -- in
- 15 areas that aren't maybe under the jurisdiction of
- 16 state or federal regulatory bodies?
- 17 A. Correct. There would be what I call
- 18 non-environmental permits from counties and other
- 19 municipalities.
- 20 So whatever requirements they have would be
- 21 separate from this discussion.
- 22 Q. In other projects those have been required?
- 23 A. Absolutely, yeah. Thousands of road
- 24 crossings and bar ditch crossings and road access,
- 25 yes. Lots.

On page 9 of your direct testimony 1 0. Okay. 2 at number 17, the question, "What are the expected 3 impacts to wildlife?" and then there's a second part, 4 "And what mitigation measures will be adopted?" 5 Now, I'm just focusing on Hardin County, because I represent Hardin County Supervisors. 6 7 it's a very specific target here. 8 Α. Okay. 9 This proposed pipeline is going to go under 0. 10 the Iowa River, through the South Fork River watershed 11 area and other streams, creeks. A lot of those are 12 zoned what we call the greenbelt, our conservation 13 zoning, and wondered what -- your answer in your 14 direct testimony doesn't really address the second 15 part of the question, what mitigation measures will be 16 adopted. 17 So I wondered if you could give the Board 18 some idea of what recommendations you would have that 19 those that are interested in Hardin County would 20 understand that there's going to be something done to mitigate the impact. 21 22 So a lot of the major rivers and Α. Yeah. 23 those with either species or cultural resources 24 associated with a stream, a lot of those are bored and 25 drilled, so there wouldn't be a sufficient impact so

mitigation is by avoiding the feature itself. 1 2 Post-construction they would work with 3 NRCS -- besides the landowners, NRCS and other land 4 agencies to make sure the right seed mixtures are 5 used, if it's grassland or pasture land. If it's cropland, the landowner dictates what he's going to do 6 7 with that property. 8 Obviously, it's going back into production, 9 but any place that's not an active farm production 10 will work with the landowners and NRCS to restore to the pre-construction condition. So that would include 11 12 monitoring after the seeding is done, weed control. 13 We provided a weed plan so they would be 14 actively managing and making sure they didn't 15 introduce something into the area. So what about deer population? There's a 16 0. 17 lot of wooded areas that border these waterways. 18 Α. Sure. 19 They're a very active hunting community in Q. 20 Hardin County. How will this project -- Have there been studies that will show how that's going to affect 21 22 deer patterns? 23 If they do it after harvest, it's going to 24 be the rut, the mating season, the season where 25 they're having fawning. Have studies been done for

- 1 that?
- 2 A. None on this project, but in most projects
- 3 I've worked on, they're built usually during the
- 4 summer, so the restoration is occurring in the fall.
- 5 So we wouldn't impede or get -- conflict
- 6 with the use of that land, if it's for hunting. If
- 7 there's specific restoration a landowner wants along a
- 8 stream or river, we would entertain that, as long as
- 9 it didn't impede on the operational monitoring of the
- 10 project.
- 11 Q. Has Summit obtained any necessary
- 12 environmental permits yet?
- 13 A. We did get clearance from the Corps of
- 14 Engineers under Section 408, which is their civil
- 15 works program. They determined we didn't have any at
- 16 the crossing of Missouri River. That's the only one
- 17 I'm aware of.
- 18 Q. So as far as Hardin County, there's not
- 19 been any permitting?
- 20 A. No. We submitted applications for -- you
- 21 know, with IDNR, but nothing has been issued yet.
- 22 Q. For the studies that are put together to
- 23 support those applications, is there a shelf life for
- 24 those studies before they'd have to be renewed or
- 25 updated?

- 1 A. Well, listed species surveys, it depends on
- 2 the species. You usually have to go back every year
- 3 anyway until construction.
- So, for instance, raptors. We have to
- 5 survey for those every year.
- 6 Q. That would include eagles?
- 7 A. Eagles and any other type of raptors, but
- 8 they don't nest in the same spot every year. So you
- 9 usually go back every year of construction before
- 10 construction to make sure you know where all the nests
- 11 are.
- 12 So in that regard we made commitments to
- 13 continue those surveys up through construction, but as
- 14 far as shelf life, I'm not sure. I think usually when
- 15 you get a permit, they'll have a timestamp before if
- 16 you don't go to construction, the permit is void, and
- 17 you have to re-apply.
- 18 Q. I'm not a raptor specialist, and I don't
- 19 know that you are. Are you saying that you don't
- 20 think eagles --
- 21 A. Eagles do, but there's a lot of other
- 22 raptors, and even eagles will move.
- 23 It depends on what's happening in the area.
- 24 I have seen them move nests.
- 25 Q. "Happening" could mean man's activity?

1	A. Right.
2	MR. MEYER: I don't have any other
3	questions. Thank you.
4	BOARD CHAIR HELLAND: Thank you.
5	Ms. Gruenhagen?
6	CROSS-EXAMINATION
7	BY MS. GRUENHAGEN:
8	Q. You've been watching.
9	A. I have to turn.
10	Q. Good afternoon, Mr. Schmidt. My name is
11	Chris Gruenhagen. I'm representing the Iowa Farm
12	Bureau Federation in these proceedings. I just have a
13	few additional questions for you.
14	In your direct testimony, on page 4, line
15	15, you describe the characteristics of the Des Moines
16	Landform Region.
17	Do you recall that?
18	A. Yes. It's very high-level summary, yeah.
19	Q. Yes. Can you describe the general location
20	of the Des Moines Lobe as it relates to the route of
21	the pipeline?
22	A. We go through the heart of it. We could
23	show a map, but it's kind of in the center of the
24	state where we go through it.
25	I don't have a map with me.

So it would be, like, the main trunk line 1 0. 2 of the pipeline? That's pretty much the Des Moines 3 Lobe? 4 Α. Yep. 5 0. In your description of the Des Moines Lobe, you use the word "marshes and prairie potholes." Can 6 those also be described as wetlands? 7 8 Α. Yes. 9 And does the Des Moines Lobe generally have 0. 10 a higher incidence of wetlands than other landform 11 regions? 12 In the very high-level description, yes. Α. 13 And then on page 12, line 1 of your direct 0. 14 testimony, you reference the number of acres of each 15 type of wetland? 16 Α. Yes. 17 Just for clarification, can you identify 0. 18 which type of wetland a marsh would be? 19 Α. PEM or emergent wetland. 20 And then what type of wetland would a Q. prairie pothole be? 21 22 Same thing, emergent wetland. Α. 23 And then what type of wetland is a fen? 0. 24 Α. It could be a scrub shrub or an emergent 25 wetland, or it could be forested. You know, how long

_	
1	it's been undisturbed.
2	I've seen some with woods around them, but
3	typically it's PEM and PSS scrub shrub.
4	Q. Did you identify any phenomena along the
5	route?
6	A. I don't recall anything specifically called
7	out as fen, but we did find quite a few isolated
8	emergent wetlands, and I'm not sure. I would have to
9	go in and look to see if they are called fens or not.
10	MS. GRUENHAGEN: If we could pull up Iowa
11	Farm Bureau Federation Hearing Exhibit 5 that
12	Mr. Taylor was discussing, and if we could go to
13	page 20 of the hearing exhibit and then "Section 5.0,
14	Wetlands."
15	BY MS. GRUENHAGEN:
16	Q. Can you read the first sentence there?
17	A. "Wetlands delineations"
18	Q. Yes.
19	A "will occur before construction and
20	captured with GPS for mapping on the construction
21	alignment drawings."
22	Q. Has that already occurred?
23	A. Yes. We've done over 90 percent.
24	Q. Can you please describe the process used
25	for identifying wetlands along the route?

So we follow, as I indicated earlier, the 1 Α. 2 U.S. Army Corps of Engineers Wetland Delineation 3 Manual, 1987, and then we use the Midwest Regional 4 Update, which is specific to these states. So it 5 covers things like farmed wetlands and atypical situations in farmland. 6 So the field crews have to walk the entire 7 route, and when they come to these situations, they'll 8 9 They make lists of species, and then do soil tests. 10 they use GPS to actually walk and map the wetlands 11 once they've completed that work. 12 Q. Did you also consult with different 13 agencies to see what had already been delineated? 14 So a lot of the CRP and other types of Α. 15 land -- We met with the NRCS and FSA I think it was, like, two years ago, because we go through five 16 17 states, and the information on any easements or 18 landowner agreed-upon protected wetlands is 19 privileged. We can't get that information. 20 So we had a call with Washington, D.C. with 21 the director of the program. He then convened a call 22 with all five states so that we had, like, 30 people 23 on the call. They picked a point of contact. 24 So we started sending full-year requests. 25 We would send them KMZs on the route, and they would

- 1 pull their records and see what was there, be it a
- 2 lien or ownership or any kind of easement, but
- 3 unfortunately, what they sent us was a name and
- 4 section township range, which was totally useless to
- 5 me.
- 6 So I turned it over to the land department,
- 7 and then Micah would use that information and his
- 8 team. When they talked to the landowners, they'd ask
- 9 them, "Are you in CRP? Are you in this? Are you in
- 10 that?"
- 11 So it was kind of an iterative process, and
- 12 we're still doing those full requests as we send them.
- 13 We're waiting on the next delivery that's coming this
- 14 month.
- 15 O. So did the FSA and NRCS provide any more
- 16 specific locations than the named township?
- 17 A. No. It's protected.
- 18 Q. Okay. As you did the field survey and
- 19 discovered wetlands in various locations, was that
- 20 identification, then -- did Summit inform the
- 21 landowner?
- 22 A. I'm not sure what was provided to the
- 23 landowner after surveys.
- Q. So once you've located the wetlands, you
- 25 just told Summit, then?

- 1 A. Yeah. We write the reports and submit them
- 2 to the Corps, and they, in turn, consult with the
- 3 other agencies.
- 4 Q. And you don't know whether Summit informed
- 5 the landowner or not?
- 6 A. I do not know.
- 7 Q. Okay. Do you know approximately how many
- 8 parcels along the route are impacted by wetlands?
- 9 A. No. There's only -- As you can see by the
- 10 acreage when we had it up there, it's less than 1
- 11 percent of the route has wetlands in it. So it's
- 12 pretty small.
- Q. But can wetlands be of any size, though?
- 14 A. Oh, absolutely. Yeah.
- 15 O. On page 24 and 25 of Hearing Exhibit 5
- 16 here, I'm just going to do a -- you talked a little
- 17 bit with Mr. Meyer, I believe, about seed mixes. I
- 18 just have a follow-up question to that.
- 19 Do you know what precautions Summit is
- 20 going to be taking to prevent weed/seed contamination
- 21 of the seed mixes?
- 22 A. So I think either in the weed plan or in
- 23 the AMIP, in one of the documents it says they'll get
- 24 weed-free sources for both the seed mix or any mulch
- 25 used or hay or any kind of mulch for that matter.

25

They also committed to monitoring it to 1 2 make sure that nothing is introduced based on their 3 construction activity. 4 0. Has Summit -- So switching back to 5 wetlands, let's go to IFBF Hearing Exhibit 3. We'll switch documents here. 6 7 So as you identified, you did ask FSA for locations of wetlands, and because they're 8 protected --9 10 Α. Right. 11 But did Summit request any farmland owners Q. 12 to file an AD-26 [sic]? 13 Α. That, I wouldn't know. 14 Okay. Let me correct that. AD-1026. 0. Ι 15 said that wrong. I think -- I would assume, in the 16 Α. Yeah. 17 negotiations between the land department and the 18 landowner, these things would come up so that it could 19 be addressed, and then the information could be 20 exchanged. 21 But you're not aware if that occurred or Q. 22 not? 23 I wouldn't be involved in that. Α. 24 Okay. On page 3, paragraph (e), I was Q.

directed that you might, perhaps, know the answer to

- 1 my questions here on this page, so we'll see with your
- 2 involvement with environmental aspects of it. I'll
- 3 give you a minute there to read paragraph (e).
- 4 (Brief pause.)
- 5 A. Yeah. I believe Micah testified -- I know
- 6 he wrote this paragraph. He would be the one who
- 7 would take care of that.
- 8 Q. Okay. I believe he asked me to talk to
- 9 you.
- 10 A. Oh, he did? Sorry.
- 11 Q. That's okay.
- 12 A. I have nothing to do with compensation.
- 13 You know, we would provide the shape files
- 14 of the wetland. They would decide the construction
- 15 methodology with the landowner and the NRCS or FSA,
- 16 depending on who is overseeing that property, and then
- 17 decide on whether or not they'd have to be paid for --
- 18 because of the impacts or not or whether we bore it.
- 19 We may change the construction method based on what's
- 20 there.
- 21 Q. If the pipeline construction or land
- 22 restoration drains a wetland, if necessary, is Summit
- 23 going to be working with you to help restore that
- 24 wetland --
- 25 A. I don't know if I'll --

-- or with your company? 1 0. 2 I don't know if I'll be around, but Summit Α. 3 will be responsible, yes. 4 Moving to your direct testimony on page 5, 0. 5 line 16, so you were asked a question about effects on -- anticipated on surrounding land, and so I'll 6 give you a minute to read the first few lines of your 7 8 answer there. 9 (Brief pause.) 10 So when you state that none of these Q. 11 impacts will be significant or long term, are you 12 referencing the previous sentence where you talk about 13 noise, dust, additional traffic? 14 Correct. Α. 15 0. And you're not talking about other impacts there? 16 17 No. Α. 18 Thank you. Q. Okay. 19 And then on page 6 starting on line 7, you 20 make a similar statement. I'll let you go ahead and give you a minute to look at that before I ask my 21 22 question. 23 (Brief pause.) 24 Α. Okay. 25 So where you state, "There will be no Q.

long-term impact to the use of land for agricultural 1 2 purposes," are you only referencing the use of the 3 land for agriculture, or are you trying to make a 4 representation about the productivity of that ag land? Just the use. 5 Α. MS. GRUENHAGEN: Okay. That's all the 6 7 questions I have. Thank you. 8 BOARD CHAIR HELLAND: Thank you. 9 Representative Isenhart. 10 MR. ISENHART: Thank you. 11 CROSS-EXAMINATION 12 BY MR. ISENHART: 13 I worked on the general assembly and worked 0. 14 on the Environmental National Resources Committee, so 15 hopefully I can ask a couple of intelligent questions 16 on those topics. 17 Earlier in the proceeding, Summit testified 18 about how the overall project is kind of divided up 19 into three parts. You have separate entities dealing 20 with capture, one transportation of the pipeline, and a third being a sequestration site. 21 22 Did your work involve all three or just the 23 pipeline? 24 Α. The pipeline. 25 Thank you. I want to refer to your direct Q.

- 1 testimony. It could be brought up, if they'd like --
- 2 on page --- it looks like it's 10, line 10. It talks
- 3 about impacts and mitigation measures and refers to
- 4 sensitive threatened endangered species.
- 5 Mr. Taylor extensively used the word
- 6 "protected species," and I think EPA refers to those
- 7 in their various -- not EPA. Fish and Wildlife
- 8 Service. Is the word "protected" left out there
- 9 intentionally, or is that part of what you would call
- 10 "sensitive species"?
- 11 A. I mean, we typically use these categories
- 12 to cover state and federal. So "protected," I'm not
- 13 usually using that term.
- 14 Q. But you didn't mean to exclude any species
- 15 with that language?
- 16 A. No, no.
- 17 Q. Thank you. Is it in general true that
- 18 federal regulations related to threatened endangered
- 19 species focus on the birds or the animals and not
- 20 necessarily the habitat, protecting the actual
- 21 species?
- 22 A. Well, their law is written specific to the
- 23 species, but their review includes the habitat. So
- 24 they require us to look for their habitat,
- 25 characterize the quality of it, because some species

- 1 you're not going to find.
- 2 Like, you could go out today and not see a
- 3 Dakota Skipper, but you can come back next year and
- 4 find it, if the habitat is suitable.
- 5 O. But if the species isn't there, there are
- 6 not necessarily protections for the habitat, if it's
- 7 not there?
- 8 A. Unless it's critical habitat, no.
- 9 O. Okay. A little farther up the page,
- 10 page 9, line 17, "Expected Impacts and Mitigation
- 11 Measures, you talk about on line 21, "Consequently,
- 12 the effects of long-term habitat loss on native
- 13 wildlife populations will be minor."
- 14 Did you also look at migrating bird
- 15 populations or just native bird populations?
- 16 A. Listed species, be they state or federal.
- 17 Q. So that would include migrating birds not
- 18 just native to Iowa?
- 19 A. Correct, yeah.
- 20 Q. So you mentioned you were -- did some work
- 21 for the Audubon Society. It just so happens I just
- 22 joined the board for that group in the county, so
- 23 we've had some situations related to the Migratory
- 24 Bird Treaty Act, which basically says and makes it
- 25 illegal to take migratory birds, as a practical

- 1 matter; that means you can't interrupt their breeding
- 2 during nesting season.
- 3 So have you recommended to Summit that they
- 4 avoid construction on grasslands, for example, that
- 5 have nesting species or --
- 6 A. I -- Sorry.
- 7 Q. -- would you recommend they get a license
- 8 to take those species?
- 9 A. So you can't get a license to take the
- 10 species. Only researchers can do that.
- 11 Q. Okay.
- 12 A. So we identify the habitat for certain
- 13 migratory birds, what the Fish and Wildlife had us
- 14 look for, as far as which species to survey for.
- So the statements in reference to the fact
- 16 there's very little of that made of habitat, so as far
- 17 as the window of time, we haven't gotten that window
- 18 of time from the service yet, but if they tell us
- 19 that's the window we have to meet, that would be the
- 20 window we meet.
- 21 Q. So we talked earlier about emergent
- 22 situations. If a construction crew is starting to go
- 23 through an alfalfa field and sees bobolinks lying
- 24 around, would that precipitate a halt on that until
- 25 they're through with nesting?

- 1 A. My understanding, from the Fish and
- Wildlife Service, is that it's a discretionary
- 3 enforcement on their part.
- 4 I'll leave that term out there. I don't
- 5 know what that means.
- 6 Q. So they will decide whether or not to
- 7 punish you if you do. My question is: Have you
- 8 recommended to Summit that they avoid construction
- 9 where migratory birds have been found in the moment?
- 10 A. Not all species of migratory birds. So the
- 11 Fish and Wildlife Service identifies a class of
- 12 migratory birds that are worth protection.
- We don't protect, like, robins and
- 14 sparrows. You can drive your truck down the road and
- 15 violate the Migratory Bird Act when you hit a bird in
- 16 your car in your radiator.
- 17 Q. That's why I used bobolinks as an example.
- 18 They pretty clearly are protected.
- 19 For the mitigation measure, have you
- 20 recommended that they avoid construction where
- 21 migratory birds' nests have been found as construction
- 22 is proceeding?
- 23 A. So, as I indicated, we did the surveys. We
- 24 provided the information to the Service. They'll tell
- 25 us what the conservation measures are.

So you provided -- you're not responsible 1 0. 2 for recommending mitigation measures to Summit from 3 Fish and Wildlife Services? 4 Α. Well, it's their jurisdiction, so we can 5 make recommendations, but at the end of the day, they're the ones that will decide what happens. 6 7 Q. They will decide to make you do more than you recommended, probably not less? 8 That's my 9 testimony. 10 One other general question. You said you were responsible for helping prepare Exhibit F; 11 12 correct? 13 Α. Yes. 14 In that it says, "One of the public 15 conveniences" -- "One of the aspects of public convenience and necessity promoted by the project is 16 17 reducing greenhouse gas emissions in the effort to 18 combat climate change." 19 Did you do any research around this or make any analysis to support that assertion? 20 21 If that was in Section 1, I didn't write Α. 22 that. 23 I'm not sure what section, but you did not 0. 24 do any research on, you know, emissions and --I didn't, but I don't know if Summit did. 25 Α.

1	I can't answer that.
2	MR. ISENHART: Okay. Thank you. That's
3	all I have.
4	BOARD CHAIR HELLAND: Thank you.
5	Mr. Jorde. Hold on. We were going to take
6	a break at 2:45. I don't want to put any
7	MR. JORDE: I'll be done by then.
8	BOARD CHAIR HELLAND: Go ahead.
9	CROSS-EXAMINATION
10	BY MR. JORDE:
11	Q. I haven't seen you for a while since the
12	Keystone days in Nebraska. Good to see you again.
13	You were asked questions from Mr. Taylor,
14	and you used qualifiers "relative to surveys where we
15	had access."
16	Do you recall that?
17	A. Correct.
18	Q. Obviously, if you didn't have access for
19	whatever reason, you couldn't have been on the ground
20	and have highly reliable data; is that fair?
21	A. Correct.
22	Q. It's true Well, is it true that no
23	geohazard phase 2 surveys have been commenced at this
24	time?
25	A. That wasn't under my scope. That would

have been Erik under engineering. 1 2 So nothing --Q. Okay. 3 I have no idea. Α. 4 In terms of what you and your firm 0. Okay. 5 were asked to do, was it limited to the actual locating of and potential routing and then 6 construction of the linear infrastructure, or is your 7 firm also tasked with looking at environmental effects 8 9 of the capture facilities and the construction of 10 those facilities? 11 There were other firms working on the Α. 12 capture facility side because it's a different 13 regulatory process. They were already underway when 14 my firm got hired, so they continued to do that work 15 independent. Okay. So to be clear, you don't have any 16 0. 17 testimony relative to adverse environmental effects 18 relative to any construction of capture facilities? 19 Yeah. That's -- Most of the State Α. 20 regulatory processes don't include capture facilities except Minnesota, and there's a firm that's doing all 21 22 that work separate from everybody else. 23 So they're doing the air permitting, the 24 water permitting. I have nothing to do with that. 25 Q. Do you know the name of that firm?

1	A. I believe it's Mergent.
2	Q. Mergent?
3	A. Uh-huh.
4	Q. Okay. Thank you. So in terms of the
5	environmental effects and other effects of the
6	hundreds of millions of gallons of water that Summit
7	proposes to use to cool the CO2 at each of the capture
8	facilities, have you or your firm been tasked to look
9	into the environmental effects of that?
10	A. No.
11	Q. And then what about the use of triethylene
12	glycol, the chemical to infuse into the capture
13	facilities to try to remove water before the stream
14	gets into the pipeline? Has your company been
15	involved in the environmental effects of that?
16	A. As I indicated, we're not working on the
17	capture facilities.
18	Q. And not even the effects of the capture
19	facilities; nothing about it?
20	A. We're not working on them.
21	Q. Got it.
22	MR. JORDE: I think that's all. Thank you,
23	sir.
24	BOARD CHAIR HELLAND: Okay. Before we go
25	to Board questions, I just want to double-check with

1	the parties before we go to the Board for questions.
2	(No response.)
3	BOARD CHAIR HELLAND: Board Member Byrnes?
4	BOARD MEMBER BYRNES: Thank you.
5	All right. On page 6 of your direct
6	testimony, you discussed the crossings of public land.
7	This kind of goes I'm going to piggyback a little
8	bit on what Representative Isenhart said.
9	Can you describe the difference between
10	Exhibit F and your testimony?
11	THE WITNESS: Exhibit F is part of the
12	petition, so it's just a high-level summary of the
13	environmental impacts.
14	My testimony was I don't believe it was
15	updated when we updated Exhibit F. So it would have
16	been out of sync, as far as the numbers.
17	BOARD MEMBER BYRNES: So has Summit
18	received all the necessary permits for crossing public
19	lands?
20	THE WITNESS: No. We filed with IDNR, but
21	we haven't received them.
22	BOARD MEMBER BYRNES: In Exhibit F it
23	stated that there was .18 miles, but your testimony
24	said .07 miles.
25	THE WITNESS: Yeah. There's probably going

1	to be a disconnect because the testimony wasn't
2	updated when we updated Exhibit F.
3	BOARD MEMBER BYRNES: All right. Thank
4	you.
5	Then in your testimony you discussed Litka
6	Creek. Exhibit F does not mention this area. Is that
7	the same
8	THE WITNESS: I think it's in the table in
9	Exhibit F, if I remember correctly. I'd have to look
10	at it to see, but I think it's in that one table that
11	lists all the public lands.
12	BOARD MEMBER BYRNES: Okay. We'll check on
13	that.
14	THE WITNESS: Okay.
15	BOARD MEMBER BYRNES: On page 6 of your
16	direct testimony, you also discussed tree removal.
17	You stated that trees will be removed, but trees will
18	be kept clear for 15 feet on either side of the
19	pipeline.
20	For clarification, Summit Carbon will allow
21	trees within 15 feet of either side of the pipeline
22	and not require the entire 50-foot easement to be kept
23	clear of trees; is that correct?
24	THE WITNESS: Typically that's what's done,
25	yes. You just have to see it from the air, so 30 feet
I	

1	is about as narrow as you can get from the air.
2	BOARD MEMBER BYRNES: All right. So it's
3	for the flyover inspections?
4	THE WITNESS: Inspection, yes.
5	BOARD MEMBER BYRNES: Thank you.
6	On page 14 of your direct testimony, you
7	discussed lit reviews. Can you explain why a
8	literature review what it is and how it relates to
9	Summit Carbon's pipeline?
10	THE WITNESS: So when you do cultural
11	resource investigations, the first step is you look
12	you have to go into the SHPO records and look at
13	previous studies, so it's considered literature
14	review. You also look at whatever scientific
15	literature is available on encampments and historic
16	use of the area. That gives you the context to design
17	your field surveys and know where potentially sites
18	are found.
19	So you do the literature review first, and
20	then you go on the ground and execute the surveys.
21	BOARD MEMBER BYRNES: These are my last
22	couple questions here for you.
23	The Board asked Mr. Schovanec about
24	proposals by landowners of crossing federal lands
25	instead of their property. What is the permitting

1	process for crossing federal lands, and is Summit
2	crossing federal lands at all in Iowa?
3	THE WITNESS: We're not crossing federal
4	lands in Iowa. The process depends on the federal
5	agency that manages the land.
6	So a National Park, they don't have
7	authority from Congress to issue a right-of-way. So
8	you can't cross them, period.
9	We talked about easements with Farm Service
10	Agency or U.S. Fish and Wildlife for the wetland
11	easement. Those you can cross, but they require
12	certain hurdles you have to go through because once
13	the government spends the money on something, you have
14	to prove you're not going to impede that money that
15	they spent.
16	BOARD MEMBER BYRNES: So we had different
17	landowners up here. If they had suggested a re-route
18	that would have included a re-route through federal
19	land, it's kind of a nonstarter?
20	THE WITNESS: Yeah, particularly ones that
21	don't have the authority to issue an easement.
22	BOARD MEMBER BYRNES: Okay. I believe
23	that's all the questions that I have. Thank you, sir.
24	BOARD CHAIR HELLAND: Thank you.
25	Mr. Dublinske, any redirect?

1	MR. DUBLINSKE: No redirect, Your Honor,
2	but just for Board Member Byrnes's ease, Exhibit F,
3	Table 3, Row 2 discusses Litka Creek Park.
4	BOARD MEMBER BYRNES: Thank you.
5	BOARD CHAIR HELLAND: Okay. Thank you.
6	Dr. Schmidt, you may step down.
7	Summit, go ahead and call your next
8	witness, and then we'll take a break, please.
9	MR. LEONARD: Thank you, Your Honor. We'll
10	call Bryan Louque.
11	BOARD CHAIR HELLAND: Mr. Louque, go ahead
12	and raise your right hand.
13	BRYAN LOUQUE,
14	called as a witness by Summit Carbon Solutions, LLC,
15	being first duly sworn by Board Chair Helland, was
16	examined and testified as follows:
17	BOARD CHAIR HELLAND: You can go ahead and
18	turn your mic on. All right. There you go. Thank
19	you.
20	MR. LEONARD: Thank you, Your Honor.
21	DIRECT EXAMINATION
22	BY MR. LEONARD:
23	Q. Mr. Louque, are you the same Bryan Louque
24	who caused to be filed prefiled direct testimony and
25	Direct Exhibit 1 as well as prefiled rebuttal

1	testimony in this docket?
2	A. I am.
3	Q. If I asked you those same questions here
4	today, would your answers be substantially the same?
5	A. They would.
6	Q. Do you have any corrections or
7	modifications to make to that prefiled testimony at
8	this time?
9	A. I do not.
10	MR. LEONARD: Your Honor, I would move
11	admission of Bryan Louque direct, Direct Exhibit 1 and
12	rebuttal testimony.
13	(Louque Direct Exhibit 1 was offered into
14	evidence.)
15	BOARD CHAIR HELLAND: Thank you.
16	Are there objections, other than
17	Mr. Jorde's standing objections?
18	MR. JORDE: Can I have clarification?
19	What's his Exhibit 1 to direct?
20	MR. LEONARD: I believe it's a list of
21	inputs used.
22	MR. JORDE: Okay. Then just my standing,
23	and then foundation and speculation.
24	BOARD CHAIR HELLAND: Okay.
25	Mr. Meyer, did you have an objection, too,
1	

1	or just getting in line?
2	MR. MEYER: No. Just ready to cross.
3	BOARD CHAIR HELLAND: Objection is noted.
4	The Board will admit the evidence and give
5	it the weight due.
6	(Louque Direct Exhibit 1 was admitted into
7	evidence.)
8	MR. LEONARD: Would you like to proceed?
9	BOARD CHAIR HELLAND: Yes. You tendered
10	the witness?
11	MR. LEONARD: Yes.
12	BOARD CHAIR HELLAND: Okay. Great. Then
13	we will take a break. We will come back at 5 till.
14	(Recess taken.)
15	BOARD CHAIR HELLAND: Okay. It's 2:58. We
16	will go back on the record.
17	I believe Mr. Jorde is up first.
18	MR. JORDE: Thank you.
19	CROSS-EXAMINATION
20	BY MR. JORDE:
21	Q. Sir, in your prefiled testimony, one of the
22	things you discuss is that your employer, Audubon, was
23	engaged to perform vapor dispersion modeling and
24	analysis for use in developing high-consequence areas,
25	also known as HCAs, and that's part of the work you

1	did; correct?
2	A. Correct.
3	Q. And when was Audubon first hired by Summit
4	relative to any CO2 pipeline work?
5	A. Best guess on my part, it was around the
6	beginning of this year.
7	Q. So beginning of this year, so early 2023?
8	A. Correct.
9	Q. And prior to that time, you're not aware of
10	Audubon being contracted or being asked to do any work
11	or analysis for Summit?
12	A. We were working on other parts of the
13	project with Summit that are well, that didn't
14	involve vapor dispersion.
15	Q. Okay. And just briefly, what were those
16	other parts of the project that you were working on
17	prior to the beginning of 2023?
18	A. So, for example, we started on the risk
19	analysis with Summit initially, is how we got
20	involved.
21	Q. And for risk analysis Well, okay. Let's
22	back up.
23	When was Audubon first hired to do risk
24	analysis?
25	A. Again, it was probably mid-last year.

- The middle of 2022. 1 0. Okay. 2 When you say "risk analysis," is that where 3 you differentiate as being separate from vapor 4 dispersion modeling and analysis? 5 Α. It's a separate scope of work, yes. All right. And in terms of HCAs, we've 6 Q. 7 talked about those, but HCAs, high-consequence areas, 8 those are federally defined terms of art. Would you 9 agree? 10 Α. Agree. 11 And there are four main categories of HCAs Q. 12 under federal regulation; is that fair? 13 Α. Yes. 14 And one of the HCAs includes population 0.
- areas of greater than 50,000 persons; correct? 16 Α. The two that involve population are HPAs
- 17 and OPAs, so highly populated areas and other
- populated areas. 18

15

- 19 And the highly populated areas are 0. Okav.
- considered, by at least federal regulators, as 20
- containing 50,000 or more persons? 21
- 22 Α. I think that's correct. In my mind, the
- 23 big differentiator around HCA [sic] -- I'm sorry.
- 24 is it exists in an incorporated boundary.
- 25 Correct, and that's a good qualifier. Q. So

- 1 it's a set number of persons within an incorporated or
- 2 defined boundary; correct?
- 3 A. Yes.
- 4 Q. And you would agree that certainly
- 5 throughout Iowa where this proposed pipeline could be
- 6 located there are lots of areas where there are people
- 7 and defined boundaries but that they don't necessarily
- 8 reach that 50,000 or more threshold?
- 9 A. There are many more OPAs within Iowa than
- 10 HCAs. That is a true statement.
- 11 Q. And for OPAs, what's your understanding of
- 12 the technical definition of an OPA?
- 13 A. An OPA is an area that has some population
- 14 density as defined by the U.S. census.
- 15 Q. And the U.S. census is, as we know, updated
- 16 every ten years?
- 17 A. That's correct.
- 18 Q. So OPAs, in analyzing them, the data is
- 19 pretty much stale after each census and then isn't
- 20 updated or modified until the next census?
- 21 A. As far as the federal government goes,
- 22 that's true. Operators have the option and ability to
- 23 curate their own HCA data at any time.
- Q. And so is it your understanding that HCA,
- 25 is that, like, kind of an umbrella or overarching

- 1 factor of which the OPAs or the HPAs, that those fall
- 2 under HCA analysis, or those are separate things you
- 3 look at?
- A. So each one of the four you referred to are
- 5 potential HCAs. So if I've got any of these four
- 6 entities, then it's a high -- that area is defined as
- 7 a high-consequence area by PHMSA.
- 8 Q. And PHMSA requires a potential pipeline
- 9 operator to identify all HCAs, as defined by PHMSA?
- 10 A. It requires the operator to define all
- 11 HCAs, including those that are defined or identified
- 12 by the operator.
- 13 Q. All right. And so regardless of if someone
- 14 is living in a populated area of 50,000 persons or
- more or 500 persons, you understand that the persons
- in smaller populated areas likely care just as much
- 17 about their family and their health and well-being as
- 18 those in larger communities; right?
- 19 A. I understand.
- 20 Q. And you discuss the vapor dispersion
- 21 modeling and what information it provides.
- Is it your testimony that PHMSA requires a
- 23 potential pipeline operator to actually perform vapor
- 24 dispersion modeling?
- 25 A. So the short answer is yes. That's part of

the Integrity Management Rule, which is triggered by 1 2 the existence of an HCA. 3 And you're aware that federal law or PHMSA Q. 4 is not in charge of siting or locating hazardous 5 pipelines; correct? 6 Α. Correct. 7 Q. So we can agree that dispersion analysis may be a tool or data required by PHMSA regulations, 8 9 but would you agree that that type of data is also 10 important data to know when considering potential 11 routing of a hazardous pipeline? 12 If you're asking my -- for my experience, Α. 13 my experience is that vapor dispersion studies or any 14 other thing under the Integrity Management Rule are 15 typically not considered for routing pipelines. And your answer there is based on the 16 0. 17 premise that I was asking from the operator or 18 pipeline company owner's standpoint; correct? 19 That's correct. Α. 20 As we are sitting here today, you Q. 21 understand we're not looking at what any particular 22 party wants but the lens through which the Board may 23 be making decisions as to routing and siting? 24 Α. I understand. 25 And you would agree it would be reasonable, Q.

- 1 when you're thinking about a greenfield project such
- 2 as this, one that doesn't exist in the state and would
- 3 be the first ever in the state of Iowa, that it would
- 4 be reasonable to consider the vapor modeling and
- 5 analysis in making routing decisions in Iowa; right?
- 6 A. I think what is much more important to
- 7 consider, from an engineering standpoint, are the
- 8 preventative and mitigative measures that would go
- 9 along with design and operation of the pipeline and
- 10 its potential impact on the community that surrounds
- 11 it.
- 12 Q. So from an engineering perspective, you're
- 13 focused more on: What can we do to prevent a
- 14 worst-case scenario or prevent an unintended release
- 15 as opposed to maybe we shouldn't even locate near that
- 16 particular community; right?
- 17 A. Yes.
- 18 Q. But, again -- I appreciate it from your
- 19 engineering perspective, but from a regulatory body
- 20 looking at an intelligent location or, perhaps, no
- 21 location, you would agree that it would be reasonable
- 22 to analyze the risk to persons and livestock before
- 23 making siting decisions?
- 24 A. I'm not going to speculate on "reasonable."
- 25 Q. Okay. So you prepared some documents

- 1 related to your vapor dispersion analysis. When do
- 2 you first recollect being asked to perform that type
- 3 of work?
- 4 A. I think -- Did I state mid-2023, or was it
- 5 early 2023? We've been working on this project for
- 6 about six months now, to my recollection.
- 7 Q. And, again, "this project," meaning the
- 8 vapor dispersion specifically?
- 9 A. Correct, yes.
- 10 Q. Okay. And have you or your firm prepared
- 11 draft reports that you provided to your client,
- 12 Summit, at any time?
- 13 A. Yes.
- 14 Q. How many drafts have you gone through?
- 15 A. In the state of Iowa, two drafts for what
- 16 you'll see in the testimony as -- referred to as a
- 17 conservative approach, and one draft of what you will
- 18 see referred to as a mechanical puncture approach.
- 19 Q. And are those approaches, in fact, combined
- 20 into one document, or are you saying the way you're --
- 21 your deliverable to your client was actually two
- 22 separate drafts analyzing each of those approaches?
- 23 A. It would be the latter, two separate
- 24 drafts.
- 25 Q. Two separate drafts. I'm sorry. One was a

- 1 puncture approach, and that would essentially be known
- 2 as the third-party damage approach; correct?
- 3 A. That's what we attempted to simulate,
- 4 correct.
- 5 Q. Understood. And the other approach would
- 6 be kind of the guillotine or that unintended release,
- 7 other than caused by a third party?
- 8 A. It would be intended to be a guillotine
- 9 release. That's true.
- 10 Q. Regardless of cause?
- 11 A. Regardless of cause, correct.
- 12 Q. All right. And is that work that you
- 13 continue to do based on Iowa's specific factors, or
- 14 was the work that you did on those two approaches a
- 15 project-wide look that didn't take into account any
- 16 Iowa-specific inputs?
- 17 A. So the vapor dispersion analysis considers
- 18 the right-of-way, which includes things like what's on
- 19 the right-of-way, what the terrain looks like.
- 20 So based on that assertion, we looked at
- 21 this -- these routes specifically in the state of Iowa
- 22 and analyzed the routes specifically in the state of
- 23 Iowa as we did in the other states.
- Q. And so when -- Were you tasked with the
- 25 directive to determine worst-case scenarios based on

actual route-specific factors on the proposed Iowa 1 2 route? 3 So the answer -- I'm going to say the Α. 4 answer is yes, okay? But what we did was, is once you 5 see the route in Iowa, whether it's in a cornfield or hayfield or what have you, one of those right-of-way 6 conditions out of the number that exist in the state 7 8 would produce a worst-case CO2 concentration after a 9 quillotine leak on the ground, and that worst case or 10 the most conservative case was applied to the entire 11 pipeline right-of-way in Iowa. 12 Does that make sense? 13 Let me paraphrase, and correct me if I'm 0. 14 wrong. So in order to choose what you believe the 15 worst-case scenario was for Iowa, you analyzed the entire proposed route and then, all things considered, 16 17 picked a location that, based on the various factors, 18 when combined together would produce what you believe 19 to be the worst possible case of an unintended 20 release? 21 In terms of CO2 concentration on the ground Α. 22 and distance from the pipeline center line, yes. 23 And is that necessarily the same location 0. 24 in terms of the amount of concentrated CO2 on the 25 ground and the distance of travel, or couldn't those

- be found at different geographic points? 1 2 So the answer is no. We were -- We're only Α. concerned with CO -- distance of travel of CO2 3 4 concentration on the ground. 5 0. On the ground? 6 Α. Yeah. Okay. All right. And we'll get into the 7 Q. modeling in a little bit. 8 I want to talk a little bit about your 9 10 testimony where you reference Satartia, Mississippi, 11 and the failure there of a CO2 pipeline. Do you 12 recollect, was that Denbury pipeline in Satartia, 13 Mississippi, a 24-inch pipeline? 14 I don't recollect, but it's in the 20-inch 15 range.
 - 16 Q. I think it was 24 inches, but we can look
 - 17 at that to confirm.
 - 18 Your recollection is in the state of Iowa
 - 19 Summit is proposing up to a 24-inch diameter pipeline?
 - 20 A. That's correct.
 - 21 Q. Now, you would agree, and based on your
 - 22 analysis, that CO2 can be toxic by inhalation in
 - 23 humans?
 - 24 A. I'm not an expert on toxicology, and I
 - 25 don't know if "toxic" is the right work. Yes, it

poses a hazard for humans in certain concentrations. 1 2 Correct. And that includes the fact CO2 is 0. 3 an asphyxiant, and it can displace oxygen because it's 4 heavier than oxygen; correct? 5 Α. Correct. Are you aware that individuals that could 6 Q. 7 come in contact with CO2 may experience rapid breathing, confusion, increased cardiac output, 8 9 elevated blood pressure and arrhythmias? 10 Α. Yes. 11 0. And then in extreme concentrations, 12 potentially death by asphyxiation? 13 Α. Yes. Relative to the Satartia incident, you're 14 0. 15 aware that PHMSA put out an incident report or what they call a failure investigation report? 16 17 Α. Yes. 18 And did you review that prior to or after 0. 19 designing or preparing the vapor dispersion analysis? 20 Α. Those reports informed our process, so we were aware of the results of PHMSA's investigation 21 22 prior to producing material, work for this project. 23 And you discuss a little bit about ALOHA, 0. 24 which is a software, a publicly available tool for 25 getting at least a rough estimate of potential

- 1 distance and width of CO2 dispersion; is that right?
- 2 A. I am aware of ALOHA, yes.
- 3 Q. All right. And you're aware also that it
- 4 is a tool that's publicly available and allows for
- 5 certain inputs that then produces outputs that may
- 6 model a CO2 dispersion event?
- 7 A. I don't believe ALOHA has any
- 8 CO2-specific -- what's the word I'm looking for?
- 9 Application.
- 10 So I think I answered your question.
- 11 Q. And in your testimony you were asked if you
- 12 agree that ALOHA is a useful tool. You say, "Yes."
- 13 You do qualify that for quickly producing reasonable
- 14 results in a real emergency.
- 15 Would you agree, sir, that that's a
- 16 qualifier for, I guess my words, kind of a
- 17 down-and-dirty and quick analysis, but it isn't the
- 18 type of software that you would want to use when
- 19 providing opinions on worst-case vapor dispersion
- 20 analysis; right?
- 21 A. That's my position, yes.
- 22 Q. And, in fact, for first responders that may
- 23 be able to quickly utilize it, it would give them an
- 24 idea, but it wouldn't be nearly as reliable as some of
- 25 the other more robust software available, such as the

25

CANARY or even PHAST or even computational fluid 1 2 dynamics; correct? 3 Α. It would give a conservative estimate for 4 the vapor dispersion for which first responders could 5 use as a starting point. 6 Q. As a starting point? 7 Α. Yep. Would you agree with me in order to kind of 8 0. 9 arm our first responders with the best available data 10 that studies, such that you did informed by CANARY and FLO-2D modeling, would give them a better idea of the 11 12 potential dispersement range of a CO2 plume? 13 Α. That's a good question. I mean, the intent 14 of the -- of Summit's vapor dispersion really is to 15 understand the impact of a release on receptors along the pipeline. That's first and foremost. 16 17 Whether or not that information would be 18 useful to first responders, you know, I won't 19 speculate on that. I've never been in that 20 first-responder position in terms of preference of understanding the potential consequences or potential 21 22 areas of a release. 23 Would you concede that in life-or-death 0. 24 situations, an emergency response, that more likely

than not it would be more appropriate to have the most

specific and best information available for those 1 2 first responders? 3 Α. Again, a very good question. Yeah. 4 Within the model that we produced for 5 Summit, there are inputs about the weather, right? Ιf I'm a first responder, you know, and the weather on a 6 7 particular day is X and Y, I might want to be able to 8 see how that would affect the vapor plume on that day 9 instead of looking at a worst-case scenario that 10 Audubon produced. 11 So, you know, generally more information is 12 better, but more information could mislead, I guess, in some cases, if that makes any sense. 13 14 Well, but if the more information, I think 15 how you were parsing that, would be providing a worst-case scenario, you use the word "mislead," but 16 17 wouldn't you agree if I'm armed on the front end with 18 what a worst-case scenario is, I can back into and 19 prepare better and kind of understand the geographic 20 distance of my emergency response as opposed to getting, for instance, a 911 call and trying to locate 21 22 ALOHA and quickly type in things; right? 23 I don't know, again, from the Α. 24 first-responder process how that happens, but, you 25 know, I guess I'll just leave it at more information

- 1 is better in terms of responding to an emergency.
- Whether or not first responders' preference
- 3 would be to look at information that was produced by
- 4 the pipeline operator or not, I can't speak to their
- 5 processes.
- 6 Q. Would you agree along those lines that more
- 7 information is also better in preparation for a
- 8 potential emergency; not just an instantaneous
- 9 response?
- 10 A. Yes. So there are a number of things that
- 11 the vapor dispersion will inform in terms of Summit's
- 12 operating procedures. One of them is a risk model.
- 13 The other one is a public awareness plan. The other
- 14 one is the Emergency Response Plan.
- So yes, the results of the vapor dispersion
- 16 model will inform and provide guidance to -- in other
- 17 operating areas of the pipeline.
- 18 Q. Okay. But also would be helpful for first
- 19 responders or counties determining what resources they
- 20 need on the front end to be prepared prior to an
- 21 emergent event?
- 22 A. Yeah. I was agreeing with your statement.
- So, you know, part of Summit's
- 24 responsibility here is to work with local first
- 25 responders and make sure that they understand the

- 1 potential exposure, make sure that they're equipped to
- 2 deal with that exposure, should worst case happen,
- 3 right?
- 4 So in terms of people, training and
- 5 equipment, yes.
- 6 Q. Now, related to the Satartia incident,
- 7 we've covered the 200 folks that were evacuated and
- 8 the 45 that sought medical attention.
- 9 Would you agree that part of the, let's
- 10 say, intensity of that release had to deal with
- 11 something called -- or a phenomenon known as
- 12 atmospheric conversion?
- 13 A. I'm not aware of that. The full details of
- 14 Satartia and what actually happened with Satartia,
- outside of what was reported by PHMSA, I'm not aware
- 16 that that was one of the things that actually PHMSA
- 17 pointed to or anyone pointed to.
- 18 Q. So setting Satartia aside, are you, as an
- 19 engineer, familiar with the concept of atmospheric
- 20 conversion?
- 21 A. In detail, no.
- Q. How about in general?
- 23 A. In general, no.
- 24 Q. So how do you go about, then, selecting
- 25 inputs to inform what would be a worst-case scenario

such as temperature? I quess, how do you go about 1 2 that, or did you accept that, the inputs that Summit 3 told you it wanted modeled? 4 So the inputs to the model, whatever model Α. 5 you're choosing, whatever model you're working with or defined by the software manufacturer, you have those 6 listed in one of my exhibits that have been submitted. 7 8 The answer to your question is, you know, 9 Summit didn't tell us what the inputs were, what 10 inputs to use or what values to use. Basically when you look at the inputs that are required for the vapor 11 dispersion analysis, Audubon ran a sensitivity 12 13 analysis using one -- a variation of one input at a time, right? 14 15 So when you look at -- Let me see here. When you look at release angle, that would be an 16 17 example, right? 18 There's an optimum release angle that will 19 produce a maximum concentration of CO2 some distance 20 away from the pipeline at grade. So that sensitivity analysis defined the worst-case inputs, worst-case 21 parameters for the analysis, for the overall analysis. 22 23 Well, wouldn't you agree that, depending on 0. 24 the inputs that you analyze, that can skew the 25 ultimate outputs?

Skew in a conservative direction, which is 1 Α. 2 what we were after, yes. 3 Q. Well, okay. They could skew either way. 4 I mean, I'm not saying you did this, but I 5 could -- if I wanted to get to an intended result, theoretically knowing that information might be 6 7 publicly available and I don't want it to be as 8 dangerous, certainly a person could select inputs 9 essentially gaming the system to show less concerning 10 outputs; right? 11 An unethical person could. Α. And someone well-intended who didn't 12 Q. Okay. 13 do a thorough job also could lead to the same result; 14 correct? 15 Α. So when you look at atmospheric vapor dispersion models and you look at the suite of tools 16 17 that is available, whether it's CANARY, PHAST, CFD, 18 garbage in is garbage out. So the results depend on 19 the ability and the experience of the modeler. 20 In that regard would you agree that cooler Q. temperatures tend to produce a worse scenario in terms 21 22 of an unintended release, all other factors being 23 equal? 24 Are you talking about atmospheric 25 temperature?

1	Q.	Atmospheric	temperature.	

- 2 A. Yes. So the most conservative cases for --
- 3 that we identified were winter cases.
- 4 Q. And in your experience is the colder it is
- 5 the worst?
- 6 So if we took it kind of to the ridiculous.
- 7 We get way into the negative temperatures.
- 8 Does it get worse, or is there kind of a
- 9 range of more likely cool temperatures that you model?
- 10 A. It would be the latter.
- 11 Q. All right. And then would you also agree
- 12 that less wind actually creates the potential for the
- 13 higher level of concentration and the more negative
- 14 potential health effects?
- 15 A. So wind was one of the sensitivity factors
- 16 that we evaluated, and there was an optimum wind speed
- 17 at which the concentrations at grade reached furthest
- 18 from the pipeline center line.
- 19 Q. Okay, and I appreciate that. Obviously,
- 20 wind clearly can move and is a big factor on which
- 21 direction a plume would travel.
- 22 It generally goes with the prevailing wind;
- 23 is that fair?
- 24 A. That's my understanding.
- Q. And if you were modeling to try to show how

- far a plume would go, you might pick a certain type of 1 2 wind speed, but would you agree that no wind speed 3 actually can produce at the site of the rupture the 4 worst possible scenario because there's not a wide 5 dispersing of the CO2 molecules? So the site of the rupture is worst case 6 Α. 7 irregardless of what the wind is doing, okay? That's 8 where you've got 98 percent CO2 escaping that 9 pipeline. 10 And in terms of modeling wind, would 0. Okay. you agree that modeling higher wind speeds, although 11 maybe counterintuitive, actually more likely then 12 13 would produce not as bad of scenarios because of the 14 phenomenon of the wind dispersing the CO2 molecules? 15 Α. High wind speed leads to turbulence. Turbulence leads to mixing. Mixing leads to reduced 16 17 CO2 concentrations at grade.
- 18 You had talked a bit ago about public
- 19 awareness and emergency response. In your work are
- 20 you familiar with considering buffers in terms of
- 21 public awareness, emergency response and initial
- 22 routing?
- 23 Is that a concept you're familiar with?
- 24 No. Α.
- 25 When you were discussing public Okay. Q.

- 1 awareness, in your experience is public awareness kind
- 2 of a range? Like, for instance, within X number of
- 3 feet from the center line of the pipeline, that's
- 4 where we want the public to be aware that the pipeline
- 5 even exists, or what's your understanding of public
- 6 awareness concept and why it's important?
- 7 A. So my understanding of public awareness is
- 8 as it's written and defined in 195 in this case and
- 9 the requirements that are incumbent upon each operator
- 10 under the 195 pipeline code to create and execute a
- 11 Public Awareness Program.
- 12 Q. Okay. So basically compliance with the
- 13 federal minimum standards relative to public
- 14 awareness?
- 15 A. Exactly.
- 16 Q. And you would agree that aside from just
- 17 complying with what the federal regs are, if we're
- 18 talking about real people in a real state like Iowa,
- 19 you would agree that it's prudent to go above and
- 20 beyond the federal minimums in your outreach and
- 21 education relative to the hazards associated with the
- 22 CO2 pipeline?
- 23 A. I would agree that whatever the federal and
- 24 state regulations and laws are that govern the siting,
- 25 design, construction, operation of the pipeline should

- 1 be followed.
- Q. Okay. So I asked a little bit different
- 3 question.
- 4 Certainly you want to comply and check all
- 5 the PHMSA boxes. I don't dispute that.
- 6 PHMSA doesn't prevent a pipeline company,
- 7 such as Summit, from sharing its analysis that it
- 8 contracted you to do to best inform the public of this
- 9 potential project and the potential risks; right?
- 10 A. I'm not aware that they do.
- 11 Q. In regard -- Are you familiar with
- 12 Integrity Management Programs, IMPs?
- 13 A. Yes, sir.
- 14 Q. And do you recollect that in the
- 15 Denbury/Satartia incident that PHMSA found that
- 16 Denbury, in fact, did identify geotechnical hazards
- 17 but essentially didn't go into enough detail of what
- 18 those hazards are and how they may contribute to a
- 19 potential rupture?
- 20 A. Yes.
- 21 Q. And are you aware in this docket that
- 22 Summit has not yet commenced, let alone concluded, its
- 23 phase 2 geotechnical surveys?
- 24 A. I'm not aware of that information. That's
- 25 information that would not be applicable to my scope

- 1 of work.
- 2 Q. Were you asked to or have you ever reviewed
- 3 buffer distances, whether you call them setbacks or
- 4 hazard zones, relative to emergency response or public
- 5 awareness distances?
- 6 A. No.
- 7 Q. And you weren't -- meaning Audubon and your
- 8 team -- involved in the initial routing? You were
- 9 called in after the fact; is that fair?
- 10 A. That's correct.
- 11 Q. All right. I want to ask you a few
- 12 specific questions about the tools you utilize, CANARY
- 13 and the FLO-2D system.
- 14 A. Yes, sir.
- 15 Q. So you utilized CANARY, which, again is a
- 16 tool, a software, and that's sold by a company called
- 17 Quest Consulting; is that right?
- 18 A. Yes.
- 19 O. And then FLO-2D, is that also provided by
- 20 Quest or a different provider?
- 21 A. It is not provided by Quest.
- 22 Q. Do you know who makes that available?
- 23 A. Off the top of my head, no, I don't.
- Q. And you stated that CANARY was validated in
- 25 a series of tests; correct?

1	A. Correct.
2	Q. And it's true that CANARY is called a
3	Gaussian model?
4	A. Yes.
5	Q. And generally can you describe what that
6	type of a model is?
7	A. A Gaussian model is a model that assumes a
8	core when you're looking at a release, it assumes a
9	core CO2 concentration with dissipation at the edges,
10	if that makes any sense, that are nonlinear and follow
11	Gaussian equations or Gaussian diminishing returns, if
12	that makes sense.
13	Q. Well, does the Gaussian model have anything
14	to do particularly with the shape of the dispersion?
15	A. Yes.
16	Q. And what exactly how are those related?
17	A. So pictures would be better, but yeah. So
18	the shape of the release plume. So think plume, with
19	a CO2 core with a core of highly concentrated CO2 that
20	mixes, and the concentration of the CO2 diminishes
21	towards the edges of the plume.
22	Q. You in your testimony talked a little bit
23	about CFD modeling, and, again, you understand that to
24	be computational fluid dynamics; is that right?
25	A. Yes.

Would you agree that that is a more robust 1 0. 2 tool whereby more inputs can be utilized to get a more 3 accurate picture of modeling? 4 Α. There's no data that I'm aware of that CFD 5 produces any more accurate, and I want to be careful about that word, because you used it. Produces any 6 7 more accurate results than any of the other tools or models that are on the market. 8 9 Okay. And so because -- based on your 10 statement that there's no study that states that, what 11 about in your own experience? Have you ever had the occasion to utilize CFD modeling? 12 13 Α. I have not. I have not seen it used in 14 pipeline vapor dispersion modeling. 15 I've been doing this 30 years. Integrity management has been around for 20-plus years, and I've 16 17 not seen a pipeline project utilize CFD. 18 Again, with all due respect to you and your 19 experience, you are hired by the pipeline companies in 20 this case to do the modeling work; correct? 21 Α. Yes. 22 So someone from the community, a 0. Okay. 23 concerned mom with kids nearby the potential route, 24 they're not your clients? It's the industry who wants 25 to get the project sited? That's your client;

Α.

- 1 correct? 2
- 3 and pipeline safety is to protect the public and to

So, you know, the whole purpose of PHMSA

- 4 protect the environment. I've been doing that, you
- 5 know, in my career for 30 years now.
- So yes, Summit Carbon is my client, but 6
- 7 I've got an obligation to the public to protect them
- 8 as well.
- 9 Well, but your statement that PHMSA's 0.
- 10 purpose is safety and to protect the public, that only
- goes so far, because they do not have the power to 11
- site, and you would agree the location of the pipeline 12
- 13 is what creates the risk?
- 14 No, absolutely not.
- 15 Okay. So would you agree that a pipeline Q.
- that doesn't exist is less risky than the one that 16
- 17 does?
- 18 Α. No. So --
- 19 **Q.** Okay.
- 20 PHMSA -- I'm not answering your question. Α.
- I'm just continuing along with my previous statement. 21
- 22 PHMSA is charged with safety of liquid and
- 23 gas pipelines. I don't know if you've looked at the
- 24 code or read the code, right, but there are all sorts
- 25 of measures that have been developed since the late

- 1 1960s, all sorts of regulations and requirements that
- 2 have been identified, developed, implemented to
- 3 protect you and I.
- 4 Unfortunately, some of those learnings come
- 5 through tragedy, right? And the fact that, you know,
- 6 it very rarely -- I understand pipelines exist, and I
- 7 understand they're in the ground. But the host and
- 8 wide variety of incident causes and mitigative
- 9 measures that directly address those causes, that's
- 10 what PHMSA is all about, right? They're here to
- 11 protect us.
- 12 Q. Okay. We can agree to disagree on that.
- My question to you was: Am I more or less
- 14 safe if a hazardous pipeline is located within 100
- 15 feet of my home or 100,000 feet of my home?
- 16 A. And I'm going to answer: It depends.
- 17 Q. Okay. Well, sure. If the one closest
- 18 never explodes, there's no risk, but understanding
- 19 that things that humans make tend to leak, spill,
- 20 rupture somewhere over time, it's pretty obvious that
- 21 any person who is located in close proximity to
- 22 hazardous pipelines is inherently more at risk than
- 23 someone who is much further away?
- 24 A. I disagree.
- 25 Q. Okay. So then if you disagree with that,

- 1 there's really no point to any of the work that you've
- 2 done in terms of modeling the distance that a plume
- 3 could travel because it doesn't matter how close you
- 4 are to a pipeline?
- 5 A. No, sir. You are making a blanket
- 6 statement, and I could give you good, real-life
- 7 examples.
- 8 Marshall, Michigan, was a good example
- 9 where the crude oil actually found its way into the
- 10 Kalamazoo River, and I would have been much safer
- 11 located uphill 100 feet from the pipeline than I would
- 12 have been 10 miles downstream of that pipeline.
- Q. Sure. Of course, we're here on carbon
- 14 dioxide pipelines.
- 15 A. Yes, sir.
- 16 Q. So we don't really need to talk about crude
- 17 oil. So in terms of carbon dioxide, which is the only
- 18 thing that's relevant here, a plume at high
- 19 concentration, based on your answer about seven
- 20 answers ago, is most intense at the rupture site;
- 21 correct?
- 22 A. CO2 concentration is greatest there in the
- 23 atmosphere.
- Q. Correct. And if I'm a person living
- 25 outside in the atmosphere, the closer I am to that

rupture site, the more dangerous it is for me; 1 2 correct? 3 For CO2 concentration in the atmosphere, Α. 4 yes. 5 0. All right. Now, do you routinely utilize CANARY calculations? 6 7 Α. Yes. Are you able to discuss five inputs that 8 0. 9 you would need in a CFD model that are not needed in a 10 CANARY calculation? Potentially. 11 Α. Is it your testimony that CFD modeling 12 0. 13 needs or it's required to use more inputs than CANARY 14 does? 15 Α. Yes. 16 0. Do you believe that CFD cannot do 17 high-velocity calculations? 18 CANARY has been developed with a jet release in mind. It has that -- it was built around 19 20 that particular problem. 21 I'm not enough of a student or not familiar 22 enough with CFD to understand how it handles jet 23 releases, but I do understand that there are some 24 potential issues with CFD and modeling of a jet 25 release.

And when you use the phrase "jet release," 1 0. 2 is that the type of release that would be associated 3 with a guillotine rupture? 4 Α. Correct. 5 0. Do you believe that CFD modeling cannot include thermodynamic calculations? 6 I have no comment. 7 Α. You don't know either way? 8 0. 9 I do not know. Α. 10 You wrote that using CFD along the entire Q. length of the pipe would not be feasible. Are you 11 12 aware of anyone that has suggested CFD should be 13 utilized at every foot along a proposed route? 14 Α. I am not aware. 15 0. Would you agree that CANARY doesn't handle terrain and variations in terrain? 16 17 I agree. So FLO-2D was that -- Audubon's Α. 18 kind of fix or work-around to the fact that CANARY doesn't handle variance in terrain. So FLO-2D was 19 20 Audubon's tool to address CO2 heavy vapor migration over terrain. 21 22 Okay. Over-land spread model. You know 0. 23 what that is, but just give me the layperson's 24 definition of what "over-land spread model" means. 25 Α. So dense phase -- it doesn't have to be

- 1 dense phase CO2 -- any liquid -- but CO2 heavy vapor
- 2 can migrate, you know, downhill. It can migrate by
- 3 gravity from the release point to some other point
- 4 away from the pipeline center line based upon the
- 5 elevation of the terrain in the area.
- 6 So the over-land spray calculation, number
- 7 one, is an attempt to identify gravity flow pass
- 8 between the pipeline center line and HCAs, number one.
- 9 And then number two, if those paths do exist, to
- 10 simulate the terrain-aided or gravity flow of dense
- 11 vapor along those paths.
- 12 Q. Were you aware that FLO-2D solves for waves
- on surfaces or wave equations?
- 14 A. FLO-2D is a hydraulic model, yes.
- 15 O. You understand that it was initially
- 16 developed to model mudslides?
- 17 A. As I said, it's a hydraulic model. It was
- 18 developed to handle hydraulic flow.
- 19 Q. Do you think that carbon dioxide travels
- 20 along the ground like a mudslide or a wave would?
- 21 A. Does it obey the laws of gravity? Yes.
- 22 Q. Well, I tell you what. You're doing a
- 23 great job at asking yourself your own guestions, but
- 24 my question was: Do you think that carbon dioxide
- 25 travels along the ground like a wave or a mudslide

- 1 would, yes or no?
- 2 A. So I answered your question. Obviously, it
- 3 travels differently, as would water travel along the
- 4 surface of the ground.
- 5 Q. In the report you talk about CFD -- or
- 6 maybe not the report. In your testimony you talk
- 7 about, "CFD requires an extensive data set that is
- 8 typically not available at incremental points along a
- 9 pipeline corridor."
- 10 Do you stand by that statement?
- 11 A. Yeah. And so what I'm really getting at
- 12 there is as the list of -- this doesn't have to apply
- 13 to CFD, but for any simulation, as the list of input
- 14 grows, so does the need for making assumptions, right?
- 15 So every assumption that you make in a
- 16 model like that takes you a degree of freedom away
- 17 from reality, in my experience. So when you -- when
- 18 you're trying to quantify something with such a level
- 19 of precision, you could be introducing error into the
- 20 analysis.
- 21 Again, I'm not speaking directly to CFD,
- 22 Mr. Jorde. I'm just speaking broadly to simulation
- 23 and model and the need for data.
- Q. For the data and input that you utilize to
- 25 run your modeling that was provided by Summit, did you

- 1 independently vet or verify that data, or did you
- 2 simply input it into your software system that you
- 3 utilized?
- 4 A. Can you give me an example?
- 5 Q. Well, I don't know what they gave you. I'm
- 6 assuming they gave you some inputs relative to, for
- 7 instance, valve distance, spacing shutoff valves,
- 8 diameter of pipe, volume, those type of fixed things.
- 9 A. Yes, sir.
- 10 Q. Did you independently verify any of those,
- or did you accept as true the input Summit provided
- 12 you?
- 13 A. So our model is based upon the pipeline
- 14 routing and design drawings as they exist today. So
- if they told us it was 24 inches, we modeled on 24
- 16 inches. If they told us the valve spacing is
- 17 10 miles, the simulation is on 10 miles.
- 18 What I will say is we spent quite a lot of
- 19 time modeling and remodeling and remodeling, based
- 20 upon changes in the pipeline route, pipeline diameter,
- 21 pipeline pressure, valve spacing, et cetera, et
- 22 cetera, et cetera.
- 23 So as the design gets updated, the model
- 24 changes.
- Q. Okay. And you said you've done two drafts.

- 1 Does that include the document that was produced for
- 2 these proceedings, or is that a third iteration of
- 3 your modeling?
- 4 A. No. That includes the documents that have
- 5 been submitted previously and the documents that are
- 6 submitted for this hearing.
- 7 Q. All right. So how often are you updating,
- 8 based on route changes or modifications?
- 9 A. I would say over some period of time
- 10 probably twice a month, right? When I say "updating,"
- 11 I'm speaking specifically about changing or updating
- 12 inputs into the CANARY tool.
- So if the valve spacing changes, the CANARY
- 14 inputs change, right?
- 15 O. For instance, those twice-a-month changes,
- 16 you're not creating new drafts because we'd have 12
- 17 drafts or more; correct?
- 18 A. That's exactly right, yes.
- 19 O. Are you familiar with the term "local
- 20 acceleration" and how that's used in modeling?
- 21 A. No, sir.
- Q. What about "diffuse wave"?
- 23 A. No, sir.
- Q. What about "convective term," the
- 25 "convective term"?

1 No, sir. Α. 2 Were the calculations you performed steady Q. 3 or unsteady? 4 Α. As in terms of --5 0. Does that phrase mean anything to you, "steady or unsteady"? 6 7 Α. Steady and unsteady release rates? Steady and unsteady, is what I'm asking. 8 9 Yes, release rates. 0. 10 So the release rates are not -- Well, Α. again, remember, the atmospheric vapor dispersion 11 buffers are based on worst case. Flow rate is one of 12 13 the inputs, and so the maximum flow rate, which would 14 be at the time of the release, was used to estimate 15 that distance of CO2 concentration at grade. So over time the release rate will 16 17 decrease, right, and we have every ability to analyze 18 that, but we're looking, remember, at the most 19 conservative case. 20 Do you recollect the release rate pounds Q. 21 per second that --22 I don't. It varies along the pipeline. Α. 23 Would that number or that input be found 0. 24 anywhere in your analysis that you prepared, to your 25 recollection?

1	A. Yes.
2	Q. Okay.
3	MR. JORDE: If I could have staff, please,
4	pull up LO-582, Landowner 582, please.
5	(Brief pause.)
6	MR. JORDE: Thank you.
7	BY MR. JORDE:
8	Q. Sir, we again discussed Quest Consultants,
9	and they have the CANARY program. Are you aware they
10	offer computational fluid dynamic solutions?
11	A. Yes, I am.
12	Q. And would you agree with that first
13	sentence there, the quote, "In some situations the
14	simplifying assumptions made with practical modeling
15	solutions do not apply," end quote?
16	A. Yes. I think it goes on to say I think
17	we've already established the fact that Quest is right
18	up front, and they state that CANARY does not handle
19	the effects of terrain as it relates to vapor
20	dispersion modeling for CO2 or other heavy vapors.
21	So they're putting us on notice by that
22	statement that had some additional analysis needs
23	to take place here.
24	Q. Would you agree with the statement there,
25	that, quote, "The techniques of computational fluid

- 1 dynamics, CFD, are required to find solutions to
- 2 complex problems where other simpler models aren't
- 3 appropriate," end quote?
- 4 A. Yeah. And, again, I'll restate what I
- 5 just -- what I just said. So we recognize the
- 6 limitations of CANARY, right?
- 7 It's a hammer. It can deal with a nail.
- 8 When we get to screws, we need another tool.
- 9 O. And your solution, rather than doing a
- 10 unified computational fluid dynamic analysis, was to
- 11 utilize two separate softwares by two separate
- 12 providers; correct?
- 13 A. So, yes. The over-land flow is a result of
- 14 a digital elevation model, which is publicly available
- in Esri, and the FLO-2D model.
- 16 MR. JORDE: I would offer Exhibit LO-582.
- 17 (Jorde Landowners Exhibit LO-582 was
- 18 offered into evidence.)
- 19 BOARD CHAIR HELLAND: Are there any
- 20 objections?
- 21 MR. LEONARD: Objection on foundation
- 22 grounds, Your Honor.
- 23 BOARD CHAIR HELLAND: Thank you. The
- 24 objection is noted.
- The exhibit will be admitted and provided

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the weight due.
 1
 2
                (Jorde Landowners Exhibit LO-582 was
 3
     admitted into evidence.)
 4
                MR. JORDE: I would also offer LO-550,
 5
     which is Mr. Louque's deposition.
                (Jorde Landowners Exhibit LO-550 was
 6
 7
     offered into evidence.)
 8
                BOARD CHAIR HELLAND: Are there objections?
 9
                MR. LEONARD: No objection.
10
                It may already be admitted, but no
11
     objection to any of that.
12
                BOARD CHAIR HELLAND: Thank you.
13
     BY MR. JORDE:
14
                Sir, pursuant to --
           Ο.
                BOARD CHAIR HELLAND: We'll admit it again.
15
16
     Thank you.
17
                (Jorde Landowners Exhibit LO-550 was
18
     admitted into evidence.)
19
                MR. JORDE: Thank you.
20
     BY MR. JORDE:
                Sir, pursuant to your efforts on carbon
21
           0.
22
     dioxide modeling, did you utilize or review any
23
     studies or any best practices relative specifically to
24
     carbon dioxide pipeline modeling techniques as opposed
     to just hazardous pipelines generally?
25
```

Say that again. 1 Α. I'm sorry. 2 0. Yes. That's okay. 3 In preparation and throughout the course of 4 your work in performing the functions that Summit 5 hired you to do, did you or anyone on your team review, study or utilize any type of peer-reviewed 6 7 reports or studies specifically on dispersion modeling 8 techniques related to carbon dioxide? 9 So the one report or study that I would Α. 10 offer would be the American Petroleum Institute 11 quidance documents. I'm aware of that document. We've reviewed that document. 12 13 In addition to those documents, the 14 Satartia -- anything in -- well, what I could find 15 related to Satartia and the causes and shortcomings at Satartia. We reviewed those. 16 17 We have experience with other CO2 pipeline 18 operators where we have produced vapor dispersion models. We had the benefit of that information. 19 20 So I think I -- I tried to answer the 21 question. 22 Are you familiar -- Well, certainly you're 0. 23 familiar with the different types of model categories such as integral FD, some of the ones we've been 24 25 talking about. Those generally are --

1 Α. Yes, vaguely. 2 And what about the model names? Are you Q. 3 familiar with SLAB, S-L-A-B? 4 Α. Only through the Australian report. 5 0. And you're there discussing about the Sherpa Consulting result? 6 7 Α. Yes, that's right. All right. 8 Q. 9 If we could pull up, please, MR. JORDE: 10 LO-580. 11 (Brief pause.) 12 MR. JORDE: All right. And then if we 13 could go to page 110, please. If we could just scroll 14 down to the bottom half of the page. Just keep going 15 there a little bit. A little bit further, please. 16 There we go. 17 BY MR. JORDE: 18 So the SLAB model, S-L-A-B, do you agree 0. that the CANARY software package by Quest fits under 19 20 the SLAB model category? 21 That's what it says in this report. Α. 22 MR. JORDE: And then if we could go to 23 page 19, please. Thank you. 24 BY MR. JORDE: 25 Now, in terms of your selection of the Q.

- 1 potential tools available to perform the worst-case
- 2 modeling, as you've testified, are you or have you
- 3 familiarized yourself with a chart like this, and if
- 4 so, did you utilize it to help select the modeling
- 5 tools you used?
- 6 A. So I'm familiar with this chart, and the
- 7 answer to the second part of your question is no.
- 8 The date of this report is 2015. It is not
- 9 state-of-the-art. There have been multiple changes,
- 10 upgrades, et cetera from CANARY and others to improve
- 11 their product that is offered in the market.
- 12 Q. And that may be true, but would you agree
- 13 with me that the CANARY system also falls under that
- 14 SLAB category, and the very first row there still has
- 15 not been updated to provide or account for complex
- 16 terrain and obstructions; right?
- 17 A. Yes. I've already stated that.
- 18 O. And the answer would be the same? The
- 19 CANARY model still to this day is not able to account
- 20 for complex meteorology?
- 21 A. I can't answer that question. So between
- 22 today and 2015, I can't answer whether or not CANARY
- 23 or Quest Consultants has updated their software to
- 24 handle that particular category.
- Q. But are you aware that the FD or the fluid

- 1 dynamic modeling choices for software are, in fact,
- 2 able to do both of those things; account for complex
- 3 terrain obstructions and account for complex
- 4 meteorology?
- 5 A. That's what it says in their report.
- 6 Q. Do you have any reason to dispute that,
- 7 that that's true?
- 8 A. I do not.
- 9 MR. JORDE: If we could go to page 108,
- 10 please.
- 11 BY MR. JORDE:
- 12 Q. Do you see there, sir, on Table 8.1 that
- 13 both PHAST and SLAB are listed in the integral model
- 14 category?
- 15 A. Yes.
- 16 Q. Okay. And does "integral" mean anything
- 17 specific to you?
- 18 A. It does not.
- 19 O. All right. Do you understand that both
- 20 PHAST and CANARY assume the Gaussian distribution and
- 21 that they both suffer from the same weaknesses that
- 22 we've discussed for inability to deal with complex
- 23 terrain and then complex meteorology?
- 24 A. As far as the effects of complex terrain, I
- 25 understand. Meteorology, I couldn't comment.

1	MR. JORDE: I would offer LO-580, please.
2	(Jorde Landowners Exhibit LO-580 was
3	offered into evidence.)
4	BOARD CHAIR HELLAND: Is there an
5	objection?
6	MR. LEONARD: Yes. Objection on
7	foundation, Your Honor.
8	BOARD CHAIR HELLAND: Okay. The Board will
9	admit Jorde Landowners Exhibit LO-580 and give it the
10	weight due.
11	(Jorde Landowners Exhibit LO-580 was
12	admitted into evidence.)
13	MR. JORDE: This is contained in this
14	report, and I'd also offer LO-581, which is that chart
15	that we discussed previously, a one-pager.
16	(Jorde Landowners Exhibit LO-581 was
17	offered into evidence.)
18	BOARD CHAIR HELLAND: Objections?
19	MR. LEONARD: Same objection.
20	BOARD CHAIR HELLAND: Okay. Thank you.
21	Mr. Jorde, what was the label on it again?
22	Jorde Landowners Exhibit what?
23	MR. JORDE: LO-581.
24	BOARD CHAIR HELLAND: Jorde Landowners
25	Hearing Exhibit 581 will be admitted and given the

- weight due. 1 2 (Jorde Landowners Exhibit LO-581 was 3 admitted into evidence.) 4 Thank you. If I could have you MR. JORDE: 5 pull up Exhibit LO-506, please. Thank you. BY MR. JORDE: 6 Sir, have you ever seen Exhibit 506 before 7 Q. or become aware of its existence? 8 9 I've seen this. Α. 10 And have you been made aware that in the Q. 11 South Dakota Public Utility Commission hearings that 12 Navigator, another proposed CO2 pipeline company, 13 decided to release this particular exhibit and make it 14 public? 15 Α. Not specifically, but I assume since I've
 - 16 seen it, yes, it's public.
 - 17 Q. All right. And given that Summit has 18 varying sizes in terms of diameter of pipeline,
 - 19 hazardous pipeline proposed for Iowa, did your company
 - 20 do any modeling on 8-inch diameter pipeline?
 - 21 A. Yes, we did.
 - Q. And do you have any disagreement with the
 - 23 hazard distances or the potential release from an
 - 24 8-inch diameter pipeline as shown here to go -- or to
 - 25 travel at least as far as 1,855 feet from the rupture

1	site?
2	MR. LEONARD: Objection, Your Honor.
3	BOARD CHAIR HELLAND: State your objection.
4	MR. LEONARD: Objection based on that's a
5	back-door way of asking what Summit's modeling maps
6	look like, which should be reserved for the
7	confidential section to the Board's order.
8	BOARD CHAIR HELLAND: That's sustained, so
9	let's move your questions to the confidential session.
10	MR. JORDE: All right. Give me a moment
11	here.
12	BY MR. JORDE:
13	Q. Forget the actual distances. Let's not go
14	there right now.
15	Can you tell me, without telling me the
16	quantity or the actual numbers of the inputs, did you
17	model varying rates of wind speed on a guillotine
18	rupture?
19	A. Yes.
20	Q. And did you model varying release rates on
21	a guillotine rupture?
22	A. Yes.
23	Q. And what about release calculation method?
24	Can you just describe what that is?
25	A. What do you mean?

	1	Q.	Well, when you input data in the model, in
	2	the FLO-2D	model or CANARY, did it have an ability to
	3	have an ing	out of the release calculation, meaning the
	4	time of the	e release of the volume?
	5	A.	So the release duration is what you're
	6	asking?	
	7	Q.	We'll start with that.
	8	A.	Okay. Yes.
	9	Q.	And the release direction you also modeled?
	10	A.	Yes. It was modeled as a guillotine break
	11	in the most	conservative condition.
	12	Q.	And did you say that was 5 degrees most
	13	conservativ	ve, or did we not cover that?
	14		MR. LEONARD: Objection. It goes to the
	15	content of	the confidential material.
	16		MR. JORDE: Well, I think he actually gave
	17	that answer	already, but if you didn't
	18	BY MR. JORI	DE:
	19	Q.	Do you recall if we discussed that?
	20	Α.	I've given the answer previously, yes.
	21	Q.	Because we've already discussed that, I
	22	don't need	to go further.
	23		You did say "5 degrees," correct,
	24	previously?	
	25	A.	Yes.
1			

All right. And is that release 1 0. 2 direction -- when you used the word "conservative," 3 again, it might be a little confusing, or at least 4 I'll speak for myself. When you're saying 5 "conservative," you mean that word to describe actual 6 worst case? That's correct, worst case being it defines 7 Α. CO2 concentration maximum distance from center line at 8 9 grade. 10 What makes you believe that a 5-degree Q. 11 release is worse or more capable of producing a more 12 dangerous event than a vertical release? 13 Α. So when we -- So when we're looking at 14 those buffers and we're looking at the extent of 15 potentially impacted receptors, the optimized angle produces the largest distance there for the 16 17 concentration, whatever that might be; wherever we 18 decide to draw a line or lines on the concentration at 19 grade. 20 And is that true using that 5-degree input? Q. Is that true even if we change the other variables? 21 22 Are you able to testify that all things 23 being equal, the 5-degree release will across the 24 board generate the worst case? In terms of the limits of those buffers, 25 Α.

- 1 yes.
- 2 Q. And atmospheric temperature, I think we've
- 3 talked about that. You modeled that variable; right?
- 4 A. Yes.
- 5 O. And temperature of the CO2 molecules
- 6 themselves inside the pipe, is that something that you
- 7 modeled, and if not, why not?
- 8 A. Yes.
- 9 O. Okay. And did you model that across
- 10 varying temperatures, understanding that the
- 11 temperature can fluctuate throughout the length of the
- 12 pipeline?
- 13 A. I understand the latter, yes.
- 14 Q. Atmospheric stability class. You're
- 15 familiar that that is on a gradient of Class A to
- 16 Class F; correct?
- 17 A. Yes.
- 18 Q. With F being described as the most unstable
- 19 weather conditions?
- 20 A. I don't think that's right. I think F
- 21 is -- if I had the chart in front of me, I could
- 22 state. I just don't want to make sure you got it
- 23 backwards.
- Q. Okay. I think you're right. I think A is
- 25 the most unstable and volatile, and F would be the

most calm. 1 2 Α. Most stable. 3 Most stable. And so relative to our 0. 4 discussion on wind speed, would you agree that we 5 would want to model an F-class stability to get to a worst case most likely? 6 7 Α. Yes. 8 All right. And, again, not a trick 0. 9 question, but just because there's less turbulence, 10 there's less wind and less dispersion, right, 11 generally? 12 I'm just -- You know, I'm not trying Α. Yes. 13 to be -- I'm not trying to give you a trick answer. 14 just want to make sure I'm -- you know, I should be 15 disclosing results. 16 0. Well, I appreciate that. I'm not getting to results. I'm just trying to understand the inputs 17 18 without even asking you too much detail, but I appreciate that. And then your modeling was focused 19 20 on a 40,000-parts-per-million concentration; correct? 21 Objection. That does go to MR. LEONARD: 22 content of the confidential documents. 23 MR. JORDE: Okay. 24 BY MR. JORDE: 25 Do you believe that Navigator, in its Q.

- 1 exhibit that we were looking at earlier, 506, was
- 2 prudent in selecting 40,000 parts per million in its
- 3 worst-case analysis?
- 4 A. So I think there are any number of ways to
- 5 display the results graphically with the modeling. As
- 6 I said previously, you have to draw some lines
- 7 somewhere.
- 8 The lines all mean different things for
- 9 different folks, but the 4 percent CO2 concentration
- 10 is one of the boundaries that I think, you know, most
- 11 pipeline operators would consider drawing, if that
- 12 makes any sense.
- 13 Q. And would you agree that that's because at
- 14 lower levels, perhaps, we're not as concerned, and
- 15 that that 4 percent, which equates to 40,000 parts per
- 16 million, is a level where we're concerned about hazard
- 17 and risk, and that's why we model that?
- 18 A. So I will say that that particular value
- 19 was one that Summit was interested in drawing or
- 20 displaying.
- I will say it's not arbitrary, but for me,
- 22 you know, that wasn't -- like I said, if you want to
- 23 see a concentration plume versus distance, that's
- 24 fine. We can do that, but that may not be easy to
- 25 understand or interpret.

- 1 Q. And in terms of, you know, a layperson
- 2 might think, "Well, a 24-inch pipeline, say, in a
- 3 10-mile span, if we just shut off the valves and just
- 4 accepted that it was at full capacity as 10 miles by
- 5 8 inches, that that would be one-third the volume of a
- 6 24-inch pipeline over the same span."
- 7 Is it, in fact, true, sir, that the volume
- 8 in a given pipeline length is not a linear
- 9 progression? Is that true?
- 10 A. That is true.
- 11 Q. And, in fact, in the 24-inch pipeline,
- 12 which is, obviously, three times 8, there is more than
- 13 three times the amount of volume and CO2 capacity?
- 14 A. The volume of any cylinder is proportional
- 15 to the radius squared times the length.
- 16 Q. Okay. That's why we've got you here.
- And so what, then, would be the factor, the
- 18 multiplier if I wanted to understand the difference in
- 19 volume between a 24-inch segment and an 8-inch segment
- 20 with the length being the same?
- 21 A. In terms of models, that would be your
- 22 release rate.
- 23 O. Okay. But can you just tell me, like, for
- 24 instance, is it -- you say, "Mr. Jorde, if you had a
- 25 10-mile 24-inch, you could actually have five times

0.

the volume in an 8-inch," I'm curious how to calculate 1 2 that. 3 I'd be speculating if I said anything. I'm Α. 4 thinking about examples, and it's not linear. So --5 0. You just told me about the radius-squared. It's not linear, but it's not factored of 6 Α. 7 some power. It's somewhere in between. 8 Okay. And I'm a lawyer because I'm not a 0. 9 math quy, so I need your help. I mean, is there --10 Certainly there's a calculation that should be pretty 11 straightforward. Do you know what that is? 12 MR. LEONARD: Objection. 13 BOARD CHAIR HELLAND: State your objection. 14 MR. LEONARD: Calls for speculation. 15 BOARD CHAIR HELLAND: We're asking the witness to do some fairly complex math in his head on 16 17 the stand. So if you know the answer, you may answer 18 it, but you don't have to. 19 The answer is that's what the modeling Α. 20 tools are working out, okay? So instead of using 21 rules of thumb like we're trying to do here, CANARY is 22 actually telling us, based on the thermodynamics and 23 hydraulics, where those calculations are going to be. 24 BY MR. JORDE:

I'll take your word for that. I have a

- 1 calculator here. I want to know a rule of thumb
- 2 without getting precise.
- Is it just the radius-squared? Obviously,
- 4 we're calculating volumes. This isn't --
- 5 A. Yeah, but you're trying to infer something
- 6 about concentration at grade based on volume alone,
- 7 and that doesn't make any sense.
- 8 Q. Well, that can be said about me a lot of
- 9 times, but I'm asking the questions. So forget
- 10 dispersion. Forget a leak. Forget there's a rupture.
- I just want to know: How do we figure out
- 12 the volume in a cylinder between 8-inch to 24-inch?
- 13 If we know it's greater than three times, how do we
- 14 figure that out?
- 15 A. I just -- We just talked about how to
- 16 calculate the volume of a cylinder. It's a
- 17 straightforward mathematical that's not directly
- 18 related to vapor dispersion modeling.
- 19 O. I understand that. I'm just at the first
- 20 part.
- 21 Radius is half the diameter; right? So we
- 22 take 4-squared. Does that get us there? Help me out,
- 23 and then I'll move on.
- 24 A. This would be pure speculation on my point.
- 25 There's no reason -- I mean, like I said, the software

- 1 is working that out. That's the whole purpose of the
- 2 software, based upon all of the inputs that we've
- 3 talked about, is to tell us where the CO2 vapor
- 4 concentration is on the ground.
- 5 Q. Right, and I'm sorry if you're getting
- 6 confused. I'm not talking about concentration on the
- 7 ground. This hasn't even left the pipeline.
- 8 My question is within the pipeline, just
- 9 within the cylinder.
- 10 A. Yep.
- 11 Q. That's all I want to do.
- 12 A. Okay.
- Q. Okay. So remember, 8-inch cylinder, pick
- 14 the distance -- doesn't matter to me -- and then a
- 15 24-inch cylinder, same distance as 8-inch. How do we
- 16 figure out that multiplier?
- 17 A. The multiplier for when? The ratio of
- 18 volumes?
- 19 Q. Yes, sir.
- 20 A. Well, we've talked about it. So the
- 21 equation for volume of a cylinder is pi R-squared L.
- 22 Get your calculator out and do it for the different
- 23 diameters.
- Q. Okay. So once we do that, and then we just
- 25 can figure out, obviously, divide the two, and then we

get the ratio; right? 1 2 Α. Of volume, yes, in the pipeline. 3 All right. Very good. See, that wasn't so Q. 4 hard. 5 Α. It was not. 6 Q. Okay. Let's see. MR. JORDE: 7 I'm trying to see if I have anything else, Your Honor, before I'm getting too 8 close to the confidential items here. Give me one 9 10 moment. 11 (Brief pause.) 12 BY MR. JORDE: 13 I think you mentioned that you performed 0. 14 analysis -- dispersion analysis per state on the 15 footprint. Was that true, or was it just a handful of the states? 16 17 We've done the analysis for every mile of Α. 18 this pipeline, to my knowledge. 19 Across the footprint? 0. 20 Α. Correct. 21 All right. And would you have, then, Q. 22 utilized specific geographic areas in each state 23 that's specific to a worst-case event per state? 24 Α. Per state. 25 Q. Per state. Okay.

1	A. Yes.
2	MR. JORDE: All right. I think I'll pass
3	and reserve the balance for confidential session.
4	BOARD CHAIR HELLAND: Okay.
5	Mr. Meyer?
6	CROSS-EXAMINATION
7	BY MR. MEYER:
8	Q. Good afternoon, sir.
9	A. Good afternoon, Mr. Meyer.
10	Q. I don't have nearly as many questions, and
11	I hope I can ask them in a way that we can stay here
12	and stay on the record here as we are.
13	A. Okay.
14	Q. Looking at your rebuttal testimony on
15	page 7, you were addressing some of, I guess,
16	Mr. Craighton's testimony, and I wanted to ask about
17	some of the pressure that you mentioned in your answer
18	on page 7.
19	A. Okay.
20	Q. You say the maximum operating pressure
21	is you say in Hardin County is 2,183 PSIG. I know
22	what PSI is, pounds per square inch. What's the G
23	for? Gas?
24	A. Gauge.
25	Q. What's that?

It subtracts atmospheric pressure 1 Α. Gauge. 2 from the pressure in the line. 3 Do you know if that maximum pressure for Q. 4 that figure, that 2,183, is the maximum structural 5 integrity of the proposed pipeline? It is not. 6 Α. 7 0. I would assume it's less? 8 It is less. Α. 9 Is the -- Just generally speaking, because 0. 10 I don't know if they would consider the structural integrity as confidential information, but does that 11 12 structural integrity increase or decrease when you go 13 from a 6- to 8- to 24-inch pipe, or is it the same? 14 So when you look at allowable stress in any 15 cylinder, the outside diameter is part of the equation, and it's in the denominator. So as the 16 17 diameter increases, the maximum pressure that that 18 cylinder will supply decreases or cylinder will hold 19 decreases for a given -- all else being the same in 20 that equation, all right? 21 So for a given wall thickness, for a given 22 grade, et cetera, et cetera. 23 So the structural integrity of a 6-inch 0. 24 pipe is going to be less than the structural integrity 25 of a 24-inch pipe?

No, that's not the case. So when you're 1 Α. 2 calculating the maximum -- the design pressure or the 3 maximum pressure or the burst pressure, which all tend 4 to kind of line up, it's a function of the allowable 5 stress of the material. It's a function of the wall thickness, and it's a function of the OD. 6 So I can manipulate. So if I know I've got 7 8 larger pipe and I want to be able to operate at a 9 certain pressure, I can use materials that exhibit 10 higher allowable stresses. I can increase wall 11 thickness to get to that pressure. 12 Does that make sense? 13 So far. So for your model, did you use 0. 14 what Summit is claiming for an operating pressure? 15 Α. Yes. Or the structural integrity pressure? 16 0. 17 The MOP. So the MOP, it's not an arbitrary Α. 18 Think of it as the speed limit in terms of 19 pressure. 20 So every pipeline in this country, whether it's gas or liquid, has an MAOP or MOP. Pipeline 21 22 operators are obligated not to exceed that pressure. 23 They can never operate above that MOP. 24 Q. On my car it will go higher than 55, even

though I'm not supposed to.

Right, right. 1 Α. 2 So what we're asking about is: What Q. 3 happens when I go over 55 by human error or structural 4 error or some failure? 5 I'm wondering, would you be able to run a model using the structural maximum tolerance? Because 6 7 when it blows, it isn't going to be 55 that causes the 8 It's going to be when I'm going 90. problem. 9 So there are measures -- I'm going Α. Yeah. 10 to try and answer your question. Anything's possible, 11 all right? 12 But there are measures and provisions on 13 this pipeline and any pipeline that protect that MOP 14 over pressure protection, right? So you might be able 15 to go higher than 55, but the UPS truck next to you has a governor on it that limits it to 55 no matter 16 17 how hard you press the accelerator. 18 I get it. We're trying to avoid speeding, 19 but if the folks in Hardin County want to be prepared 20 for the worst possible scenario, shouldn't we expect the pipe to blow at its structural failure? 21 22 Α. No. 23 0. Why not? 24 So, I mean -- so remember, the MOP, it Α.

includes some safety factor, which is based upon -- so

- some design factor; right? And that MOP is based --2 also based upon I put a half-inch-thick wall in the 3 pipe and wall thickness in the ground, and I got a 4 half-inch wall thickness pipe in the ground, right? 5 That's not always the case.
 - So the whole purpose of the MOP is to 6
 - 7 provide some margin of safety between the operating
 - 8 pressure and the burst pressure between which the
- 9 operator is obligated to protect that number.
- 10 why we can't exceed it, right?
- 11 And also to assess at the same time to make
- 12 sure that on Day 365 that that pipeline is in the same
- 13 condition as it was on day one, right? So MOP, it's
- 14 something -- it's your speed limit.
- 15 There's a safety factor between there and
- 16 burst pressure. We never want to get to burst
- 17 pressure regardless.
- 18 So if we're doing a laboratory experiment,
- 19 then I think the answer to your question is yes, this
- 20 is actually taking steel out and putting it in the
- ground and operating. 21
- 22 Does that make sense?
- 23 I understand you want to pick and choose 0.
- 24 the numbers you input, but let's input the worst-case
- 25 scenario, because you haven't done that yet, have you?

1	A. We haven't used the burst pressure.
2	Theoretically, again, you would never
3	Q. You could; right?
4	A. You would never exceed the MOP. That's why
5	it's there.
6	Q. But you could run that model?
7	A. Sure. We can input any pressure.
8	Q. Why don't you use the rupture pressure?
9	Take out the word "why."
10	Would you please run the rupture pressure
11	for Hardin County so we can prepare for that
12	A. So I've stated several times that we've
13	used the most you know, this is a conservative
14	approach. The most conservative pressure number to
15	input into this model is the MOP.
16	Not all parts or segments or feet of this
17	pipeline will see 2183, all right, a less
18	conservative.
19	Q. Do you think
20	A. Go ahead.
21	Q. Would it be your Drawing by analysis
22	here, should the Transportation Department create
23	safety seat belts that will succeed up to 55 miles per
24	hour, but beyond that, they're just going to fall
25	apart?

Q.

I'm not going to follow that. 1 Α. Yeah. 2 That's what you're expecting --Q. 3 BOARD CHAIR HELLAND: Mr. Meyer, make sure 4 we're not speaking over each other. We have to make 5 sure the record is clean. Make sure we're finishing 6 our sentences. THE WITNESS: 7 Okay. 8 Α. So the worst-case pressure that this 9 pipeline will ever see under the 195 rules, laws is 10 2183, and that's the number that we're using for the vapor dispersion model. 11 BY MR. MEYER: 12 13 You can't guarantee it's going to operate 0. 14 within the law, can you? 15 Α. It's an engineered piece of equipment, right, that's designed to operate at that pressure. 16 17 0. And there's a saying for equipment. If you 18 use it, it will break. 19 I'm not sure where you're going with Α. Yeah. 20 this, but, you know, the safety factor that's built into this for the design margin is there to protect 21 22 against some of the things that you're talking about. 23 On paper it works perfectly? 0. 24 I've got no comment to that. Α. 25 In your 30 years of experience with

pipeline integrity, would you agree that fail points 1 2 are at joints or elbows in the line? 3 No, I would not agree. Α. 4 So the number of -- So asking Summit to 0. 5 turn more here or there isn't going to create more safety concerns, in your opinion? 6 7 Α. That's correct. I have no other questions. 8 MR. MEYER: 9 BOARD CHAIR HELLAND: Thank you. 10 Mr. Whipple? 11 CROSS-EXAMINATION BY MR. WHIPPLE: 12 13 Just one question for the open session for 0. 14 you, Mr. Louque. 15 Do you happen to know what the actual pressure was in the Satartia incident when it 16 17 ruptured? 18 I do not. I do know that it was a dense 19 phase CO2 pipeline, and it was probably Class 900, 20 which would have given them the option to operate at pressures similar to this pipeline, but in terms of 21 22 what they were operating at, I have no idea. 23 But just to refer to the question a moment 0. 24 ago from Mr. Meyer, can you be certain that they were 25 operating within the maximum operating pressure --

1	A. Yes.
2	Q. You can be certain of that?
3	A. Yes. If they had exceeded MOP, that would
4	have been in the accident report. They would have
5	paid fines. It would have been really, really not
6	good for them.
7	MR. WHIPPLE: Okay. That's all I have for
8	the non-closed session, Your Honor.
9	BOARD CHAIR HELLAND: Thank you.
10	Ms. Gruenhagen?
11	MS. GRUENHAGEN: I believe Mr. Taylor's
12	tent was up first.
13	BOARD CHAIR HELLAND: Oh. He was on my
14	list first. Sorry.
15	Mr. Taylor?
16	MR. TAYLOR: I didn't know I was on your
17	list.
18	CROSS-EXAMINATION
19	BY MR. TAYLOR:
20	Q. You've mentioned guillotine ruptures or
21	guillotine cuts. If a pipe wears out or it's corroded
22	or there's some pressure put on it that's more than it
23	can handle, would it always be a guillotine rupture,
24	or is there some other type of rupture it might be?
25	A. There are other failure modes to your

- 1 point, sir.
- 2 Q. So why do you just talk about a guillotine
- 3 rupture?
- A. Because we're talking about conservative --
- 5 we're talking about a conservative approach here.
- 6 We're talking about impacting the largest number of
- 7 receptors.
- 8 Q. Okay. So a guillotine rupture would give
- 9 you the worst-case scenario?
- 10 A. Yes, sir.
- 11 Q. Okay. Got it.
- 12 A. Okay.
- 13 O. I have seen videos of a CO2 rupture, and it
- 14 looks like there's a big, white plume that comes out
- 15 first, and then it goes down to the ground. Then as
- 16 it gets farther out, it becomes less colorful, shall
- we say.
- 18 Is that how you envision it?
- 19 A. No, sir. I think some of those videos that
- 20 are out there that you're referring to are actually
- 21 water or water vapor. So I -- I hesitate to
- 22 speculate, but what -- so I'll leave it at that.
- Q. Okay. Well, the one I saw was from DNV,
- 24 which is a reputable firm.
- 25 A. Yeah. I think I would reserve that

question for John Godfrey and let John answer that 1 2 question. 3 0. All right. So what do you envision a CO2 4 plume and dispersion would look like? 5 Α. So what it would look like? It would be really loud, right? Jet release. It would be really 6 7 It would be really disruptive. 8 You've got the cooling effect going on 9 there, so any water vapor that was in the air in the 10 So water vapor would be what you see coming vicinity. 11 out of the stacks of power plants, right? You would 12 start to see water vapor form in and around the area. 13 And then you would -- there would be some 14 presence or visual presence of dense phase or dense 15 vapor -- sorry -- CO2 component. You would probably also -- Well, there would also be some solid particle 16 17 fallout, right, from the cooling effect on the CO2 18 itself. 19 Beyond that, I'm quessing. 20 Okay. One final topic here. Q. 21 Depending on where the rupture is on the 22 pipe, would the angle of the release be different? 23 other words, it might come straight up, or it might 24 come out at an angle. 25 Does that affect the dispersion modeling?

1	A. Yes, sir. The angle of the leak does
2	impact the CO2 dispersion.
3	Q. Okay. And then that's something you take
4	into consideration in your modeling?
5	A. Yes, sir.
6	MR. TAYLOR: Okay. Thank you. That's all
7	the questions I have.
8	BOARD CHAIR HELLAND: Thank you.
9	Ms. Gruenhagen?
10	MS GRUENHAGEN: Thank you, Your Honor.
11	CROSS-EXAMINATION
12	BY MS. GRUENHAGEN:
13	Q. I just have two quick questions.
14	A. Sure.
15	Q. First, I assume the answer is yes to this,
16	but will Summit's Integrity Management Plan include
17	high-consequence areas?
18	A. Yes. All pipeline operators' plans will
19	include high-consequence area identification.
20	Q. Will their Integrity Management Plan
21	include any non-high-consequence areas along the
22	route?
23	A. I'm going to split hairs here. When you
24	look at the 195 Code, high-consequence areas and
25	integrity management are synonymous. You can't

	-
1	separate them, okay?
2	There are other I hate to even say this.
3	There are other assessments or other integrity-type
4	assessments that do have to be performed outside of
5	high-consequence areas. Those assessments are
6	brand-new as a result of the Mega Rule, so within the
7	last year that became part of a law.
8	Q. So as far as the integrity management Go
9	ahead.
10	A. The last thing I'll say and this is
11	where I'm splitting hairs all of that is covered.
12	So non-ACA is covered under operations and
13	maintenance. HCAs is under the integrity management
14	section.
15	MS. GRUENHAGEN: Thank you.
16	BOARD CHAIR HELLAND: Thank you.
17	Ms. Ryon, I'm sorry. I didn't see your
18	name tag behind Mr. Whipple. Go ahead.
19	MS. RYON: That's okay.
20	CROSS-EXAMINATION
21	BY MS. RYON:
22	Q. I just have a couple quick questions
23	Mr. Taylor asked about. He had asked about other
24	types of ruptures, and I was interested in finding out
25	specifically if you had run any drafts using a running

- 1 ductile fracture.
- 2 A. So that was not part of our scope of work.
- 3 The worst case that we've identified would be the
- 4 guillotine break.
- 5 O. So it would be your contention that a
- 6 guillotine break would create a worst-case scenario;
- 7 it would be worse than a running ductile fracture?
- A. Yes, ma'am.
- 9 MS. RYON: Thank you.
- 10 BOARD CHAIR HELLAND: Any other questions
- 11 from the parties before we go into confidential
- 12 session?
- 13 MR. JORDE: Yes. I have a couple I forgot.
- 14 I'm sorry. It will be quick.
- 15 BOARD CHAIR HELLAND: Hold on. Go ahead.
- 16 MR. JORDE: Okay.
- 17 RECROSS-EXAMINATION
- 18 BY MR. JORDE:
- 19 O. Sir, do you agree that if it's reasonable
- 20 for a landowner, who is being asked to sign an
- 21 easement that would host this hazardous pipeline, that
- 22 they have in hand, in order to make an informed
- 23 decision, your worst-case analysis that you prepared
- 24 for your client?
- 25 A. I'm not going to speculate there.

You don't have an opinion either way? 1 0. 2 Α. No, I don't. 3 Okay. We touched a little bit on risk Q. 4 Are you generally familiar with these avoidance. 5 concepts: Risk avoidance, risk management, event 6 response? So the first two absolutely. "Event 7 Α. response" could mean multiple things to me. 8 9 And would you agree that risk -- in looking 0. 10 at risk avoidance, one could utilize air dispersion 11 and plume programs to minimize the collective impact 12 and utilize that in routing as to avoid many of the 13 at-risk areas? 14 In my -- What I consider "risk avoidance" Α. 15 would not encapsulate what you're talking about. risk avoidance are the physical barriers that we can 16 17 put in place to prevent an event from even happening. 18 So to be clear, you don't believe that 19 selecting a location of a hazardous pipeline is a 20 variable in risk avoidance? 21 I'm trying to be -- I'm trying to answer Α. 22 your question. 23 You know, so risk avoidance would be if I 24 want to put barriers in place to make sure this never happens; like, increasing wall thickness. 25 That's a

- 1 risk avoidance strategy, okay?
- 2 Q. I totally get that. I just want to pin you
- 3 down here.
- 4 The way you look at the concept of avoiding
- 5 risk or risk avoidance does not include where to or
- 6 where not to locate a pipeline; you're talking about
- 7 after-the-fact variables?
- 8 A. No. It's not -- It wouldn't include where
- 9 to locate a pipeline. Risk avoidance are those things
- 10 that we can do to make sure or to lower the
- 11 possibility of anything ever -- any event ever
- 12 happening.
- 13 Does that make sense?
- Q. But those factors, such as wall thickness
- or valve spacing, those are all after a pipeline,
- 16 obviously, is located and exists?
- 17 A. There are several -- There are several risk
- 18 avoidance strategies that are available, and there are
- 19 several risk management strategies that are also
- 20 available.
- 21 I think the risk, in my -- If you want my
- 22 opinion, risk avoidance has everything to do with the
- 23 pipeline itself in the design phase. You may be
- 24 getting into risk management with some of the things
- 25 that you're talking about.

Well, what I'm talking about is the 1 0. 2 existence and the decision on where or where not to locate a hazardous pipeline. From your perspective, 3 you don't put that in the risk avoidance category? 4 5 Α. That's a good question for Kent Muhlbauer. Since you're here, is it true that you 6 Q. 7 don't put that in the risk assessment category? 8 I agree with you. Α. 9 All right. Thank you. Q. 10 Thank you, Chair. MR. JORDE: That's all. 11 BOARD CHAIR HELLAND: Okay. So a couple --12 I'm sorry. A couple quick things before we break. 13 We're going to start at 8:30 tomorrow. 14 For planning purposes, I need to get an 15 idea from the parties of how long we'll be in confidential session, and obviously, we don't need to 16 17 be rigid about it. I need to get an idea of how long 18 we need for confidential. MR. JORDE: Your Honor, I think I have at 19 20 least one hour, which probably means more, but that's the best I can give you right now. 21 22 MR. WHIPPLE: Your Honor, I would 23 anticipate 10, 15 minutes. 24 BOARD CHAIR HELLAND: So about par for 25 where we've been on most questions.

1	(Brief pause.)
2	BOARD CHAIR HELLAND: I guess for Summit,
3	would it make more sense to send Mr. Louque home
4	relieve him for the day and move on to the next
5	witness and then come back into confidential session
6	tomorrow?
7	MR. DUBLINSKE: Mr. Leonard and I
8	haven't had a chance to talk about it or think about
9	that.
10	BOARD CHAIR HELLAND: Do you want 15
11	minutes to think about that? We can be back here in
12	15 minutes.
13	We're going to take a 15-minute break right
14	now anyway, so let's just come back in 15 minutes.
15	We'll be here shortly before 5 o'clock.
16	(Recess taken.)
17	(Discussion was held off the record.)
18	BOARD CHAIR HELLAND: With that, we'll go
19	back on the record at 5 o'clock.
20	MR. LEONARD: Thank you, Your Honor.
21	Summit calls Dr. Michael Lumpkin.
22	BOARD CHAIR HELLAND: Good afternoon,
23	Dr. Lumpkin. Go ahead and raise your right hand.
24	
25	

1	MICHAEL LUMPKIN,
2	called as a witness by Summit Carbon Solutions, LLC,
3	being first duly sworn by Board Chair Helland, was
4	examined and testified as follows:
5	BOARD CHAIR HELLAND: Thank you. Make sure
6	you are speaking into the microphone. Move the mic
7	wherever you need it. Don't be shy with it.
8	MR. LEONARD: Thank you, Your Honor.
9	DIRECT EXAMINATION
10	BY MR. LEONARD:
11	Q. Are you the same Michael Lumpkin that
12	caused to be filed rebuttal testimony in this docket?
13	A. I am.
14	Q. If I asked you those same questions in your
15	testimony today, would your answers be substantially
16	the same?
17	A. They would.
18	Q. Do you have any modifications or
19	corrections to make to your prefiled testimony?
20	A. I have one.
21	Q. Can you tell us what that correction is,
22	please?
23	A. On page 7 of my prefiled testimony, I have
24	a typo that needed to be corrected. It is in regard
25	to the definition of the IDLH.

1	There's a typo that says "60 minutes." It
2	should be "30 minutes."
3	MR. LEONARD: For the benefit of Board
4	staff, look at line 18, I believe.
5	BOARD CHAIR HELLAND: Lines 18 and 19?
6	What was that correction?
7	THE WITNESS: On line 19 the correction
8	should be 30 minutes from 60 minutes.
9	BOARD CHAIR HELLAND: Okay. Thank you.
10	MR. LEONARD: Your Honor, I move the
11	admission of the Lumpkin rebuttal testimony.
12	BOARD CHAIR HELLAND: Are there any
13	objections, other than Mr. Jorde's standing
14	objections?
15	(No response.)
16	BOARD CHAIR HELLAND: Okay. It will be
17	admitted and given the weight due.
18	MR. LEONARD: We tender the witness for
19	cross.
20	BOARD CHAIR HELLAND: Mr. Taylor.
21	MR. TAYLOR: Thank you.
22	CROSS-EXAMINATION
23	BY MR. TAYLOR:
24	Q. I'm Wally Taylor, and I represent the
25	Sierra Club. At least part of your rebuttal takes

1	issue with our witness, Dr. Ted Schettler; is that
2	correct?
3	A. That is correct.
4	Q. First of all, looking at your testimony on
5	page 4 starting at line 11, you indicate that
6	high-level CO2 can be toxic to humans; is that
7	correct?
8	A. That is correct.
9	Q. And it's also an asphyxiant, is it not?
10	A. I'm sorry. What was that again?
11	Q. It's also an asphyxiant, is it not?
12	A. At sufficiently high concentrations, yes.
13	Q. And if I read your testimony correctly,
14	your only criticism of Dr. Schettler revolves around
15	your assertion that he's relying on outdated studies
16	or information; is that correct?
17	A. Partially.
18	Q. And your basis for saying that he's relying
19	on outdated information is based on a 2022 study that
20	you cite by Rutger van der Schrier and others;
21	correct?
22	A. That's the primary study on which I rely,
23	yes.
24	Q. That's the only one you mentioned. That's
25	why I said "the only one."

1	That's the only one you mention in your
2	testimony, isn't it?
3	A. That is correct.
4	MR. TAYLOR: Can we bring up Sierra Club
5	Exhibit 12?
6	BY MR. TAYLOR:
7	Q. Okay. Is that the van der Schrier study?
8	A. Yes, that's it.
9	Q. Okay. And it's my understanding that this
10	study was sponsored or commissioned by Shell Global
11	Solutions; is that correct?
12	A. That's my understanding as well.
13	Q. Okay. And, in fact, one of the authors of
14	the study I'm not sure I can pronounce the man's
15	name, but he is a Shell Global Solutions employee?
16	A. Looking at the study that's on the screen,
17	I see that there's an affiliation. One of the authors
18	does have an affiliation with Shell Global Solutions.
19	I can't remember who it is off the top of my head.
20	Q. Okay. And this study was basically using
21	some humans and some rats; correct?
22	A. That's correct.
23	Q. And they were exposed to increasing levels
24	of CO2 concentration?
25	A. That's correct.

Let's go to page 2 of Exhibit 12, and at 1 0. 2 the bottom of the page on the right-hand column, 2.2. 3 In talking about the participants, it says, "Healthy 4 male volunteers were recruited to participate in the 5 Inclusion criteria were age 18 to 25 years, body mass index in the range of 18 to 25 kilograms per 6 7 square meter with body weight between 50 and 100 8 kilograms." 9 Are you able to translate that into English 10 numbers? 11 Well, the study design was intended to look Α. at a large group of individuals as test subjects. 12 Ι 13 think they were trying to get the group to be as 14 homogeneous as possible for making comparisons. 15 0. Well, my question was: The body mass 16 index, does this indicate that these participants were 17 not overweight? They were of average build? 18 Α. That's correct. 19 And they had an absence of any significant Q. 20 medical, neurological or psychiatric illness; correct? 21 Α. Correct. 22 The next page on the top left. "Exclusion Q. 23 criteria were: A history of panic disorder; a history 24 of hypertension; present or a history of any illicit 25 drug use; present or a history of alcohol abuse;

- 1 smoking of more than ten cigarettes per day;
- 2 participation in a drug trial in the last three months
- 3 prior to screening; any physical abnormalities as
- 4 determined by an independent physician; or any other
- 5 issue/condition that in the opinion of the
- 6 investigator would complicate or compromise the study
- 7 on the well-being of the subject."
- 8 So boiling all of this down, these were
- 9 young, healthy individuals with no medical history
- 10 particularly, didn't smoke more than ten cigarettes a
- 11 day, and had no other physical abnormality.
- 12 So it was a very focused type of
- 13 participant, wasn't it?
- 14 A. Yes, it was.
- 15 Q. And the type of participant that would
- 16 probably withstand CO2 exposure in higher levels than,
- 17 perhaps, what we would call the ordinary person?
- 18 A. Well, not necessarily.
- 19 O. But if an elderly person were exposed, that
- 20 would be a different situation than these young
- 21 participants; correct?
- 22 A. If an elderly person were part of the
- 23 study, it would be -- they would biologically be
- 24 different from this group.
- 25 Whether or not that would play out into a

different result is -- that's not necessarily true. 1 2 Q. But we don't know, do we? 3 Α. We don't, no. 4 And on the lower right-hand part of that 0. 5 same page, it says, "The CO2 exposure ended when the intended duration of the experiment was reached, in 6 7 case stopping rules were met, upon request of the 8 subject, or upon judgment of the attending physician." 9 So there was some variance in when the 10 exposure ended, depending on various participants; 11 correct? 12 That is correct, yes. Α. 13 And on page 4 at the top left, after the 0. 14 CO2 exposure, the participants were given what's 15 called a p-deletion test; correct? I'm sorry. Could you repeat the question? 16 Α. 17 Sure. This is Section 2.2.6. It says that 0. 18 after the CO2 exposure the participants were given what was a modified p-deletion test? 19 20 Yes, that's correct. Α. And a p-deletion test means that the 21 Okay. Q. 22 subject is shown a line of letters with the letter P 23 randomly interspersed; correct? 24 Α. Correct. 25 And the test is how accurately they can Q.

determine the Ps and delete them; correct? 1 2 Α. That's correct. 3 And this test does not test the ability to 0. 4 think or to analyze or to make decisions; correct? 5 It's used to measure how fast and how accurately you can take those Ps out of there, but it doesn't measure 6 7 reasoning ability; correct? 8 Α. Well, indirectly it does. It is -- It's 9 designed to determine whether or not visual acuity and 10 mental recognition of patterns has been compromised. 11 But that doesn't take any reasoning or any Q. 12 thinking or any decision-making, does it? 13 Α. It's no complex decision-making, no. 14 Not the kind of decision-making you would 0. 15 need, if you were actually exposed to CO2 in the real world and had to make a decision on what to do; 16 17 correct? 18 I'm not sure I'm following the question. Α. 19 The p-deletion test doesn't measure the 0. 20 kind of reasoning or decision-making ability a person would need if they were exposed to CO2 in the real 21 22 world and had to make a decision on, you know, whether 23 to run, whether to shelter in place, whether to call 24 somebody? You know. Those kinds of reasoning 25 decisions? It doesn't measure that, does it?

I'm not familiar with it being 1 Α. Yeah. 2 associated with that type of decision-making. 3 Right. And as far as the rats are Q. 4 concerned -- this is on page 4, bottom left -- it 5 says, "Animals that appeared in discomfort or moribund (for example, gasping) prior to the end of the CO2 6 7 exposure were taken out of the inhalation box and 8 euthanized." 9 So that doesn't really measure the impact 10 on humans, does it, if they're taking the rats out as 11 soon as they appear in discomfort or are moribund? 12 Α. Well, the purpose of stopping the 13 individual rat trials early was to try and minimize 14 inhumane testing on the animals. The data had been 15 collected at that point, and then there would be postmortem exams done on the rat tissues. 16 17 Q. And then I'm looking at page 4 in the lower 18 right under 2.4. We have it up there already. 19 It says, "No formal data comparisons were 20 performed as this was an exploratory study. 21 Additionally, group numbers were small, comparisons 22 were hampered by data loss from a discontinuations 23 (human study) or premature death (animal study) and 24 concentration-effect relationships were evident, making a post hoc comparison less relevant." 25

1	So that sounds like there was a lot of
2	uncertainty in the test and that the data wasn't
3	particularly valuable.
4	A. I would disagree with that. The
5	description there of not performing post hoc analysis
6	refers to statistical comparisons between the groups.
7	So the purpose of the study, as I
8	understand it and in my opinion, was to look at the
9	grade of various physiological effects on both humans
10	and rats with escalated CO2 exposures. So they
11	weren't looking at, for example, the difference
12	between exposure and non-exposure in which a
13	statistical comparison would have been more useful.
14	Q. And then on page 12 is that page 12? Go
15	back up to the top again. Yes. Okay.
16	On the left-hand column there it says,
17	"When individuals are exposed to an excess of CO2 in
18	ambient air, an important question is at what levels
19	of CO2 inhalation does the human body maintain its
20	ability to adequately function to, for example, escape
21	from the incident scene or to perform a cognitively
22	challenging task. An answer to this question is not
23	only dependent on the results of our current study in
24	healthy young volunteers but is certainly also
25	dependent on the age and more importantly the physical

condition of the exposed individual as well as 1 2 presence of underlying cardiac or pulmonary disease." 3 So there's a lot of factors that are written in there, aren't there? 4 5 The study authors point out that the data, while very comprehensive with the data study group 6 7 both in humans and the rats, there are -- in their 8 discussion they mention there are uncertainties of how 9 some of this data can be extrapolated to other 10 individuals of various age or various health 11 conditions. The van der Schrier study refers, among 12 0. 13 others, to a 2014 study by Gill and others. Are you 14 familiar with that study? 15 MR. TAYLOR: Let's call up Exhibit 13. Is this the question still asked, am I 16 Α. 17 familiar with this study? 18 BY MR. TAYLOR: 19 Q. Yes. 20 Α. Yes. 21 And if we go to page 2, it says this study Q. 22 involves 16 male volunteers from among local certified 23 scuba divers or people who had previous 24 hypo/hyperbaric chamber experience at the laboratory. 25 So, again, this was some fairly healthy

- individuals; correct? 1 2 Α. That's correct. 3 And they use a cognitive function test Q. 4 called the auditory n-back test, which measures the 5 response to long and short sounds. Is that a fair statement of that test? 6 7 Α. Yeah, conceptually that's what that test 8 looks for. And the result was farther down where it 9 0. 10 says, "Determination of the highest tolerable inspired 11 CO2 limit." It says, "There was wide variability of 12 CO2 tolerance among the subjects." 13 So we don't really get a very firm 14 response, do we, or a firm result? 15 Α. Well, it depends on what you mean by "firm result." 16 17 Q. That different individuals had different
 - 19 A. That's correct, yes.

responses to the CO2.

- Q. In fact, on page -- Well, it's page 409.
- 21 This came out of another journal, I guess. It would
- 22 be at the top of the page, the page number. There it
- 23 is.

18

- Down at the bottom right-hand column, it
- 25 says, "Individual tolerance for" -- is that -- "PI-CO2

- 1 varied widely among our subjects, suggesting that CO2
- 2 exposure safety cannot be characterized by a single
- 3 value"; is that correct?
- 4 A. That is what this study says, yes.
- 5 Q. And then pull up Exhibit 14. This is from
- 6 the National Academy of Sciences.
- 7 Is that a document you're familiar with?
- 8 A. It is, yes.
- 9 O. It looks like it's from 2007, if you look
- 10 at the title?
- 11 A. Yes.
- 12 Q. On page 48, which is actually page 4 of the
- document, it talks about some studies showing that CO2
- 14 causes a variety of effects ranging from non-specific
- 15 signs and symptoms such as tremor, dyspnea,
- 16 intercostal pain and headache to cardiovascular and
- 17 CNS defects. What are "CNS effects"?
- 18 A. Effects on the central nervous system.
- 19 O. Thank you. It says, "Tremor was noted at a
- 20 CO2 concentration of 60,000 parts per million," and,
- 21 "It was also noted in 10 of 12 subjects exposed at
- 22 7,000 to 14,000 parts per million for 10 to 20
- 23 minutes."
- So based on your testimony, 7,000 to 14,000
- 25 parts per million would be a fairly low concentration,

1 wouldn't it? 2 It would be a fairly low concentration Α. relative to the exposures that have been tested in 3 4 other studies, yes. 5 And it says that dyspnea is a commonly recorded endpoint and can be induced by acute 6 7 exposures of CO2 at greater than 30,000 parts per million. 8 9 First of all, what is "dyspnea"? 10 The for -- I want to make sure we're Α. 11 looking at the right text. 12 Q. Let's go to the next page. There you go. 13 So dyspnea is an umbrella term for Α. 14 subjective breathing difficulties, and it can range 15 from something as mild as rapid breathing up to chest pain, breathlessness, things like that and anywhere in 16 17 between. 18 It's typically subjective, so there's not a 19 specific clinical measure of it. 20 Is it fair to say that it's subjective in Q. terms of its degree, but you can tell objectively if 21 22 somebody has dyspnea at some level? 23 Not necessarily. It's subjective in terms Α. 24 of how the patient or the participant describes it. 25 If I describe myself as feeling having

- 1 dyspnea, that may be very different from how you or
- 2 someone else would describe it.
- 3 Q. Okay. And I had Exhibit 15, but your
- 4 correction that you made in your testimony took care
- 5 of that.
- 6 It's 30 minutes rather than 60 minutes?
- 7 A. That's correct.
- 8 Q. And so you are basing your rebuttal
- 9 testimony on Dr. Schettler's direct testimony;
- 10 correct?
- 11 A. That is correct. More to my rebuttal than
- 12 just Dr. Schettler's testimony, but yes, I do address
- 13 his direct testimony.
- 14 Q. I understand there was more to your
- 15 rebuttal testimony than that, but I'm just focusing on
- 16 Dr. Schettler. And Dr. Schettler was using the
- 17 accepted National Institutes of Health level, was he
- 18 not?
- 19 A. He used several values, one of which was
- 20 the NIOSH IDLH.
- 21 Q. Right. Okay. And NIOSH is a government
- 22 agency?
- 23 A. It's a government-funded research group.
- 24 It's the research arm of OSHA.
- 25 Q. Okay.

1	MR. TAYLOR: I think that's all I have. I
2	would offer into evidence Dr. Ted Schettler's
3	testimony and Exhibit 1.
4	BOARD CHAIR HELLAND: We'll do the
5	testimony when it comes to the stand, but do you want
6	to do the exhibit [sic] now? Direct Exhibit. Sorry.
7	MR. TAYLOR: I guess my basis for offering
8	his testimony in at this time is that Dr. Lumpkin has
9	relied on it. He's testified about it. It seems like
10	it should come in on that basis.
11	(Schettler Direct Exhibit 1 was offered
12	into evidence.)
13	BOARD CHAIR HELLAND: Are there objections?
14	MR. LEONARD: No objection, Your Honor.
15	BOARD CHAIR HELLAND: So we will admit the
16	testimony and the exhibit and give it the weight due.
17	(Schettler Direct Exhibit 1 was admitted
18	into evidence.)
19	MR. TAYLOR: Okay. Thank you.
20	BOARD CHAIR HELLAND: Okay.
21	MR. TAYLOR: That's all the questions I
22	have.
23	BOARD CHAIR HELLAND: Okay. Very good.
24	Mr. Taylor, just to clarify that's not the
25	hearing exhibits. Did you want the hearing exhibits

1	admitted, too?
2	MR. TAYLOR: Yes, I'm sorry. Thank you.
3	(Sierra Club Hearing Exhibits 12 through 15
4	were offered into evidence.)
5	BOARD CHAIR HELLAND: No problem. Is there
6	objection?
7	MR. LEONARD: No objection, Your Honor.
8	BOARD CHAIR HELLAND: The Board will admit
9	the hearing exhibits and give it the weight due.
10	(Sierra Club Hearing Exhibits 12 through 15
11	were admitted into evidence.)
12	BOARD CHAIR HELLAND: We've still got a
13	half hour, if anybody wants to use it.
14	MR. JORDE: Five minutes. One minute
15	maybe, honestly.
16	BOARD CHAIR HELLAND: Go ahead, Mr. Jorde.
17	MR. JORDE: Thank you.
18	Along the same lines Jorde Landowners will
19	offer Exhibit LO-479, 480, 481. Those are the Sheri
20	Deal-Tyne exhibits that this witness relied upon,
21	rebutted and discussed; and then the same with 483 and
22	484. Those are the Carolyn Raffensperger exhibits for
23	the same arguments.
24	BOARD CHAIR HELLAND: Will you run through
25	those numbers again?

```
479, 480, 481, 483 and
 1
                MR. JORDE:
                            Yes.
 2
     484.
 3
                (Jorde Landowners Hearing Exhibits 479,
     480, 481, 483 and 484 were offered into evidence.)
 4
 5
                BOARD CHAIR HELLAND: Okay. Any objection?
                MR. LEONARD: We will object to foundation,
 6
     Your Honor. My understanding is we were going to
 7
     admit those as the witness testified.
8
 9
                MR. JORDE: And my response is they can't
10
     possibly call a rebuttal witness to rebut testimony
11
     without the testimony even being in. So this was
     their strategy. This was what they wanted to do.
12
13
                He's talked all about it and that their
14
     testimony should be in. They're documents he relied
15
     upon, and so foundation was waived.
16
                He's an expert and relied on it, so it
17
     comes in.
18
                BOARD CHAIR HELLAND: Okay.
                                             The Board will
19
     admit Jorde Landowners Hearing Exhibits 479, 480, 481,
20
     483 and 484, and they will be given the weight due.
                (Jorde Landowners Hearing Exhibits 479,
21
22
     480, 481, 483 and 484 were admitted into evidence.)
23
                       CROSS-EXAMINATION
24
     BY MR. JORDE:
25
                Sir, how were you hired? Who reached out
           0.
```

1

- to you? 2 Someone within my employer, CTEH, had a Α.
- contact with Summit Carbon Solutions, and they asked 3
- 4 me to join a call as a toxicologist.
- 5 0. About how long ago was that?
- 6 Α. It was just over a year ago.
- 7 Q. And other than your prepared testimony here
- for Summit, did you prepare any reports, studies or 8
- 9 any other data of any kind for them?
- 10 Not for this hearing, no. Α.
- Well, okay, but I didn't limit it to that. 11 0.
- 12 I mean, in order to get to this final version here, I
- 13 assume they put the question to you, "Hey, can you
- 14 testify and try to down-play the risks of CO2
- exposure?" Was that kind of the gist of it? 15
- 16 Α. No, no.
- 17 All right. Did they just say, "Whatever 0.
- 18 the results, just put together a report and tell us
- 19 what CO2 risks look like to humans, and we'll accept
- whatever you say"? Was that part of the conversation? 20
- 21 Well, the conversation of risk never came Α.
- 22 up, since that's a question of likelihood.
- 23 asked to help them understand the continuum of effects
- 24 and being able to distinguish, based on the data, the
- 25 difference between physiological responses and actual

- 1 toxicity.
- 2 Q. And to Mr. Taylor's point, it seems like
- 3 the study you rely upon was with the subjects were
- 4 healthy males and not members of maybe an at-risk
- 5 persons with COPD, with breathing, the elderly or any
- 6 other disease process; correct?
- 7 A. Well, it's difficult to know with the older
- 8 studies whether or not those subjects were in good
- 9 health or a mix because the methodology wasn't
- 10 described very well.
- 11 Q. I agree. That's right where I was headed.
- 12 Given that the methodology was not
- described very well, it's hard to, with a high degree
- 14 of certainty and confidence, apply that to, say, a
- 15 given person in a given community in Iowa; correct?
- 16 A. Well, the point of the studies are not to
- 17 try to identify the likelihood of an effect of a given
- 18 individual. They were trying to look at continuum
- 19 effects in humans in general.
- 20 Q. Well, sure, but what if the study -- if the
- 21 control in the study are healthy, young, vibrant
- 22 males? That doesn't translate very well necessarily
- 23 to an 80-year-old person on a farm in Iowa that has
- 24 breathing problems and a walker and all sorts of other
- 25 ailments; right?

25

sense.

For CO2 that may not be necessarily the 1 Α. 2 case, because the physiology, biology behind CO2 3 production escalation is so common even between 4 healthy and unhealthy individuals, the extent to which 5 an unhealthy individual compared to a healthy individual would uptake and eliminate CO2 is not fully 6 7 understood. Well, you certainly would agree that if a 8 0. healthy person was sitting still and not expending 9 10 energy and didn't have rapid breathing that they could 11 sustain their current physical state longer in an environment exposed to CO2 than if they were running 12 13 up and down stairs or engaged in vigorous activity? Well, there are a lot of factors that would 14 Α. 15 have to be known to answer that question. Well, but if I am expending energy such 16 0. 17 that I'm requiring more oxygen in to keep up with the 18 vigorous nature of what I'm expending, I am more 19 susceptible to the effects of CO2; correct? 20 Only after -- if there was a sufficient Α. concentration of CO2. It depends on the 21 22 concentration. 23 Well, obviously, you've got to have a 0. 24 concentration of CO2, or these examples don't make any

But you wouldn't dispute the fact and the

reports from Satartia of individuals foaming at the 1 2 mouth, unconscious on the ground, cars still in park 3 with the people passed out, based on their exposure to 4 You don't dispute those reports, do you? CO2? 5 Α. I don't dispute some details of those There are other details that I don't have 6 reports. 7 any knowledge of. 8 And if you don't have any knowledge, you, Q. 9 obviously, couldn't dispute them? 10 Α. That's correct, yes. MR. JORDE: All right. I don't have 11 12 anything further. Thanks. 13 BOARD CHAIR HELLAND: Okay. Thank you. 14 Ms. Ryon? MS. RYON: 15 Thank you. 16 CROSS-EXAMINATION 17 BY MS. RYON: 18 Just a quick question to make sure I 19 understand something about these studies. 20 From what I've been hearing, it sounds like they included healthy men. Did any of them include 21 22 any women? 23 The early studies -- when I say "early," Α. 24 I'm talking about prior to 1950. Some of them just weren't described. We don't know anything about those 25

1	subjects.				
2	Q. But the recent ones you relied on the most				
3	didn't include any women?				
4	A. That's correct.				
5	Q. Not even healthy ones?				
6	A. That's correct.				
7	MS. RYON: Thanks. That's all.				
8	BOARD CHAIR HELLAND: Mr. Meyer?				
9	MR. MEYER: Thank you, Your Honor.				
10	CROSS-EXAMINATION				
11	BY MR. MEYER:				
12	Q. Sir, I'm Bill Meyer from Hardin County.				
13	Just a couple quick questions.				
14	I gather your testimony is basically to be				
15	a scientific some scientific testimony about health				
16	risks; right?				
17	A. Not the risks. "Risk" is a very particular				
18	term.				
19	The testimony is about the change from CO2				
20	physiology effects to toxicity as CO2 levels go up.				
21	Q. All right. Thanks for clarifying that.				
22	Essentially it's the science of toxicity;				
23	right?				
24	A. Partially, yes.				
25	Q. Okay. Well, is your testimony was it				

- 1 intended to delve into public policy?
- 2 A. No. My understanding was that in the
- 3 discussion of the CO2 exposure from pipelines or any
- 4 other source, there's often a conflation between
- 5 toxicity and normal compensation by the human body for
- 6 higher CO2 levels.
- 7 So my intention was to explain that
- 8 difference.
- 9 Q. On page 13 of your rebuttal testimony, you
- 10 kind of took a little turn and went down the public
- 11 policy road, the way I look at your answers here. The
- 12 two gentlemen [sic], Raffensperger and Deal-Tyne, you
- 13 dismissed their opinions on page 13 as being
- 14 policy-focused, didn't you?
- 15 A. That was the wording, but the dismissal --
- 16 it was a particular statement, statements made. I
- 17 believe one that said CO2 would kill anything in its
- 18 path. Scientifically that's just inaccurate.
- 19 O. Okay. Well, all right. If you believe
- 20 that those opinions or that statement was
- 21 policy-driven or focused, I mean, wouldn't you agree
- 22 that the genesis and nourishment of this project is
- 23 tax policy-focused?
- A. When you say "the project," what are you
- 25 talking about particularly?

1	Q. The pipeline.
2	A. The pipeline?
3	Q. Yes.
4	A. I don't know the genesis of the pipeline
5	business.
6	Q. Well, if it's about the tax credits and the
7	CO2 and that being a dangerous thing, would you also
8	say it's hyperbole to say that the world is going to
9	end in ten years unless we get all this CO2 put in the
10	ground?
11	A. Could you repeat the question? It didn't
12	seem like the first part was connected with the second
13	part. I'm not following.
14	MR. MEYER: Could you read it back, please?
15	(The requested portion of the record was
16	read.)
17	A. The question mentioned tax credits, CO2
18	being dangerous and the world ending. I don't see how
19	any of those are connected in that question.
20	BY MR. MEYER:
21	Q. So you think it would be hyperbole to make
22	those claims that we need to we need to address
23	climate change in such a way, or the world will end in
24	ten years? Would those be hyperbole?
25	A. I don't have an opinion on that.
1	

1	Q. Okay. You talked in the next answer to the
2	next question on the same page 13 that you're fine
3	because you consider this to be there's no undue
4	risk; correct?
5	A. Is that Where is the text? I want to
6	make sure that I'm addressing it correctly.
7	Q. On page 13, line 19. "There's no undue
8	risk"?
9	A. That's correct.
10	Q. So from again, I'm taking it that on
11	page 13 you're kind of going into public-policy
12	judgments, and so in your judgment the risk posed by
13	the project is the acceptable sacrifice to be laid on
14	the altar of climate change?
15	A. No, none of my opinions have anything to do
16	with climate change. All of my opinions have to do
17	with human health.
18	MR. MEYER: Okay. I don't have any other
19	questions.
20	BOARD CHAIR HELLAND: Okay. Thank you.
21	Any other questions from the parties?
22	(No response.)
23	BOARD CHAIR HELLAND: Okay. None from the
24	Board.
25	Summit?

1	MR. LEONARD: I don't have any redirect,
2	Your Honor. Just as a matter of clarification, I
3	assume when the parties say they don't have any other
4	questions, they don't have closed session questions
5	for this witness?
6	BOARD CHAIR HELLAND: Good question.
7	(No response.)
8	BOARD CHAIR HELLAND: It looks like a no.
9	You can step down, Dr. Lumpkin.
10	THE WITNESS: Thank you.
11	BOARD CHAIR HELLAND: Okay. I don't think
12	there's any other witnesses in the building we can get
13	on the stand and wrapped up in 20 minutes.
14	So John is making a really strong lobby
15	effort for Mr. Bents. We're not entirely opposed,
16	Mr. Long. It just seems really unlikely we can get
17	your witness up and down in 20 minutes.
18	Does anyone disagree with that? Hold on.
19	MR. ISENHART: I do have questions that
20	will probably take longer than that.
21	BOARD CHAIR HELLAND: There we go. We've
22	got our answer. Thank you.
23	So we'll plan on being back here tomorrow
24	morning at 8:30. We're going to start right off the
25	bat in confidential session with Summit Witness

1	Louque, and then as soon as we're done with Louque, we
2	will proceed back into Summit's witness list.
3	So we'll get here at 8:30. We'll get
4	started.
5	So it will be for Summit to determine in
6	confidential session who can stay. So we will work
7	through that first thing in the morning at 8:30.
8	Mr. Whipple and Mr. Jorde?
9	MR. WHIPPLE: If you're finished, Your
10	Honor, I have an additional update for you.
11	BOARD CHAIR HELLAND: Sure.
12	MR. WHIPPLE: The Counties have Counties
13	Witness Willingham arriving from Mississippi tomorrow
14	on a 10:30 flight. He'll be here starting about noon
15	and departing on Friday. So we would dearly like not
16	to have to send him back to Mississippi and bring him
17	back again.
18	So I'm letting you know that that's his
19	those are his arrangements, and he's the only
20	non-local witness for the Counties.
21	BOARD CHAIR HELLAND: Thank you.
22	Mr. Jorde?
23	MR. JORDE: We don't have an objection to
24	work with any party to get the people on and off.
25	I was wondering if Mr. Dublinske could just

- 1 confirm the order after Louque in confidential, who he
- 2 thought he'd be calling.
- 3 MR. DUBLINSKE: Yes. So after Louque
- 4 confidential will be Muhlbauer and then Dillon.
- 5 McCown is not available until Thursday. I think the
- 6 only one we would have left at this point would be
- 7 Godfrey.
- If we get there and need to do that, he
- 9 will be available tomorrow.
- 10 BOARD CHAIR HELLAND: Okay. Can the
- 11 parties give us an idea of who we'll need for
- 12 confidential session? Will we need any of those for
- 13 confidential session?
- 14 MR. JORDE: Louque only for the landowners,
- 15 Your Honor.
- 16 I'm sorry. Muhlbauer. We think we might
- 17 need Muhlbauer possibly, I guess, but since he's
- 18 second, that would work out.
- 19 MR. WHIPPLE: I believe we mentioned maybe
- 20 re-calling Mr. Powell and doing some closed session on
- 21 that, perhaps.
- 22 MR. DUBLINSKE: Unless Mr. Powell reaches
- 23 over and tells me otherwise, he would be available
- 24 tomorrow as well.
- 25 BOARD CHAIR HELLAND: I assume there will

20

- be multiple parties for Mr. Powell in confidential or 1 2 not? Maybe not. Okay. 3 Well, all right. Representative Isenhart, 4 you have your name tag up. 5 MR. ISENHART: Just on the conversation you have, it might be useful for those of us not in a 6 7 confidential session to know when we should arrive 8 tomorrow or maybe a ballpark figure? 9 BOARD CHAIR HELLAND: Yes. Hopefully noon. 10 We can tell you theoretically 10 o'clock. It's possible that it's 9:45. It's possible that it's 11 12 noon. 13 You're familiar with the legislature. 14 We're not indifferent in how often the debate will 15 last. MR. ISENHART: I don't even control the 16 17 time. 18 One other issue. The Board sent out 19 information this morning on how it would like
 - formatting and that type of thing. To the extent that
 was sent out due to my filings, I plead guilty. If I
 need to refile any of those correctly, if you'd have a
 staff member reach out to me and make sure I get it

intervenors to prepare and submit hearing exhibits and

25 right the second time, that would be helpful. Thank

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```
1
     you.
 2
                BOARD CHAIR HELLAND:
                                        Appreciate it.
                                                        We
 3
     always appreciate correct filings. Thank you.
 4
                Okay. We will see everyone at 8:30 in the
     morning.
 5
 6
                 (Hearing recessed at 5:52 p.m. to be
     reconvened the following day at 8:30 a.m.)
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	,
1	CERTIFICATE
2	I, the undersigned, a Certified Shorthand
3	Reporter of the State of Iowa, do hereby certify that
4	I acted as the official court reporter at the hearing
5	in the above-entitled matter at the time and place
6	indicated.
7	That I took in shorthand all of the
8	proceedings had at the said time and place and that
9	said shorthand notes were reduced to typewriting under
10	my direction and supervision, and that the foregoing
11	typewritten pages are a full and complete transcript
12	of the shorthand notes so taken.
13	Dated this 25th day of September, 2023.
14	
15	
16	
17	Darry K. Kriens
18	CERTIFIED SHORTHAND REPORTER
19	Darcy Kriens, Iowa CSR #988
20	
21	
22	
23	
24	
25	
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