STATE OF NORTH DAKOTA

PUBLIC SERVICE COMMISSION

SCS Carbon Transport LLC Midwest Carbon Express CO2 Pipeline Project Siting Application	Case No. PU-22-391

TRANSCRIPT OF FORMAL HEARING

May 9, 2023

Linton, North Dakota

APPEARANCES

Commissioners Randy Christmann, Sheri Haugen-Hoffart, and Substitute Decisionmaker Timothy J. Dawson

LAWRENCE BENDER, BRET DUBLINSKE, and PATRICK MAHLBERG, Fredrikson & Byron, P.A., on behalf of Applicant SCS Carbon Transport LLC

RANDALL J. BAKKE, Bakke Grinolds Wiederholt, on behalf of Intervenor John H. Warford as Trustee of the John H. Warford, Jr. Revocable Trust

STEVE J. LEIBEL, Knoll Leibel LLP, on behalf of Intervenors Dean Twardoski, et al

KEVIN PRANIS, on behalf of Intervenor Laborers District Council of Minnesota and North Dakota (LIUNA)

ZACHARY PELHAM, Special Assistant Attorney General Advisory Counsel to the Public Service Commission

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ADMINISTRATIVE LAW JUDGE HOGAN: All right. Good morning. My name is Hope Hogan and I'm the administrative law judge that's been designated upon the request of the Public Service Commission to serve as the hearing officer for this hearing.

Let the record show that it is May 9th, 2023, at 9:02 a.m. This is the time, date, and place set by the notice of filing and this is the time, date, and place set by a notice of filing and notice of hearings issued by the North Dakota Public Service Commission on February 1 and March 30, 2023, for hearings in Case No. PU-22-391. Today's hearing is being held at the Emmons County Courthouse auditorium in Linton, North Dakota.

As we begin our hearing today, I'd ask everybody, please check your cell phones to make sure they're either silenced or turned off so that we don't have cell phone interruptions as we proceed today.

There is an attendance sheet that I believe is -- is there just one? -- on both sides of the room. The Commission would ask that you please sign in so that they have a record of everybody that attended today's hearing.

This is the fourth of five hearings scheduled regarding an October 17th, 2022, application of SCS Carbon Transport LLC for a certificate of corridor

compatibility and route permit concerning approximately 320 miles of carbon dioxide pipeline ranging from 4.5 to 24-inch diameter and associated facilities located in Burleigh, Cass, Dickey, Emmons, Logan, McIntosh, Morton, Oliver, Richland, and Sargent counties, North Dakota.

This hearing has been scheduled to focus primarily on the portions of the project located in Emmons, Logan, and McIntosh counties.

The notice of filing and notice of hearing specified the following issues to be considered concerning the application for waiver of procedures and time schedules:

Number one. Are the proposed facilities of such length, design, location, and purpose that they will produce minimum adverse effects and that the adherence to applicable procedures, requirements, and time schedules may be waived?

And number two. Is it appropriate for the Commission to waive any procedures, requirements, and time schedules as requested in the application?

Concerning the application for certificate of corridor compatibility and route permit, the issues to be considered are:

First, will construction, operation, and maintenance of the facility at the proposed location

produce minimal adverse effects on the environment and upon the welfare of the citizens of North Dakota?

Number two. Is the proposed facility compatible with environmental preservation and the efficient use of resources?

And, finally, number three. Will construction, operation, and maintenance of the facility at the proposed location minimize adverse human and environmental impact while ensuring continuing system reliability and integrity and ensuring that energy needs are met and fulfilled in an orderly and timely fashion?

I'm now going to ask the parties to make their appearance for the record.

Mr. Bender, do you want to state your appearance for the record, introduce who's seated at the table with you, and identify the witnesses you intend to call today?

MR. BENDER: Thank you, Judge Hogan. Lawrence Bender, PO Box 1855, Bismarck, North Dakota. And I'm appearing in this matter on behalf of SCS Carbon Transport LLC.

To my immediate right is Mr. John Godfrey. Mr. Godfrey is one of the witnesses we plan on calling later today. To Mr. Godfrey's right is Mr. Bret Dublinske. Mr. Dublinske is a lawyer with Fredrikson

Byron out of our Iowa office. Our first witness that we intend to call is Mr. James Powell. And I guess the other two witnesses we've listed as witnesses, Mr. Godfrey as a witness and --

Help me out, who's the second witness?

UNIDENTIFIED SPEAKER: Phil Oakes.

ALJ HOGAN: All right. Thank you.

Mr. Pelham, do you want to state your appearance for the record and introduce staff that's appearing with you today?

MR. PELHAM: Thank you, Your Honor. Good morning. Zachary Pelham, special assistant attorney general. To my left is Victor Schock, who is a utility analyst with the PSC. He may have questions today and we ask that he be permitted to ask questions as well. Thank you.

ALJ HOGAN: All right. Thank you.

And now I'm going to ask the intervenors to this case to make their appearance for the record.

Mr. Bakke, would you like to state your appearance for the record and identify the witnesses you intend to call today?

MR. BAKKE: Good morning, Your Honor. I'm Randy Bakke from the law firm of Bakke, Grinolds, Wiederholt in Bismarck, and I represent intervenor John Warford,

Sr. To my right is paralegal Kate Finck from my office. And the witnesses we will be calling today are Jerry Briggs, Curtis Jundt, and also former mayor of Bismarck, Steve Bakken.

ALJ HOGAN: All right. Thank you.

Mr. Leibel, do you want to make your -- state your appearance for the record and identify the witnesses you intend to call today?

MR. LEIBEL: Sure, Your Honor. My name is Steve Leibel from the Bismarck law firm of Knoll Leibel. I represent a number of different landowner intervenors, along with Brian Jorde of Domina Law. The witnesses we intend to call today are Pam Schonert, Ann Bernhardt, Steve Laine, Linda Gayman, and Kevin Bernhardt, and also David Locken. And these are all landowners. Some of them are from Burleigh County, which I know we're making an effort to avoid having a huge hearing in Bismarck at the end and that's why some of our people are testifying today.

ALJ HOGAN: All right. Thank you.

And then finally, Mr. Pranis, would you like to state your appearance for the record and identify any witnesses you plan to call today?

MR. PRANIS: Thank you, Judge Hogan. Kevin Pranis on behalf of LIUNA, Minnesota and North Dakota,

representing construction workers who build infrastructure pipelines, and we will be calling Mr. Evan Whiteford for a few additional questions today.

ALJ HOGAN: All right. Thank you.

By a show of hands, can I -- anyone who plans to provide public testimony, can you raise your hand so I have an idea of how many people would like to testify today?

All right. Thank you. And I won't hold you to that, so if you decide later today you want to provide public testimony, you certainly can.

We're going to handle public testimony different than we have for the other hearings for this case. Testimony from the public will be taken throughout the hearing today. It's my understanding a large portion of the party witnesses to be called today are from the intervenors, and to balance the time we have today with intervenor witnesses and the public testimony, I'll be interspersing blocks of public testimony throughout our hearing. So following Summit's opening witness and one of the intervenor witnesses, we'll have a one-hour block for public testimony, and I would ask that persons attending from the counties this hearing is intended to focus on should come forward first to provide testimony. And then the remaining public testimony will be followed

in approximately one-hour blocks throughout our hearing today.

If you do wish to provide public testimony, I'd ask that you indicate that on the attendance sheets just so I have a better idea of how many people we have that want to provide that testimony today.

I encourage you to take this opportunity to tell the commissioners what you think is important about this matter, but I would ask you to limit your testimony to the construction and effect of the pipeline. I'd also ask that you try not to repeat concerns previously testified to, especially from somebody that's similarly situated to you. It would be more time efficient to just say you agreed with the previous testimony.

Due to the amount of testimony that we need to get through today, I'd ask that you try to limit your public comments to approximately ten minutes. The goal today is to have a safe and orderly hearing in which many voices are given the opportunity to be heard. I'll provide further instructions regarding providing public testimony when we get to that portion of our hearing today.

It's now time for opening comments from the commissioners, and we'll start with Commissioner Christmann.

COMMISSIONER CHRISTMANN: Thank you, Your Honor.

And I'm going to be a little more brief than usual in order to try and save time, but I do want to emphasize to people who aren't regulars at these things that this is an important part of our process. The much easier and more convenient thing for us to do would be to stay and have our hearings in Bismarck and have people come, but part of our whole evaluation process is -- involves hearing from the people.

And our goal, our job in this role, is not to see the projects get built or to stand in the way of projects, specifically. Our job is to evaluate projects that come before us, see if they meet the requirements of the law as the legislature has laid it out. And if they do, they should be approved. If they don't, they should not be approved. But part of that whole process where we can make the best possible decision, because that's our goal, based on the law, and part of that is hearing from the people that are directly impacted.

So we like to get out and hear from folks. That's why this is our fourth hearing. We had one in Bismarck, we've had one in Gwinner, we had one in Wahpeton, and now here in Linton. And so I look forward to hearing that. And that's why the judge has moved up so that -- because of so many intervenors in this case

and the length of testimony, it can -- you know, gets into the evening before the public even gets a chance.

So I appreciate Your Honor doing that and bringing some public folks up kind of throughout the day so they don't have to wait so many hours.

And I especially want to highlight sometimes we have elected officials come, and I haven't seen them but it's bright up here when I look out into the crowd, but I do know that specifically Senator Jeff Magrum has been very involved in this process.

And I don't see you, Jeff, but if he's not here, I'm certain that he will be.

And our North Dakota State Agriculture Commissioner, Doug Goehring, is here and I appreciate that. If you decide to testify, I know you know the agriculture industry well. This project would cover a lot of agriculture territory including very diverse types of territory, all the way from the Red River Valley all the way over to Oliver County in southwest North Dakota.

So appreciate everyone here, but I did want to give a shout-out to those two individuals specifically.

ALJ HOGAN: Thank you.

Commissioner Haugen-Hoffart.

COMMISSIONER HAUGEN-HOFFART: Good morning,

everyone. It is good to see so many people here and involved. Commissioner Christmann had an excellent opening comment on why we're here and what our role is, and I just want to emphasize, is that we sit and listen. We do ask questions for clarification so we can make the appropriate decision based on the siting law and which we're required to do.

So, again, I just want to appreciate your time, your willingness to get engaged in the process that could be affecting your community, and I look forward to hearing from many of you. Thank you.

ALJ HOGAN: Thank you. Mr. Dawson.

SUBSTITUTE DECISIONMAKER DAWSON: Judge Hogan.

Good morning. I am Timothy Dawson. I'm the director of the Office of Administrative Hearings. As such, I sit as an administrative law judge like Judge Hogan does. I've done that many times for hearings from the Public Service Commission. Today I sit as a substitute for Julie Fedorchak who has recused herself. My title today is substitute decisionmaker, but that is difficult to say so just call me "Mr. Dawson" today. Thank you.

ALJ HOGAN: All right. Thank you.

I think I'll just note as far as exhibits, we are keeping a master exhibit list so any new exhibits or

exhibits offered today will be added to the running exhibit list. That exhibit list is available on the docket online, as are all the exhibits that have been entered into or accepted into the record up to this point.

And I'll just ask before we move to testimony if there's any other preliminary matters we need to discuss.

Mr. Bender?

MR. BENDER: Nothing.

ALJ HOGAN: Mr. Pelham.

MR. PELHAM: No, Your Honor.

ALJ HOGAN: Mr. Bakke.

MR. BAKKE: No, Your Honor.

ALJ HOGAN: Mr. Leibel.

MR. LEIBEL: No, Your Honor.

ALJ HOGAN: Mr. Pranis.

MR. PRANIS: No, Your Honor.

ALJ HOGAN: Okay. All right. Then, Mr. Bender, you can call your opening witness.

MR. BENDER: Thank you, Judge. As you pointed out, this is our fourth in a series of hearings that we're having on this matter, and as a result of that, we're trying to streamline our presentation. At the first hearing in Bismarck, I believe we had four

or five witnesses, but our purpose here today is just to give the general public a very brief summary of what this project is about and also to follow through with what you said, Your Honor, and Commissioner Christmann's remarks, we want to give the public more time to make comments. So we will call our first witness, Mr. James Powell, and he'll be very brief.

ALJ HOGAN: And as Mr. Powell makes his way up here, I'll just ask all parties today to try to focus their questions and testimony today on new information as much as possible because we have a lot of witnesses to get through today.

Good morning, Mr. Powell. Can you state your full name for the record and spell your last name?

JAMES POWELL: James Powell, P-O-W-E-L-L.

ALJ HOGAN: And, Mr. Powell, before you testify this morning, I'm required by law to advise you on the penalties for perjury in the state of North Dakota.

Perjury is a Class C felony, punishable by a maximum fine of $10,000, a maximum five years' imprisonment, or both.

Do you understand what perjury is?

JAMES POWELL: I do.

ALJ HOGAN: And being advised of the potential penalties for perjury, do you promise to tell the truth

in this case today?

JAMES POWELL: I do.

ALJ HOGAN: All right. Thank you.

Go ahead, Mr. Bender.

JAMES POWELL,

being first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. BENDER:

Q. Thank you, Mr. Powell. You go by "Jimmy"; is that correct?

A. Yes.

Q. Is that correct?

A. Correct.

Q. Okay. Can you state your full name for the record?

A. James Ernest Powell, II.

Q. And by whom are you employed?

A. Summit Carbon Solutions.

Q. In what capacity?

A. As chief operating officer.

Q. Okay. And can you briefly describe your role with respect to the project that's before the Commission today?

A. I'm accountable for the engineering, design, the

execution or construction, and ultimately operation of the Midwest Carbon Express project.

Q. And can you provide us with a brief summary or overview of the project?

A. So the project captures carbon dioxide from the fermentation process at what is now 33 ethanol plants located in five states, those being Iowa, Nebraska, South Dakota, North Dakota, and Minnesota. We compress that gas, CO2, into a supercritical state. We inject it into a pipeline network that's comprised of approximately 2,058 miles of 4-inch through 24-inch pipe, and in these three counties it's 24-inch. We transport that to a sequestration site in Mercer and Oliver counties for injection and permanent storage and sequestration.

Q. And what counties will the pipelines cross in North Dakota?

A. Ten counties in total.

Q. Okay. And do you have the names of those counties?

A. Not off the top of my head I don't.

Q. And how many miles of pipeline will be located in the state of North Dakota?

A. Approximately 320. And that does not -- that excludes the mileage in the sequestration area.

Q. And in terms of ethanol plants in North Dakota that will be putting CO2 into your pipeline, are there any?

A. Yes.

Q. Okay. And what is the name of that ethanol plant and where is it located?

A. It's the Tharaldson plant and that's located on the eastern side of the state.

Q. In terms of new information, at previous hearings you provided some testimony with respect to easement acquisition; is that correct?

A. Yes.

Q. Do you recall, the last time you testified, what you provided in terms of testimony as to easement acquisition?

A. Yes.

Q. Can you tell us what that was?

A. At that time it was approximately 70 percent --

Q. Okay.

A. -- that's been acquired across the state.

Q. And as you sit here today, what is your understanding as to what the number of easements or the percentage of easements that you've acquired as of today?

A. Today it's approaching 72 percent.

Q. Okay. And also, Jimmy, at the last hearing there were some questions, I believe it was -- I'm not sure if it was by the intervenors or if it was by the Commission staff, but there was some question about the 500-foot setback to the pipeline. Do you recall those questions?

A. I do.

Q. Okay. And I believe your response was that you measured the 500 feet from the corridor boundary. Is that a correct statement of what you testified to at the previous hearing?

A. I believe it is.

Q. Okay. And can you describe for us what the actual approach is in terms of measuring the 500-foot setback to the pipeline?

A. Yeah. The actual approach is from the centerline of the pipe as it's located in that corridor to the nearest corner of the structure or dwelling.

Q. Okay. So all of the information that's been provided to the Commission in terms of setback to the pipeline was, in fact, from the center of the pipe to the nearest point of the structure; is that correct?

A. That's correct.

Q. So it was just a minor error that you made indicating that it was a setback from the corridor?

A. That's kind, Mr. Bender. I misspoke. Correct.

MR. BENDER: That's all the questions I have.

ALJ HOGAN: All right. Mr. Pelham, any questions?

CROSS EXAMINATION

BY MR. PELHAM:

Q. Mr. Powell, I know at a prior hearing there had been an inquiry as to -- by Commissioner Christmann as to potential crossing elsewhere in and around the city of Bismarck. Is there any update on that?

A. There is, Mr. Pelham. So we're developing an analysis of a southern crossing on the south side of Bismarck versus the current route on the north side of Bismarck. And the first draft of that analysis -- or a final draft of that analysis should be ready mid-May.

Q. And as far as the State Historical Preservation Office, is there any update as to where the process is for its concurrence or non-concurrence of the proposed route?

A. Yes. So the SHPO has provided questions back to our team and we're currently in the process of responding to the SHPO. And some of that -- Mr. Pelham, some of that response will include some clarification around survey, especially cultural survey that was previously performed. So that should be available in

the very near term.

MR. PELHAM: I don't have any other questions. Thank you.

ALJ HOGAN: Mr. Bakke, any questions?

MR. BAKKE: Yes, Your Honor.

CROSS EXAMINATION

BY MR. BAKKE:

Q. First of all, Mr. Powell, you mentioned there are 33 ethanol plants; is that correct?

A. That's correct.

Q. Has there been one added since you testified in Bismarck?

A. There has.

Q. Okay. And where has that been added?

A. South Dakota.

Q. And where in South Dakota?

A. That's in Turner County, South Dakota.

Q. So in North Dakota there will just be one ethanol plant that will benefit from this Summit pipeline?

A. I wouldn't agree with that statement.

Q. Okay. So what other ethanol plant will be contributing CO2 from North Dakota into the Summit pipeline?

A. Well, there's at least one other plant that

we're actively discussing with -- discussing potentially injecting CO2 into our system that's located in North Dakota.

Q. Okay. But I'm asking about in terms of your application to the PSC now.

A. As we sit here today, there's one, correct.

Q. Okay. On this easement acquisition issue, let's focus specifically on Emmons County. You have the exhibits in front of you. I'd ask you to look at Exhibit W107.

(Pause)

A. I have it.

Q. Okay. Have you seen this Emmons County ordinance that passed in January of 2023 in Emmons County?

A. I have.

Q. Okay. And you're aware you're testifying here in Emmons County today?

A. I am.

Q. Okay. And do you see that that was unanimously approved by the Emmons County Commission 5 to 0 on February 7, 2023?

A. Yes.

Q. Okay. And one of the things that this ordinance deals with is setbacks; is that correct?

A. Yes.

Q. Okay. And the setback that Emmons County is requiring for the Summit pipeline, should it be built in Emmons County, is there can be no pipeline right of way within two miles of the corporate boundaries of any city; correct?

A. I believe that's correct.

Q. Okay. Would you agree that's a prudent thing for Emmons County to do?

A. I would not.

Q. Okay. You don't think there needs to be some separation from where the population is and this CO2 pipeline?

A. Well, as I think you're aware, Mr. Bakke, PHMSA, the federal entity that governs or provides oversight of design, construction, and operation of liquid pipelines, they govern siting -- not siting of that but setbacks. They have a reference. So that's one benchmark that we use.

The other is the analysis around dispersion, which we've talked about in previous hearings, and we use the guidance provided by PHMSA and our analysis to determine what risk there is to municipalities, landowners, etcetera. And we use that as a guide for the setbacks.

Q. Okay. And you understand --

A. In North Dakota, as you know, there's a state law of 500 feet.

Q. And PHMSA, the PHMSA regulations by the Federal Government, you're aware those are in the process of being amended; correct?

A. I do not. I'm not aware of that.

Q. Okay. So you're not aware that they've issued an order indicating that they're going to be looking at the changes to the rules and regulations to address safety of citizens in areas that may be populated as a result of the leak of CO2 in Satartia, Mississippi?

A. Well, I think you're mischaracterizing that, Mr. Bakke. They've already issued a finding, a report. And in that report, Satartia, they found that there were five contributors to that release, and each of those contributors would be covered by the current regulation.

As you probably know, PHMSA updates their regulation about every four years. And I don't think it's specific -- so this is the normal course of business. So I don't think it's been characterized as safety as a result of the Satartia incident.

Q. And so you dispute that PHMSA has indicated that they're going to be addressing changes to the rules and regulations in regards to the safety of CO2 pipelines

directly in response to the leak and incident in Satartia, Mississippi, where 45 of the 50 residents of Satartia, as a result of that leak, were sent to the hospital? You dispute that?

MR. BENDER: Madam Examiner, I'm going to object. Mr. Bakke had, I think, the better part of three hours to cross-examine Mr. Powell in Bismarck. He has no clients in Emmons County, Logan County, or McIntosh County that I'm aware of. My understanding is that the reason he's here is so that we can cut back on the workload that we're going to be having in Bismarck. And if we're going to go through a bunch of cross-examination, we're going to have the same problem in Bismarck that we had in Bismarck before. We're just not going to have time to cover all this stuff.

ALJ HOGAN: I agree. We addressed the PHMSA rules in Bismarck. So if we can spend time on other issues, that would be appreciated, because we've got an abundance of testimony to get through today.

MR. BAKKE: Sure. And I'm just following up on his answer because I believe it directly contradicts the PHMSA order which indicates that it is as a result of the leak of Satartia that they are going to be amending the rules and regulations out of concern to safety issues and the public health issues as a result of that

leak. I think there's already an exhibit that's been submitted to the commissioners.

Q. (BY MR. BAKKE) Let's turn back to the Emmons County ordinance. In terms of the two miles within the corporate boundaries of an organized city, you don't think that's a necessary safety determination by Emmons County to protect their citizens in the event there was a leak of the pipeline and the associated public health issues that would arise in the event of a leak?

MR. BENDER: Same objection.

ALJ HOGAN: Again, I don't know how long we're going to spend on this, but I think Mr. Bender has a valid point that, Mr. Bakke, your witnesses -- or your client is in Burleigh County. So I'm not really sure that this line of questioning is relevant to your position in this case as far as your client is concerned.

MR. BAKKE: Well, the reason it's relevant, Your Honor, is it deals with the safety of the public in populated areas where there are citizens. I think the people of Emmons County and Burleigh County and every county in North Dakota are entitled to know what Summit's position is as to whether public health and safety risks are important to Summit. I hear this witness saying it isn't.

MR. BENDER: And --

ALJ HOGAN: And to that point I think he's answered --

(Applause)

ALJ HOGAN: Okay. I'd ask the public to please refrain from commenting and clapping. I mean, we just have so much to get through today.

I think he's answered that question regarding his position on the ordinance so --

I don't know if I interrupted you, Mr. Bender.

MR. BENDER: No. That's --

MR. BAKKE: Okay. There are other parts I want to briefly cover with him on the ordinance because there's other setbacks.

ALJ HOGAN: Well, if you can do it briefly.

MR. BAKKE: Sure.

Q. (BY MR. BAKKE) And another setback is the Emmons County ordinance indicates that the pipeline should not be any closer than a mile and a half of an established residence. Do you agree that's an appropriate safety measure to avoid the risk of public health issues in the event of a leak for the citizens of Emmons County?

A. I do.

Q. You agree that is appropriate?

A. No, I don't. I disagree that it's appropriate.

Q. Okay. Do you agree that it's appropriate not to have the CO2 pipeline in Emmons County within 500 feet of any building or surface water body?

A. Well, as I mentioned earlier, it's North Dakota state law that the pipeline has to be located a minimum of 500 feet from a dwelling, a habitable dwelling, or we have to obtain a waiver.

Q. So you disagree with that as well?

A. Yes.

Q. Okay. Let me ask you about the investors in Summit. Were you aware that my client, through me, asked for a list of investors in the Summit pipeline?

A. I am.

Q. Okay. And did, in fact, Summit provide a list of investors?

MR. BENDER: Mr. Bakke, you well know that the commissioner -- one of the commissioners also requested that list and that was filed with the Commission.

MR. BAKKE: I understand that. That's what I'm going to ask him about. And to speed this up --

MR. BENDER: You asked if he responded to you. And we didn't respond to you. We responded to the commissioners.

MR. BAKKE: Right. And that was my point. I

think he agreed you didn't respond to me.

Q. (BY MR. BAKKE) Can you turn to Exhibit 164.

MR. BENDER: Mr. Bakke, I don't have a 164. I have a 158, is my last exhibit.

MR. BAKKE: We have the exhibits for everyone. I apologize.

ALJ HOGAN: Is this a new exhibit, Mr. Bakke?

MR. BAKKE: It is, yes, and we have some new exhibits. Exhibit 159 through 178, which are in a separate binder up there. In the same binder. I'm sorry.

MR. BENDER: Do you have a copy for us?

MR. BAKKE: Yes.

Q. (BY MR. BAKKE) Have you had a chance, Mr. Powell, to look at Exhibit 164?

A. Just the second page. No, I have not had a chance to look beyond that.

Q. Why don't you look at the first page. It says -- it's got Summit Carbon Solutions letterhead, and it says "Summit Carbon Solutions, LLC Investor List"; correct?

A. It does.

Q. And there's a second page identifying five investors in the Summit pipeline?

A. That's correct.

Q. Okay. And then just their website information; is that correct?

A. That's correct.

Q. Okay. And do you agree that the Public Service Commission should be provided with detailed information regarding the investors in Summit?

A. I would agree that we should provide what the commissioners ask for, yes.

Q. Okay. Did the commissioners just ask for the name of five of the investors or did they ask for the names of all the investors?

A. In my experience, Mr. Bakke, the commissioners are very, very capable of expanding their request. So when we submit a document in response, or we submit a response to the commissioners, if they feel that it's not adequate, they follow up and tell us what they believe is adequate, and then it's our duty to comply.

Q. Okay. Do you think the members of the public, the citizens of North Dakota, are entitled to know who the investors are in the Summit pipeline?

A. Well, I think what's important to the citizens of North Dakota is that they understand that the pipeline that we will construct if we're granted a permit by the PSC in North Dakota will strictly adhere and/or exceed the requirements of the federal

regulators.

Q. Okay. Well, isn't one of the issues that the Public Service Commission is being asked to analyze here, is whether or not this Summit pipeline is for the benefit of the welfare of the citizens of North Dakota?

A. I believe they stated that earlier, yes.

Q. Okay. And so part of that would be whether or not any of these companies that are investing in the Summit pipeline are citizens of North Dakota; correct?

A. I don't make that connection.

Q. Okay. Well, are any of these five investors that are listed on Exhibit W164 -- Continental Resources, TPG Rise Climate, Summit Agricultural Group, SK Group, Tiger Infrastructure Partners -- citizens of North Dakota?

A. Mr. Bakke, some of these investors are funds so I don't know, but I'm assuming they have many, many investors in those funds. I don't know who those individuals are or where they live.

Q. Okay. Well, let's take, for instance, on the investor list, this SK Group. Isn't SK Group a South Korean company?

A. They're a global company. They are headquartered in Seoul, South Korea. They have a large presence in the United States, correct.

Q. Sure. And SK Group was -- recently had a top executive indicted for alleged breach of trust and embezzlement of $190 million; is that correct?

A. Mr. Bakke --

MR. BENDER: Your Honor, how long are we going to -- are we going to go through every member of Continental Resources and determine what their background is? I mean, the whole idea behind Mr. Bakke coming down to Linton was so that he could put on some of his witnesses so we could take the pressure off of Bismarck. What it's being utilized for is another two- or three-hour cross-examination of Mr. Powell.

ALJ HOGAN: I have that concern as well, Mr. Bakke. We have 12 witnesses outside of public testimony to get through today and I -- you have the right to cross-examine witnesses, but, again, we have a very ambitious schedule today so --

MR. BAKKE: I'll try to be --

ALJ HOGAN: -- we need to balance that.

MR. BAKKE: I'll try to be as fast as I can, but I think this is a new issue they raised. They provided the investor list that the commissioners requested at the hearing in Bismarck. We now have it. I think I should be allowed to ask who the investors are and whether any of them are from North Dakota and whether

there's any benefit to the citizens of North Dakota.

ALJ HOGAN: Well, he's already answered whether or not any are from North Dakota, and his answer was he wasn't sure and that most of these are investment groups so --

MR. BAKKE: Right. And that's why I followed up and asked him questions about --

ALJ HOGAN: Okay. Well, I don't want to spend time arguing with you, but I think he has answered that question.

MR. BAKKE: Okay.

Q. (BY MR. BAKKE) So let's turn to TPG Rise, one of the investors in the Summit pipeline. Is TPG Rise Climate owned in part by the China Silk Road Fund?

A. Mr. Bakke, I'm not an expert in who the investors are in TPG Rise fund.

Q. Okay. So you can't tell me whether there's a Chinese company --

A. No, I can't.

Q. -- invested a significant amount of money in the Summit pipeline?

A. No, I cannot.

Q. And I notice on the investment -- investor list, you don't -- Summit doesn't indicate the amounts that are invested. Has Tiger Infrastructure Group invested a

hundred million?

A. That sounds reasonably accurate.

Q. Okay. Has the Canada Ontario Teachers Pension Plan invested 300 million in Summit?

A. Not that I'm aware of.

Q. Has Continental Resources invested 250 million?

A. They have. And I'm glad you mentioned Continental Resources, because obviously they're a huge contributor to oil and gas development in this state, especially on the western side of this state.

Q. And then this Tiger Infrastructure Group, is Mr. Bruce Rastetter of Summit a senior advisor for Tiger Infrastructure?

A. Not that I'm aware of.

Q. Has this SK Group from South Korea invested 110 million?

A. That sounds reasonably accurate.

Q. Okay. Are there a total of 464 investors in the Summit pipeline? That sound accurate?

A. As I mentioned, Mr. Bakke, some of the investors are via funds and those funds have multiple investors. I'm not aware of who all those individuals are.

Q. And I'm not asking who all the individuals are --

A. You asked me a number, Mr. Bakke, and I'm not

sure what that number is.

Q. I'm asking about companies that have invested in the Summit pipeline. Are there hundreds of them?

A. Companies?

Q. Right. Entities.

A. No. I --

MR. BENDER: Your Honor, again --

A. -- don't think there's hundreds of companies.

MR. BENDER: -- I'm going to object. This is a total waste of time. He's getting another opportunity to cross-examine this witness. If he wants to burn up his time asking these sorts of questions in Bismarck, fine, but we're down here to try to take some pressure off of Bismarck, and Mr. Bakke certainly isn't doing that with this line of questioning.

MR. BAKKE: Your Honor, these are questions I would ask in Bismarck --

MR. BENDER: Then ask them in Bismarck.

MR. BAKKE: But that's the whole purpose of us being down here, is to save some time in Bismarck. So I'm asking them now rather than in Bismarck because we have an ambitious schedule at both places. That's the whole reason Mr. Leibel and I are here today, or at least Mr. Leibel in part, is to call some of these Burleigh County witnesses and ask some of the questions

relating to Burleigh County which apply --

ALJ HOGAN: Can you tell me approximately how many more questions you have or length of your questions for Mr. Powell?

MR. BAKKE: Probably 15, 20 minutes.

ALJ HOGAN: Okay. Let's get through it.

MR. BAKKE: Okay.

Q. (BY MR. BAKKE) I mean there's many more investors in the Summit pipeline than the five that Summit has identified for the Public Service commissioners; correct?

A. Yes.

Q. Okay.

A. I mean, Gary Tharaldson is an investor in Summit. He's a North Dakotan.

Q. Okay. Anyone else you can name from North Dakota who's invested in the Summit pipeline?

A. Mr. Bakke, you've asked me several questions about this and you yourself asked me if there are hundreds of investors, and I believe that's a fair assumption. And no, I don't know each of those individuals by name.

Q. Okay. But Summit would have that information, wouldn't they?

A. Mr. Bakke, I'm not the commercial officer of the

company so I don't spend my time reviewing that information. I'm concerned about the design and construction and ultimately operation of this pipeline. That consumes my time.

Q. Sure. And I understand what you do, but my question is: Are you telling the commissioners and the public that Summit doesn't know who the investors are in Summit, that someone at Summit doesn't have that information?

A. Mr. Bakke, as I mentioned earlier, what I'm telling you is the commissioners are very capable of telling us what information that they expect or they want, and if we don't provide that at the level of detail that they want, they're very capable of telling us that wasn't good enough. And so if they ask for more detail, then we'll consider providing that.

Q. Well, is the public in North Dakota entitled to know who the investors in Summit are to gauge whether this project is for the benefit of the state of North Dakota and the welfare of the citizens of North Dakota or is that to be kept secret?

A. There are -- there are privacy issues with who invests in any company, Mr. Bakke.

Q. So is it Summit's testimony that the public and the commissioners don't get to know who the investors in

Summit are?

A. I didn't say that.

Q. Okay. And you're not -- Summit isn't claiming this is some sort of national security risk if Summit discloses who the investors are in Summit such as the China Silk Road Fund, are they?

A. I don't -- I don't remember anyone claiming that could be a national security risk, Mr. Bakke.

Q. Okay. And so Summit concedes the five names of the investors that they gave to the Public Service Commission is woefully incomplete because you agree there's hundreds of investors?

A. I think your mischaracterization around "woefully incomplete" is for the commissioners to provide their feedback to Summit as to whether they think it's adequate or not. To my knowledge, I haven't heard that it was woefully incomplete.

Q. Well, just here today, the handout provided by the young lady here on behalf of Summit -- and she's here on behalf of Summit; correct?

A. Are you speaking to Ms. -- Sabrina?

Q. I don't know the young lady's name at the table there with the handouts.

A. Sabrina Zenor.

Q. Okay. And on that it lists another investor,

John Deere, but that's not on the investor list that Summit gave to the Public Service Commission, is it?

A. Mr. Bakke, I'll say it again. If the commissioners want more detail about who the investors are in Summit, I'm sure they'll ask and then Summit will have to consider whether or not to provide that information.

Q. There's a frost heave study, Exhibit 162, that's been provided since the last Bismarck hearing. And that's performed by a Gulf Interstate Engineering out of Houston, Texas, a Mr. David Ammerman and a Mr. Lance Thomas. And the date of that report is April 17, 2023?

A. Correct.

Q. Do you have that available to you?

A. I do.

Q. Okay. Has Gulf Interstate Engineering ever done any engineering work before in North Dakota, to your knowledge?

A. I'm sure you know, Mr. Bakke, Gulf Interstate is probably the premier pipeline engineering design company in the world. They do work all over the world. And they have done work in Canada, in North Dakota, South Dakota, Montana, the upper region of the United States.

Q. Okay. So what engineering work, what frost heave study, has Mr. Ammerman done from Gulf Interstate

Engineering before he did this one for Summit in April 2023?

A. Mr. Bakke, I don't have Mr. Ammerman's CV in front of me, but as I stated, he represents Gulf Interstate. Gulf Interstate is the premier pipeline engineering company in the United States and one of the premier engineering companies in the world.

Q. Okay. And I'm asking specifically about the gentleman who performed the frost heave study for Summit. Can you tell me one frost heave study he's ever done before in North Dakota?

MR. BENDER: If you know.

A. What I can tell you is that we have an internal staff of very talented professional engineers, and they've reviewed the work that Mr. Ammerman and others have done and stand behind this study.

Q. Okay. So who are the engineers, the talented engineers, that reviewed his work?

A. Mr. Alex Lange, Mr. Erik Schovanec.

Q. And have they done frost heave studies in North Dakota?

A. They've done frost heave -- Erik Schovanec has, yes, in the western side.

Q. Okay. And this frost --

A. They're very rare, Mr. Bakke, because frost

heave, there's not a permafrost risk in North Dakota, and, in fact, in the Lower 48 of the U.S. And so buoyancy -- buoyancy is a risk. Frost heave is not.

Q. Okay. So frost heave, at least as far as Summit is concerned, is not an issue or a concern for pipelines buried or installed in North Dakota. That's your testimony?

A. That's not Summit's opinion. It's a fact.

Q. Okay. And did Summit just do the one frost heave study for the proposed Summit pipeline?

A. Yes.

Q. Okay. Where was this frost heave study? Which county and which location?

A. It's across the full length of the pipeline in North Dakota.

Q. So they did -- Summit did multiple frost heave studies and we just have the one?

A. This is a summary.

Q. Okay. Well, this doesn't identify any specific location along the 2,000-mile plus pipeline where this frost heave study was performed by Summit, does it?

A. I think what it does indicate is where -- what is heave and what factors have to be present in the substrate, in the soil, moisture content for heaving to be a risk and that those aren't present in North Dakota.

Q. Well, in terms of frost heave, will frost heave conditions vary from where this pipeline starts in Ames, Iowa, to where it ends in Center, North Dakota, or is it uniform frost heave in that entire 2,000-mile plus area?

A. Well, as -- I'm sure you've read this. It depends on the consistency of the soil, the amount of moisture that's present, etcetera. But frost heave is not a risk in the Lower 48.

Q. Okay. But Summit is telling the PSC and the public that, as far as Summit's concerned in terms of frost heave concerns, one size fits all, you just need to do one frost heave study for 2,000 plus miles and call it good. Is that your testimony?

A. No, it's not my testimony.

Q. But you can't tell me that they did more than one frost heave study; correct?

A. Mr. Bakke, what I can tell you is Summit and Summit's consultants have done all the analysis that's required by all the regulators, including PHMSA, and that we feel are adequate to safely design and construct this pipeline.

Q. Well, doesn't Mr. Ammerman say in this report, on page 5 of 7 under section 4.3, frost penetration -- several factors influence seasonal frost penetration depth, and then he lists a number of factors:

vegetation cover, snow cover, number of degrees days below freezing, soil grain size, moisture content? Doesn't he say those are all factors?

A. Yes.

Q. Okay. I mean, there's going to be a significant difference between number of degrees days below freezing in Ames, Iowa, versus Linton, North Dakota, isn't there?

A. There could be.

Q. Okay. And the information that he used for soil temperatures actually came from Mandan, North Dakota; correct?

A. Yes. We typically try to look at the worst-case scenario.

Q. Okay. And this Mandan -- USDA Mandan station isn't even in the path of the Summit pipeline where he got his soil temperature information; is that correct?

A. Again, Mr. Bakke, we look at across the state and across the length of the pipeline. We look at the different soil structures, soil types, weather conditions, range of weather conditions. And those were to determine -- used to determine that we do not feel there's a frost heave risk.

Q. Okay. And Mr. Ammerman says, on section 5.2, is the soil temperatures necessary to create frost to a depth greater than 51 inches is not probable; correct?

A. That's correct.

Q. Okay. And is that for the entire length of this 2,000-mile plus pipeline?

A. Mr. Bakke, as I've said a couple of times now, there are many different factors involved that would have to be contributing to -- for frost heave to occur, and we do not feel that they are present at any point along the pipeline, in North Dakota or the other four states.

Q. Except for --

A. And I think you -- and I think -- and I think if -- if you can cite an instance where there was an incident or an issue with frost heave in North Dakota, I'd be happy to look at it.

Q. Well, have you done any frost heave studies in North Dakota yourself?

A. In the western side of North Dakota.

Q. And in terms of --

A. I haven't -- let me correct for the record, Mr. Bakke. I haven't done frost heave studies myself, but we've had them done.

Q. And do you understand that if there's frost heave below a pipeline, that what can happen is there can be a rupture or leak in the pipeline?

A. Well, I -- I think you're speculating,

Mr. Bakke. If there is -- if there are conditions present that could result in heaving and that heaving was extreme enough to move the pipeline and put stress on it, potentially. But I think that's a big -- big stretch. And as I've said a couple of times already, there is no incidences, that I'm aware of, of heaving in North Dakota or the upper part of the United States and, in fact, in the whole Lower 48.

Q. I mean, isn't it common knowledge in North Dakota that in farmers' fields, pastures, that you can have rocks, large rocks sometimes, make their way to the surface due to frost heave?

A. I'm not aware of that.

Q. I mean if there was a rock below the Summit pipeline and frost heave occurred, it could push that rock into the pipeline, causing a leak, couldn't it?

A. Well, I am aware that there are tens of thousands of miles of pipeline in North Dakota. There's Dakota Access. It's a pipeline that's traversing this part of the state. And I'm not aware of any incidences of frost heave. And that pipeline's been in service since 2017.

Q. Okay. And the Dakota Access pipeline, to be clear, that's an oil pipeline, not a CO2 pipeline; correct?

A. It is.

Q. You would concede the CO2 pipeline industry is a very young, untested industry because, in the whole of the U.S., there's only about 5,000 miles of CO2 pipelines?

A. That's a gross mischaracterization, Mr. Bakke. There's been CO2 pipelines in service in this company for over four decades.

Q. You say --

A. There's one in North Dakota. It's been in service for 20 years.

Q. Okay. So your testimony is there isn't just approximately 5,000 miles --

A. There is. But that -- you can't conflate the length of pipeline with being a new industry. And it doesn't matter, in my opinion, whether it's CO2 in the pipe, crude oil in the pipe, natural gas in the pipe, or refined products. Still governed by PHMSA, the design, construction of those pipelines. And a weld is a weld, Mr. Bakke.

Q. So in Summit's opinion, a CO2 pipeline is no more dangerous than a natural gas pipeline?

A. I'd say less so.

Q. And a CO2 pipeline has no purpose for individuals, for their homes, such as a natural gas

pipeline where we all, especially in North Dakota, need natural gas to heat our homes in the winter, heat our other buildings; correct? CO2 you'll never connect to your home and use?

A. Connect to your home, no, but there are industrial and commercial uses for CO2.

Q. But not in populated areas or not in cities or near residences?

A. Well, there's wastewater treatments in populated areas, and that's one industrial use, yes.

Q. One. Other things that's discussed in relation to Mr. Ammerman's frost heave study is groundwater issues need to be taken into consideration. Can you point to me in the report any groundwater considerations that are taken into account by Mr. Ammerman in determining his frost heave study conclusions anywhere in North Dakota?

A. Well, you know that the extent of the permit application in North Dakota is significant. And so there are a lot of analysis that's been done on not only water tables and other type of either areas that we have to avoid or areas we have to consider along the pipeline route and they are not all reflected in this report.

Q. In regards to this frost heave report by Summit, did Summit consider any information in regards to soil

moisture and temperature below 40 inches?

A. We considered the data that's available as to those factors, yes.

Q. Okay. So you don't know?

A. No. I said yes, we did.

Q. Okay. And specifically where?

A. Again, Mr. Bakke, I'll repeat myself. There's not a frost heave risk in North Dakota for this pipeline.

Q. Where are the five monitoring stations described by Mr. Ammerman located in his report? There's no identification provided, is there?

A. I'd have to go back and reference the detail.

Q. Well, would you agree five monitoring sites over 2,000 plus miles is inadequate to have any reliable information in regard to frost heave or to come to any conclusions?

A. I would not.

Q. Okay. Can you identify any city anywhere in the U.S. where a CO2 pipeline has run through a city, a populated area?

A. Again, Mr. Bakke, I'm not familiar with the location -- generally, I am -- of the other CO2 pipelines in the country. Generally, pipelines try not to traverse through cities, although you know yourself

in Bismarck, you have a refined products pipeline and a natural gas pipeline that run through the city. So I'm not aware of the other pipelines in the country, exactly their location, but most of them are in west Texas, Wyoming, the Dakota Gasification project that goes north in Dakota -- North Dakota. Most of them are not in areas where they would likely, but I don't know that for a fact.

Q. Okay. My question, however, is specific to CO2 pipelines.

A. My answer was specific to CO2.

Q. So you can't name a single location where there's a CO2 pipeline in the U.S. that runs through a populated area; true?

A. No, it's not true, Mr. Bakke. I'm not sure where those pipelines, what areas they traverse and whether they do or do not traverse a city.

Q. Can you name a single city or location where a CO2 pipeline runs close to a populated area?

A. Again, I'm not intimately familiar with the routes of those pipelines.

MR. BENDER: Your Honor, I thought we were going to stick with new issues. I --

MR. BAKKE: I just got one --

MR. BENDER: -- think we're about out of time.

Q. (BY MR. BAKKE) One final question here. And that question is: all these locations of these CO2 pipelines that you discussed here today, Wyoming, Dakota Gasification Company, Texas oil fields, those are all in very rural locations; correct?

A. Again, I'm not sure of the exact routing of all those pipeline systems, but you know yourself, you mentioned -- it's Satartia, by the way. You mentioned Satartia, Mississippi. And that pipeline runs from Louisiana to Mississippi and it is not all rural areas.

MR. BAKKE: I have no further questions.

ALJ HOGAN: Mr. Leibel, any questions?

MR. LEIBEL: Yes, Your Honor, and I'll be very brief limited to one clarification about the direct.

ALJ HOGAN: Sure. I appreciate that. Thank you.

CROSS EXAMINATION

BY MR. LEIBEL:

Q. So, Mr. Powell, you're going to hear a little bit later from an Emmons County resident who's going to ask the Commission to delay their decision-making until PHMSA updates their safety regulations. And my understanding from your testimony earlier is that those -- that update is actually something that happens in the regular course. Am I summarizing your testimony

accurately?

A. I think that's the case, yes.

Q. Okay. And so it's your understanding that that's unrelated to the Satartia, Mississippi, incident?

A. Well, again, as I mentioned to Mr. Bakke, the PHMSA report for the incident, it references five, what I would consider failures, and all five of those failures are currently -- are addressed in the current regulation.

Q. Okay. So if PHMSA had decided to reevaluate all of their regulations in light of Satartia, don't you think it would be reasonable to wait to see what PHMSA identified needed to be changed?

A. Well, again, PHMSA's already reviewed the Satartia incident. In their report, they reference the five failures and those five failures are covered in their current regulations. So if the operator of that pipeline would have addressed those five areas, that may have impacted the incident.

Q. Could you please turn to the document that's been admitted as Exhibit W147?

A. Is that same -- same --

Q. I think it's in the skinnier -- it's one of the Warford exhibits. It's 147.

A. 147.

Q. Yes. I'm sorry.

(Pause)

A. I have it.

Q. Okay. Now, document 147 appears to be a news bulletin from an official website of the United States Government. Do you see that at the upper left-hand corner?

A. I see it's an official website of the United States Government, correct.

Q. And at the very bottom it has the website on there and it's https://www.phmsa.dot.gov. Do you see that at the bottom left-hand corner?

A. I do.

Q. And this news bulletin is dated Thursday, May 26 of 2022. Do you see that?

A. I do.

Q. And I'm going to read just the first sentence here of this bulletin, and it says "The U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA) today announced it is taking steps to implement new measures to strengthen its safety oversight of carbon dioxide pipelines around the country and protect communities from dangerous pipeline failures."

Do you see where I read that?

A. I do.
Q. Could you please read that next sentence for me.
A. "The new measures, as well as an enforcement action taken today are a result of PHMSA's investigation into a CO2 pipeline failure in Satartia, Mississippi, in 2020."
Q. And the rest of that sentence says "that resulted in local evacuations and caused almost 50 people to seek medical attention"; right?
A. Correct.
Q. And the next paragraph talks about that PHMSA is undertaking to strengthen CO2 pipeline safety, and they list five bullets there including additional research, a failure investigation report, an updated nationwide advisory bulletin, and new rulemaking to update standards for CO2 pipelines; right?
A. Correct.
Q. And so when you testified earlier in response to Mr. Bakke's question that there was no reason to wait, the rulemaking was just a standard or something that happens every four years, that was not accurate?
A. No, that was an accurate statement. What I'm saying, if you read down through these bullets, it's talking about emergency preparedness and response, that's a robust standard requirement anyway. And the

valve spacing rule that came out in '22, I think, was in part due to the Satartia incident. So if PHMSA were grossly concerned about safety related to CO2, I think they would act very, very quickly.

Q. Well, according to this, they are acting; right?

A. Well, again, I'm saying that CO2 is referenced in 195, PHMSA regulation 195, CFR 49, 195. And there are also components, depends on if it's a supercritical dense phase like we are going to transport our CO2 or it's a gas phase, which will be in 192.

So I think PHMSA intent -- and I'm not speaking for PHMSA, but my understanding, their intent is to clarify standards and -- the requirements in both of those standards to make sure they're clear.

Q. And it's Summit's position that we don't need to wait for PHMSA to clarify those regulations?

A. Yes.

MR. LEIBEL: That's all I have.

ALJ HOGAN: Mr. Pranis, any questions?

MR. PRANIS: No, Your Honor.

ALJ HOGAN: Commissioner Christmann.

COMMISSIONER CHRISTMANN: Since our hearing in Wahpeton, were you able to identify the occupancy of the building just south of the Tharaldson plant that looks to be within the North Dakota state law 500-foot setback

range?

THE WITNESS: Yes, sir.

COMMISSIONER CHRISTMANN: And what is that?

THE WITNESS: I'll have to refer to my map but is -- that building was not -- if I remember correctly, Mr. Christmann, that building was a shed or a barn. You're not referring to the one that looked like the long strip?

COMMISSIONER CHRISTMANN: I can look up the page number, but it looked like a long -- very long building, yes, something probably commercial or industrial.

THE WITNESS: I think the answer is yes and I can get you the document that depicts that.

COMMISSIONER CHRISTMANN: Yeah, I do want that ultimately.

THE WITNESS: Okay. What we've done, Commissioner Christmann, is taken -- I know you can't see this from there. We've taken all those instances and we've actually put the location along the pipeline and then a tract number and the distance from the pipeline to the corner of the dwelling, etcetera. We've done that in all those instances.

COMMISSIONER CHRISTMANN: Okay. And so I will want that specifically. If we've gotten it, maybe I just need a reference to where it is, but I didn't

notice it if it's been turned in.

And did you ever get a number on the depth of the bore underneath the Red River?

THE WITNESS: We submitted a document showing all of the major water crossings. If I remember correctly, there may have been 11 HDDs, which those -- where those were located and the depth of the pipe below the mud line in each one of those.

COMMISSIONER CHRISTMANN: Okay. If we have that, I will review that.

And then my last question, you had said, I think, that you're approaching 72 percent easement acquisition. That's across the whole length?

THE WITNESS: Yes, sir.

COMMISSIONER CHRISTMANN: In North Dakota or the whole pipeline?

THE WITNESS: The whole pipeline, we're about 68 percent. So North Dakota is a little ahead of the curve.

COMMISSIONER CHRISTMANN: And in the past you've turned in a document that showed it like per foot or per mile, per occupant, both ways, because it can vary quite a bit, although your numbers have been fairly close in each of those, but do you have a new one now? Oh, and also county by county. Do you have a new one that

you're turning in today or will there be --

THE WITNESS: We have one coming. It will be turned in today. They signed about seven tracts late last night and so they wanted to make sure those were incorporated. So that will be provided today, yes, sir.

COMMISSIONER CHRISTMANN: Okay, very good. No other questions. Thank you.

ALJ HOGAN: Commissioner Haugen-Hoffart.

COMMISSIONER HAUGEN-HOFFART: Thank you.

Thank you for hanging in there and -- it was brought up about the safety valves. Mr. Leibel, I think, just briefly mentioned it. And you talked in Bismarck a lot about the safety features on the pipeline, in the valves. Can you tell us, just to recap or confirm, that those safety valves are located what, 20 feet apart?

THE WITNESS: No, ma'am. The new PHMSA rule that was issued in '22 says the maximum spacing for valves, for block valves, is 20 miles.

COMMISSIONER HAUGEN-HOFFART: 20 miles.

THE WITNESS: Previously -- that's fine. Previously, there was restrictions around major water crossings, either side of a pump station or facility, but there was no intermediate -- to my knowledge, there was no intermediate spacing requirement. And without

going in too much detail again, typically when we're developing a project like this, we do an analysis around risk. Where's potential risk, where could we have a release, and how to mitigate that risk and the volume of material that would escape, and that's how you locate the spacing of your valves. But PHMSA was much more prescriptive in this new rule and said 20 miles is the max spacing, and with high consequence areas it's even tighter. And before that rule was official, the project adopted that, and that added about 70 valves to the project. But -- but Summit adopted that requirement before it was officially a rule.

COMMISSIONER HAUGEN-HOFFART: So just to summarize, Summit is putting valve spacing, with that additional, less than 20 miles apart?

THE WITNESS: In some cases they'll be less than -- for instance, in North Dakota, at the Missouri River crossing, there will be a valve on either side of the river. So that will be much closer than 20 miles. But at any point along the pipeline length, valves cannot be spaced -- main line valves cannot be spaced more than 20 miles apart.

COMMISSIONER HAUGEN-HOFFART: Okay. Thank you for that clarification. I have no further questions.

ALJ HOGAN: Mr. Dawson.

SUBSTITUTE DECISIONMAKER DAWSON: Judge Hogan, Mr. Powell, I have a question because of a question that she asked, that is: is there any other way to mitigate risk besides valves?

THE WITNESS: Yes. There are many ways. One is through a robust integrity management program that PHMSA requires, and that's having a cathodic protection system. And that's where we're going to install an impressed current system, which essentially just puts a sacrificial anode so that any -- any soil constituents that may erode the pipe will erode the anode versus the pipe. The PHMSA requirement is to have that in place one year after operation. We'll have that in place on day one. We're running inline inspection tools. It's coating, it's the thickness of the material, and it's leak detection.

And so we'll have -- we've talked about this -- I know we did in Bismarck. We'll have a real-time transient model, which just means we'll have a simulated operation of the pipeline running in parallel to the actual pipeline so an operator sitting in his console and he's looking at both, and if they don't align, and especially if it's the operating pipeline, then he can take action.

So sorry for the kind of meandering response,

but there are many factors that can mitigate that risk.

SUBSTITUTE DECISIONMAKER DAWSON: Thank you. I have no further questions.

ALJ HOGAN: Mr. Bender, any redirect?

MR. BENDER: No redirect.

ALJ HOGAN: All right. Thank you, Mr. Powell.

THE WITNESS: Thank you.

MR. BAKKE: Could I just ask a question?

ALJ HOGAN: How many do you have?

MR. BAKKE: Just a couple.

MR. BENDER: And, Your Honor, I'm going to object if it goes outside the scope of I would say my redirect, which he should not be allowed to ask any questions, but if it goes outside the scope of what the commissioners have asked.

MR. BAKKE: It's in regards to one of Commissioner Christmann's questions.

ALJ HOGAN: Okay. It needs to be quick because we need to move on.

RECROSS EXAMINATION

BY MR. BAKKE:

Q. You were asked about the easement percentage, and you had mentioned in your testimony that "We are analyzing a southern crossing of the Missouri River"; correct?

A. Well, we're -- at the request of the commissioners, we're analyzing a route south of Bismarck so --

Q. So my question is, in relation to these 72 percent of the easements, which counties would this affect, the southern crossing?

A. I'd rather not get into that here. When we submit the analysis, it will be very clear what's impacted.

Q. Okay. And when does Summit intend to submit the analysis to the PSC on the southern crossing?

MR. BENDER: Asked and answered.

ALJ HOGAN: You can -- if you can just repeat.

A. I said the final draft will be done middle of this month.

Q. Thank you.

ALJ HOGAN: All right. Thank you, Mr. Powell.

THE WITNESS: Thank you.

ALJ HOGAN: All right. I have on my list Ms. Schonert as the next witness.

Is that your client, Mr. Leibel?

MR. LEIBEL: Yes.

ALJ HOGAN: Is this going to be lengthy testimony, do you think?

MR. LEIBEL: No. I will keep it to around 15

minutes.

ALJ HOGAN: Okay. I think we'll take her testimony and then do our morning break.

PAMELA SCHONERT: Good morning.

ALJ HOGAN: Good morning. Can I get you to state your full name for the record and spell your last name?

PAMELA SCHONERT: My name is Pamela Schonert, S-C-H-O-N-E-R-T.

ALJ HOGAN: Ms. Schonert, were you in the room this morning when I went through the penalties for perjury?

PAMELA SCHONERT: Yes, I was.

ALJ HOGAN: Do you understand what perjury is?

PAMELA SCHONERT: Yes, I was. Yes, I do.

ALJ HOGAN: And being advised of the potential penalties for perjury, do you promise to tell the truth in this case today?

PAMELA SCHONERT: Yes, I will.

ALJ HOGAN: All right. Thank you.

Go ahead, Mr. Leibel.

PAMELA SCHONERT,

being first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. LEIBEL:

A. Good morning.

Q. Good morning. And is it okay if I call you "Pam"?

A. Sure.

Q. Okay. Pam, can you first identify for the Commission where your affected property is?

A. It is in section 15, township 140 north, range 80 west. And it's about three to -- three and a half, four miles north of Bismarck.

Q. So in relation to the new Costco, is it north and east of highway -- or of Bismarck?

A. It's about -- it's north of Costco and -- I'm very bad at directions -- yes, east.

Q. Okay. And so tell us a little bit about this property.

A. It's farmland. And it's been in my family since 1938. My Grandfather Joseph and my Grandmother Ann bought it. And then my father, a World War II veteran, and he married my mom in 1948. And when my grandparents retired and moved to Yakima, my parents

took over the farm. And then in 1951 I was born so the best thing ever happened to them. And so I've -- I am the third generation of Mastels (phonetic) to have owned and lived on this land. My son is the fourth generation. And my granddaughters will be the fifth generation.

Q. And you said it's mostly farmland. How many acres are there?

A. Well, I can show you. They're going to take our whole field. This is an easement -- or a picture of -- they wanted us to sign. And -- so I don't know. This is 115 acres right in here. I would say -- I don't know. We might as well forget the whole part of it because we're not going to be able to do anything with it. And then they want this easement and then they want this easement. So all our land is covered by this pipeline.

Q. Okay. What's your -- what is your -- absent the pipeline, what was your intention for this land? What was your plan on how to use this land?

A. Well, we wanted it for future generations. Just north of the farmland is where my son lives and my sister owns land and my brother owns land. And my brother's daughter wanted to build a house there and my sister's daughter might want to build a house there, and

my son was in the middle of planning to build a new home. And now we're so stressed out about this that I told him he can't live there.

I mean, I can't -- I don't sleep at night thinking about my granddaughter. What size self-contained breathing apparatus do I buy for them, I don't know, for a three-year-old and a two-year-old? If this pipeline breaks, how long do they have before they get out? Mr. Powell said at the Wahpeton meeting no -- how did he put that? -- no electrical vehicles will benefit. I thought, "Hmm, how are they going to be rescued if there's no electrical vehicles?" I don't understand.

Q. And so one of the issues that the Commission is deciding with this is whether or not this pipeline will produce minimal adverse effects on the property owners. And you said that you don't -- your concern is, is that you don't want your family and your grandkids living in proximity to this pipeline.

A. Exactly.

Q. Tell us specifically what it is that concerns you.

A. Well, I'm afraid that the pipeline is going to break. Well, the land will be rendered useless. I mean, we rent it right now. We won't be able to rent

it. We will no longer be able to insure it.

Q. And I'm going to stop. When you say you're not able to rent it, tell me what's your concern about renting the property.

A. Well, because the pipeline goes through the middle of the field. And what? Are you going to rent him a couple of acres and then he's going to turn around and -- I mean --

Q. So is your concern that the pipeline, if it's only buried 48 inches, that it's not deep enough --

A. Exactly.

Q. -- to facilitate farming?

A. Unh-unh. Well, we can't take the chance that there's a third-party strike or what do we do -- what do you do if he hits it? We can't afford to pay Summit for this pipeline.

Q. Now, have you made inquiry of anyone as to whether or not you can get insurance for that?

A. We're waiting to hear from our insurance. And she just went -- she just made a face. So I'm assuming she knows that we won't be able to but she had to -- she's just an agent. She had to wait for headquarters.

Q. Now, one of the other things that the application requests from the Commission is that the Commission waive any procedures, requirements, and time

schedules laid out in the application. Do you believe that this pipeline project should be delayed until PHMSA completes their safety review?

A. I am so tired of Summit using PHMSA's rules, North Dakota rules to their advantage. And if they don't work towards their advantage, then they don't use them. No. Yes, I think they should wait for PHMSA.

Q. Do you have anything else that you would like to tell the Commission today?

A. I just wanted to touch on, he said there were 72 people that signed easements. And just because they signed an easement doesn't mean that they support this project. They might have needed the money. They didn't understand what they were signing. They signed, but now they regret it. They felt pressured.

There's so many things that I could say. This is my land, our land, and it's been in our family forever. They don't deserve it. No.

Q. Thank you, Pam.

A. Thank you.

ALJ HOGAN: Mr. Bender, any questions?

MR. BENDER: No questions.

ALJ HOGAN: Mr. Pelham, any questions?

MR. PELHAM: No questions.

ALJ HOGAN: Mr. Bakke, any questions?

MR. BAKKE: Just briefly.

CROSS EXAMINATION

BY MR. BAKKE:

Q. You mentioned, Ms. Schonert, that "We can no longer insure the land." In the exhibits, and I'm not asking you to look at these, but the new exhibits we provided to the commissioners today, there's two letters which are Exhibits 173 and 174.

And were you aware that there's two insurance companies who have taken the position that farmers, ranchers, landowners who provide an easement to Summit will not be able to secure insurance for the pipeline area should a leak occur because it's considered a pollutant under the insurance policy and therefore excluded from coverage?

A. I did not know that there were two insurances that already had stated that, but I -- I was concerned about it.

Q. Okay. And those two are Farmers Union Insurance and State Farm Insurance.

A. We have State Farm.

MR. BAKKE: Okay. That's all I have.

ALJ HOGAN: Mr. Pranis, any questions?

MR. PRANIS: No, Your Honor.

ALJ HOGAN: Commissioner Christmann.

COMMISSIONER CHRISTMANN: I'm sorry, ma'am, but I was slow at getting your land description down. Did you say section 15 of 140 north and range 80 west?

THE WITNESS: Yes. Yes.

COMMISSIONER CHRISTMANN: So that is just east of Highway 83; correct?

THE WITNESS: Yes.

COMMISSIONER CHRISTMANN: Okay. And the railroad goes north and south through the -- kind of the eastern half --

THE WITNESS: And that's --

COMMISSIONER CHRISTMANN: -- of that section?

THE WITNESS: -- another question that hasn't been brought up. They have to go underneath the railroad for this pipeline. What's going to happen there when trains go over and the vibrations? That's another concern. I worry about everything. I'm a grandmother. I do.

COMMISSIONER CHRISTMANN: I just wanted to verify that I'm looking at the right spot here.

THE WITNESS: Yes.

COMMISSIONER CHRISTMANN: That's where it is.

THE WITNESS: We're about four miles north of Bismarck right now. We used to be ten.

COMMISSIONER CHRISTMANN: Did you say you live

on the --

THE WITNESS: No.

COMMISSIONER CHRISTMANN: -- or your --

THE WITNESS: I live in Bismarck. My son.

COMMISSIONER CHRISTMANN: Your son does. Okay.

THE WITNESS: My son, daughter-in-law, and two granddaughters.

COMMISSIONER CHRISTMANN: How far from the pipeline route, the residence?

THE WITNESS: Less than a mile.

COMMISSIONER CHRISTMANN: Less than a mile. So it's not in that section?

THE WITNESS: I have -- no. They don't live right in there. No.

COMMISSIONER CHRISTMANN: And the last thing. When you were talking to your insurance agent -- so insurance covers a lot of things. Were you talking about just a general --

THE WITNESS: A liability.

COMMISSIONER CHRISTMANN: -- ranch liability or were you talking about insurance on you or people using your land not damaging the pipeline specifically?

THE WITNESS: It was for our renter so that, if he would get hurt while doing something on the farm, we would have insurance that would cover. Liability

insurance.

COMMISSIONER CHRISTMANN: And are you saying that they won't give you insurance at all or they won't insure that if something is related to the pipeline, that it --

THE WITNESS: Something that's related to the pipeline. If there's a strike or --

COMMISSIONER CHRISTMANN: But could you still get general farm liability like --

THE WITNESS: I don't know.

COMMISSIONER CHRISTMANN: -- if your renter --

THE WITNESS: Like I said, we haven't heard from our insurance agent yet so I don't know.

COMMISSIONER CHRISTMANN: Okay. Thank you.

THE WITNESS: You're welcome.

ALJ HOGAN: Commissioner Haugen-Hoffart.

COMMISSIONER HAUGEN-HOFFART: Thank you.

Pamela, you indicated, when asked about minimal adverse effects, your land being useless and you referenced that you currently have someone renting the land; correct?

THE WITNESS: Right.

COMMISSIONER HAUGEN-HOFFART: Have you had any discussions with that renter, if the pipeline comes in, that he does not want to rent it for --

THE WITNESS: We can't afford to rent it if we can't get liability insurance. We can't have a renter on there.

COMMISSIONER HAUGEN-HOFFART: Okay. Thank you for that clarification. No further questions.

ALJ HOGAN: Mr. Dawson.

SUBSTITUTE DECISIONMAKER DAWSON: Commissioner Hogan.

Have you signed an easement yet?

THE WITNESS: No.

SUBSTITUTE DECISIONMAKER DAWSON: Okay. That's my only question.

ALJ HOGAN: Mr. Leibel, any redirect?

MR. LEIBEL: I have none, Your Honor.

ALJ HOGAN: All right. Thank you, Mr. -- I'm sorry, there's too many misters.

THE WITNESS: I know.

ALJ HOGAN: Ms. Schonert.

THE WITNESS: Thank you.

ALJ HOGAN: All right. We are going to take our morning break. And when we come back, we'll have our first block of public testimony. So if you're a landowner or live in Emmons, Logan, and McIntosh, the commissioners would like to hear from you first. And if you want to maybe sit in those front seats and get ready

to come up stage -- on stage to testify, I would appreciate that. So we'll try to take a 15-minute break or so and we'll reconvene around 10:45.

(Recess)

ALJ HOGAN: Okay. We're going to get started again. As I mentioned earlier, we are going to start with a block of public testimony.

Before we talk about that, I'll just mention for anybody that didn't hear, there's attendance sheets by both of the doors. So if you could sign in so that there's a record of everybody that attended today's hearing, the Commission would appreciate that.

And, likewise, if you do want to testify today, if you want to mark that on the attendance sheet, that would be helpful. If you plan on -- if you're a landowner or reside in Emmons, Logan, or McIntosh County and want to testify during this block, if you want to try to maybe start making your way up and sit in the front row so we don't waste a lot of time with people walking up and down, that would be great.

As with our other witnesses you've seen this morning, if you provide testimony, I'll have you come up to the witness stand and I'll have you state your name, probably spell your last name, and then you will be sworn in. And if you do provide public testimony, just

like with the other witnesses, we'll go around to all the parties to ask if there's any questions for you. If you represent a group, if you could identify the group and your relationship to the group, that would be helpful. And if you're a landowner, if you want to provide the location of your property, that would be helpful as well.

Just a few other things to keep in mind. This is not -- public testimony is not the opportunity to ask the parties or the commissioners questions. It's your opportunity to provide information and evidence to the Commission, much like the witnesses have done. Testimony is most useful for the Commission if it's factual, to the point, and not -- if you cannot be redundant, that would be appreciated. If somebody previously has made the point that you agree with, perhaps you can just indicate that you agree with that point rather than repeating the testimony. And I think that's it.

And, Commissioner Goehring, you're going to kick us off this morning. I'll have you state your full name and spell your last name for the record.

DOUG GOEHRING: For the record, I'm Doug Goehring, North Dakota agriculture commissioner. My last name is spelled G-O-E-H-R-I-N-G, sometimes

pronounced "Gehring" (phonetic) where I have relatives down and south of the border too.

ALJ HOGAN: And, Commissioner, were you in the room when I went through the penalties for perjury earlier this morning?

DOUG GOEHRING: I was, Judge Hogan, and I'm not lying about my name.

ALJ HOGAN: Great. And I assume you understand what perjury is?

DOUG GOEHRING: Yes, I do.

ALJ HOGAN: With that in mind, do you promise to tell the truth this morning?

DOUG GOEHRING: I do.

ALJ HOGAN: All right. Thank you. Go ahead.

DOUG GOEHRING,

being first duly sworn, testified as follows:

DOUG GOEHRING: Well, good morning, Judge Hogan, Commissioners, and panelists. As I've already stated, I'm Doug Goehring, North Dakota agriculture commissioner.

I have been receiving in the last -- well, probably in the last year and a half numerous emails and documents and calls and visitations from concerned citizens, landowners, farmers, and ranchers. And probably in the last couple weeks I have received

numerous emails, documents, probably at this point about an inch and a quarter thick so there's a lot. Plus numerous calls. I can't even return all of them or could even tell you how many they've been.

But I have compiled a lot of the questions, a lot of the concerns, that have been stated to me. I thought about them and I -- I believe the best use of my time would probably be to come here, convey some of that, offer a solution, offer a way in which one could potentially mitigate. I'm not saying it's going to be cheap, but it's just my opinion. I'm in the problem-solving business. And the fact that we do run the pipeline remediation, reclamation program, we have some knowledge with how you would mitigate and how you manage through some of the pipeline issues, but it's still up to the PSC and whatever arrangements can be made to address a lot of these things. So, again, it's our opinion, my opinion, and I'll just share that today.

And although we're not here to discuss the merits of CO2 in a pipeline, I will go on record with my objections. This Administration and some in Washington and the European Union have all taken a position that CO2 is a harmful greenhouse gas, that it's toxic and it should be regulated. Although issues have been raised about methane as another greenhouse gas, no one's really

discussed the most prevalent gas in the entire world. It's water vapor. In fact, I will tell you that CO2 is essential for life and supports vegetative growth, which, in turn, absorbs sunlight, supporting more vegetation, photosynthesis, and creates more habitat on our world. CO2 in itself provides great value to the earth, to the climate, society, and all living things.

But I'll move on from those concerns and talk about the pipeline, talk about concerns with construction, the route, reclamation, and safety. I don't intend to get down into the weeds. If there's questions, I can elaborate more on that, but I'll just make some overarching broader statements.

First of all, the pipeline depth has a concern with many, including myself, but to avoid unintended contact with equipment or the heat that will impact vegetation growth on the surface and the subsoil, the depth should be four feet or greater. The deeper, the better.

I also believe we need some ensurances concerning proper separation of topsoil and subsoil. I see this quite often in the work that we already work on. We need the same care and consideration when backfilling the pipe where the subsoil would go in first and making sure that there's no mixing with the topsoil.

I would also suggest that proper nutrients are applied afterwards to enhance quicker recovery for forages and to avoid any significant crop production losses. In fact, an application of manure on all pipeline paths and then within that construction area would actually reintroduce a lot more biological activity that's been disturbed and soil structure has been destroyed during that period of time. It just takes time for it to recoup and regenerate. So any of those types of activities, any of those things that can be done to enhance the soil will certainly minimize the impact back to the landowner, the farmer, the rancher, whether they're growing forages or they're growing crops.

Compaction is also an issue. And this has got a couple different issues, a couple different roles and which we'd have to consider, but first of all, when we're talking about surface compaction, we need to consider how wide that construction easement is and also work with soil scientists, work with the landowners, work with the farmers and the ranchers.

Understand that soils are part of the issue here. Moisture is part of the issue. So is the timing. What part of the season are we doing this? But consider applying gypsum. And in some soils that works really

well. Gypsum doesn't always address compaction issues, but in many cases it certainly can. But manure and ripping certainly are good ways in which to mediate compaction and start to address soil issues. Wherever it's applicable, it would help alleviate some of the problems.

Concerns have also been raised about a breakage in the line or a rapid release. I guess along those lines, and I heard it stated that I was referring to them as check valves, but I think there was a reference made to block valves and the distances that exist between these block valves. I would -- and I know this would be rather extensive so, again, it's just my opinion.

Thinking about CO2, its atomic weight compares to methane, natural gas, which is much lighter and will just dissipate into the air, CO2 is -- tends to follow the contour of the land and go to lower areas. If you're out in areas where you have very few rural residents or inhabitants, it's probably -- it's probably all right to have check valves every so many miles, but when we start thinking about inhabited areas, we start thinking about those more urban, populated areas, instead of miles, we might want to start thinking about thousands of feet where we would have block valves in.

A rapid release would immediately shut the pipeline down and it would minimize very little exposure probably to the public.

But there's something else to consider here and that's maybe mapping the elevation of the route and areas that are adjacent to it. I wouldn't be concerned with a hundred people living on top of a hill living next to a pipeline as much as I'd be concerned about someone a mile away in the lowest part or in the ravine where you may have several homes. You're likely to have more issues there and have to consider where you're going to have block valves in to help mitigate and minimize any potential harm or effects.

I throw these out. I'm not in charge here, but I'm just bringing some solutions forward instead of just criticism and pointing out that I may or may not like this project, I may or may not like the fact that the Federal Government calls CO2 a bad thing, but at least I want to put something on the table for everyone's consideration.

Moving on, the one issue that has been raised quite frequently with me and it has to do with tiling. In the last 20 years we've had more and more tiling projects in North Dakota. And although there may be very little here in Emmons County, I know that the

pipeline route has a considerable amount of tiling areas or tiled fields which will be potentially crossed. This is one time when you want to make sure that if you're cutting through tile, there has to be proper compaction underneath that tile line so that we can avoid any sagging or future breakage.

Now, I have asked Summit about this issue. There's a liability here if ten years down the road that line breaks or all of a sudden it's not working properly. And they have asserted that they would make sure -- because it's their pipeline, they would make sure that that line is fixed, repaired, and that it operates and functions the way it's supposed to.

If you provide me that assurance, the same assurance they have, and our farmers can be assured that their system that they spent an inordinate amount of money to put in place will operate and function the way in which it was designed, you'll probably be able to eliminate a lot of their fears over this also. But that has probably been one of the bigger issues I've heard from those producers, those landowners that have made such an investment with tile lines, is they want assurances that, no matter what, it operates and functions the way that it was meant to, the way that it was put in the ground. So if we can address some of

those things, I believe it will help with those producers and landowners that have invested so much in the tile line side.

With that, I appreciate your time and I'll stand for any questions. I know you have a lot of people that want to speak today, so like I said, I wasn't going to elaborate unless you ask me.

ALJ HOGAN: All right. Thank you.

Mr. Bender, any questions?

MR. BENDER: Thank you, Commissioner, for your time. And I don't have any questions.

ALJ HOGAN: Mr. Pelham.

MR. PELHAM: Thank you, Commissioner. I don't have any questions either.

ALJ HOGAN: Mr. Bakke.

MR. BAKKE: Surprisingly, I do.

(Laughter)

ALJ HOGAN: It surprises nobody.

MR. BAKKE: Commissioner Goehring, could you turn to Exhibit 159 in the binder there? They're all labeled. I think it's on your left-hand side.

DOUG GOEHRING: 159?

MR. BAKKE: 159.

DOUG GOEHRING: I have it here.

MR. BAKKE: So that's a brochure from a company

called Linde who is in the pipeline industry and it has safety advice for carbon dioxide. And if you turn to page 2 of that document, it talks about -- there's a summary of likely health effects, CO2 by volume. And it talks about --

And, first of all, am I correct in understanding you understand this CO2 pipeline that Summit wants to install would be a hundred percent carbon dioxide --

DOUG GOEHRING: Correct.

MR. BAKKE: -- by volume?

DOUG GOEHRING: That what I understand, yeah.

MR. BAKKE: Okay. And this talks about the health effects at different exposure levels by volume.

3 percent of carbon dioxide exposure to someone on the gas is weakly narcotic at this level, giving rise to deeper breathing, reduced hearing ability, coupled with a headache, increase in blood pressure and pulse rate.

4 to 5 percent volume carbon dioxide exposure, stimulation of respiratory center occurs, and deeper and more rapid breathing, signs of intoxication become evident after 30 minutes of exposure.

5 to 10 percent exposure of carbon dioxide, breathing becomes more laborious with headache and loss of judgment.

And if the carbon dioxide exposure of this -- hundred percent carbon dioxide to someone is between 10 percent -- even as low as 10 percent, if it increases above 10 percent, unconsciousness will occur in under one minute, and unless prompt action is taken, further exposure to these high levels will eventually result in death.

Were you aware of this danger posed by the CO2?

DOUG GOEHRING: Yes, I'm aware of what CO2 does. Yes.

MR. BAKKE: So understanding that, do you agree that this CO2 pipeline should not be built near populated areas such as Bismarck?

DOUG GOEHRING: I believe there's ways in which one can mitigate the risk or should look at to mitigate. I'm not here to decide whether -- where it should actually go. Do I believe any place you put it, somebody's going to be inconvenienced? Is there a way to minimize and mitigate that? I believe so. I know that that's what all of you are charged with.

MR. BAKKE: Okay. Well, and you talked about these block valves, and I think you said you believe, in populated areas, these block valves should be thousands of feet apart?

DOUG GOEHRING: I believe they should. If I'm

looking at how to mitigate a project and mitigate the risk with the concerns that have been brought forth to me, I'm finding ways in which -- let's face it. If something is going to happen, how can I best minimize that impact?

MR. BAKKE: Sure. And one way -- because as an example, Summit proposes in their pipeline route to run this pipeline through north and east -- to the north and east of Bismarck within two miles of three existing public schools. Were you aware of that?

DOUG GOEHRING: No, I wasn't. I'm -- I'm not really necessarily sure where the pipeline route is. I know of all the people that have contacted me and I have an idea of where they live. So I have a general idea, an area, but I wasn't sure.

MR. BAKKE: Okay. Were you aware that there's 1,259 911 call locations within two miles of this pipeline, meaning those are residences or offices or occupied buildings?

DOUG GOEHRING: I'm aware of all the residents that reside around the Bismarck, Mandan area. I reside around that same area.

MR. BAKKE: Sure. And don't you agree that there would be much less risk, we could mitigate the risk by moving this some substantial distance away from

the city of Bismarck?

DOUG GOEHRING: I don't disagree, but it's not my option or it's not for me to say where it gets moved to, but I'm going to point out where I may have concerns with where it's at. That's up to the Commission to decide where it may need to move or where the route is. I came here with something that I deal with and do every day, which is I try to find solutions to problems. How do I best mitigate to minimize impact and effects, knowing that sometimes in the world I live and work in there aren't very many options. Things exist. Things happen. How do I best manage through that.

MR. BAKKE: Has Summit ever come and spoken to you about any mitigation efforts they're willing to consider to reduce the risk to the public due to this proposed CO2 pipeline?

DOUG GOEHRING: Summit has visited with me. I wouldn't say necessarily about mitigation. They asked if I had any questions, if I had any concerns. They did approach me early on and asked if I would -- if I would consider using my pipeline reclamation, remediation program in this situation.

I did share with them that it's a little bit different circumstance and situation. In the pipeline reclamation, remediation program, the reason it exists

is because, in oil and gas country, mineral owners have a constitutional right to develop their minerals. In doing so, you are imposing a pipeline on a surface owner and many times -- I shouldn't say many times -- often there is issues and concerns with how that pipeline is going in or what may have happened. Our job was to intervene, to mediate, and to point out ways in which we can mitigate the situation, we can minimize the impact, we could help the surface owner and still accomplish what the operator and the mineral owner are trying to accomplish, which is to develop those minerals and then to make sure that that oil and gas makes it to a processing facility or a major transmission line, pipeline.

Those are a little bit different than what we're dealing with here. Here we have a private company that needs to negotiate with landowners to determine what's the best path forward.

That's not to say that we couldn't, if asked, potentially intervene and mediate, but here's the problem. One thing, when we -- when that program was developed and the legislature had us do that back in 2012, I stated right away and the legislative intent exists that states we are not to negotiate contracts. I won't negotiate a contract between a landowner and a

company. We can help point out some things about how wide that construction easement should be, some things to consider when you want to mitigate and how that soil should be put back in place. There's a lot of things we can address. But in most cases, when it comes down to this pipeline route or one that exists in western North Dakota, we're only going to get involved in sort of the mechanics and the mitigation and the impacts. We aren't going to get involved in trying to negotiate the contract or state whether you should or shouldn't.

MR. BAKKE: Sure.

DOUG GOEHRING: I'm going to respect a person's rights in doing that.

MR. BAKKE: Sure. And you mentioned mineral owners and their right to develop their mineral interests --

DOUG GOEHRING: Constitutional right, yes.

MR. BAKKE: -- and the effect on surface owners. But this is a different situation with this CO2 pipeline because basically that CO2 is not something where somebody is going to sell that, make money off it like minerals, provide a fuel for vehicles, fuel for homes, anything like that. This is, essentially, a waste product primarily coming from other states to be dumped in North Dakota, isn't it?

DOUG GOEHRING: What I would -- what I would state, this is my opinion, the Federal Government has deemed CO2 to be a harmful substance that needs to be regulated or at least they'll compensate you for managing it in a certain way. Whether I agree with that or not, they've already set the framework in place to address the issue. And in the Federal Government's eyes, they see a benefit to capturing CO2 and sequestering it.

MR. BAKKE: Sure. And I understand the rationale, but you would agree this is not a product that can be sold or burned or used at the end point. It's strictly something that doesn't have any commercial value to be used by anybody, at least at this point, at the area where it's going into the ground?

DOUG GOEHRING: Presently, no.

MR. BAKKE: Okay.

DOUG GOEHRING: Because most of the statements have been made that it's going to be sequestered forever.

Now, when the payments run out, any CO2 that's coming to North Dakota I would hope get used for the first intended use. When I became commissioner, we started down this path of looking at sequestering carbon dioxide but for two main reasons. One was to preserve

and protect our coal-fired electric generation facilities. The second thing was to use it for enhanced oil recovery, because it's a great substance in that.

What's happened in between is this program was developed that said we're going to sequester CO2 and you're going to have to do it for a minimum of 12 years, and we're going to pay you $50, $55 a ton -- now Congressional action has moved to $80 a ton -- but after 12 years, any of that product that is coming to North Dakota, any product that's being sequestered in North Dakota, I would hope we turn around and use it for enhanced oil recovery to assure recovery of our oil and gas reserves that exist in the geology in the state of North Dakota. That was the intended use originally.

MR. BAKKE: But whether that ever is going to come to fruition, we don't know?

DOUG GOEHRING: I would agree. But I would suspect, after 12 years, why else would you be moving it into -- to spend that kind of money to move it into a formation other than our companies could take benefit of that and we could turn around and utilize it for oil and gas recovery.

MR. BAKKE: This $80 a ton, that is --

ALJ HOGAN: Excuse me.

MR. PELHAM: Your Honor, I'm going to -- I don't

mean to interrupt the questioning, but we're getting a bit off track here. I mean, this is a siting hearing for the line and we're not here to talk about the policies behind it. And all due respect to Commissioner Goehring, I think he did indicate that in his testimony, but I think further questioning on this, we want to hear about this project, whether or not this project here and now is something that's to be sited in North Dakota or not.

So I'd ask that we move to questions that are related to this project and not the policies behind carbon capture that this Commission has no jurisdiction whatsoever. The Federal Government has decided these policies and they just don't relate to this Commission.

MR. BAKKE: And I can move on. I just have one question on the economic benefit he mentioned.

ALJ HOGAN: Hang on a second.

Commissioner, did you --

COMMISSIONER HAUGEN-HOFFART: Yes. I was going to say the same thing. I think we need to --

ALJ HOGAN: Okay. So you only have one other question? Because I think we are beyond the scope of what Commissioner Goehring intended this morning.

MR. BAKKE: So, Commissioner Goehring, you heard about -- from Ms. Schonert about the issue with

landowners being able to have liability insurance coverage if this CO2 pipeline is on their land. Is that of concern?

DOUG GOEHRING: One time I was the president of the state's largest domestic insurance company. And I think some things could be misconstrued. And I'm not really sure -- it depends on what you're asking for. Can you insure someone else's liability? No. Summit's responsible and liable for their pipeline. Now, if you damaged it, there's the process there and investigation. They're going to try and determine and figure out who's going to be paying what expenses to repair it.

But pipelines go across my property. Insurance hasn't -- my insurance company hasn't denied me liability insurance because that pipeline is there. As long as I'm having normal agricultural activities and practices on that ground, I'm safe, I'm fine. If I do something that creates a liability, my insurance company probably isn't going to like it.

But I don't know the situation because I don't know what you're trying to insure for. That would be the concern and the question.

MR. BAKKE: Okay. So whether or not you would have a concern or not, you would need more information to know?

DOUG GOEHRING: Correct.

MR. BAKKE: Okay. Thank you.

ALJ HOGAN: Mr. Leibel, any questions?

MR. LEIBEL: I have no questions.

ALJ HOGAN: Mr. Pranis.

MR. PRANIS: Yes, Your Honor. Thank you.

And thank you, Commissioner, for being here. I appreciate your comments. Kevin Pranis for LIUNA, Minnesota, North Dakota. Our members build pipelines. And I think we agree overwhelmingly or entirely with the comments that you made and I just want to briefly talk about a couple of them.

If I understand you correctly, you're saying that the -- that we can focus here on mitigation of risk and mitigation of impacts, understanding that there will always be some impacts and risks; is that right?

DOUG GOEHRING: Yes. I don't think you can completely eliminate risk. And let's just say, if I have to operate in a world where this is going to happen, what can I do to mitigate and minimize any of those impacts? So that's certainly the world that I get presented every day. And that's what I'm trying to do. I'm not trying to just come forward and bring criticism for everything you're doing. At least I should be offering something that provides value, usefulness, and

also addresses people's concerns. Because I do have a responsibility there. And that's what I've tried to bring forward --

MR. PRANIS: Thank you.

DOUG GOEHRING: -- how can we alleviate that?

MR. PRANIS: Thank you.

I heard you reference at least two sort of what I would consider types of mitigation. One was we could call it "engineering" in terms of what actually gets built. I think you specifically mentioned block valves. There's, I suppose, the depth of cover question, how it's designed, and that's one area of mitigation.

And the second area of mitigation I think I heard you describing was about the way that the pipeline is built; in other words, how it's -- the techniques that are used to actually install it and what sorts of impacts that have. Is that a fair characterization?

DOUG GOEHRING: It is. And it's exactly -- when I worked construction, we did pipelines, waterlines. And how you managed and cared for putting that back in, how you were backfilling, how you were treating the whole project generally meant whether you had a water leak there or not. Not all the time, but in some cases your care and consideration meant something.

MR. PRANIS: That is exactly our experience.

And so specifically in terms of construction, I heard you list topsoil separation as one of the issues of concern. I heard you reference compaction in terms of what the sort of impacts are on the soil. I heard a reference to drain tile damage.

I guess the question would be: are those, you know, some of the priority areas and are there any other priority areas in terms of how the pipeline is built that you think that should be managed in this process to minimize risk and damage?

DOUG GOEHRING: I will say as a landowner and a farmer, any time you go on anybody's property, treat it with the utmost respect. How would you want that land to come back into condition knowing that a pipeline is going to go through here?

I would take the utmost care to make sure that when you're taking the topsoil off, that it is -- and out here, it's measured in inches and sometimes just a few inches. I'd just make sure that that is over here in one area, that that subsoil does not come in contact with it, and it's the very first thing that goes back in.

And when you're dealing with rocks, make sure those rocks are removed from that backfill to the greatest degree. I mean, you can't have them within a

foot of anything that's going to be next to that pipe.

And then put that topsoil back on, the last thing. And then, if you can, apply some manure, apply some of the basic nutrients, NP and K, some of the micronutrients. Help that soil to recover as quickly as possible. They are going to be -- and even though they're being compensated for surface damages, for the loss of forages and crop that are there, try to help them recover that as quickly as possible so it doesn't minimize their bottom line and their operation.

And then do a good job cleaning up. Remove the rocks. I don't care if they were underneath. They end up on top, remove them. Take them to a rock pile.

Work with the landowner, respect them, and you'll probably -- may not have a friend at the end of the day, but at least they won't be an enemy.

MR. PRANIS: Thank you, Commissioner.

One last question. Would you agree that it's important that the workers -- having done this work yourself, that the workers performing this work have the necessary skills and experience to know what to do correctly and to be able to perform that work correctly? For example, to recognize where the topsoil changes to subsoil?

DOUG GOEHRING: Yeah. And I got some funny

stories to go along with that that I'm not very happy to share. But, yeah, when people are out there doing the work and you're an operator, you got topsoil here and you have subsoil here, and you go when you're backfilling and you just blend it and mix it all together and throw it back in the hole, I don't think you're very competent. I think the company needs to find someone new to do the work. But, yeah, competent people will go a long ways.

MR. PRANIS: Thank you, Commissioner. That's all.

ALJ HOGAN: Commissioner Christmann.

COMMISSIONER CHRISTMANN: I really appreciate you being here today to give us some of your insight on ag.

And, also, on another topic, you were a little modest. You talked about your ag work, but as ag commissioner, you also join the Attorney General and Governor as members of the Industrial Commission; correct?

DOUG GOEHRING: Correct.

COMMISSIONER CHRISTMANN: And we have some kind of a mixed bag of responsibilities, especially with oil and gas where, for instance, Industrial Commission sites drilling things, the PSC sites pipelines and natural gas

processing plants and things like that; correct?

DOUG GOEHRING: Correct.

COMMISSIONER CHRISTMANN: And then you alluded to this part. And I can't remember what year it was. I think you said 2012. You developed that ombudsman program on some of these pipeline projects where there was dissatisfaction from landowners; correct?

DOUG GOEHRING: Correct. Commissioner Christmann, legislators knew there was a growing tension and anxiety out there, and in 2012 there were suggestions that the only way to resolve this is we got to have some type of program. And they came to me. And because the Industrial Commission oversees the gathering lines, not the transmission lines but the gathering lines, that's where we played that critical role then in intervening, mediating, and help bringing some resolution to the table.

COMMISSIONER CHRISTMANN: Okay. So that's about when I left the legislature and came to this responsibility so I've never really known how that works out. I mean, no one can ever satisfy everybody completely, but are you usually able to come to some kind of resolution on those complaints or does it often just end up at loggerheads? How has it worked?

DOUG GOEHRING: It's actually been very

successful. Probably the first year, in probably the first four public meetings we had, it brought 4, 500 people in the room. And we had landowners, farmers, ranchers. We had companies.

And one of the things, I didn't walk in with a bias, or I tried to remove that bias and be objective, but I tried to look at it from both points of view.

We had companies that their reputations were being ruined. They were hurt. They were frustrated that they're being treated like this and called a lot of names. But when you really dug into it, what you found out, the companies didn't want their reputations smeared or ruined. They wanted to have a good relationship and do a good job. But they hired contractors and subcontractors.

Contractors and subcontractors don't care about the company's reputation. They don't care anything about the company. All they care about is doing their work. So what was happening is there was poor work being done or they were being disrespectful to the landowners out there and it was causing tensions, it was causing problems.

On the opposite side of that, we had landowners that sometimes had bad days. Give you a quick one. I had a gentleman one morning, gets up, feeds cows, middle

of the winter, busted a -- an axle on the front end of his tractor. He's got a heifer going into labor. He's got to take it to the vet. A neighbor just brought back the auger, which, by the way, it had a twisted PTO shaft, but he hit the dog on the way in so now the dog's got to go to the vet. He walks in the house. He's not having the greatest day and mom burned the toast again. It's like for God's sake. And here comes a landman that drives in the yard and wants to talk to him about getting an easement to put a pipeline, a gathering line, across. And he -- this is the nicest guy in the world, yet he blew up at the landman.

So then the company's like "Well, he's just a rotten SOB and you can't get along with him." I said, "You have no idea what he went through that day, though. Go back and visit with him. Go back and talk to him." Just don't come in with this preconceived notion of what you believe people are like or what they're going through. Try to relate to their point of view.

And when you do that with both sides -- it took about three months to resolve a lot of this. Within several months -- we had people that were using my name in vain because they'd just call the company and say, "Are you guys going to come out and address this issue I've had for a couple of years?" And when they said --

well, when they said, "Otherwise, we're going to call the commissioner," they were out there within a couple of days. So it got resolved on its own.

COMMISSIONER CHRISTMANN: Glad that's working.

So most of our transmission siting has been in the west, like you were talking about, didn't have to do with tiling. This is kind of new. Did you hear at all our testimony that we had in Wahpeton on tiling?

DOUG GOEHRING: No, I didn't.

COMMISSIONER CHRISTMANN: So much of the -- we brought someone in from the Ag Extension Service and the company had a tiling company there. And a lot of the discussion had to do with corrugated sleeves that the splices would go into to give it extra support.

DOUG GOEHRING: Well, that would be good.

COMMISSIONER CHRISTMANN: You mentioned thorough compaction below. And you also mentioned long-term assurances of the quality of the splices. Does that pretty well cover what we should know, do you think, about dealing with a pipeline crossing tiled fields?

DOUG GOEHRING: Backfilling is still going to be a concern because of that structure that's been ruined within that soil when you've actually removed it, then put it back in. So just making sure that there's some care and consideration that's going to -- that's going

back into that backfilling. That's such a big, important part. It's not saying that it won't settle out, that there won't be issues. Just work with landowners to make sure that they're trying to remediate that as best they can.

COMMISSIONER CHRISTMANN: Okay. And you've addressed a number of the other questions I had, but kind of one of the last ones that we heard a fair amount of in public testimony through this had to do with a perception that -- well, I guess it's two more things I want to address, but one of them, a perception that there will be a significant loss of land value.

With the pipelines that we have done in the past and your work within the agricultural industry, do you notice that there's a perceptible reduction in land value when transactions take place if there's a pipeline involved underneath it as opposed to if there isn't?

DOUG GOEHRING: I've heard this a lot. And it really has more to do with the use. I mean, if you're going to try and establish and zone something rural residential and do a little mini development out there, yeah, you're going to devalue that. That's not going to be a prime piece of property to do that in. But when it comes to most agricultural practices, systems, farming and ranching, you shouldn't have a problem if you're

remediating the site properly.

COMMISSIONER CHRISTMANN: Okay. And then previous testimony had to do with not being able to rent out their ag land, and I didn't catch if that was pasture or cropland so I guess I'm asking about both.

DOUG GOEHRING: Yeah.

COMMISSIONER CHRISTMANN: But have you ever heard of people being unable to rent their land out to other ag producers because there's a pipeline underneath?

DOUG GOEHRING: No, I haven't heard of that. I think the -- from what I gather, and again, I shouldn't do this because it's making an assumption, but it appeared as though there's a concern with having liability insurance. Again, if you're renting to someone, your liability insurance doesn't cover them anyways. They're liable for their actions and any of their equipment.

I think it's kind of difficult that if you have something in the ground or something you're liable for, you're liable. I mean, there's no ifs, ands, or buts about it. If Summit puts in a pipeline there, or just like there's a waterline that goes through my property, they're liable.

Now, if I do something to intentionally damage

that or if there is damage to it because of something I've done above, there's probably going to be an investigation and there's going to be a lot of questions and there's going to be some determinations that are made. There might even be some civil action that may result in some of that.

But I would -- I think it comes down to what are you trying to insure, what type of liability are you trying to cover, that would then put an owner of that land or an insurance company in a position to say they will or won't insure. I can't go and insure your house. I can only insure my house.

COMMISSIONER CHRISTMANN: Thank you. I don't have any other questions, but I do thank you, Commissioner, for taking time to be here and provide information for us.

ALJ HOGAN: Commissioner Haugen-Hoffart.

COMMISSIONER HAUGEN-HOFFART: Thank you.

Thank you, Commissioner. I do have a couple of questions for you. You were in the room this -- earlier today when they talked about a study on the frost heave. It's Exhibit 162.

DOUG GOEHRING: I heard them talk about it, yes.

COMMISSIONER HAUGEN-HOFFART: Okay. In your practices as ag commissioner or in your farming

practices, have you ever experienced or seen frost heave?

DOUG GOEHRING: I wouldn't necessarily say frost heave. I've seen frost go down considerably, but there's always so many different factors you have to consider. What amount of vegetation or litter is above the ground in the winter before you actually get cold? Secondly, how much snow cover there is. Third, soil is a big deal. The more coarse your soil is, the more apt you are to have freezing further down. Moisture in the soil. There's so many different factors.

But one thing to remember about a pipeline, whether you're talking an oil pipeline or a gas line or even this CO2 pipeline, they all generate heat also. So the deeper, the better. But if you're at a four-foot distance, the heat that's around that pipeline is going to help prevent some of that frost from going down that deep.

But to that point I'll also raise another issue we found. Where you have a pipeline, and there's some different factors that affect this, but you'll see, in a drought, right over that pipeline the crops will be shorter. And part of it is due to the fact that you have a warmer soil deeper down there. You may not have the same root structure that's going down that deep.

And when you have a lack of moisture, you're just going to see that area probably impacted more. And it could be with how it was remediated also.

So I threw a lot of things on the table for you. I'm sorry.

COMMISSIONER HAUGEN-HOFFART: Yeah, you did so let's break it down a little bit for me.

So let's say the frost that we were first talking about and the pipeline being four feet and the frost goes down, the impacts on that frost can be -- what have you seen, on the pipeline?

DOUG GOEHRING: Well, I can only address what I've seen in waterlines where, going across the middle of the yard where it's bare and we found out it was only, like, six and a half feet deep, that's an area where that type of soil, the light condition, that situation, it froze and broke a pipeline. So then you got to get a backhoe and you go out and you fix it.

COMMISSIONER HAUGEN-HOFFART: Okay.

DOUG GOEHRING: And dig back a ways so you can start to get a little bit lower.

COMMISSIONER HAUGEN-HOFFART: So you have seen a broken pipeline from that?

DOUG GOEHRING: Yes.

COMMISSIONER HAUGEN-HOFFART: Okay.

DOUG GOEHRING: We've had it on the farm.

COMMISSIONER HAUGEN-HOFFART: Okay. I don't think you've had a chance to read this study, but based on the testimony today, is there anything that you didn't agree with as far as hearing that based on the evidence of this study?

DOUG GOEHRING: Commissioner Hoffart, I haven't read the study. I'm not sure. I would be disingenuous if I were to make way too many more comments about the study. I can tell you about personal experience, but I don't know if I can necessarily get into this. I can only give you my opinion as to what I know how frost reacts in the state of North Dakota under different conditions, situations.

We just went through this last winter where we got snow in October. We didn't have frost six inches. So, I mean, when it started to melt, a lot of this snow actually went into the ground this year so...

COMMISSIONER HAUGEN-HOFFART: And that was a good thing.

DOUG GOEHRING: It was.

COMMISSIONER HAUGEN-HOFFART: Okay. I'm going to go on, but thank you. You did give us some insight into your professional opinion on frost.

My other question is you indicated that the

pipeline depth of four feet or greater would be the benefit. And I'm just going to read a little bit of the application so you understand what they submitted and then ask you a question about farming practices around that.

So in North Dakota, the pipeline will be installed at a minimum of 48 inches below the ground surface and will cross primarily agriculture and undeveloped lands. It will be increased to 60 inches at water body and drainage ditch crossings. Additionally, the depth to cover will be increased to 72 inches at underdeveloped section lines per North Dakota Public Service requirements.

So that is the current depth of the pipeline in this application. And it meets what you suggested, four feet or greater. With your current -- with the current depth of the pipeline, and you referenced it, that you have a pipeline on your land, in your farming practices, would you see the current depth of the pipeline as applied would have any impacts on farming practices?

DOUG GOEHRING: No. Because in most situations, even across the United States of America, even rippers are not going to go any deeper than 27 inches. And even at that, if you think about major utilities, and you guys would know this so you can correct me if I'm wrong,

you're talking about utilities that are in at 30 and 36 inches. So you're already getting a little dangerous at a ripper that someone may drop in the ground at 27. I'm not saying it happens very often. I'm saying there are a few occasions where there's some equipment that they've used to rip deep in some fields.

COMMISSIONER HAUGEN-HOFFART: Okay. Thank you. I have no further questions.

ALJ HOGAN: Mr. Dawson, any questions?

SUBSTITUTE DECISIONMAKER DAWSON: Judge.

Commissioner, thank you for coming today. I have no questions for you.

ALJ HOGAN: All right. Thank you, Commissioner Goehring.

DOUG GOEHRING: Thank you.

ALJ HOGAN: It's a little after 11:30. I think we'll just take this last chunk of time before our lunch break for further public testimony and then we'll move on to our other witnesses right after lunch.

So do we have other individuals that would like to provide some public testimony today?

MICHAEL ROHRICH: Good morning everybody, commissioners.

ALJ HOGAN: Good morning. I'll have you state your full name and spell your last name for the record.

MICHAEL ROHRICH: My name is Michael Rohrich. I go by "Mike P. Rohrich," R-O-H-R-I-C-H.

ALJ HOGAN: And were you in the room this morning when I went through the penalties for perjury?

MICHAEL ROHRICH: I was in the room. Yes, I do.

ALJ HOGAN: And do you understand what perjury is?

MICHAEL ROHRICH: I do.

ALJ HOGAN: Being advised of the potential penalties for perjury, do you promise to tell the truth in this case today?

MICHAEL ROHRICH: I do.

ALJ HOGAN: All right. Thank you. Go ahead.

MICHAEL ROHRICH,

being first duly sworn, testified as follows:

MICHAEL ROHRICH: Okay. Hello. My name is Michael P. Rohrich. I'm a Burleigh County resident. I was also born and raised and I hold interest at an Emmons County farm that the proposed Summit energy CO2 line is slated to cross.

My grandparents homesteaded this -- most of this ground over 109 years ago. Four generations later, over 30 people have called this farm home. One unique statistic about this farm is that it consists of land both my mother's parents and father's parents once owned

and farmed. It has supported the jobs and livelihoods of many other people over the years. I can't help but think back to what my dad used to say, "Take care of your land, take care of your cattle, and it will take care of you." That being said, this land has always had good stewards on it.

The land that I'm -- that I'm talking about that's going across, they're all in township 133, range 74 west. It's the west half, northwest quarter of section 16, the southeast quarter of section 8, the northeast quarter of section 8, and the northwest quarter of section 8.

I am not opposed to pipelines. I believe, under the right circumstances, that pipelines can be the most economical and safest way to move products. However, this proposed CO2 pipeline is a first in many ways. It will be the longest CO2 line spanning through five states. It's the largest diameter, highest pressure pipeline that carries liquid CO2 that has shut-off valves up to 24 miles apart from each other.

I'm a firm believer in being responsible stewards of the land and the environment in which we live. Since we are only borrowing our world from the next generation, all people should be equally responsible for leaving our planet in a better place

than we received it.

I would also like to stress I am not a believer in the global warming hoax that our governments are trying to sell us. Without getting too far in depth, I'd like to briefly explain some of my reasoning.

We were all taught in school that thousands of years ago the glaciers that carved out the hills in western Emmons County, even the great Rocky Mountains, and there's also Lake Agassiz, which was once one of the Great Lakes in upper North America, is now dried up. We know this area as the Red River Valley of North Dakota. I could go on and on. This all happened in prehistoric times when there were not power plants, cars, airplanes emitting greenhouse gases.

The fact that the topography of the earth is constantly changing, it seems every time we hear about a hurricane, a tornado, a flash flood, news media is blaming them on climate change and global warming. Why is it that we never hear about growing glaciers in places like Jakobshavn Glacier on the West Coast of Greenland? This is one of the youngest glaciers in the world that keeps growing every year.

To me, it seems like people making the most noise about this excessive amount of carbon being released in the atmosphere are driving luxury cars,

living in mansions, flying around the world in fancy jets, and are the biggest emitters of gases.

About -- I was -- I was able to return to college and finish up a degree some 13 years ago. One of the classes I took was a soils class. In that class I learned about the biology of soils, about the nitrogen cycle, the carbon cycle. And with the carbon cycle, I learned how plants and Mother Nature pull carbon from the air, store it in the soil, which in turn adds structure to the soil, feeds the biology in the soil. It's Mother Nature's way of storing carbon. This is a far less expensive and more reliable method of carbon sequestration. The biggest difference is I don't believe some politicians and businessman have figured out how to make money on the carbon cycle.

Another alternative the world should be looking at investing and pursuing, new carbon use and technology such as using carbon to create insulation, using carbon as an alternative to steel and aluminum, which is lighter than both. Also, there's ways to feed carbon to algae to create barrier reefs in the oceans and seas. Also, create rock-like materials used for riprap and other construction applications. There's ways to incorporate carbon into concrete and asphalt to give roads harder surfaces, better wear properties.

These technologies already exist, along with many more. It is just mainly a matter of time to make them feasible. Imagine the possibilities if we invested 150 billion a year into these innovations.

Speaking of 150 billion a year, this is the projected income Summit and its investors are projected to earn every year this venture is in operation, which is primarily funded by American taxpayers and ethanol consumers alike. Most of the market in the western U.S. coastal region, California holds the biggest market share of the ethanol being produced that is tied to this carbon project. I find it ironic that California itself does not allow the construction of CO2 pipelines. I also find it amusing that California will outlaw the sale of internal combustion engines in 2035.

Did you realize that if one was to take $100 bills, $100 bills, Jeffersons -- not dollar bills, hundred dollar bills -- and stack them on top of each other to the amount of a billion dollar stack, one would have to stack the equivalent of over 41 of the North Dakota state capitols on top of each other. That is how high that stack of hundred dollar bills would be. Summit and its investors stand to share in $100 bills stacked nearly as tall as 62 North Dakota state capitols stacked on top of each other every year. Commercial

airlines would have to fly around it because of its height.

So let's discuss that stack of money. First of all, these communities that this pipeline is slated to run through will be on the hook for equipment, training, education to prepare for any emergency events that could be derived from the pipeline should it fail. Yes, there's a potential for tax -- property tax revenue generated by this existence. But even at that, there's a ten-year property tax exemption on it. But let's face it. 400,000 going back to this county wouldn't be a drop in the bucket for the investment it would take to prepare for potential catastrophes this pipeline could create. So, in short, very little of that huge pile of money would come back to these local towns, counties, townships, etcetera.

Our family land partnership has yet to find an insurance company that will cover any losses due to a CO2 pipeline failure.

Summit claims they will indemnify any losses due to a break in their pipeline. We all know big companies can face financial ruins as well as small ones. I haven't heard of anything about the PSC making Summit set money or assets aside to, say, in a trust account to cover such losses. There's nothing in the initial

contracts that puts values on loss of life, dismemberment, or property loss due to the inability to use property. No guarantees as to where the money or assets will be set aside for such claims should they result. Anyone that suffers losses will be forced back into an already overloaded court system in our state in order to be fairly compensated.

The sequestration of CO2 was an afterthought of the ethanol industry. Why else didn't this plan fall into the process of the initial building of these ethanol plants?

There's many hazards affiliated with the construction and location of this pipeline. This will no doubt be afterthoughts of this pipe -- once this pipeline is built. Refinements, adjustments, and construction of this line may come many years into the future. Hopefully, these alterations and refinements won't come as afterthoughts from an unforeseeable disaster or disasters related to this pipeline.

I'm not saying I wouldn't be persuaded to enter a contract with Summit if certain conditions and criteria were met. For example, the first contract proposal Summit sent us was an insult to the value of our property, offering us only about eight inches of that huge stack of money in exchange for a lifetime

blanket easement that would run through four parcels of land.

Also, the depth of the buried pipe is only four feet deep. That's not even below the average North Dakota frost line. Even local city codes require deck posts and some frost walls to be down at least 60 inches.

I have a picture that I sent around, that picture of that tractor. It's just a reference tractor picture. I guess you look at that picture, how many of you would want this to be a situation on top of a CO2 pipeline on their land? That did happen. You know, never say never, but those situations can happen.

The pipeline is projected to run within 500 feet of the farmyard I grew up on. Even though this farm is currently not occupied by people, I feel it's way too close. The CO2 line running crossways across a couple of our parcels could make it prohibitive to farm efficiently, especially since large equipment farmers use these days could make it too risky to cross over a pipeline with equipment such as a 130,000-pound grain cart or a 40 to 50 -- 40 to 60-foot-wide air seeders. This could possibly hinder the ability to efficiently farm such a piece of land, thus greatly devaluing the land.

A construction practice that has been adopted in our North Dakota's own Bakken fields is running infrastructures on easements and alignment of one another. This makes utilizing lands involved in any type of property much more practical. We have already been practicing this in cities and communities throughout the country for decades. I ask why can't Summit follow that type of construction practice when routing their pipeline?

Transparency. We were involved with the NextEra Emmons, Logan wind project about five years ago. The biggest difference I see between Summit and NextEra is transparency. NextEra's offers and dealings were out in the open. No secrets. Of the contracts Summit has commitments on, it seems most of the people do not -- do have a "do not disclose" addendum tied to their contracts. In my mind, the only reason for a company to do that is to eliminate competition in leases and/or terms of leases.

I know a couple people who have some regrets about signing contracts with Summit, but their no-disclosure agreements, it's very hard for them to get up and talk and testify about their regrets. I know of a few people whose landmen talked about the use of eminent domain in negotiations with Summit.

One issue I address -- on one issue I addressed with the Emmons County Commission several months ago where Summit representatives were present was the fact that the proposed pipeline jogs around state and school lands. I had an attachment with that map. That map was handed out at -- I believe it was a January meeting, Summit was handing that out. It shows the route of that -- of the pipeline -- proposed pipeline going through Emmons County. And if you notice on that map, there's a lot of direct, call them 90-degree swipes around state school lands. State school lands are noted on that -- on that map.

Anyhow, one of the responses that -- lost my place here, sorry -- there where Summit -- one of the issues I addressed at the Emmons County meeting with several months -- where Summit had represents -- the fact that the pipeline jogs around those school lands. One of the responses I got from a -- Mr. Skaare with Summit gave was that Summit preferred to give the money to business opportunities to private landowners versus the state.

If that's so, did Summit give that adjacent landowner of those school lands the same contract the State of North Dakota required, including but not limited to compensation, environmental impact studies,

exact routing request, the exact location and registration of the easement, depth of bury, and so on? In fact, shouldn't all property owners be able to have the same terms that the State requires and their contractors when crossing state-owned land? Would Summit use eminent domain to cross state land if the terms of their contracts didn't match up to their demands?

You as PSC commissioners are going to have to decide on the future of the state of North Dakota. On one hand you may approve this pipeline in the name of economic prosperity with businesses and job creation. Keep in mind there will not be many permanent jobs here once the state -- once this pipeline is in full operation. Also, the jobs used to build this pipeline will be filled mostly by out-of-state workers.

You have to ask yourself: is turning a beautiful state in North Dakota into the nation's garbage can worth the money it will bring to Summit's investors?

Also, there may be political influences that have bearing on your decision. On the other hand, there may be contributions to you or your party's election campaign funds or the possibility of funds moving towards your opponent's campaign funds. Then there's

the influence of voters and landowners alike who may bear on your decision.

You must also be mindful of the safety factor. Is running this pipeline close to schools on north prevailing wind side a good idea? Is a four-feet burial depth safe? Will there be adequate training and safety equipment available to the communities affected by this? And whose -- and at whose expense? Is running the pipeline close to towns or housing developments going to be safe? Are the shut-off valves adequately spaced? Are the landowners going to be given fair say in this project? I could go on and on.

A little side note I have written down here. One thing I thought of standing over here. In the future, like these parcels of land, if I as a landowner or farmer into the future, let's say I wanted to break up one of my pastures into different paddocks. You need to get water to those paddocks. If I have to run water, electrical, any kind of utility across this CO2 line when it's only buried four feet deep, the only way of getting across that is going to be to directionally bore under that. Where directionally boring might be feasible for someone doing a development in a city developing land, but doing that in most cases for a landowner who just wants to water cattle or livestock,

that might not be a very good return on investment and may be cost prohibitive. Another thing to think about.

But in closing, my last paragraph here, the most important thing you as commissioners must consider and the biggest takeaway I hope you get from my talk today is if there's ever a serious accident that would cause serious injury or death to someone close to this pipeline, especially children, because of an accident caused by this pipeline, you as commissioners must be able to look into your conscience, whether this life or your eternal life, you must be able to answer the question: Did I do everything in my power to make sure this occurrence could have been avoided?

With that, I'll close. And if there's any questions, I'd be happy to take those.

ALJ HOGAN: Mr. Bender, any questions?

MR. BENDER: No questions.

ALJ HOGAN: Mr. Pelham, any questions?

MR. PELHAM: Yes.

Just wondering, where did you get the photo from?

MICHAEL ROHRICH: It's just a generic photo off of YouTube. There's thousands of them out there if you want to look for equipment --

MR. PELHAM: Okay.

MICHAEL ROHRICH: -- stuck. It's just -- it's just a -- it was just an example.

ALJ HOGAN: Mr. Bakke, any questions?

MR. BAKKE: No questions.

ALJ HOGAN: Mr. Leibel, any questions?

MR. LEIBEL: No questions.

ALJ HOGAN: Mr. Pranis.

MR. PRANIS: No, Your Honor.

ALJ HOGAN: Commissioner Christmann.

COMMISSIONER CHRISTMANN: I think just one. It takes a while to look through our big map to find townships, ranges, and sections. So just in general, you know, I see on the map that you handed out Linton and Hazelton and Braddock and Kintyre. About where is your property in here?

MICHAEL ROHRICH: We're kind of caught in the middle of -- we're kind of -- down here on that -- where it says 14th Avenue Southeast, I believe we're right in there. One of those parcels of school land is due south -- southeast of our farmstead about a mile --

COMMISSIONER CHRISTMANN: Kind of just east of Linton?

MICHAEL ROHRICH: Yeah. We're north -- we're northeast of Linton. 16 miles northeast of Linton.

COMMISSIONER CHRISTMANN: Okay. You covered a

lot of ground. Thank you for being here. I think you answered all my questions.

MICHAEL ROHRICH: And I appreciate you allowing me up here to be part of the process and thanks for that.

ALJ HOGAN: Hang on, hang on. There might be more questions.

MICHAEL ROHRICH: Sorry. I'm sorry.

ALJ HOGAN: Commissioner Haugen-Hoffart.

COMMISSIONER HAUGEN-HOFFART: Mr. Rohrich, thank you for your testimony. I have no further questions for you.

ALJ HOGAN: Mr. Dawson.

SUBSTITUTE DECISIONMAKER DAWSON: Mr. Rohrich, thank you for coming today. This is why we come out here. And I appreciate you coming forward.

MICHAEL ROHRICH: You're welcome.

ALJ HOGAN: They made me a liar. There wasn't any more questions. So thanks.

MICHAEL ROHRICH: Okay.

ALJ HOGAN: Do we have others that would like to provide public testimony?

Good morning. Can I have you state your full name and spell your last name for the record?

JULIA STRAMER: Julia Stramer, S-T-R-A-M-E-R.

ALJ HOGAN: And, Ms. Stramer, were you in the room this morning when I went through the penalties for perjury?

JULIA STRAMER: Yes.

ALJ HOGAN: And do you understand what perjury is?

JULIA STRAMER: Yes.

ALJ HOGAN: Being advised of the potential penalties for perjury, do you promise to tell the truth in this case today?

JULIA STRAMER: I do.

ALJ HOGAN: All right. Thank you. Go ahead.

JULIA STRAMER,

being first duly sworn, testified as follows:

JULIA STRAMER: Thank you, Commissioners. Our family owns cropland in east -- east of Hazelton in Emmons County. If you want to see, it's in your map binder, Map 25. It just shows -- it's up in the corner. And it doesn't show all of the land. It's cut off.

Our family has spent over $8,050 to date on lawyer fees, wasted countless hours of work trying to keep Summit Carbon Solutions from entering and taking our property. Summit plans to cut our land in half diagonally with a pipeline carrying hazardous high-pressure waste. I believe that this would be an

accident waiting to happen.

Why do our governor, heads of state, representatives, and government officials agree to allow our beautiful state to be turned into a dumping ground for other states' garbage? I have written dozens of letters to the aforementioned and received only a single reply from a single senator.

We have watched our District 8 Senator Magrum do everything that he could possibly do in the legislature to protect land rights. After the shocking display of the North Dakota bills killed regarding property rights, I believe that the North -- that North Dakota landowners no longer have a voice.

If this privately-owned company is allowed to take our land for their personal gain, what is to keep other groups from coming to North Dakota to take more land? Our local people in Emmons County have seen other surveying crews scratching around on lands near Braddock, Kintyre area and to the west near the Missouri River. We feel that if this CO2 transport is allowed, we could be flooded with other out-of-state or, dare I say, out-of-country entities who are already preparing to have free rein on our property rights.

Our family was first contacted by Summit Carbon Solutions in November of 2021. The first easement

contract compensation amount was an insult, to say the least. My share of the compensation amount after income tax figures to $23.24 per year for 99 years. That's $23.24 per year for 99 years. Who would ever agree to such an absurd contract? This much loss of property value, long-term crop and land damage, liability and risk would require a carefully written easement and a very large and just yearly compensation.

So I understand that a private group of unknown people will earn millions or billions of dollars at the expense of the private landowner to bring in waste product from other states and supposedly bury it in the ground in our beautiful North Dakota rolling hills. Will our future generations have to deal with unforeseen catastrophes?

Who will actually be getting all the dollars for using our land? We don't know. Who is Summit Carbon Solutions? We don't know. Who owns the supercritical CO2 in the pipe? We don't know. When there's a rupture somewhere, who will be the "buck stops here" entity for the liability? The landowner? We don't know.

The insurance provider that is protecting our land does not have an agent who can specify any coverage for CO2 pipeline mishaps. Will anything be covered? We don't know.

Since 2021 we have received another easement contract, same compensation, same language. Then we received another and another and another and another and another and another. All with the same compensation and language. The language is all for Summit's protection with no consideration for the landowner.

In July of 2022 we received a threat letter regarding survey access. On July 29th of 2022 we received a letter stating that Summit was to initiate legal action and advised us to retain an attorney.

Summit's representatives throughout these meetings and hearings repeatedly say that these are voluntary easements. Would you call an elderly couple who are both battling cancer who signed a survey access agreement only because they couldn't deal with the stress of the constant phone calls, harassment, and threats by Summit's agents, would you call that voluntary? This is the case of the family property adjoining ours owned by my uncle and aunt.

Let's talk about the repeated quote by Summit's representatives during these hearings when they say the landowner is in charge. Our family is not in charge of our land. In fact, we are powerless if this Commission votes to allow this project.

Do Americans need to start defending their

property the way our forefathers did by all means possible? And how do we keep unwanted intruders from stealing and destroying our land?

Our land is a fourth generation property. The proposed pipeline would be about 1,800 feet from the yard where my father was born and raised and about 500 feet from both neighbors on either side. The view from our side on the hill is nothing but spectacular scenes of farmland in every direction. For many years our family planted a large garden on the land in addition to the crops. Our family also used this field as a shooting range.

My dad was a rock hound. Our whole family loves rocks. Back in the 1960s when my dad would plow the field turning over new topsoil, we would pick rock and collect rocks. Our most prized finds were the rocks used by people who lived and used the land many years ago. We also found arrowheads, pottery, scrapers, and bone tools, but the most special were the rocks we called "hammer heads." We think that one -- at one time these were attached to a bone to make a hammer.

When dad and mom died, these treasures were divided amongst the kids. Dad made displays of the smaller items and hung them in the kitchen that we had found. We cherished these things and we cherished the

land and we cherished the dirt of it. We want no one messing with it, digging in it, cutting it, displacing our topsoil, and especially laying a toxic, pressurized 24-inch pipe.

If this pipeline is built -- the land will be our children and our grandchildren's -- it will keep them from wanting to live there and retire there. The incentive to build, improve, or better the farm would be greatly hindered and limited. Please, let's nip this problem in the bud. Generations to come will thank us from keeping our state from becoming overrun by outsiders who only want to use up our land for personal profit.

Thank you, Commissioners.

ALJ HOGAN: Thank you.

Mr. Bender, any questions?

MR. BENDER: No questions.

ALJ HOGAN: Mr. Pelham. Mr. Bakke.

MR. BAKKE: Just quickly, Ms. Stramer, you held up a letter from an insurance company?

JULIA STRAMER: Yes.

MR. BAKKE: Who is that from and, very quickly, not reading the whole --

JULIA STRAMER: It's Nodak. It's very vague, stating -- down here it says agents with answers, but

there was no answer in this letter. Not to advise on policy coverages, conditions, or exclusions preemptive or before any claim is submitted regarding CO2 pipeline. And the policy does have a pollution exclusion.

MR. BAKKE: Okay. So was it -- when you received that letter, did you come to the understanding that you could not get coverage for the pipeline?

JULIA STRAMER: Correct. I would still have liability insurance but -- but not for anything regarding a CO2 pipeline.

MR. BAKKE: Thank you.

ALJ HOGAN: Mr. Leibel, any questions?

MR. LEIBEL: I have no questions.

ALJ HOGAN: Mr. Pranis, any questions?

MR. PRANIS: No, Your Honor.

ALJ HOGAN: Commissioner Christmann.

COMMISSIONER CHRISTMANN: Could you say the section and township and range of your property?

JULIA STRAMER: Sure. Township 135 north, range 76 west, section 26, E2E2 and W2E2.

COMMISSIONER CHRISTMANN: Do you have any power lines or anything like that running over your property?

JULIA STRAMER: There's no power lines.

COMMISSIONER CHRISTMANN: Nothing at all. Okay. Thank you. No other questions. Thanks for being here,

though.

ALJ HOGAN: Commissioner Haugen-Hoffart.

COMMISSIONER HAUGEN-HOFFART: I have no further questions, but thank you so much for your testimony.

ALJ HOGAN: Mr. Dawson.

SUBSTITUTE DECISIONMAKER DAWSON: Thank you for coming today. Appreciate it.

ALJ HOGAN: Thank you so much. We probably have time for one more person before our lunch break if there's somebody else that would like to provide public testimony.

Hello. Can I have you state your full name and spell your last name for the record?

JULIE SMITH: Julie Smith, S-M-I-T-H.

ALJ HOGAN: And, Ms. Smith, were you in the room this morning when I went through the penalties for perjury?

JULIE SMITH: Yes, I was.

ALJ HOGAN: Do you understand what perjury is?

JULIE SMITH: Yes, I do.

ALJ HOGAN: Being advised of the potential penalties for perjury, do you promise to tell the truth in this case today?

JULIE SMITH: Yes, I do.

ALJ HOGAN: All right. Thank you. Go ahead.

JULIE SMITH: Okay.

JULIE SMITH,

being first duly sworn, testified as follows:

JULIE SMITH: I'm a resident of Emmons County. I can't give you township and all of that. I can give you a street address. We live at 955 Highway 34. We own eight acres of land.

I'm not a landowner who's impacted. I'm a resident who is impacted. The pipeline is proposed to be somewhere within the 500 feet of the corner of our residence. Having participated in the commissioners -- the county commissioners meeting earlier in Emmons County, the 500 is of great concern to me because I'm like a secondhand smoke person. I'm impacted because of my location. I'm impacted because I'm there. And that has great concern for me.

Emmons County has at least put out there that -- I thought it was a mile and a half but I heard this morning two miles distance or setback, which would be greatly appreciated when one considers that should an explosion occur, should a leak occur, the amount of time that it's going to take for the CO2 to travel is really actively rapid. I found a few scientific papers online doing some reading from some research, and within a very short time period that is going to travel quite the

distance.

And it's different from natural gas. It's different from what goes and expels up into the air and actually dissipates in the air. With carbon dioxide being 1.5 times heavier than atmosphere, it's going to go down to the ground and travel on the atmosphere. So should anything occur within proximity of our property or any community's property, that's going to happen quickly and it's going to relatively be out there and people aren't even going to know or be aware that it happened because it's going to happen so fast.

They say that the explosion has a sonic effect to it so you're going to hear the boom if it's an explosion.

Okay, so it's just a leak. A leak still has that capability of traveling. It's going to push up a plume into the air and then from there fall out. And because carbon dioxide will come out and be the cold at first, it's going to fall to the ground and then travel on the ground. That's a huge concern for me, not only for our residence but for the communities that are in our North Dakota community -- our North Dakota state that are close to the pipeline.

I heard the words "exceed" this morning. And when we meet the 500-foot requirement in the state law,

I question whether our legislators at the time even ever considered of a CO2 pipeline and what kind of impact that would have should it have any kind of leak or explosion. So with that being in mind, I would question the 500-foot, as to whether or not that is indeed applicable in the case of a CO2 pipeline.

My other concern is the land that we have, our eight acres. Over the years that we have lived there, I now see, I don't know, I'll call them depressions in the land. We now have places that used to be mounded up are now sinking down. We have had that increase over the last several years. We now have depressions in the land that hold water. With our snow that just melted, we have about three or four puddles in the yard that we no longer had or never had before.

And so I also look at the land and I'm concerned with the land, and not only the movement of the land, the coarseness of the land. We have good black dirt. Our dirt is good black dirt. If you love a garden, it's a great place to plant a garden because you've got good soil there. But also then that tends to make me think that we've got other issues, like we don't have clay like some places do. We don't have clay that would hold it and keep it up there so you would not have it go down in -- at a depression as we see now in the yard.

So those are my concerns and I just wanted to express them.

ALJ HOGAN: All right. Thank you.

JULIE SMITH: Uh-huh.

ALJ HOGAN: Mr. Bender, any questions?

MR. BENDER: No questions.

ALJ HOGAN: Mr. Pelham, any questions? Mr. Bakke.

MR. BAKKE: No questions.

ALJ HOGAN: Mr. Leibel.

MR. LEIBEL: No questions.

ALJ HOGAN: Mr. Pranis.

MR. PRANIS: No questions.

ALJ HOGAN: Commissioner Christmann.

COMMISSIONER CHRISTMANN: Julie, I'm not familiar with the county roads in Emmons, but where -- about where is this from one of the communities, like miles?

JULIE SMITH: A little over three miles east of Hazelton on Highway 34.

COMMISSIONER CHRISTMANN: About three east of Hazelton.

JULIE SMITH: Uh-huh.

COMMISSIONER CHRISTMANN: Thank you for being here.

JULIE SMITH: You're welcome.

ALJ HOGAN: Commissioner Haugen-Hoffart.

COMMISSIONER HAUGEN-HOFFART: Mr. Christmann just asked the question I had. So thank you for your time. I have no further questions.

ALJ HOGAN: Mr. Dawson.

SUBSTITUTE DECISIONMAKER DAWSON: No questions. Thank you.

ALJ HOGAN: All right. Thank you so much, Ms. Smith.

All right. As I mentioned before, we're going to break up the public testimony so we're going to have another block of public testimony, probably we'll shoot for midafternoon. But right now we're going to take our lunch break, and let's take 45 minutes and we'll reconvene at 1:00.

(Recess)

ALJ HOGAN: If everybody wants to start making their ways back to their chair, we're going to get started here in just a second.

All right. Before we get started again, just a couple of reminders. If people want to check their cell phones again to make sure your cell phone is either silenced or shut off so we don't have those interruptions during the hearing, that would be great.

Also, if you have not yet signed an attendance sheet that's located by either of the doors, I would ask that you please sign in so that the Commission has a record of everybody that attended today's hearing.

So, with that, I believe our next witness is Mr. Bakke's witness.

And, Mr. Bakke, do you want to formally call your witness.

MR. BAKKE: Yes, Your Honor. At this time we'll call Jerry Briggs.

ALJ HOGAN: Good afternoon, Mr. Briggs. Can you start by stating your full name and spelling your last name for the record?

GERALD BRIGGS: Gerald Briggs, B-R-I-G-G-S.

ALJ HOGAN: And, Mr. Briggs, were you in the room this morning when I went through the penalties for perjury?

GERALD BRIGGS: Yes, ma'am.

ALJ HOGAN: Do you understand what perjury is?

GERALD BRIGGS: Yes, ma'am.

ALJ HOGAN: And being advised of the potential penalties for perjury, do you promise to tell the truth in this case today?

GERALD BRIGGS: I do.

ALJ HOGAN: All right. Thank you.

Go ahead, Mr. Bakke.

MR. BAKKE: And, Your Honor, this morning earlier, I believe, I may have neglected to offer our exhibits so I'd like to do that at this time, Exhibits 159 through 178.

ALJ HOGAN: And I don't know who to ask. No objection on behalf of Summit? All right.

Mr. Leibel, any objection?

And Mr. Pelham?

UNIDENTIFIED SPEAKER: No objection.

ALJ HOGAN: All right. Then Exhibits W159 through W178 are received.

MR. BAKKE: Okay. Thank you.

GERALD BRIGGS,

being first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. BAKKE:

Q. Pull the microphone just a little bit closer to you, you're a little bit soft-spoken, so everyone can hear and so this can be recorded.

A. Better?

Q. I think so. Could you --

ALJ HOGAN: I'll let you know if you're not loud enough.

THE WITNESS: Thank you.
Q. Could you tell the commissioners what your occupation is?
A. One of my occupations is the Warren County Fire/EMS chief and 911 chief now.
ALJ HOGAN: Can you repeat what county it was?
THE WITNESS: Warren, W-A-R-R-E-N.
ALJ HOGAN: Okay. Thank you.
THE WITNESS: Mississippi.
Q. (BY MR. BAKKE) And that is in Mississippi?
A. Yes, sir.
Q. Okay. Where do you live?
A. In Vicksburg, Mississippi, in the same county.
Q. And for those of us who are geographically challenged, can you tell us what part of Mississippi that's in?
A. We are west central Mississippi, halfway down the state, all the way against the river.
Q. And the river being which river?
A. The Mississippi River. I'm sorry.
Q. Okay. And do you have personal knowledge of a CO2 leak that occurred in Satartia, Mississippi, on February 22nd, 2020?
A. Yes, sir.
Q. And are you appearing before the North Dakota

Public Service Commission pursuant to your request that we present your testimony to the PSC to consider in relation to what happened at the CO2 leak in Satartia, Mississippi?

A. Yes, sir.

Q. Okay. So, Chief, you mentioned that you are the fire/EMS coordinator in Mississippi, in Warren County. What are your job duties and responsibilities in that regard?

A. So my biggest job duty is fire protection for the county of Warren and maintaining fire protection equipment and training.

Q. And how long have you been employed in that position as the fire and EMS chief in Warren County?

A. Employed by the county since July of 2023.

Q. And have you received training in regards to serving as a fire/EMS chief?

A. Yes. I started my fire career in 1996 and numerous trainings since then through the Mississippi State Fire Academy.

Q. Okay. And we have marked as Exhibit 172 -- and I believe you have your binder open to that page. Is that a copy of your resume in regards to your background and training in fire/EMS?

A. Yes, sir.

Q. Okay. And I notice you are, in fact, the training coordinator for Warren County for medical responders?
A. Yes, sir.
Q. And have held that position since 2008?
A. Yes, sir.
Q. And then also there's a long list of Mississippi State Fire Academy training courses you've attended?
A. Yes, sir.
Q. You attended the National Fire Academy?
A. Yes, sir.
Q. Is that kind of the premier fire academy that some firefighters are allowed to attend?
A. Yes, sir.
Q. And then you've also got training by FEMA on many different topics; is that correct?
A. Yes, sir.
Q. And your emergency medical training is outlined there, including being an EMT, being on the American College of Surgeons ACS Committee on Trauma, an EMT first responder, and so on?
A. Yes, sir.
Q. You've also had law enforcement training?
A. Yes, sir.
Q. Okay. And you have a lengthy work history going

back to the 1990s in fire and EMS; correct?

A. That's correct.

Q. Okay. And also have a degree in criminology?

A. Yes, sir.

Q. And additional education in emergency medical technician?

A. That's correct.

Q. Okay. To your knowledge, is there any specific training in relation to responding to a CO2 leak on a pipeline that's offered for emergency responders or firemen or EMS people?

A. To my knowledge, specifically for CO2, no.

Q. Okay. You were involved in responding to the CO2 leak in Satartia, Mississippi, on February 22nd, 2020?

A. Yes, sir.

Q. And we'll discuss that in greater detail. However, let me ask you, first of all, what type of equipment is necessary to respond to a CO2 leak? What do you need?

A. The biggest thing that we needed was self-contained breathing apparatus.

Q. And do you refer to that as a SCBA?

A. Yes, sir. Or "Air-Pak" is another term.

Q. Okay. And the SCBA, in Warren County,

Mississippi, at the time of this CO2 leak, how many of those SCBAs did the county have?

A. We, roughly, have a hundred.

Q. Okay. And was there a large cost associated with obtaining those?

A. They average between 5 and 6,000 apiece.

Q. So each SCBA costs the county -- or whatever the emergency response entity is -- between 6 and $7,000, roughly?

A. Yeah. Including spare bottles and spare mask, yes, and spare.

Q. And so for a hundred of those, do you recall, did you have to take out a loan there or how did you pay for it?

A. We did. We had to take out a loan for it.

Q. Okay. And do you recall how much that was for the SCBAs?

A. Total cost was, roughly, 750,000.

Q. And just for familiarity purposes, is an SCBA something that people might be familiar with as a self-contained breathing apparatus that firefighters use when they run into a smoky building or a building on fire?

A. Yes. That's what's commonly on our back for our breathing.

Q. Okay. And is Exhibit 161 an example of a SCBA but apparently a cheaper one or -- than you're able to secure or were able to secure in Warren County?

A. Yes. That's not the brand that we have, but, yeah, that's an older brand.

Q. Okay. So let's turn to the topic of natural gas. You have natural gas in your part of Mississippi?

A. Yes, sir.

Q. Do you have training in responding to what needs to be done in the event of a natural gas leak?

A. Yes, sir.

Q. And in terms of this February 22nd, 2020, leak of CO2 from a pipeline -- and that was the Denbury pipeline?

A. Yes, sir.

Q. Okay. Am I correct in understanding that pipeline ran about 77 miles?

A. That's what I understand, yes.

Q. Okay. And only had the one feed-in point. There was no additional plants feeding in like the Summit pipeline where there's now 33 plants that plan to feed into that?

A. I have no idea. I don't think so.

Q. Okay. And then the Denbury pipeline, do you know where that ends up at and where it begins?

A. I do not. I do know it crosses my county and it crosses the Mississippi River through Lake Providence, Louisiana.

Q. Okay. And is it your understanding that the Denbury pipeline that leaked was a 24-inch pipeline?

A. Yes.

Q. Okay. Prior to this CO2 leak, had you been provided any training by Denbury about the pipeline and what to do from an emergency, medical, or firefighting or rescue perspective before the leak occurred?

A. Provided by Denbury, no. I didn't know Denbury existed.

Q. Okay. Did Denbury provide the county, specifically your organization, with any of these SCBAs or other equipment in order to allow you to respond to a CO2 leak?

A. No, sir.

Q. Are you familiar with what a plume study is?

A. Study, no, sir, but model, yes.

Q. Okay. And what's a plume model?

A. It's what we used the night of the explosion from the Weather Service to track where the gas may be headed to.

Q. Okay. So that tells you, in the event there is a leak, where --

A. Potential victims.

Q. -- where the CO2 would go, what direction it would go, where it might travel to?

A. Yes, sir.

Q. Okay. And are you aware in this case that Summit has refused to provide the public or us as the attorney for the intervenors with a copy of their plume model?

A. No, sir.

Q. Okay. Do you feel it would -- it's important for the public to know and be able to see what would happen based on a plume model in the event there was a leak in a CO2 pipeline?

A. I think it's important, but I think it's also going to be hard to pick a location and geography and that type of stuff.

Q. Okay.

A. You'd have to have several.

Q. Okay. And in this particular case it's 2,000 plus miles of Summit pipeline. And our understanding, although we've never been permitted to see this plume study, is that they've done one.

MR. DUBLINSKE: Objection, Your Honor. I let counsel get away with a lengthy bit of testifying to something that there's no foundation that the witness

even knows last question, but I've got to draw the line here.

ALJ HOGAN: I agree. He already said he wasn't aware of Summit's plume study or modeling so let's move on.

MR. BAKKE: And I wasn't asking him about that. I was asking him whether one plume study would be adequate for a CO2 pipeline that runs over 2,000 miles. I'm not asking specifically about the Summit plume study.

Q. (BY MR. BAKKE) So over 2,000 miles, in your opinion --

MR. DUBLINSKE: Same objection, Your Honor. Again, he's testifying as to his view of the record. There's no indication that the witness has the familiarity with any of the details about this case.

ALJ HOGAN: Agreed. And I don't know that you've established he even has the expertise to offer an opinion on something like that.

MR. BAKKE: Well, I can do that.

Q. (BY MR. BAKKE) So as a fire chief in relation to dealing with a CO2 pipeline leak -- and let me ask you, first of all, to your understanding, are you and your other staff members from the Warren County EMS/fire the only EMS and fire entity in the entire U.S. that has

actual real world experience with a CO2 leak?

A. I was not aware of that.

Q. Okay. Are you aware of anybody else who's had a leak other than the one in Denbury, in Satartia?

A. No.

Q. Okay. And you indicated that you were -- during trying to deal with the CO2 leak in Satartia, you obtained a plume study which showed the direction of travel that the plume was going after it leaked out of the Denbury pipeline?

A. Yeah. I didn't directly request that. That came through our emergency management and it was texted to my phone.

Q. Okay. And did you use that in your efforts to try to rescue people and to try to determine how to react to the CO2 --

A. We did use that as far as searching for potential victims.

Q. So back to my question. Do you feel it would be adequate to have just one plume study for 2,000 miles plus of a proposed CO2 pipeline?

MR. DUBLINSKE: Objection, Your Honor. For starters, they're talking about two different things. The witness is very clear he's talking about an after-the-incident information from the Weather Service.

And for Mr. Bakke to try and turn that around and say, "Well, what about a plume model?"

We're not talking about modeling. We're talking about Weather Service providing after-the-fact information to the responders. The question is not related to the expertise that the witness has talked about at all.

ALJ HOGAN: You can ask him about how they used the plume modeling and study and his experience and how he responded, but I'm not going to allow you to compare it to what Summit has or hasn't done and how -- whether or not that's sufficient. I think that's beyond the scope of what this witness can testify to.

MR. BAKKE: I can move on and ask a different question.

Q. (BY MR. BAKKE) Is a plume model reliable if the conditions and the location of the leak are not the same as was on the plume model?

A. I wouldn't know the answer to that question. And what I was after that particular night is, with the current conditions, the temperature, wind direction, where might I start searching for potential victims.

Q. Okay. So let's talk about the events on February 22nd, 2020. Where were you at when that leak occurred?

A. I was in Vicksburg at a festival.

Q. Okay. And so did you receive something on your cell phone or how were you alerted?

A. No. Actually, I was approached by one of our local law enforcement asking if I'd heard about the explosion in Satartia.

Q. Okay. And so what did you do when you heard about that?

A. I called my counterpart in Yazoo County, which is the county where Satartia is, and I asked what was going on.

Q. Okay. And who was that counterpart and what did he tell you?

A. His name is Jack Willingham and he is the county emergency management director for Yazoo. And he didn't really have a lot of information. He said they had an explosion, didn't know what it was, please help.

Q. Okay. And so did you then proceed from Vicksburg to head towards Satartia?

A. I did. I gathered a small crew of individuals to approach the leak from the south side.

Q. And what did your crew consist of?

A. It was three other additional guys, a UTV or side-by-side, our air equipment, and probably 20 spare bottles.

Q. Of oxygen?
A. Breathing air. It's not oxygen.
Q. And a UTV, is that kind of like an ATV but a utility --
A. Yeah, a utility vehicle.
Q. So how long did it take you to get from Vicksburg and to get organized and to be able to respond and get close to Satartia, Mississippi?
A. I don't have my 911 times, but I would probably guess around 45 minutes.
Q. Okay. And to your understanding, were you the first emergency responders that arrived in that location?
A. No.
Q. Okay. Who had arrived earlier?
A. The local fire department had already set up a roadblock or checkpoint south of the incident.
Q. Okay. And had any of them proceeded, to your knowledge, beyond the checkpoint?
A. No. They did not know what to do or where to go.
Q. Okay. At that point, did you know what the explosion or leak was?
A. We knew it was either chlorine or natural gas.
Q. Okay. And why did you think that's what it was?

A. That's what the emergency management director said he had in that area.

Q. Okay. And did you later find out that was incorrect?

A. Yes. After we were done.

Q. And you found out then it was what?

A. CO2.

Q. Okay. After that leak occurred, while you were en route to Satartia or while you were at the checkpoint, did you receive any communication from Denbury who had the CO2 pipeline that there had been a leak in their pipeline?

A. I did not, no.

Q. Do you know if anyone did in terms of the emergency response people?

A. Not that I'm aware of. My understanding is they actually reached out to Denbury an hour into the event.

Q. Okay. So it was an hour later before anybody from Denbury let any of the emergency responders know that there had been a leak in their CO2 pipeline?

A. That is my understanding.

Q. So let's talk about what you did after that. So you're at the checkpoint. And what direction is that from Satartia?

A. Probably, I would say -- looking at a map,

everybody would say it's north, but it's more -- we were southwest of the event.

Q. Okay. And if you would look at Exhibit 177, or perhaps 178, that's some Google Earth photographs. Do you see that there?

A. Yes, sir.

Q. Okay. And you've seen those before; correct?

A. Yes, sir.

Q. Okay. And there are some lines drawn on there with measurements in terms of miles and meters. Did you verify that those measurements are accurate?

A. Yes, sir.

Q. Okay. Okay. So let's start with 178, the first page. Where in relation to what's shown there was this checkpoint to the south that you arrived at?

A. It would be at the bottom of your page, but it is not on this map.

Q. Okay. And was that along Highway 3?

A. Yes, sir.

Q. Okay.

A. Approximately five miles from the leak.

Q. Okay. So why was the checkpoint, the southern checkpoint, set up five miles away from where the leak was --

A. So I can't speak for the responders that did

that, but my understanding is the original department that was responding to the event, the 911 call of an explosion with a green gas, tried to go out the normal route, which is on 433, and their fire truck would not run so they backed out, went a different route, and that's what put them at Highway 3, at that spot five miles from the leak. And they just shut the traffic down to -- they didn't know what they had so they didn't want anybody entering. You know, safety first kind of thing.

Q. Okay. And you said their fire truck shut down. In other words, it wouldn't --

A. It would not run.

Q. Okay. And why was that?

A. It's my understanding that it had no oxygen to run.

Q. Okay. Was that because of the presence of the CO2?

A. Yes, sir.

Q. Okay. And is that something you observed on that day involving multiple vehicles as you were involved in your evacuation and rescue efforts of citizens, that there were many vehicles that had just stopped alongside the road, on the road, other locations?

A. Yeah. Most of them were stopped where they were at. They were in the middle of the highway or in the middle of the road.

Q. Okay.

A. The headlights still on, doors wide open, unoccupied.

Q. Okay. And is that your understanding of what happens if there's a CO2 leak? Gas-powered vehicles of any type cannot run?

A. Yeah. It's my understanding that CO2 displaces oxygen.

Q. Okay. And so tell us what you did next once you were at the checkpoint.

A. We arrived at the checkpoint. Again I asked what type of leak we were dealing with so we would know what to take in with us or how we needed to respond to it. And at that point they still did not know. So we just loaded up everything we had for bunker gear, turn-out gear, air packs, spare bottles, whatever we needed, into that side-by-side or UTV and proceeded towards the sound of what the leak was.

Q. And you said the sound of where the leak was. Could you hear it?

A. You could hear it.

Q. Was that, from the checkpoint, five miles away?

A. Yes.
Q. What did it sound like five miles away?
A. It was just a light sound off in the distance, but you could tell there was something. It wasn't very loud.
Q. Okay. And at various points that day did you get closer to the leak location?
A. I did.
Q. Okay. Did the sound change as you got closer to the leak?
A. It did. It sounded like a ruptured pipeline or a jet crashed into the earth and was still going.
Q. Okay. Was it loud?
A. Very loud. Deafening.
Q. Okay. So using the map of 178, from that location just off the first page, the first photograph on Highway 3 to the south, where did you proceed from there?
A. So there was no residences. There was just farmland in between our checkpoint and Highway 433 where the town of Satartia is. So we proceeded there. And our instruction from our command was to check the town of Satartia for victims.
Q. Okay. And so in that route that we see on the photograph, on Highway 3, would then you have proceeded

kind of north, northeast, and then taken a left or gone to the north, somewhat northwest towards the village of Satartia?

A. Yes. We took a left on 433. Or Satartia road at that point is what 433 turns into.

Q. And at that time on February 22nd, 2020, roughly how many residents were there in Satartia, Mississippi?

A. I'm not sure the actual census count, but I would guess somewhere around 60, 65, just judging by structures.

Q. In the PHMSA report, they report that there were 50 residents in the village of Satartia. Do you know if that's accurate?

A. Sounds right close.

Q. Okay. And then you mentioned the SCBA and the extra oxygen tanks. Tell the commissioners about that. How long do those tanks of the special oxygen last when you're using them?

A. It's kind of a moving target. They say 30-minute bottles, but depending on your workload and your physical condition and -- they may last 10 or 15 minutes. This all depends on what you're doing at the time. If I was wearing one today in this room, I could probably wear it for an hour. And if I go out and start doing jumping jacks, I might wear them for five minutes.

Q. Okay. So does it depend on the circumstances involved --

A. Yes.

Q. -- whether you're physically exerting yourself --

A. Yes, sir.

Q. -- or you're under stress, whether anxious, those types of things so you might --

A. It just goes on your breathing rate.

Q. Okay. And so how long that day, roughly, did you have to change or replace those oxygen tanks?

A. When we first started, not very often, but obviously after we walked the entire village of Satartia, it was probably every ten minutes.

Q. And how many of those extra bottles of oxygen did you bring with you?

A. Roughly 20, I believe, is what they brought.

Q. Were those on the UTV?

A. Yes.

Q. And so what personal protective equipment in addition to the SCBA were you and your other members of the EMS wearing that day as you responded to this CO2 leak?

A. We were wearing full structural firefighting gear from head to toe. Helmet, hoods, mask, coats,

pants, boots.

Q. Okay. And that SCBA, does that cover your entire face as shown on the exhibit that we marked Exhibit 161?

A. It does.

Q. It's essentially what people might think of as a gas mask?

A. Yeah, you could relate it to that.

Q. Okay. And so when you're -- when you have that SCBA on and your other equipment on, approximately how much gear are you wearing? What does it weigh?

A. I would say probably 60, 75 pounds total.

Q. Okay. And then if we look on the first page of Exhibit 128, it shows a distance between the leak point. And is the leak point on the lower right of that photograph?

A. You said 128?

Q. 178.

A. 178. Yes, sir.

Q. Okay. And that's where it's got a label "Site of CO2 pipeline rupture"?

A. Yes, sir.

Q. Okay. And in looking at the Google Earth map, it looks like there's no residences anywhere nearby, no structures that might be occupied; is that correct?

A. In relation to the rupture?
Q. Yes.
A. If you look just -- I guess it would be more northeast, that would be where Perry Creek Circle is, and the actual resident is not shown on that map, but there is a residence pretty close.
Q. And when you say "pretty close," how far away are we talking?
A. It would probably be a mile, I'd guess, through the woods.
Q. Okay. And then it shows a distance into Satartia from the CO2 leak location of 1.24 miles; correct?
A. Yes.
Q. So tell us what you observed as you're driving on Highway 3 and then you turn left on 433 or Satartia road in terms of what you observed in terms of any victims or individuals who were affected by CO2.
A. Well, my first observation of victims was at the checkpoint that other people had brought from the town of Satartia or nearby the town of Satartia. And they were laying on the ground, waiting on an ambulance.
Q. Okay. And do you recall how many people there were at the checkpoint to the south about five miles away from the leak location?

A. Victims?
Q. Victims.
A. Three or four. I didn't -- I was trying to get geared up to go search.
Q. Okay.
A. But I did notice several people laying on the ground, shortness of breath, and vomiting.
Q. Okay. And did you understand those symptoms to be an effect from the CO2 exposure?
A. I figured it was symptoms of whatever gas it was.
Q. Which at the time you didn't know?
A. I did not know.
Q. Okay. And so then as you're then proceeding from the checkpoint towards the town of Satartia, what did you observe in regards to additional victims?
A. Additional victims in the town of Satartia, I didn't observe any. The one thing I noticed as we got close to town was all the vehicles sitting in the roadways.
Q. Okay.
A. But we did not encounter any victims in the village of Satartia.
Q. Had there been others that arrived there before you who were involved in rescue efforts for the

individual --

A. There was a deputy checking houses also as we were walking there, we ran across him, that was -- we had to make him leave by ambulance to go get medical care at a hospital.

Q. Okay. And do you recall that individual's name?

A. I think he may be an investigator. I don't want to speak for that. His name is Terry Gant, G-A-N-T.

Q. And then in terms of these vehicles where you saw the doors open and they're stalled on the road, had there been, to your understanding, occupants in those vehicles before you arrived that had been evacuated out of the area?

A. Yeah. And I would just assume that that was the people that were at the checkpoint.

Q. Okay. And then in Satartia, did you learn from other EMS, not necessarily by talking to them there but at some point that day, that there had been individuals in Satartia who had symptoms as a result of exposure to the CO2?

A. Yes. My understanding is there were several people at their houses outside having a barbecue and one of the ladies come outside to find them all collapsed on the ground.

Q. Okay. Unconscious?

A. I don't have that answer.

Q. Okay. And so where did you proceed next after observing the abandoned vehicles along Satartia road and going into Satartia?

A. We checked the village or the town of Satartia all the way to the Yazoo River, which is on that map. That was the populated area according to the Weather Service plume model that we needed to check.

We were coming back out and command asked us to check one more place. It was a road across Highway 3 on 433. It was Perry Creek Circle, which was really close to the leak, that road is.

Q. Okay. And so on this photo we have, Exhibit 178, where would that be? Would that be to the right-hand side of Highway 3 where we see 433 curve somewhat to the south?

A. If you look just to the right of Highway 3 at Satartia, there's actually a label that says "433." That's the road to the left of that label. That's Perry Creek Circle.

Q. Okay. And so how far did you proceed down that road?

A. If you look at the map, it looks like some sort of creek that's there. Right after the first turn in the road.

Q. Okay.
A. Just on the other side of that creek.
Q. Okay. So just so we're clear here, where the words "United States Postal Service" appears, it would be to the right of that just a little bit below the 433 sign we see on here?
A. It would be above and to the right of the 433.
Q. Okay.
A. That's Perry Creek Circle.
Q. Okay. And so what, if anything, did you observe in terms of victims on Perry Creek road?
A. We encountered a small sedan in the middle of the road, headlights on, doors closed, with three victims inside of it.
Q. And were you on the UTV at the time?
A. Yes.
Q. Okay. Was that able to operate or run?
A. It was -- the whole night it had been trying to die. We actually related it to -- I made the comment we need to get the fuel filter changed. But it was still running, just not very well. And the closer we got on Perry Creek, it did not want to run.
Q. Okay.
A. So I actually -- when we found the victims, we bailed and told our driver to go somewhere and make sure

it stays running, and we would either drag these people out or call him back.

Q. Okay. And so this small vehicle, you approached that and what did you observe?

A. So I looked in the -- in the rear right passenger window and observed a male slumped over the rear seat. Did not appear to be breathing and was foaming out of the mouth. And in the front seat were the same. Two individuals appeared not to be breathing with frothy stuff coming out of their nose and their mouth. And their vehicle was still in drive and the radio was on.

Q. Okay. Did those individuals appear to be unconscious?

A. They were absolutely unconscious.

Q. Is it your understanding that those three occupants of that vehicle were experiencing symptoms of exposure to CO2?

A. And still at that time I had no idea what they were exposed to.

Q. But do you know since --

A. Oh, now I do know. Yes, sir.

Q. Okay. And so what did you do in response to seeing these three occupants -- and, first of all, were they unconscious?

A. They were unconscious and unresponsive.

Q. Okay. So what did you do when you see these three unconscious individuals inside the vehicle foaming at the nose and the mouth?

A. Well, like I said, it did not appear that they were even alive. So our first -- our first instance was to break the glass to gain access to the victims to verify that they were alive. And they were. They were breathing six to eight times a minute and shallow.

Q. Okay. So what does that tell you, if anything, if a victim is breathing six to eight times a minute?

A. If you were breathing six times a minute, I would be bagging you to make you breathe.

Q. So did you consider this a life or death situation --

A. Absolutely.

Q. -- for these individuals?

A. We needed to get them to care.

Q. Okay. Did you think there was a chance that they were going to die due to this CO2 exposure?

A. I did. And like I said, I didn't know the reason why they were the way they were, but I actually made the comment that I didn't expect them to live through the night.

Q. Okay. And you said you had to break the window

to gain access to these victims. Were their windows closed at the time?

A. All of their windows were closed and doors were locked, just as you would driving your car, your windows are up and your doors are locked.

Q. And could you -- did you determine at any point during this process whether the vehicle for these victims was in drive or park or neutral?

A. It was in drive. We secured the vehicle, as we do with any type of motor vehicle wreck.

Q. And did you -- but the vehicle was stationary?

A. Yes. It was sitting still. The driver had his foot on the brake.

Q. And so did you believe it was in drive but not moving because the engine couldn't run due to --

A. The engine couldn't run and it was on a flat surface.

Q. Okay. Did you feel it was necessary to immediately try to get those victims to a location where they could receive medical treatment and potentially be in a location where there would be sufficient oxygen for them to breathe without an SCBA?

A. Yes. And that was our first communication back to that checkpoint, was to make sure there was ambulances available, that we were coming out with three

critical patients.

Q. Okay. Did you do anything to see if you could revive them at the scene?

A. Revive, no. But part of your checking for an unresponsive is trying to figure out what they're unresponsive to, whether they're just alert or verbally they'll -- they'll understand you're saying something or painful, that kind of thing. So we did the sternum rub, just the knuckles in the chest, to try to get some response out of them, and we didn't get anything.

Q. Okay. And is the sternum rub used by EMS people to see whether they respond because it would typically be painful if you were conscious or aware?

A. Yeah. If you were semiconscious, you would make some groan or some noise when somebody rubs in on your sternum.

Q. And they made no movement or --

A. There was nothing.

Q. Okay. So you had the UTV, you had your SCBA bottles on there. Was there any discussion about "How do we take them out? One at a time? All together?"

A. We did. And one of my guys actually asked if we were going to take them one at a time because we didn't have room. The two of us had to ride on the rear. The driver had to have his pack in the seat beside him so he

could drive also. And then we had all of our equipment piled in the back as well. So we talked about taking one, and our consensus was, if we left the other two, they wouldn't be alive when we got back.

Q. Okay.

A. So we just kind of piled them all on top of each other and we -- one of our guys actually got up there with them to hold them in the back. And I hung on the side and we came out.

Q. Okay. And so where did you take these victims? How far away before they were at a location where there was sufficient oxygen without an SCBA for them to potentially breathe?

A. I don't know where that point would be, but we took them back to the checkpoint five miles away.

Q. Okay.

A. Because we didn't come off of our air so I couldn't tell you where that line was.

Q. Okay. And did these individuals survive?

A. Yes, they did.

Q. Okay. And do you know if they were hospitalized and, if so, how long?

A. It's my understanding they were hospitalized, but I do not have a length that they were in the hospital.

Q. Out of the -- the PHMSA report indicates that out of the 50 residents in Satartia, that 45 out of 50 were treated or had to go to the hospital or were perhaps hospitalized. Is that your understanding as well?

A. I do understand it's 45 total patients, but out of Satartia I'm not sure because there were some people just traveling down the highway that did not live in Satartia that ended up being hospitalized as well.

Q. Okay. What was the wind direction that day?

A. It was to the north and kind of to the northeast.

Q. So it was blowing from the south and going to the north and northeast?

A. Geography-wise, it was blowing out of the hills, the hills, the Vicksburg hills, before the Delta of Mississippi and blowing down into the river bottom.

Q. And so could you actually see a plume or see anything visual that would tell you which direction that plume was going or which way the CO2 was --

A. We had 911 reports that there was a plume or a gas or a fog or a green gas. I never witnessed anything.

Q. Okay. And based on the modeling -- and you got that from the Weather Service; is that correct?

A. Yes. We got it from our command. They got it from Weather Service.

Q. Okay. And so that showed that this plume went to the -- to the north -- and was it northwest or northeast?

A. Northeast direction.

Q. Okay. So after you dropped off these three victims -- and incidentally, have you had further contact with at least one of these victims in terms of their -- whether they've had any long-term effects from this CO2 leak exposure?

A. I have talked to one of them. I've actually got to meet one of the guys that we pulled out of the car probably a year after the event. And then I also talked to him again this year. We exchanged numbers and I, ironically, talked to him on Super Bowl Sunday of this year because he wanted to know who I was pulling for.

Q. And did he offer anything in terms of his medical condition and what, if any, ongoing effects he had from the CO2 exposure?

A. I didn't ask him directly if he was still having effects of it. I just asked the general question that we ask to be nice, you know, "How have you been doing?" He offered up that he was still having some problems due to it. And I asked what type of problems. He said he

was still having severe headaches and nausea and couldn't sleep at night.

Q. Okay. So after you drop off these three victims that were foaming at the mouth and nose, unconscious, where do you go after that?

A. We looked back at the plume model. We had some better mapping at that point. And we continued on out. I guess it would be northwest, northeast, whichever direction it was, of the plume, and we noticed there was some houses out that way as well going towards the next town so we went and searched those houses as well.

Q. Okay. And then if we look at the second photo with the distance on it, part of Exhibit 178, there's a line from the pipeline rupture or leak location and then it has an end point on that Satartia Road. What's that end point on the upper left-hand side?

A. The end point looks like it's in the middle of a field, but that's three and a half miles from the blast site. But if you also look before the end point, there's a few scattered structures in there. And that was from residences. That was the last residence on that road.

Q. Okay. So where I see the words "Satartia Road," the second one from the left, it appears just to the left of that there's some type of buildings or

structures; is that correct?

A. Yes, sir. There's a couple of houses and several mobile homes in that area.

Q. Okay. And so did you proceed there to see if there were any victims from the CO2 in that location?

A. We did. We went there, again on our side-by-side, and the conditions for it running were better out there, for the side-by-side to run. And we did find several people that were experiencing some shortness of breath but no major symptoms but wanted to go to the hospital to be seen.

Q. Okay. And so would that location where those victims were be something in excess of three miles from where the leak location was?

A. It's, roughly, three miles.

Q. Okay. And so during that -- between that distance of the leak location to that, roughly, three-mile location, in that area, was that all area where, in order to breathe and not have effects from the CO2, an individual would have needed to wear an SCBA?

A. I can only assume because we were wearing ours. I couldn't tell you that, other than the victims we did find were experiencing shortness of breath.

Q. Okay. And those were three miles away?

A. Yes, sir.

Q. Okay. And the individuals in Satartia, you understand, had been evacuated and rescued by others?

A. Yes. They supposedly -- we had two checkpoints. One north of the event and one south. So they went in both directions.

Q. Okay. And the one to the north, was that further to the north on Highway 3?

A. Yes, sir. That's not in the map.

Q. And then if we look at the third photograph on Exhibit 178, we can see there that there are farmers' fields, it goes out 2.49 miles, but other than the structures you talked about on the prior photograph, it does not -- not appear there's any residences or occupied structures at all; is that correct?

A. And there's not. The next closest thing, probably five out, would be fish camps. They weren't occupied in February.

Q. And so if we turn to the fourth page of Exhibit 178, does that zoom us further out from Satartia so now we're a distance of 6.21 miles away from the leak location?

A. Yes.

Q. Okay. And is that the direction that the plume went that day of CO2?

A. That's the direction that the Weather Service

said the plume would go.

Q. Okay. But you can't at that point visibly see it?

A. No. I never seen a plume or a gas or anything like that.

Q. Okay. And then on that fourth page of Exhibit 178 that shows 6.21 miles from the leak location as we follow the plume there, it doesn't appear there's any residence or occupied structure at that time at least on the date of this CO2 leak; is that correct?

A. There are some on Highway 16 and Highway 14, but they're farmhouses, various, scattered.

Q. Okay. Do those show up on this photograph?

A. I don't see any.

Q. Okay. And then the next page, the last page of Exhibit 178, shows a national forest and a national wildlife refuge. Actually, two wildlife refuges, Theodore Roosevelt and Panther Swamp, and the Delta National Forest. Is that pretty much, as you get further away, completely unoccupied and it's national wildlife and national forestland?

A. Yeah. The biggest occupancy you have there are some deer camps. It's very scattered.

Q. Okay. And those deer camps, would I be correct in understanding on February 22nd, 2020, they wouldn't

be in use?

A. Hopefully not because deer season would have been closed on January 31st.

Q. Okay. And so what effect did it have, to your understanding, that the location where this CO2 leak occurred and traveled with a plume of, roughly, 25 miles have on the number of victims, that it was essentially very rural, much of the area completely unoccupied?

A. I think, fortunately, that it was very scattered, rural communities. I couldn't imagine this type of severity of an incident happening somewhere closely populated. I think they were fortunate that it happened on a Friday night at 7:00 so most people were gone to the nearest town to eat or go out or whatever it was and not everybody being at home.

Q. Okay. And in Satartia, at that time at least, were there any restaurants where you could go on a Friday night or places to go?

A. Only the grill in your yard would be your restaurant.

Q. Okay. Now, let's talk about the actual leak itself. And you indicated that you could hear the noise, and as you got closer to the leak, it was a very loud noise?

A. Yes, sir.

Q. And there is a timeline. If you turn to Exhibit 155 in your binder -- and incidentally, when you get there, we'll talk first about page 12 of 21.

A. Okay.

Q. And page 12 of 21 shows the direction of the plume from Satartia?

A. Yes, sir, from the Weather Service.

Q. And is that your understanding of the direction of travel of the plume from this CO2 leak event on February 22nd, 2020?

A. Yes, sir. That's not the map that I received by text but general direction, yes.

Q. Okay. And it indicates that the plume went 40 kilometers. And I should know this stuff, I'm married to a Canadian, but we've done the math. 40 kilometers equals about 25 miles. Does that sound correct?

A. If you say so. I don't know that math either, sir.

Q. But a person could do the calculation?

A. Absolutely. I think it's actually 24.8 miles.

Q. 24.85 miles the plume went.

A. Oh, is it? Okay.

Q. Okay. Okay. So then let's talk about this timeline that is provided in the PHMSA report. And,

incidentally, Exhibit 155, you've seen that before? It's the PHMSA report regarding this --

A. Yes, I have.

Q. -- Satartia, Mississippi, CO2 leak event on February 22nd, 2020, on the Denbury pipeline?

A. Yes, sir.

Q. Okay. So let's turn then to the page that has the timeline on it.

A. Page 6.

Q. Okay. Thank you.

So this timeline indicates that the Denbury pipeline ruptured at 7:06 p.m., and it says at 7:14 p.m., so eight minutes later, the Denbury's control room remotely closed three MLBVs. What's an MLBVs?

A. I have no idea.

Q. Okay. Is it some type of shut-down valve, to your understanding?

MR. DUBLINSKE: Objection, Your Honor. The witness just testified he has no idea.

ALJ HOGAN: Yep. That's what he said.

Q. (BY MR. BAKKE) Okay. So it says one MLBV at Tinsley Station, which is upstream of --

MR. DUBLINSKE: Objection, Your Honor. Now he's just going to testify on his own to put it in. That's clearly not proper.

MR. BAKKE: I'm just reading from the documents.

MR. DUBLINSKE: The witness said he has no idea what it's talking about.

MR. BAKKE: I didn't ask him a question yet.

ALJ HOGAN: What's going to be your question yet if he already --

MR. BAKKE: My question is going to be: does it indicate that one MLBV was shut down upstream of the rupture site and two MLBVs at Satartia and Redwood, which are downstream of the rupture?

ALJ HOGAN: Well, the document speaks for itself so I don't know that he needs to answer that.

MR. BAKKE: Well, I need to lay the foundation for my next question.

MR. DUBLINSKE: But the foundation fails because the witness doesn't know what that refers to. The document's in the record already.

ALJ HOGAN: Correct.

MR. BAKKE: Right. And I'm just going to read him the document and then ask him some questions so I can set the stage.

MR. DUBLINSKE: But if he's not familiar with what the document means, there's no appropriateness to the follow-up questions.

MR. BAKKE: I'm not asking him about the valves.

I'm asking him does it say that, and he can say yes or no and I'll ask my next question.

MR. DUBLINSKE: It seems rather inefficient when the document's already in to ask if a document says something, but we can, you know --

UNIDENTIFIED SPEAKER: That's actually defined, Randy, page 4, fourth paragraph, an MLBV.

Q. (BY MR. BAKKE) Okay. So that we can define that as Summit has requested, do you see the fourth paragraph down on page 4, that they defined MLBVs as the mainline block valves?

A. Yes.

Q. Okay. Then let's get back to the timeline. And it says at 7:14 p.m., eight minutes later, that these valves, what they call MLBVs, one was shut down upstream of the rupture site and two valves were shut down downstream of the rupture; correct?

A. That's what it says, yes.

Q. Okay. But then this report from PHMSA indicates, towards the bottom of the timeline, "IC confirmed Denbury's CO2 pipeline had ruptured; however, no one could get close to the release site due to the ongoing release of CO2."

So despite Denbury remotely shutting off these valves, it didn't stop the leak. Is that your

understanding?

A. I never seen the leak at that time. I could hear the leak but I never seen the leak.

Q. Okay. And I'm not asking about seeing the leak. So how long did you hear noise from that leak that night?

A. I don't have an exact time, but it was probably two to three hours.

Q. And so if Denbury is telling PHMSA in this report they shut it off eight minutes after the leak occurred by closing the remote valves, you weren't even at Satartia at that time; correct?

A. No. I probably got there closer to 8:00.

Q. And after 8:00 you could hear the noise from the CO2 pipeline continuing to leak for two to three hours more?

A. Yeah. Probably closer to 10 or 10:30.

Q. In this location on the Denbury pipeline, between the valves that had been described here, it was 9.55 miles. And in terms of the 24-inch pipeline, is it your understanding that noise you're hearing for two to three hours after you get there at 8 p.m. is CO2 that's between those two sections of the valves?

A. That's what I was told that night, because our command kept telling me that it was closed so I relayed

back, well, they may ought to tell the leak that it's closed because I could still hear it. And they said, well, it just takes time for it to bleed out of the line, that it was off.

Q. Okay. Was the entire village of Satartia evacuated because of this incident?

A. The entire village was empty, yes.

Q. Okay. And in this case we've heard testimony, including today, that Summit is proposing 20 miles on the same size pipeline, 24-inch, between valves. Did you hear that?

A. Yes, I did.

Q. You understand then if there was a leak somewhere in that 20 miles, it would take longer than what happened in Satartia for that CO2 in the 20-mile pipeline to bleed out, depending on how big the rupture was and where it was?

A. Yeah. And I think that's a fair statement, depending on the leak.

Q. Okay. In terms of physical symptoms by victims, you mentioned the rapid breathing, people being unconscious, foaming at the mouth and nose --

A. I did not mention rapid breathing. I said shallow.

Q. Shallow breathing? I'm sorry.

A. Slow breathing.
Q. Okay. And then you also mentioned the vomiting. Did you observe or come to the conclusion that any of the victims you encountered were confused?
A. The elderly people that we evacuated, I guess it would have been two on Satartia road, were confused with shortness of breath.
Q. There's some discussion in the PHMSA report about NCS. Do you know what NCS is?
A. No, sir.
Q. Okay. Have you heard of hydrogen sulfide?
A. Yes.
Q. Okay. And hydrogen sulfide, when there's just a small portion, parts per million, can cause a rotten egg smell, something like people might be familiar with from natural gas or propane?
A. You're referring to H2S?
Q. H2S. I'm sorry. Right. Hydrogen sulfide.
A. Yes, sir.
Q. Was there a smell that day at some point when you were involved in your rescue efforts of a rotten egg smell?
A. I couldn't advise. I had my breathing apparatus on. You can't smell through that.
Q. Okay. At least you didn't smell it?

A. I did not.

Q. Okay. And if you look at Exhibit 166 in your binder, do you see that that document which comes -- is a chart from OSHA information identifying the effects of H2S or hydrogen sulfide, identifies symptoms depending on the parts per million that someone is exposed to H2S? Do you see that there?

A. Yes, sir.

Q. And then if you turn to page 8 of 21 of Exhibit 155, which is the PHMSA report --

A. Okay.

Q. -- the last paragraph down before it says "Summary of Return-to-Service," and I'll just read this paragraph above that.

"According to firsthand accounts, as well as secondhand accounts from first responders, there was a 'rotten eggs' odor associated with the CO2 release and gas plume. A rotten eggs odor can be attributed to the presence of H2S, which is naturally occurring in the geologic formation that serves as a source of the CO2 in the pipeline."

Then it goes on to say "PHMSA reviewed the CTEH air monitoring results and did not identify any observed readings of H2S by monitoring equipment. The monitoring equipment's detection limit for H2S was 0.1 parts per

million."

Do you see that there?

A. Yes, sir.

Q. So does that tell you that the monitoring equipment that was used detected parts per million of H2S in the area of the leak of 0.1 parts per million?

A. Yes.

Q. Okay. And if we go back to the chart, Exhibit 166, and we look on there for the parts per million of 0.1, it has a range there and it says when someone's exposed to H2S of 0.01 to 1.5 parts per million, what will happen is there will be an odor threshold and a rotten egg smell; correct?

A. That's right.

Q. Doesn't report that you'll have any physical symptoms or problems or issues as a result of that low level parts per million of H2S; correct?

A. That's right.

Q. Okay. And then even if you go up to 10 parts per million, which would be over ten times what was reported in the PHMSA report, you can have exposure over eight hours without any physical symptoms; correct?

A. Yes, sir.

Q. Do you agree these physical symptoms you described can't be accounted for based on any exposure

of victims to H2S?

A. No. The symptoms that I seen with the victims that I dealt with were not typical symptoms of H2S.

Q. Okay. And the symptoms that you observed, you believe those were symptoms of the CO2 exposure from the Denbury pipeline?

A. I do.

Q. Okay. Since the event in Satartia, the leak event, have you been involved in different panels and been at different locations where the dangers of CO2 and a leak in a pipeline have been discussed and addressed?

A. Yes.

Q. Okay. And tell the commissioners about that.

A. The latest one I've been to is in Baton Rouge, Louisiana. They're going through a similar -- I don't know the name of the pipeline but there's something very similar.

Q. Now, I'd like to talk about lessons learned from this CO2 leak in Satartia. Based on that Denbury leak near Satartia that you responded to as a local fire/EMS chief, did you come to any conclusion as to whether any public engagement efforts were necessary to ensure public and emergency responder awareness should be provided to first responders and the public in the event a CO2 leak might occur?

A. Absolutely. Most pipeline groups, we have annual meetings and trainings and here's the equipment that you need for our type of gas or whatever they're doing. They reach out to the small rural fire departments. That's where these pipelines are going. They're not going through major cities where they have the resources and training to deal with this. They're going out in the county, obviously, for that reason, it's less populated if something does happen.

But just like I learned then in 2020, I had no idea Denbury existed. And I actually made a comment to a Denbury representative on scene that "Thank God I don't have this running through my county." He asked me what my county was. I told him. He said, "We run right through the middle of it." And my response was "We need to talk." That was in 2020. He came to my office four weeks ago.

Q. In relation to this smell of the rotten eggs that people smelled, or some people smelled who didn't have the SCBA on, do you think that was actually helpful in this situation with the leak in Satartia, that there was some odor that people could smell?

A. I think it would be helpful to know that there is a leak, yes.

Q. Okay. And if there is no odorant like H2S, like

Summit plans no -- or has no odorant in the proposed ethanol to be put in this pipeline, is it your understanding that CO2 will be colorless, odorless, won't get any notice that it's occurred other than possibly the sound of a leak or an explosion, depending on how close you are to that?

A. Yes.

Q. Okay. And in your opinion, is that what makes CO2 particularly dangerous to people, is you're not going to get that type of advance warning and also because of the health problems that you've seen personally arise from exposure to CO2?

A. Yeah. I think it's kind of twofold, that that is definitely it, but also just in talking with some local fire officials here in your state, if you're not in a big city, you have to wait on the big city to come to you. So that doesn't hold very well for the people that are trapped in their house or in their car and not breathing, waiting on the city of Bismarck to come with their response team.

Q. Okay. Did you yesterday drive through the areas to the north and east of Bismarck where the -- Summit is proposing this CO2 pipeline to be installed?

A. Yes. I drove their proposed pipeline.

Q. Okay. And did you observe the populated areas

in those locations?

A. Yeah. It looks like it's a lot of growth in that -- that area that happened recently. There's a lot of new buildings and homes there.

Q. Okay. And did you notice that there's one or more grade schools that are located relatively close to where this proposed Summit pipeline is planned to go?

A. Yeah. There were several new schools actually.

Q. Do you feel that that would be a safe location for this CO2 pipeline to go in north and east of Bismarck in these areas that you saw that have the level of population you saw if there were a CO2 leak?

A. My opinion is no just because of the growth in that area.

Q. Okay. Summit takes the position that these CO2 pipelines are no more dangerous than a natural gas pipeline or an oil pipeline. Do you agree with that?

A. Well, all pipelines are dangerous. I do agree with that. But the one difference is, is the weight of the product, that it's not going to go straight up in the atmosphere, it's going to sink. And it's going to sink in your lower-lying areas.

Q. And if, as an example, there's a natural gas leak and it should start on fire, is that typically a situation where you're not going to see it go over three

miles and affect victims of the exposure?

A. No. Most of your natural gas leaks, the reason you have the explosions is because they're trapped in some type of structure and they have ignition.

Q. Do you believe that the -- that CO2 pipelines pose a significant safety risk to the public?

A. Yes.

Q. In your experience, how far away should these CO2 pipelines be placed in relation to populated areas?

A. Just in my experience of what I've seen in Yazoo County, a couple miles at least. That's where we stopped seeing victims.

Q. Okay. And then in terms of where the Summit pipeline is placed from populated areas -- and I'm setting aside Yazoo, such as the areas you saw in Bismarck, do you have an opinion about how far away that pipeline should be from these areas north and east of Bismarck?

A. No, I don't.

Q. Okay. That's all the questions I have.

ALJ HOGAN: All right. Mr. Dublinske, any questions?

MR. DUBLINSKE: I do, Your Honor. Thank you very much.

CROSS EXAMINATION

BY MR. DUBLINSKE:

Q. I will try to work my way through this efficiently, but I do have a couple follow-ups, Chief Briggs. You were talking about some of the other interviews and panels and things that you have been on. One of those was with a group of pipeline opponents led by a woman named Jane Kleeb; is that correct?

A. What was the name?

Q. Jane Kleeb, Jane Kleb (phonetic), from Nebraska. You were on it with Jack?

A. Yes. Yes. I don't know the leader of that, but yes.

Q. You know the one I'm talking about?

A. Yes, sir.

Q. And I've watched that and read some other interviews with you so I do have a little bit of background and I appreciate the opportunity to get to talk a little bit with you in person. And we have the odd situation where my opposing counsel actually asked a lot of questions I was going to ask, which will speed things up a bit. You were talking a fair amount about the equipment things that you had with you when you went out to the incident that evening. Did you have gas monitors, air monitors with you?

A. No.
Q. Would that be something that you normally would take into a known gas leak?
A. Yes, but they didn't have any in Yazoo. I didn't respond as a hazmat. Since that incident, the pipeline group has given gas monitors.
Q. Okay. And that was going to be my question.
A. Yes.
Q. In that situation, having gas monitors would be helpful; correct?
A. It would, yes.
Q. And I believe you covered this, but you said that normally pipeline groups actually do meet with you and other counties to talk about the pipelines in your county and they do that sort of outreach; correct?
A. Yes, annually.
Q. In your experience, was Denbury an outlier in that regard?
A. They weren't there.
Q. What's that?
A. They weren't there. I've never seen them.
Q. But you have seen plenty of other pipeline --
A. Oh, yes, sir.
Q. Okay. And I guess my question was, in that regard, is Denbury unusual for not doing that sort of

outreach with you?

A. Yes.

Q. Okay. Roughly -- actually, let me back up a little bit. You said you got there about 8:00 and it's February. I assume it was dark out?

A. Yes.

Q. I believe that you made the reference in that video that we were talking about a minute ago, that the term you used was this was the perfect storm. Do you recall that?

A. Yes.

Q. You're not an engineer by trade, are you?

A. No, I'm not.

Q. So what you're talking about there were weather conditions, as I recall?

A. Yes.

Q. Correct? The wind was relatively calm?

A. Yep.

Q. I think you mentioned, in discussing that, that it was cool?

A. Uh-huh.

Q. And that's what you meant by this was the perfect storm or the worst case; correct?

A. Yes, sir.

Q. Okay. And I believe you said that when you went

in, and you stressed several times that you didn't know what gas you were dealing with, but I think you said that "We took our standard precautions or did our standard protocols"; is that correct?

A. Yes, sir.

Q. And so for a known gas leak, you would do essentially the same thing regardless of the product; is that correct?

A. Yes.

Q. Okay. Is there any different way you would approach it if, for example, you knew it was chlorine?

A. No.

Q. Okay. And you do have other products that can be hazardous that come through your county by pipeline; correct?

A. Yes, sir.

Q. Come through your county by rail?

A. Yes.

Q. Come through your county by road?

A. What was the last one?

Q. By road, by truck.

A. Yes. And river.

Q. Roughly, once you got out to the car where you rescued the three folks, roughly, how long were you at that location?

A. With them?
Q. Yes.
A. I would say ten minutes, max.
Q. Okay. So ten minutes --
A. Break the glass and threw them --
Q. -- to break in the car, get them --
A. Get going.
Q. -- drag out --
A. Yeah.
Q. Have the pipeline companies provided some of the SCBA?
A. That we have? No, sir.
Q. Do you have any way of knowing how long the folks that you carried out of that car had been in that location?
A. I don't. I would assume since the explosion or the leak.
Q. And you said that -- and to be fair, I don't think it was today, I think it was on the video. I believe you said that was, roughly, a quarter mile as the crow flies from the leak; is that correct?
A. Yeah. And that was just me looking at some mapping of where we were at.
Q. You said that you ran into some folks right at the end of the night that had some shortness of breath

and said they wanted to go to the hospital to be safe. Was that correct?

A. Yes, sir.

Q. Is it possible that some of the other 45 people that were alleged to have gone to the hospital, that that was their view on it too? Feeling a little headache, "I think I'm going to go to the hospital to be safe"?

A. It would be a fair assumption. I did not encounter those people so...

Q. So we don't know, out of that 45, how many, if any, were admitted, if they were --

A. I can only tell you the three.

Q. Okay. We were talking a minute ago about standard protocol for gas leaks. Is that protocol something that you have trained on in the past?

A. Yes.

Q. And your whole department would have training on the standard protocol for gas?

A. It's a block in standard certification. And it's not just gas leak through pipeline. It's just hazmat incidents.

Q. And to be clear, you said the three folks that you helped get to safety, that they all survived?

A. To my knowledge, I know one just because I've

had communication. I have not heard of any deaths related to it.

MR. DUBLINSKE: Okay. No further questions, Your Honor.

ALJ HOGAN: All right. Mr. Pelham.

CROSS EXAMINATION

BY MR. PELHAM:

Q. Good afternoon, sir. I believe you testified that you had talked to some local fire department personnel in North Dakota?

A. Yes. Just people I ran into.

Q. Okay. Was that recently on your trip up to Bismarck?

A. While I'm here today.

Q. Okay. So what types of things are you conveying to them about the potential for a CO2 line coming through their communities?

A. So my stance on this has never been for or against pipelines or anything like that. My stance is how underprepared we were as a community for the pipeline. So training, supplies, equipment, those are the things that -- that, if this thing goes in place, that you need to ensure.

And we often get overlooked, especially in the rural setting, that it's not a big city, they don't have

the resources. So we may tell one person this is what you need to do, but the turnover rate for volunteer fire departments is so high, they may not be there next year or the year after that. It needs to be an annual in-service. "What can we do to help you help our community?"

Q. As far as the vehicles, you mentioned the UTV, the side-by-side that's used, and it was working, but there were some issues and there was some concern about it conking out, for lack of a better word. In your experience since the incident in Satartia, have you come across any potential solutions to vehicles?

A. We actually discussed locally about golf carts or electric type vehicles, just in case of that incident, we can drive to the scene.

Q. I don't have any other questions for you. Thank you.

ALJ HOGAN: Mr. Leibel, any questions?

MR. LEIBEL: I do have a few.

CROSS EXAMINATION

BY MR. LEIBEL:

Q. Chief, on the night that this -- of this incident on February 22nd of 2020, did you actually see or lay eyes on the leak itself?

A. After our mission was over, I was asked to go

look at the leak, the leak site.

Q. Was the pipe where the leak happened, was that buried down into the ground?

A. Visually, no. I think what had happened there is the ground left the pipe. It was on the side of a hill.

Q. Well, what did it look like? What did you see?

A. It looked like a broken pipe down in the bottom of a ravine.

Q. Okay. So on the night when the leak was active, were you ever within 500 feet of the leak?

A. No.

Q. Would you have gone within 500 feet of the leak without a mask on?

A. No.

Q. What about within a thousand feet?

A. No.

Q. Did you -- was there any residences or any people within a thousand feet of where this leak was?

A. I think the closest that came was the fire truck that didn't know where they were going.

Q. Okay.

A. No people or houses, no.

Q. And that fire truck, did it -- I mean, did it just -- driving and then it just died on the road? What

happened?

A. The story I heard of it was they encountered the cloud or the gas or the green, whatever it was, the truck started spitting and sputtering, the passenger in the truck got sick, so they backed out of the area, retreated.

Q. So it was that instant they were driving and then, all of a sudden, it started sputtering and the person got sick?

A. Yes.

Q. Was that person not wearing any kind of the breathing apparatus?

A. Typically, we don't wear that going down the road.

Q. How close to the leak was that?

A. I have -- I have no idea.

Q. Was it within a thousand feet?

A. I don't know.

Q. Okay. Did anyone at PHMSA talk to you after this leak?

A. No.

Q. And we've heard a lot of talk about PHMSA regulations. Was this Denbury pipeline regulated by PHMSA?

A. According to the document that it was, yeah,

that I read.

Q. And so the last question I want to ask is kind of a follow-up to the question that you talked about at the end. So we have in North Dakota a lot of rural, you know, volunteer firemen. You probably have some sitting here in the audience. What kind of things does a rural -- do the rural firefighters need, other than you said some annual training because the turnover is high? What about equipment?

A. Well, and that's just it. The gas monitoring would help because a lot don't have it. It may be different here, but back home, that wasn't a common thing that we had. Typically, our role in a pipeline incident is just to evacuate the area. We know somebody with better -- you know, Bismarck bringing their response team in or whatever. This was a little different because we had known victims in the highway.

Q. Okay.

A. So maybe some air monitoring and, like I say, just overall training of what's in the pipe and what they can expect if something catastrophic does happen.

Q. So this big -- this loan you all had to take to buy the breathing apparatus, was that something that your little county had to undertake?

A. Yes. That was our individual departments. It

was not a county purchase.

Q. Okay. And did you make that purchase because of what happened in this --

A. No. We purchased that in 2016.

Q. Okay.

A. That was just standard firefighting needs.

MR. LEIBEL: Okay. I don't have any other further questions.

ALJ HOGAN: Mr. Pranis, any questions?

Commissioner Christmann.

COMMISSIONER CHRISTMANN: What was the -- what was the breach like? Was it a bad valve or a bad seal or did a backhoe do some work and completely sever it? What was the breach like?

THE WITNESS: So the February of 2020, we had, I think -- don't quote me -- roughly 18 inches of rain. And our soil type just gave loose. And I think that's what caused the -- I think it was a weld fracture, if I remember correctly. And it just severed the pipe. It really wasn't like a pinhole or a specific leak. I think the pipe was severed.

COMMISSIONER CHRISTMANN: And do you know, in the subsequent reports -- and I think you were questioned on one of them, but I've lost track of all these numbers, exhibit numbers. Do you know what

percentage of CO2 that pipeline stream is that goes near Satartia?

THE WITNESS: I do not. I know I've read it in the reports, but I don't remember what that was.

COMMISSIONER CHRISTMANN: Okay. No other questions. Thank you. And thank you for your great work that day.

THE WITNESS: Yes, sir.

ALJ HOGAN: Commissioner Haugen-Hoffart.

COMMISSIONER HAUGEN-HOFFART: Yes.

Mr. Briggs, thank you for being here.

THE WITNESS: Yes, ma'am.

COMMISSIONER HAUGEN-HOFFART: And thank you for your service to your community.

You mentioned in your testimony that you looked at the route northeast of Bismarck where the pipeline would go.

THE WITNESS: Yes, sir -- yes, ma'am.

COMMISSIONER HAUGEN-HOFFART: Did you look at any other areas regarding the pipeline route here in Linton or Emmons County?

THE WITNESS: We didn't get here until late yesterday, into Bismarck, so that's where I looked first. And then we were actually talking about riding around this community after we left here.

COMMISSIONER HAUGEN-HOFFART: It may be dark.

(Laughter)

THE WITNESS: Maybe after you're done here it may be dark.

(Laughter)

COMMISSIONER HAUGEN-HOFFART: I think you've answered or stated a lot as far as the safety and what local responders need to mitigate risk. You need proper equipment. You need annual training. Is there anything else, I mean equipment, vehicles, anything else that, in your discussion on panels or whatever, as far as what else is needed to mitigate risk for a pipeline like this?

THE WITNESS: From our side of it, from the fire world side of it, it's just what I said. The training, the equipment. Because -- and I think what they were alluding to, we're going to have problems in our communities, whether it's this pipeline or a railroad incident or whatever, but the training and these pipeline groups, whether it's this one at Summit or whoever, being involved in each one of these communities, not the city of Bismarck or whatever, but in each one of these communities, getting out, in touch with these rural -- I think one of the deputies upstairs is a fire chief just south of here, I don't remember the

city he said, but that's what it's going to take, is getting out there and educate and not just doing it one time and making sure that they have the proper equipment to respond to your community and to your citizens.

COMMISSIONER HAUGEN-HOFFART: I guess I'm going to take it a step further as far as response. Besides the company and like the EMS and fire department, what other community leaders need to be involved if an incident like this occurred? I mean, was your mayor involved? Was your -- you know, did you have shelters identified? Were they set up? Because you said that the community was gone, maybe out in another community.

THE WITNESS: Right.

COMMISSIONER HAUGEN-HOFFART: But was there a period of time where they were not allowed back into the residence?

THE WITNESS: It was. And I think the pipeline group were doing air monitoring to allow them to come back into their community. I don't think it was that long. Maybe 10 or 12 hours. And as was said, most of the community went to the hospital. So by the time all that was over with, they were back. But there was a shelter set up in Yazoo City, which is, roughly, 20 miles to the north of the incident. I'm not sure if anybody came to the shelter or went to a family house or

that kind of thing.

But the first victim we had in this was the deputy that went to see what was going on. So they need to be educated as well, your law enforcement. They're usually going to be the first on the scene of any event.

COMMISSIONER HAUGEN-HOFFART: So one can technically say the whole community needs to be educated?

THE WITNESS: And I actually made a comment dealing with that, you know, where is some type of notification system that goes out? I know, yes, in our world we can do reverse 911. We can do a lot of things after we know what's going on. But where can we notify --

And there were several failures with the Denbury pipeline that shouldn't have happened. Absolutely. But had we known and could set off some type of warning device, at the very minimum, shelter in place, stay in your house, you know, shut your AC off, shut your ventilation off. I don't think you'll have AC up here, but shut your heat and stuff off to circulate through your house, you know, and just shelter in place. But you need to have some way of notifying these people of what's going on and when it's safe to go outside. Because your first inclination of a big boom is you go

outside and see what just went boom.

COMMISSIONER HAUGEN-HOFFART: Right. And that's what I was kind of getting at, is going a little deeper into the notification system. It affects, potentially, everyone in the community.

THE WITNESS: Right.

COMMISSIONER HAUGEN-HOFFART: You know, it did. Your sheriff, you know, the responders, everyone, there needs to be a notification.

THE WITNESS: Yes, ma'am.

COMMISSIONER HAUGEN-HOFFART: Again, I want to thank you for your service to your community and thank you for being here.

THE WITNESS: Yes, ma'am.

COMMISSIONER HAUGEN-HOFFART: I have no further questions.

THE WITNESS: Thank you.

ALJ HOGAN: Mr. Dawson, any questions?

SUBSTITUTE DECISIONMAKER DAWSON: Mr. Briggs, it cuts off all sources of ignition, the carbon dioxide? Does it knock out pilot lights and things like that in a house?

THE WITNESS: I wouldn't know. I just know it displaces oxygen. Displacement.

SUBSTITUTE DECISIONMAKER DAWSON: And if you had

one thing you could change in the whole incident besides perhaps having the pipe break, what would it be? Would it be one piece of equipment or a siren or -- what would it be?

THE WITNESS: Personally for me it would be some type of monitoring system. But for the community, I think it would be a notification system. These people move in there. The pipeline was built, I think, in 2012. And there's people that move there, renting a house, that had no idea there's a pipeline in their community that weren't there like we are here today talking about it. They bought a house and didn't know that it's a half a mile from a pipeline. So how do you notify these people that there's a problem that they don't even know exists?

SUBSTITUTE DECISIONMAKER DAWSON: No further questions.

THE WITNESS: Yes, sir.

ALJ HOGAN: Any redirect, Mr. Bakke?

MR. BAKKE: Yes.

ALJ HOGAN: Before you go, I'm also going to remind you we've got 11 witnesses yet to get through.

MR. BAKKE: I'm just following up on some of the questions. I won't steer from that at all.

REDIRECT EXAMINATION

BY MR. BAKKE:

Q. So you were asked this question about a perfect storm for this event, but, you know, in planning for a CO2 leak, you don't know where the leak's going to occur or what the conditions are?

A. No.

Q. For planning, you've got to prepare for the worst?

A. Correct.

Q. And you can't always plan for the event or maybe rarely plan for the event that actually happens?

A. Well, I mean, you can plan for the event and your response to an event, but you can't predict what's going to happen.

Q. Okay. You were asked about other transportation, perhaps CO2 or other fuels, oil, gas, and aren't they transported by barge, by train, by semis. None of those are 9.55 miles long, are they, and have this quantity of CO2 in them, in a train or a truck or a barge; correct?

A. Not that I'm aware of, but it seems like there are trains that long when I'm sitting there waiting.

Q. And with the pipeline, that danger of a leak is always present versus a barge going by on the river one

time or perhaps every fifth day or a truck driving through; correct?

A. Yes, sir.

Q. You talked about the golf carts and the electric vehicles. And that probably could work pretty well in Mississippi, but you understand here we have very cold weather in the winter where a golf cart or an electric vehicle wouldn't work very well in the winter?

A. Yes, sir. I seen the snow in May.

(Laughter)

Q. (BY MR. BAKKE) And you were asked by Commissioner Christmann about the leak and what it looked like. In Exhibit 155 is a photograph showing the leak on page 9 of 21; is that correct?

A. I'm familiar with it, yes.

Q. And there was actually a color copy provided to the commissioners this morning of that leak location. We can -- and to the other attorneys and parties and to the judge. You can see on there that the area is frozen in the area around the leak; is that correct?

A. Yes, sir. I think that photo was taken by drone the next day or next afternoon.

Q. Okay. And did you see more ice in that area earlier than when this photograph was taken?

A. Yes, sir. The road that is shown there and

probably for at least a thousand feet that I was walking in, it was frozen, the trees were frozen. There was -- the reason the road was closed as long as it was, because it was frozen mud all over the road where the pipeline actually exploded.

Q. And then if we turn to -- and so that would be the road shown above where the leak is where the vehicle is positioned on this photograph on page 9 of 21?

A. Yes, sir. On 433.

Q. And then you were also asked by Commissioner Christmann about what the breach looked like. Does that breach show up on page 11 of 21 of Exhibit W155?

A. Yes.

Q. You mentioned, in response to one of the Commissioners' questions, that there was a second CO2 pipeline leak by Denbury after this one on February 22nd, 2020; is that correct?

A. Did I mention that today?

Q. Yes.

A. No.

Q. I thought you said there was a second leak.

A. No.

Q. Was there a second leak?

A. Yes.

Q. Okay. And when was the second leak of the

Denbury CO2 pipeline?

A. It was just down the road from the initial leak probably two weeks later, three weeks later. I'm not real sure. Again, that's not my county. I didn't respond to that one.

Q. Okay. And then you were asked some questions about pilot lights and so on. At any point that day when you're responding and performing your rescue efforts, did you notice anything on fire anywhere?

A. No.

Q. And although you may have the perception it's always cold here, we do have to use air conditioning in the summer sometime.

(Laughter)

A. Okay.

MR. BAKKE: That's all I have.

ALJ HOGAN: All right. Mr. Dublinske, any questions?

MR. DUBLINSKE: No, Your Honor. Thank you.

ALJ HOGAN: Mr. Pelham. Mr. Leibel.

MR. LEIBEL: I just had one follow-up.

RECROSS EXAMINATION

BY MR. LEIBEL:

Q. Was there any -- so within this area that this plume was and you had victims, was there any animals or

any livestock that you located or saw?

A. That I seen, no. I did hear a few people saying that there were some dead animals near that blast site where the ice was.

Q. Okay. And when you said -- did I hear you right, that the ground was frozen for a thousand feet around this pipeline?

A. Roughly. It seemed like that when you were walking in it, it was probably a thousand feet, but it was just frozen mud that had blown out of the hole.

Q. Okay.

MR. LEIBEL: No further questions.

ALJ HOGAN: Any other commissioner questions?

All right. Well, thank you, Mr. Briggs.

THE WITNESS: Thank you. You all have a good day.

ALJ HOGAN: All right. I have on my list Mr. Jundt as the next witness.

MR. BAKKE: Correct.

ALJ HOGAN: This is your witness as well, Mr. Bakke?

MR. BAKKE: Yes, Your Honor.

ALJ HOGAN: All right. And same request, to just keep in mind we've got a lot of witnesses to get through yet.

All right. Can I have you state your full name and spell your last name for the record, please?

CURTIS JUNDT: It's Curtis Jundt, J-U-N-D-T.

ALJ HOGAN: And, Mr. Jundt, were you in the room this morning when I went through the penalties for perjury?

CURTIS JUNDT: I was.

ALJ HOGAN: And do you understand what perjury is?

CURTIS JUNDT: Sure do.

ALJ HOGAN: And being advised of the potential penalties for perjury, do you promise to tell the truth in this case today?

CURTIS JUNDT: So help me God.

ALJ HOGAN: All right. Thank you.

Go ahead, Mr. Bakke.

CURTIS JUNDT,

being first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. BAKKE:

Q. Okay. Mr. Jundt, can you tell the commissioners a little bit about your educational background and work background?

A. Yes. So 41 years ago this month I graduated

from NDSU with my engineering degree. And prior to that, for about four years, five years, while going through school, I worked for three different consulting engineering firms out on construction, inspection, putting in waterlines and sewer lines across Fargo and in the Burleigh County, Bismarck area.

But I left NDSU with my engineering degree, decided I did not want to be a consultant so I did get a job, took me back to Bismarck working for the MDU Resources Corporation, which I spent 15 years there. Much of it was in the pipeline business. I actually was the guy that you would go to if you wanted to build to or from the Interstate Pipeline. My last three or four years there I was director of WBI Gas Services and I oversaw all the development of shallow gas fields, drilled about 118 shallow gas wells, fracked the dickens out of them, and built all the gathering systems and booster stations. I oversaw it. I was basically the project guy.

Q. Do you come from an engineering family?

A. I sure do.

Q. And who was your father?

A. Ray Jundt. He was city engineer of Bismarck until -- for about 34 years until he retired in April of '93.

Q. And have you been involved in terms of engineering and building energy pipelines before?

A. I have.

Q. Okay. Have you been involved in building compressor stations for any energy pipelines?

A. I was part of being, more or less, the project manager. I had a good team of engineers, but yes. The Glen Ullin station, injecting into the 42-inch Northern Border Pipeline, the extension from Valley City to Mapleton, which involved compression, but numerous projects.

Q. Okay. And have you been involved in building and overseeing projects involving energy shut-off valves?

A. Of course. That's all part of the operation, maintenance, safety, control of a natural gas pipeline.

Q. And you also have experience with the operation of energy pipelines for gases other than CO2?

A. Natural gas. That's the world I come from so very passionate about it so yes.

Q. And do you have experience dealing with safety issues relating to energy pipelines?

A. Yes. Most of the 15 years of my corporate career I was actually on the corporate safety committee representing the headquarters in Bismarck, and we would

hold our meetings in Glendive. And I even did hazmat training. So safety, even in my private businesses that I retired from seven years ago, I did have a safety services company. It's a very big part of my world.

Q. Okay. And as part of your work experience in -- with energy pipelines and also your engineering training, do you have knowledge and education and experience with carbon dioxide, with CO2?

A. I do not.

Q. Do you know whether or not there's a difference between natural gas and CO2?

A. Yes, I do.

Q. Okay. And what is the difference?

A. Well, I believe the differences are very stark. For one thing, it would just -- Chief Briggs had talked about how natural gas goes up. And I know it's all about the thermophysical properties of natural gas versus CO2 and the laws of gravity.

Methane, which is predominantly 96 percent of our natural gas stream with other hydrocarbons, that's about .55 to .65 specific gravity. And when that ruptures, it goes up until it dissipates in the air. You know, you could have a spark that could set it off. Where CO2 is 1.55, it's 1.55 times heavier than ambient air. And that will, once it sublimes from its solid

particles and ice crystals, it will warm up and become a gas and move low to the ground in low-lying areas.

There's a very significant difference. CO2 is not combustible, but it moves across pretty good distances in low-lying areas like fog. And depending on the breeze, the temperature increasing the density and the colder it is -- like this winter we had days where it was 25 below 0 and more -- that cloud will stay dense and take longer to dissipate if we have 10 to 15 mile-an-hour winds, which we can get, whereas natural gas is different. It goes up. And if it does ignite, we're talking about an event that is localized to where the rupture is. There's significant differences.

Q. Okay. Let's talk about size and pressure of pipelines. And so you have studied the Summit pipeline application and their engineering information?

A. Just generally I -- only from what I've been able to grab online. I've not purchased a full application, but I've read enough material, listened to all the hearings that have been held and the testimony of Mr. Powell and others so...

Q. And so you heard the testimony that there are different sizes of pipes at various points on the Summit pipeline?

A. Yes. You know, like any pipeline system, you've

got your gathering lines, which I would call those the lines coming from the ethanol plants or laterals. Then they move to a -- maybe several will come into a trunkline so you'll maybe have 4-inch, then you'll move to maybe a 6- or 8-inch. And it's all about volume, until you finally interconnect with the main line. I want to call what is coming through Emmons and Burleigh County a main line.

So that's your -- we're at the end of the delivery system so we have the largest pipe, the largest capacity, just by the fact that all of the inputs are happening in four other states. Well, and one from ours.

Q. And so you've heard that there are some pipelines on the Summit system from the ethanol plants that are 8-inch pipelines; is that correct?

A. And 4-inch. Yeah, 4, 6, and 8, I believe. Yeah.

Q. So what's the difference going to be in terms of the volume of CO2 that will be in a 4-inch pipeline on the Summit pipeline system versus a 24-inch main line, as you call it, through Emmons County and Burleigh County?

A. So early on as my awareness -- I gained an awareness about this project, that was a question that

was asked of me almost right away. What's the difference between an 8-inch -- you know, we're talking about Denbury running from DGC up to the Weyburn field is 8 and 12. What's the difference between that 8-inch and a 24-inch? Is this 24-inch going to carry three times more?

And I said no. Just the difference of squares without friction losses, this 24-inch will be equivalent to 9.4 8-inch pipes. But when you factor in friction loss, you're talking about 15 8-inch pipes to move about the same volume as this one will at, you know, 2,183 PSI. It's significantly different.

Q. Okay. And so you would need 15 8-inch pipelines to carry the same amount of CO2 that can be carried in the 24-inch pipeline?

A. That's my opinion, yes.

Q. And then what significance does it have that this pipeline is planned to be a critical pressure pipeline at 2,183 pounds per square inch?

A. So I'm very familiar with high-pressure pipelines. To reach supercritical phase, CO2 has to reach 1,070 PSI at 87 degrees. Now, there are going to be points along this pipeline where the temperature is probably not going to be 87 degrees the further the CO2 gets away from the discharge end of a compressor

station. So, you know, it could -- could be less than that, but when you're well above 1,070 PSI, you're going to remain in supercritical state -- phase across a pretty good temperature range.

Q. So when this Summit pipeline is planned to be supercritical, is that extremely high pressure?

A. It is. You know, near -- well, 2,183 maximum allowable operating pressure. Starting out, depending how full the pipe is, they may not be at that right away, but from what I've heard, they intend to -- like any pipeline, you intend to maximize your throughput so we have to expect sooner than later they will get it to be running this at 2,183 PSI.

Q. And we already heard today that there's been an additional ethanol plant added from South Dakota. That's going to add to the volume that's going to go into the pipeline; correct?

A. Well, that I didn't -- wasn't aware of until now, but on their own website, press releases, February 2nd of this year, they added Devo. I don't know what Devo is, D-E-V-O. It's a renewable jet fuel company.

So what they're going to try to do is add any emissions from the burning of natural gas. Why is that? Because that's your purest CO2. You burn natural gas in

pretty complete combustion, you're going to be at probably 98 percent CO2 and you're going to have some nitrogen maybe. And because it's pipeline quality gas that's being burned in all these ethanol plants, we don't allow hardly any H2S in our natural gas pipeline system so that's not even going to be there, but you'll have some other trace contaminants in the other couple percent. But that's why they're pulling off of these ethanol plants.

Q. Okay. And so will this be a 24-inch CO2 pipeline that's planned for Emmons County and Burleigh County?

A. It is.

Q. Okay. And so let's talk about that 24-inch pipeline. And from a shut-down standpoint, how that would happen if there was a leak, let's say, God forbid, northeast of Bismarck in the 24-inch Summit pipeline, what would that shut-down process look like?

A. Well, again, I can only relate from the natural gas industry, and we are talking about a totally different -- we're talking about a baboon and a monkey here, but this is a baboon.

So if this thing is running at supercritical, at maximum pressure, you don't get a lot of wiggle room in shut-down procedures. If you're running a natural gas

pipeline at 400 PSI but the allowable pressure in the pipe is 800, you can probably shut your valves quicker because, you know, things -- you have 400 PSI to pressure up.

So this, in my opinion, will have to be an orderly shutdown to prevent a water hammer-like effect and catastrophic failure downstream of any rupture. So the upstream valve could shut pretty darn quick, like immediately.

I -- again, I'm just envisioning, but I don't believe, as I've heard from Mr. Powell, the valve can shut and the actuator can close the valve in two minutes. I don't believe that that's going to be two minutes from the time they sense a pressure drop. That's going to be an orderly shutdown.

And I know there's pressure sensors and pop-offs on all their compressor stations and all the safety stuff, but there's going to be -- I don't know. Is it going to be tens of minutes? Is it going to be 30 minutes before that downstream valve is shut? I don't believe it's going to be just minutes.

Q. And so what is this -- did you call it a water hammer effect?

A. Correct.

Q. Okay. What's the water hammer effect?

A. Well, you know, when you're running this at a supercritical fluid -- and it's really not the pure fluid, liquid CO2 and it's not the gas. It's right in between those two phases. It's very dense, weighing -- you know, having a weight in the pipeline that -- and you're going to be at 2,183 PSI. It's going to be, you know, potentially 50 pounds per cubic foot in that pipe at 2,100 PSI.

And if it's running at maximum allowable pressure, I mean that -- the last -- the compressor station in Burleigh County, I believe there's one in Burleigh County, that would have to shut down immediately. So once that shuts down, then -- and stops discharging, they can shut the downstream valve of -- beyond the rupture.

So maybe minutes is not unreasonable, depending on the response that their dispatch, their SCADA, you know, how much the pressure drops and what his response is, it's going to be up -- there's going to be humans involved in this. The equipment is not going to automatically shut stuff down. There will be humans involved in evaluating the data.

Q. So will there be a lag time between when Summit in Ames, Iowa, sees a drop in pressure to when they can start the shut-down process?

MR. DUBLINSKE: I'm going to object on the grounds that this is speculation. This witness has testified that he's not operating -- familiar with CO2 pipelines. He's speaking generally about operations of SCADA systems. So a question calling for this witness to provide that --

MR. BAKKE: I can --

MR. DUBLINSKE: -- as a fact is --

MR. BAKKE: I can rephrase.

Q. (BY MR. BAKKE) When you have a system, an energy pipeline system, is there a lag time between when there's a drop in pressure and when the system can be shut down?

MR. DUBLINSKE: I'm going to --

A. Logically --

ALJ HOGAN: Hang on.

MR. DUBLINSKE: Sorry, Mr. Jundt.

I'll renew the objection. Now we're calling all pipelines "energy pipelines." If we're going to treat all pipelines the same, fine, but just calling them "energy pipelines" is a vague question.

MR. BAKKE: I can ask about natural gas, same question, natural gas.

MR. DUBLINSKE: Then I'm going to object on the grounds of relevance because now we have a witness who

is -- whose history is in natural gas, a long history in natural gas. Now Mr. Bakke's only going to ask him about what would happen if this were a natural gas pipeline.

MR. BAKKE: Well, Summit is the one who said it's the same as a natural gas pipeline in terms of the safety aspects. That's what I'm asking about.

MR. DUBLINSKE: The specific questions he's asking about are the SCADA operations in the event of a -- the SCADA operations in the event of an event on a natural gas pipeline. If he wants to rephrase the question and draw parallels, that's fine. But he specifically asked him about what's going to happen on a natural gas pipeline system.

MR. BAKKE: Yeah, I can rephrase the question.

Q. (BY MR. BAKKE) When a natural gas pipeline system is being shut down, is there a lag time between when there's a drop in pressure and when the valves can be shut off to shut down the pipeline?

MR. DUBLINSKE: That was the exact same question. I've got the objection out there. I'm not going to keep interrupting. I know we are pressed for time.

ALJ HOGAN: The objection is noted. And, yeah, I'm not sure on relevance either, but he can answer.

A. There's a lag time.

Q. And what does that lag time range to and from?

A. I don't know. Depends on the circumstance. The amount of pressure drop, location. You know, if it's a small pressure drop, it could be a faulty pressure sensor. They would send a field guy out to verify. So one size doesn't fit all in any of this.

Q. In terms of pipeline, you understand this is a carbon steel pipeline that Summit proposes to install; is that correct?

A. Correct.

Q. And is that type of carbon steel pipeline, CO2 pipeline, does it have the same susceptibility to corrosion that a natural gas pipeline does?

A. It does.

Q. And so can you explain that?

A. So natural gas, we limit four pounds per million cubic foot of water. We let in minimal grains of H2S, .4 percent of CO2. CO2 and H2S are extremely corrosive, especially if there's any water vapor or content in the pipeline at all. But the biggest thing with water content in a natural gas pipeline isn't -- it's not the -- when water vapor mixes with methane, CH4, it's not in and of itself corrosive. We do -- we minimize that for, yes, corrosion, but we minimize it so that when you do

pressure drops across a system into town borders and across valve settings, that's an endothermic reaction. We don't have hydrates. So that's why we limit other liquid hydrocarbons too, to prevent valves and things like that from freezing up.

Q. Okay. So is CO2 from carbon capture likely to have some water in it?

A. Well, that's one of the by-products of natural gas combustion, that's another -- is water vapor. And they'll have to dehydrate after capture at every ethanol plant.

Q. Okay. So if there's some water vapor in the CO2 that goes in the pipeline, will that increase the risk of corrosion of the pipeline?

A. Correct. Just like, you know, they don't have to deal with H2S, which is a good thing, but they're going to have to be extremely vigilant, and I believe even more than natural gas, because of the fact that any water vapor, any water in that pipeline with CO2 forms that carbonic acid and it can corrode through the pipe very quickly.

They'll have to dehydrate this CO2, you know, dryer than a popcorn fart. I mean, it's going to have to be very dry. And I'm sure that's what they're going to do, but that's another critical thing that has to be

monitored.

Because that carbonic acid can do significant damage to even a weld. I mean, your weakest links are your welds. So the internal corrosion on the internal part of a weld is a big risk.

Q. Do CO2 pipelines operate at higher pressure than natural gas pipelines?

A. Not necessarily. I mean, in my experience, the higher pressure -- highest pressure one I believe I've had any experience with is Northern Border, and that runs at 1,440 and maybe higher. I think they did a pressure upgrade. It might be up to 18 -- it might be close to 2,000 by now, but that would be probably the highest one I'm aware of.

Q. Summit says that a CO2 pipeline is safe or safer than natural gas pipelines. From an engineering perspective, do you believe that to be true?

A. Absolutely not.

Q. Okay. And why not?

A. Well, Chief Briggs explained part of it and I just explained a little bit of it here earlier. We're talking about a monkey and a baboon here.

So I would prefer that the CO2 were combustible. I would prefer that it was the specific gravity of methane, or even anhydrous ammonia which has a specific

gravity of .767, I think. Because it's going to tend to disperse upward and out much faster.

You know, we've significant experience with natural gas. We odorize it. When they built the first long-haul hundred-some mile natural gas pipeline 130 years ago, they didn't odorize it. But like all things in engineering pretty much, we -- we learn and grow from, you know, catastrophic or bad incidences. So that came into play years later and we odorized natural gas. That's a significant safety aspect and a significant difference between CO2 and natural gas. We have something that you can smell, even a very small leak anywhere around your home or in your home and most -- and so 130 years of natural gas versus -- and 3 million miles of pipe in natural gas systems versus 5,150? I mean, we're talking two different animals here from a safety standpoint and public awareness.

Q. And then in terms of anything that would alert someone there's been a CO2 leak, will there be any color, any odor, any plume that would show a color in the plume?

A. No.

MR. DUBLINSKE: I --

A. Not in this CO2. And chief --

MR. DUBLINSKE: Let me address that. Hold up.

ALJ HOGAN: Hang on.

MR. DUBLINSKE: Sorry, the ordering is I have to go first.

This witness has now testified several times that his analogy is that we are talking monkeys and baboons, two things that are terribly different. He's testified that he has experience only with either the monkey or the baboon, whichever it is, or apples and oranges.

I think he's being offered as some sort of expert witness but who has now testified that he only has expertise in a different field. So I don't know what the foundation is for continued questions about this application when he's disqualified himself as an expert by saying it's not the same topic.

Q. (BY MR. BAKKE) It's not the same type of gas, but it is a gas that you study and know the engineering of and the physical properties of; is that correct?

A. Correct.

Q. Okay. And so my --

ALJ HOGAN: Mr. Bakke, I think you need to establish his experience with CO2. I mean, I think that's what the objection was, that his experience is on natural gas and not CO2.

MR. DUBLINSKE: He established earlier right out

of the gates that he has no experience in CO2. We didn't stop there. There's some leeway. But we do have time pressures and we now have just general opining about CO2, and I think we're too far beyond what he ought to be allowed to testify to.

Q. (BY MR. BAKKE) Well, I think what you were saying, correct me if I'm wrong, Mr. Jundt, is that in terms of CO2, you don't have experience building or operating a CO2 pipeline; is that correct?

A. Right, I don't, even though it's similar type construction methods and pipe material and valves and things like that. I mean, it's just carrying a different product, but the construction methods, the pipe, the materials, compressor stations, valves, main line block valves, MLBV, they're pretty much the same.

Q. Okay. And so then in terms -- and is part of the reason that there's not a lot of engineers that have experience with CO2 pipelines is there just aren't that many of them?

A. That's correct.

Q. Okay. But you do have knowledge about CO2 and its properties and its propensity, and on oil wells there is CO2 that occurs on pipelines, there's some CO2; is that correct?

A. There is, yeah. We deal with that and H2S.

Q. Okay. And so you've dealt with CO2 on the pipelines you've been involved with and with --

A. Making sure we limit what goes in, correct.

Q. Okay. So getting back to my question, my question was: is there going to be any warning to the public or someone nearby in the event there's a CO2 leak in terms of odor or color or something like you might have with natural gas where you can smell (indiscernible)?

A. No, there won't be. You'll hear the jet noise like Chief Briggs talked about.

Q. Okay. And so in terms of comparing gases, natural gas versus CO2, in terms of what would happen in a leak event, is one more lethal or potentially lethal than the other?

A. I believe CO2 is substantially more lethal.

MR. DUBLINSKE: I'm going to object. If he's going to start testifying about lethality, that's a whole nother field unto itself. We're now talking about lethality of CO2 by an experienced natural gas pipeline engineer. There's got to be a foundation established to have an expert discussion.

MR. BAKKE: We've already got the exhibits that discuss from OSHA what the lethality is of CO2. Now I'm asking him to compare that to natural gas, which he's

worked in for decades. So he knows the lethality of natural gas. Now I'm just asking him to compare with what the OSHA information is in terms of these exposure things that we've heard about.

MR. DUBLINSKE: There was no reference to any document right now in this question about OSHA comparisons. And I --

MR. BAKKE: I guess you can ask him when it's your turn what does he base that on.

ALJ HOGAN: Hang on. If you're asking him to compare OSHA studies with natural gas, that's fine. But the OSHA information speaks for itself, and I tend to agree, we're kind of getting in the weeds here and we have a long list of testimony to get through. So I don't know that this is --

MR. BAKKE: In all due respect, Your Honor --

ALJ HOGAN: -- the time --

MR. BAKKE: -- I should be allowed to confront their claim, which is their claim frequently, that this is no more dangerous than natural gas. This is someone who has expertise and substantial experience, decades, with natural gas. So I don't --

ALJ HOGAN: Okay. But, again, if you're asking -- he's said that and he generally understands carbon dioxide, but now you're asking him to make a comparison

on issues that I think is beyond what he has indicated as his expertise on that.

MR. BAKKE: I don't think so.

Q. (BY MR. BAKKE) Can you speak to the --

A. I would like to -- when your ninja-lawyering stuff is done here, I'd like to have some input.

I've had to deal with more than just methane. I mean, we've had to move ethane, pentane, butane, propane in our gas streams and CO2. I know enough about the thermodynamics, the thermophysical properties, the laws of gravity to know the difference. You don't have to be someone that was out there and did some, you know, three-mile test of an 8-inch pipeline and burst it or whatever. You can, you know, understanding the thermophysical properties, coming from the engineering world of gases, have a pretty good idea to envision what might happen.

And that's one of the things I've taken exception to from the very beginning I got involved in this, is this is significantly more safe than any pipeline running through Burleigh County. That is total BS. It is not. It is a very large high-pressure pipeline carrying a totally different product.

I do have the -- enough of a background. I didn't just fall off the turnip truck so I do have

enough of a background to know the difference between CO2, methane, pentane, hexane, butane, propane. They all have different thermophysical properties. So that's what I'm trying to address here.

MR. DUBLINSKE: Your Honor, I think the objection, though, is to the lethality. If Mr. Bakke is referring to Exhibit 166, that's effects of hydrogen sulfide.

So I'm not sure which OSHA report you're referring to, Mr. Bakke.

MR. BAKKE: And I withdrew that question --

MR. DUBLINSKE: Okay.

MR. BAKKE: -- and moved on to another question. I think that's what he was responding to.

MR. DUBLINSKE: Okay.

MR. BAKKE: But I can ask a different question. I think he's answered it.

Q. (BY MR. BAKKE) So based on the thermophysical properties of CO2, let's talk about what would happen if a leak occurred north of Bismarck. Based on the thermophysical properties of CO2, what would happen if that leak occurred?

A. Okay. So this is where the plume modeling is going to be extremely complex, and it is extremely complex because of all the variables. But I can

envision, knowing enough about the thermophysical properties of natural gas versus propane, butane, and CO2, CO2 in a pure form, 98 percent, supercritical, when that erupts, it's going to be -- well, the Satartia one was 1,402 PSI. If this one is at 2,100 PSI and it's a guillotine break --

Which, Chairman Christmann, that was -- we call that a guillotine break, when the pipe separates at a weld, because you have the full diameter of the pipe venting at that point versus just a crack or a pinhole.

So in a guillotine break in a 24-inch pipe, this is going to blow a crater in a hole very substantial. The temperature will drop to minus 109 and colder. It will shoot solid particles of CO2 up in the air. It will crystalize any water vapor in the air. And when that finally warms up, it will flow to the ground.

This is all -- this is not -- you know, this is exact science. This is why Commissioner Goehring had a point. And because of what this pipeline has brought to the attention of a lot of people -- I've been on this soapbox for 40 -- 30 years. There's no way CO2 makes it up to the ozone layer. That is not what thins the ozone. And I thank Commissioner Goehring for expressing what, you know, I would have liked to have said.

It moves to the ground. And that's what makes

it very dangerous. And we have -- we had what, 101 inches of snow this year. We had stretches where we were 25, 30 below 0. I mean, operationally, checking on a valve, if you have a valve actuator failure, to get to it, you better have a UTV with snow tracks on it or you're not getting there. I mean, I can envision what's going to be needed to respond.

And the further this pipeline is away from occupants and inhabitants, it's all about risk mitigation, the longer we have to respond. It's all about emergency response and limiting how much section of the pipe is going to vent.

And, again, thank you, Commissioner Goehring, for pointing out thousands of feet of control valves or ML -- main line block valves. These are the things that are going to be needed.

But to put this pipeline east and north of Bismarck for all of the -- I mean, if I would have been part of the siting team, just like I expressed my opinion when I got involved with Dakota Access for a short stint and they have their first route east and north of Bismarck, I basically told them they were insane to be doing that.

This pipeline needs to run south of Bismarck halfway between Northern Border's right of way and

DAPL's right of way in Bismarck because you've got ample -- 20 miles to clear and disperse south, 20 miles for Bismarck, Mandan. But to run it where it's going right now, I would have used the same language. Are you insane? It's crazy. It's absolutely crazy. And that's all I can say.

I'm about three miles away from it. I have friends that are hundreds of feet away. And this pipeline cannot be located where it is. It's an absolute injustice to Bismarck and its growth and all the citizens in the county. And 500 feet from a farmstead or anyone living, that's -- that's nuts.

Q. Okay. So let's turn to another topic in this, the issue of frost and frost heave. Summit indicates it plans to bury the pipeline 40 inches --

A. 48.

Q. -- 48 inches below. And you've been involved in pipelines including --

A. Of course.

Q. -- siting them?

Including the depth; correct?

A. Of course.

Q. Okay. And whether it's a natural gas pipeline, a methane gas line, an oil pipeline, they all have to deal with this frost heave issue; correct?

A. They all do. And one size doesn't fit all so it's -- Commissioner Goehring gave all the things that I would give that affects frost heave.

Q. Okay. So then in terms of frost heave, they have indicated through their frost heave study that they looked at a ten-year time frame for the soil temperatures and frost. Is that a sufficient time period to determine the likelihood or possibility of frost heave occurring?

A. Well, I mean, this is going to be in service for decades. We've had frost go much deeper than that in Burleigh County. Even back with the records I got from the North Central River Forecast office out of Chanhassen, Minnesota, just two weeks ago, we've had stretches of weeks where the frost has stayed at 50 inches. Since 2009 or '10 we've been at 52 inches, 51 inches, 50 inches, 50 inches. And that's just going back to 2009.

So -- but, again, if I'm sitting here testifying on behalf of natural gas pipeline, I would just tell you that one size doesn't fit all. I mean, we're -- you have to bury deeper under a road. Under a railroad, I got to believe it's going to be a significantly deeper bore to avoid the vibration. They're going 49 or 50 feet under the Missouri River, and I think the other

crossings are 25 to 37 feet. So I mean, all that's not unreasonable.

But I think that when you have drain tile in the field, whether you have a very rocky field where you have rocks that, you know, are down quite a ways -- I mean you could get six-foot, seven-foot frost. It would have to be pretty severe. The pipe does keep the soil warm around it so -- you know, again, one size does not fit all. And that's where working with the landowners who have the most experience on -- on their soil type and rocks and things like that that could bother the pipeline if you get heaving going on.

Q. In relation to some of the safety measures you talked about, is there such a thing as CO2 sensors?

A. Sure. Just like H2S sensors, which they all pretty much all wear out in western North Dakota.

Q. Okay. So what are CO2 sensors and would those be required in relation to this pipeline, and if so, where?

A. So in addition to distance from residents, ranch homes, farm homes, it's all a matter of how much time are you going to give people to respond. So if it's simply closing block valves and then you let the pipeline blow down, there has to be a quick response tied into the Department of Emergency Services where --

and I've advocated for -- and, again, we haven't put these on natural gas pipelines, but somewhere, you know, up and downstream wind, I mean, of this pipeline, that there's some CO2 monitoring, just like you have carbon monoxide monitors in your home -- I hope you all do -- but that there's some monitors out there that, even if something isn't detected at the SCADA system in Ames, Iowa, that there's some -- you know, again, it's giving us, the citizens, the time to respond and then we, as citizens, knowing what to do when the phone goes off. And I'm sure it will say "Shelter in place, get indoors immediately, shut your windows, close your doors, shut any fresh air coming in from the outside."

Those are the societal education points that are going to have to be made. This isn't just educating emergency response, law enforcement, fire, EMS, and all that. The citizens have to be educated on what to do.

Q. And these -- have you seen anything to suggest that Summit is proposing to have CO2 sensors placed in the community --

A. No.

Q. -- near this pipeline?

A. No.

Q. Okay. And would those, in your opinion, be mandatory to alert the public in the event of a leak?

A. I mean, it's one. It's just an idea I had. Again, when you're talking only hundreds of feet, even several miles, just listen to what Chief Briggs had to say about the coverage.

Now, that temperature, air temperature, in Satartia, Mississippi, isn't near as cold as it can get here. And that keeps that CO2 much more dense, much closer to the ground at 25 below 0. So we need something to give us as much early response as possible no matter where this pipeline is located.

Q. In regards to the frost heave study of Summit, you've reviewed that; is that correct?

A. I did.

Q. Okay. And they used five monitoring sites over the 2,000 plus mile pipeline. Is that your understanding based on reviewing their report?

A. It is.

Q. Okay. Is that sufficient to do a frost heave study for a 2,000 plus mile pipeline, using five monitoring sites?

A. Well, I mean, there's five monitoring sites across five states seems a little light, but there's more than that when you're talking about -- there's other resources and places, you know, even localized where they might have some frost depth information.

Again, as a responsible pipeline developer, you really need to have a really strong idea of what you're up against when you're dealing with the different soils, when you're crossing thousands of miles. Because your soil changes, your water content changes, your water table changes, your snow cover changes, etcetera, etcetera, all affecting frost depth. So it's incumbent upon them to be prudent and have a really good idea of the soil conditions and potential frost depth of every tract they go through.

COMMISSIONER HAUGEN-HOFFART: Judge, I'm going to just comment.

Mr. Jundt, I thank you for pointing out Commissioner Goehring's testimony. We all heard it. He was very clear on many things as far as mitigation, taking care of the land, you know, topsoil, subsoil. I think we're repeating ourselves. I thank you for collaborating Mr. Goehring's testimony, but we've heard it.

So I'm going to ask that, you know, Mr. Bakke, if you can ask questions that have not been addressed and answered or if he is in contradiction so we can move on.

MR. BAKKE: And I just want to ask about some pipeline ductility issues.

Q. (BY MR. BAKKE) So have you studied the information in regards to whether or not there's any information showing whether the Summit pipeline pipe materials will meet specific ductility requirements?

A. I believe they will.

Q. And is that important?

A. Extremely.

Q. Okay.

MR. BAKKE: Okay. That's all the questions I have.

ALJ HOGAN: Mr. Mahlberg, are you questioning?

MR. MAHLBERG: I'll try.

ALJ HOGAN: Okay.

MR. MAHLBERG: I will try some ninja lawyering. I haven't heard it described that way.

(Laughter)

MR. MAHLBERG: I'm going to try it here.

THE WITNESS: That just came to me. I apologize.

MR. MAHLBERG: I couldn't tell if it was a compliment. I don't think it was.

THE WITNESS: I didn't mean it as an insult so I -- I guess if you were a ninja, that wouldn't be a bad thing, would it?

MR. MAHLBERG: I don't look like one.

CROSS EXAMINATION

BY MR. MAHLBERG:

Q. On this issue of frost heave, how many frost heave studies did you conduct in your work?

A. Again, project manager, we have engineers that did that work. So that was part and parcel to -- we had our civil engineers that oversaw all that.

Q. Part of the team?

A. You got it.

Q. Okay. What depth is, like, Northern Border buried at?

A. Typically -- and this is a PHMSA thing. And, you know, what I've always said, building pipelines, I'm sure that's about four feet. It's a 42-inch pipe. Probably four foot on average. But I'm sure there's places it's much deeper like under railroad crossings, things like that. But I'm guessing similar to what's happening here with this pipe.

Q. Did you experience frost heave difficulties with the Northern Border Pipeline?

A. Not that I'm aware of.

Q. This idea of a monitoring system that you talked about, I think you said it's an idea to --

A. It's an idea.

Q. -- give people notice; right?

A. Early notice.
Q. Early notice?
A. Warning.
Q. And so if we think about the occasions where something like that would happen, I think what you're talking about there, it would have to be a very slow release, right, a very small release, because otherwise you've described this catastrophic explosion-type event and we don't need a monitor to tell us that; right?
A. Well, I -- I think maybe I need to clarify that. This CO2, from a guillotine in a 24-inch, we have a 10-, 20-mile-an-hour wind, will -- in one hour will be 20 miles. I'm talking --
Q. Well, I'm going to stop you there because before I have you answer a question like that or say things like that, how many plume modeling analyses have you done for carbon dioxide released from a pipeline in any environment at any time under any conditions?
A. Probably one less than Summit.
(Laughter and applause)
Q. By my math --
ALJ HOGAN: I'm going to ask, again, the public to refrain from clapping and jeering. That just is not how these hearings are designed to run.
Q. And it's entertaining, Mr. Jundt, but the answer

is zero; right?

A. I've -- I've --

Q. The answer is zero, yes or --

A. Zero that I've conducted. I only read several and it's extremely complex.

Q. A question. You described the source of the CO2 as having been burned off from natural gas in your testimony today. Do you recall that?

A. Yeah, I did.

Q. Do you know where the CO2 is coming from that is being put into the -- into the Midwest Carbon Express pipeline?

A. I keep hearing it's off the fermentation process.

Q. Is that burning of natural gas?

A. That's what creates a fermentation.

Q. So when you say burning of the natural gas, you're equating that with the fermentation at the ethanol plant. I just wanted to --

A. Sir, that's why they burn natural gas, is so that they can ferment the corn.

Q. So your source of CO2 is the burning of the natural gas, not the fermentation itself?

A. Okay. So --

Q. It's a question, yes --

A. You're splitting hairs. The fermentation process is allowed because you're burning natural gas. They're taking the combustion gases off the stack that is the result of burning natural gas to heat the corn and cause fermentation. So it's from the burning of natural gas. The emissions from burning of natural gas.

Q. It's the fermentation process that produces the CO2, yes?

A. No.

Q. Okay.

A. It's the burning of the natural gas that is creating the heat to ferment corn, which is part of the fermentation process.

Q. You talked about the potential for corrosion inside of the pipeline. And I think there what I heard you say was they just have to be very careful to make sure that they don't introduce too much water content into the pipe; right?

A. Dehydration will be even more critical than any natural gas line, correct.

Q. Right. And you were just saying it's important to do that, not that it wasn't going to happen. I just wanted to make sure that you weren't --

A. I'm not -- I'm not accusing them of not doing it. I know that's going to be a very important aspect

of operating this pipeline.

Q. And so maybe that's one of the things we agree on; right? It's important for them --

A. Right.

Q. -- to do what they say they're going to do?

A. Absolutely.

Q. And you'd agree that Mr. Powell who has testified on behalf of the company is a very capable person in charge of leading this project; right?

A. Yeah. Judging by what I've read as his background, yeah.

Q. Yeah. It's what you testified to at the -- at Burleigh County; right?

A. He --

Q. Very capable individual?

A. Yeah. And has as much experience in CO2 pipelines as me so...

(Laughter)

Q. Last one, and maybe this is -- I apologize to everyone. It's a curious question for me in the natural gas industry. Natural -- you said natural gas pipelines are all odorized. Does that include all transmission pipelines?

A. No, sir.

Q. Okay. I just wanted to make sure. I thought I

heard you saying that all natural gas lines were odorized. And that's not true?

A. It's -- again, one size does not fit all. So if we've got a natural gas transmission line that's running a hundred miles and not near any occupants, to speak of, you know, we probably won't be odorized at that point, but if we have a natural gas main line running through a populated area like we have one in Bismarck, they will odorize it, correct.

Q. And, Mr. Jundt, all I was trying to understand, I thought I heard you to say all of them, and that just wasn't my experience with the laws and the rules.

A. Okay. All that are near citizens so that you have that early warning of odor.

MR. MAHLBERG: I don't have anything further for Mr. Jundt.

Thank you, Mr. Jundt.

THE WITNESS: Yep. You're welcome.

ALJ HOGAN: Mr. Pelham, any questions?

MR. PELHAM: Thank you, Judge.

CROSS EXAMINATION

BY MR. PELHAM:

Q. Good afternoon, Mr. Jundt. We heard Commissioner Goehring talk about a thousand feet, between a thousand feet placement of main line valves in

more populated urban areas. Do you have an opinion on that?

A. Yeah, I've been kind of tripping that for quite some time.

Q. What's your opinion?

A. My opinion is I don't care where you put the block valves at this point around Bismarck. There's other issues. But, yeah, the closer -- that's all mitigation again, Mr. Pelham. So a thousand feet, you're going to vent a thousand feet. 9 and a half miles, 15 miles or 20 miles, it's all about mitigation. The further away --

Q. Sure.

A. -- the less you vent. So, yes, I would agree that was a good point.

Q. So then as far as you had testified when Mr. Bakke was asking you questions about the order of -- you know, shutting down the -- the upstream valve could be shut but the downstream valve would take some time and the order of it, have you had experience with that in your job at WBI? I'm just wondering if you could tell us a little bit about that?

A. Yeah, absolutely I have. Being somebody on the safety committee, I was one of the first ones that found out about one of the last main line incidences that

happened at my time there, and it was on the way up to Saco, Montana. In the summertime, the winds blow from the south, southeast. This crew was working south of Saco, Montana, replacing dresser coupled pipeline. And I knew all these guys well because I helped, you know, conduct training for them.

So we had a trackhoe, a backhoe, two big four-wheel-drive Ford trucks all around. And, of course, when you're excavating, pulling this pipe out, and we had -- we had both isolation valves shut. As they got close to the downstream isolation valve that had pressure up to it -- this is a dresser coupled pipeline that's held together with bolts from the 1920s, '30s -- they pulled that section of pipe up close to the isolation valve and the valve slid. Basically, the bolts were rusted out on the pressurized side. The valve slid and she went kaboom.

Due to our training, they knew to run upwind. You always know you have little windsocks or flags going. You always know which way the wind is going.

But we have that pipeline shut down, and we do it in the summer because we pressure it up, there's enough pressure and load in there, we can feed all the customers while we're doing pipeline replacement.

They ran upstream. One guy, I think, weighed

375 pounds and was able to leap over a barbed wire fence. That was the joke at the conference meeting that spring, how Bill got over that three-wire barbed wire fence without ripping his pants.

Nobody was injured and nothing would have happened had the backhoe operator shut the ignition off on the backhoe. But they -- I mean, when you got 450 PSI whistling Dixie, it hurts your ears. So it -- eventually, the cloud ignited and it just sat there and it just flared until all the gas blew down. The next isolation valve we shut and it just flared.

Q. Was that a manual -- a manual closing of that or would that have been automatic?

A. No. These automatically were closed.

Q. Automatic?

A. So they saw a pressure drop on the next downstream valve and they shut that valve immediately so they had to let another section of pipe blow down.

Q. I see.

A. And they actually came back when it started to flare, and they came back and they stood around and waited until it blew down. There was no threat to Saco, Montana. There was no plume moving up there. There was no -- they actually stood around it after it had fried all the equipment, burned it all, rubber tires and

everything to a crisp.

Q. Sir, I wonder if you have an opinion then on if there's -- is there a greater propensity for issues with the line being aboveground, say a thousand feet, in thousand-feet increments with main line valves, than if it was -- remained underground with main line valves at a greater distance, in your opinion?

A. Well, Mr. Pelham, that's a good point, because it's a catch-22 because valve settings, welds, compressor stations, dehydration facilities are where you are most susceptible to have a leak or an escape. So the more aboveground valve settings we have, there's going to be more maintenance required. They got to keep them painted nice and shiny like WBI does. They got to protect them from nefarious creatures, things like that.

But, again, I think the safety that it brings nearby residents far outweighs that --

Q. That was my question, because I recognize that there's sort of a catch-22, I mean underground or --

A. Uh-huh.

Q. And I was wondering, and I heard you say that your opinion is, is the greater -- the less distances, rather, of main line valves, in your opinion, would be a more prudent approach. Is that fair to say?

A. Yes, I would -- I would prefer, yes. Yes.

Q. I'm just curious. The WBI pump station just north of Bismarck on 57th Avenue, are you familiar with that?

A. Been there many times.

Q. All right. Do you know when that was put in place?

A. I want to say the first compressor engine in there -- because it actually has a turbine -- gas turbine engine running the compressor. They have one of those or two. I mean, '30s.

Q. Okay.

A. And that was way, way north of Bismarck.

Q. I was just --

A. In the '30s.

Q. -- went by there and I was just wondering "How long has that been there?"

So then the 1930s, you're saying?

A. Correct. And I was, you know, part of the team that we -- as Bismarck started to grow, we planted all those -- had those trees put around there. You can't hardly see it now. That's all noise mitigation so...

Q. Yeah. Thank you, sir. I don't have any other questions. Victor has one or two.

CROSS EXAMINATION

BY MR. SCHOCK:

Q. So in that Montana incident you were talking about, how far was it to the next block valve?

A. Mr. Schock, I can't say for sure but --

Q. Approximately is good enough.

A. I would say we had to blow down at least another ten miles.

Q. Miles. And how long did that flare of gas keep firing?

A. It was hours. You know, because it's a declining flame.

Q. Sure.

A. But the flame is -- when it first ignited the cloud, that flame was probably -- didn't turn into a flame until about 20 feet in the air. So it was just a jet until it mixed with the oxygen. And then probably -- it was hours.

But they were able to come back and their equipment was all smoldering. It fried everything. It just -- everything had melted tires. I saw all the equipment sitting in Glendive, Montana. It was quite the sight.

Q. Sure. I'm just trying to get an idea for like the CO2 --

A. Hours.
Q. -- block valves.
A. Hours.
Q. So we're talking hours?
A. Hours.
Q. So for a 24-inch line, 20-mile interval? 10-mile interval? I mean, obviously it's going to make a difference on intervals, block valves.
A. Are we talking -- the CO2 line you're talking about? Yeah, main line block valves, 20 miles is way too far. I know --

That's another thing. On May 31st and June 1st PHMSA's having their public hearing in Des Moines, Iowa. They're addressing all that. Fracture control, main line block valve locations. And it all has to do with high consequence areas. Distance from populated areas versus ranch, farm homes, things like that. But that's one of the things they're addressing, is valve spacing, dispersion modeling, all those kinds of things.

Q. I have read quite a bit up on those kind of things. I'm just trying to entertain some curiosity of how long we could expect, if there's a full bore guillotine break on a 24-inch break, in your opinion, how long would it blow gas for a 10-mile versus a 20-mile spacing of block valves?

A. I don't think it's linear, but it's probably going to be -- it's not probably going to be twice as long, but it's probably going to be 1.8 or -- times as long, because that higher pressure is going to move that product out really fast and then it will decline. But until it stops venting, that's when it reaches equilibrium with atmospheric pressure.

And the same with the natural gas. So until that flame on that gas went down and it actually just snuffed itself out, you know, it was actually at or below atmospheric pressure when it stopped so...

But I would say look at what Chief Briggs said about -- you know, it vented for several hours. 9.5 miles. That was 1,402 PSI when it ruptured.

Now we're talking about 20 miles of potentially at some point -- and I know that, as a pipeline company, you want to get there sooner than later, fill your pipe. So 2,183 PSI, we're talking substantially longer hours and we're talking about CO2. You know, 10-, 20-mile-an-hour winds could cover a significant area in miles, length and width.

Q. Absolutely.

A. Oh, at different concentrations. And, you know, 4 percent and higher is a problem. And we breathe .03 to .05. And OSHA says you can -- eight hours you can be

exposed to .5 percent. Point 5. So for many, many thousands of feet from a 24-inch guillotine rupture, we're going to be much higher than probably 4 percent.

Q. Thank you for that. It's helpful.

MR. SCHOCK: I have no further questions.

ALJ HOGAN: Mr. Leibel, any questions?

MR. LEIBEL: I have no questions.

ALJ HOGAN: Mr. Pranis.

MR. PRANIS: Just briefly, Your Honor.

CROSS EXAMINATION

BY MR. PRANIS:

Q. My question -- and I appreciate your testimony.

So you -- in your opinion, you believe it would be crazy to permit -- I think that was your word -- to permit the pipeline on the proposed route; is that correct?

A. East and north of Bismarck, absolutely. That's absolutely a longer route than if they would have just stayed on the hypotenuse of their triangle and went south of Bismarck. It's actually more pipe.

Q. And in your reasoning for that is that you believe that there would be substantial risk involved because of the proximity to populations in building that location; is that correct?

A. Absolutely.

Q. All right. So if the Commission were to nonetheless decide to move forward and approve the pipeline along that route, then your -- the next step would be to focus on mitigation, so all the precautions that could possibly be taken. Is that fair?

A. Yeah. The very next step would be I'm putting my house up for sale. So -- I'm about three miles away and I'm not -- there will be -- and you'll hear more about it in Burleigh County from others, but there will be -- even before there's an incident anywhere in the four states, but there will be impediment to Bismarck's growth. There will be land devaluation.

And I don't -- you know, I spend a considerable amount of time outside with a golden retriever on my heel spring, summer, fall. And three miles is nothing for this plume to move over and, you know, I could be a thousand feet from my house and not be able to get back. So I don't want -- I don't want any part of it.

So not to be knee-jerking but -- but, yes, mitigation no matter where it's at, mitigation will be key, whether it's CO2 sensor tied to emergency response. You can work with DES. But you not only have to train emergency response, law enforcement, fire, EMS. You're going to have to train the citizens to know what to do.

Q. If I can focus on just one specific aspect or

risk mitigation. In your role for WBI, for MDU, were you involved in the selection of contractors to build pipeline projects?

A. I didn't make the final decision. There was a team. You know, you go out for bids and things like that. So it was -- it was a selection team. So there were times when I was involved, yes.

Q. You were involved in that. And what -- for a project, given what you believe to be the risks, what kind of contractor, if this project moves forward, do you think should be selected to build the main line section, in particular the section near Bismarck?

A. Well, that's a pretty easy question because that's the position I always took. Do you have any experience building a pipeline, excavating, building a pipeline in our state? Or I had to deal with Montana, Wyoming, South Dakota. So I always had -- my input was always I want folks that are familiar with the construction practices, the soils. The weather challenges are significant in this state.

Nobody from Texas can imagine -- you cannot imagine what it's like, like I can, to be out in southeast Montana in a raging snowstorm clearing four feet of snow so we can lay a gathering line at 20 below 0 weather. So if we're talking about bringing

contractors up from Texas, I don't even think they own any wooly underwear, but they're going to need a whole lot more than that.

So we want folks that are experienced, in my opinion, with dealing with the challenges of construction, soils, weather, etcetera, in North Dakota.

Q. And to just take that a little further, would you want a contractor that had experience building large main line pipeline similar to the kind of line that would be installed here in North Dakota or in comparable climate and soil conditions?

A. Well, I think that goes without saying. I don't think you'd hire someone that's only built little storage sheds to build your house. So, yeah, correct.

Q. Thank you.

MR. PRANIS: That's all.

ALJ HOGAN: Commissioner Christmann.

COMMISSIONER CHRISTMANN: I think all mine have been asked and answered.

ALJ HOGAN: Commissioner Haugen-Hoffart.

COMMISSIONER HAUGEN-HOFFART: Yes, I do.

Mr. Jundt, thank you for your compassionate testimony so far. This morning I asked Mr. Powell about the valves and he -- safety valves, and he indicated that -- recapped that they were 20 miles apart.

However, he went on to say in high concentrated risk areas they would evaluate putting them closer together. Do you remember that testimony?

THE WITNESS: I do.

COMMISSIONER HAUGEN-HOFFART: Okay. So I'm going to ask you, what is your recommendation, in those high concentrated risk areas, how far apart they should be?

THE WITNESS: I'm going to -- I can't give you that answer. Because, honestly, if you're wanting me to say something that justifies the route around Bismarck, there's so many other things involved in that than just spacing block valves closer. It runs right through planned developments and right through housing developments. And, I mean, if you've watched Bismarck grow in the last ten years, it's on a fast pace to continue north and northeast. And there's so many other factors involved.

One of the most significant reasons we have pipeline incidences in the U.S. of any kind are third-party strikes. And when you route this pipeline in the future growth of development of Bismarck north and east, you just increased the risk. So risk mitigation, that's a huge one.

So block valve spacing, I -- you know, we just

had that discussion here. So if you're trying to get me on record to say --

COMMISSIONER HAUGEN-HOFFART: No. Just for clarification --

THE WITNESS: Okay.

COMMISSIONER HAUGEN-HOFFART: -- I am not identifying a certain area. I am not. Mr. Powell said high concentrated risk areas. I don't know what they are. I'm just using the general term.

THE WITNESS: Yeah. Right.

COMMISSIONER HAUGEN-HOFFART: And in your testimony you've given recommendations. I'm just asking you, based on your experience, how far apart?

THE WITNESS: Again, I'm going to go with what he said. I don't have experience in designing and building of pure CO2 pipeline. When we space those -- I don't mean to be none --

COMMISSIONER HAUGEN-HOFFART: No. That's fine.

THE WITNESS: -- or evasive, Commissioner Haugen-Hoffart. I'm just trying to tell you that I -- I don't -- I mean, the more time you give residents and emergency responders to respond before there's catastrophic concentrations, the more -- the less you're able to vent. It's kind of common sense. The less you have to vent, the less size of the plume. So I don't

know. A thousand feet would vent fairly quickly and be a lot smaller plume off a 24-inch pipeline so...

I don't know what the optimal answer is.

COMMISSIONER HAUGEN-HOFFART: Okay. I appreciate that. Thank you. I have no further questions.

ALJ HOGAN: Mr. Dawson.

SUBSTITUTE DECISIONMAKER DAWSON: Judge Hogan.

How can you detect carbon dioxide? Is the detector like your carbon monoxide detector? Does it just measure the lack of oxygen or does it measure actually carbon dioxide?

THE WITNESS: I don't know. I've never had a reason, Mr. Dawson, to get one. But they do exist, I mean, just like -- just like carbon monoxide detectors, which I have all over my house.

SUBSTITUTE DECISIONMAKER DAWSON: But they aren't at Lowe's?

THE WITNESS: You know, they may be eventually.

(Laughter)

THE WITNESS: Not currently.

SUBSTITUTE DECISIONMAKER DAWSON: No further questions.

ALJ HOGAN: Any redirect, Mr. Bakke?

MR. BAKKE: No, Your Honor.

ALJ HOGAN: All right. Well, thank you, Mr. Jundt.

THE WITNESS: I want to thank the commissioners.

And, Commissioner Haugen-Hoffart, I've watched all of -- I was at the 14-hour painstaking March 14th. I've listened to Gwinner and Wahpeton. And I want to thank you for being the one commissioner that has asked about health and safety, because that's what everybody behind me and in Burleigh County, that is what we're most concerned with.

We all know that this pipeline is coming to us because of politics. And Commissioner Goehring did a good job of addressing that. I'm going to shake his hand sometime. I know his dad, Charlie. So I 100 percent subscribe to that. It's basically something that we didn't ask for that we're having to deal with.

And what we can do and what you can do for us in your job is make sure that the health and safety, aside from noxious weeds and, you know, all those rudimentary things, whether you're putting in a regional water, rural water pipe, are addressed. I think first and foremost is the health and safety.

If this thing ruptures north of Bismarck, that CO2 is going to move in low-lying areas, and what's the lowest-lying area in Bismarck is going to get the most

of it. What is that? That's the Missouri River. Those people are significantly at risk. Because if it ruptures north of Bismarck, it's going to go around Burnt Creek and it's going to head right over the river. And it's going to be fairly high concentration. So the plume models are going to show that so...

That, again, is all the research and the reading I've done on plume modeling, which gets into calculus equations and assumptions galore. So that's just my -- that's the one thing I wanted to say at a public hearing.

So I -- thank you for humoring me.

ALJ HOGAN: All right. Thank you, Mr. Jundt.

THE WITNESS: Thank you.

ALJ HOGAN: It's 3:50. We're going to take our afternoon break. We'll take a 15-minute break. And when we come back, we'll do another block of public testimony.

So, again, if you want to provide public testimony, if you can maybe take a seat in the front so that you're ready to come up and provide testimony, I would appreciate that.

(Recess)

ALJ HOGAN: Okay. We're going to get started again. As I mentioned before the break, we're going to

shoot for about an hour of public testimony. So if there's anybody that wishes to provide public testimony, if you want to come up.

Good afternoon.

FRANCES ROBINSON: Hello.

ALJ HOGAN: If I can get you to state your name and spell your last name for the record, please.

FRANCES ROBINSON: Frances Robinson, R-O-B-I-N-S-O-N.

ALJ HOGAN: And, Ms. Robinson, were you in the room this morning when I went through the penalties for perjury?

FRANCES ROBINSON: Yes.

ALJ HOGAN: And do you understand what perjury is?

FRANCES ROBINSON: Yes.

ALJ HOGAN: And being advised of the potential penalties for perjury, do you promise to tell the truth in this case today?

FRANCES ROBINSON: Yes.

ALJ HOGAN: All right. Thank you. Go ahead.

FRANCES ROBINSON,

being first duly sworn, testified as follows:

FRANCES ROBINSON: I am opposed --

ALJ HOGAN: Hang on, hang on. Is your

microphone on? Is there a green light there?

FRANCES ROBINSON: Yes.

ALJ HOGAN: Oh, that sounds way better. Thank you.

FRANCES ROBINSON: I am very opposed to the CO2 pipeline that Summit Carbon Solutions is trying to put through our land. It is -- if it were not for the government funding, this sort of thing would never be considered. They would be trying to find a natural way to capture CO2 without running over landowners.

Why is it that whenever there is a hearing, that no matter what the landowner explains as to why they don't want it on their land, the answer is "Do you know how much money that will bring in?" Whether to Summit, the oil companies, or whoever plans to make money on the pipeline.

We are the third generation to own this farm and have chosen to do it in a very self-sufficient way -- in the most self-sufficient way we know: raising crops, cattle, and a garden, which we preserve and store for future use.

The pipeline is marked to be about 870 feet from our residence. If a rupture occurs near us, we won't have -- we won't have to enjoy their money anyway. It would -- I would hesitate to encourage my children or

grandchildren to ever live where we live when we can no longer live there because of the safety factor.

Summit seems to avoid answering questions as to the safe distance from the pipeline. I am sure that it is perfectly safe. I breathe it every day, I am told, although they fail not to mention at a hundred percent concentration or 2,100 pounds of pressure. If it is so safe, maybe a few Summit employees would like to demonstrate the safety.

Summit seems to be in an awful hurry to get the project going. Is it due to the new CO2 pipeline safety regulations or are they afraid of a change in administration that would cut the funding?

I hear that California is setting a moratorium on CO2 pipelines until the new regulations are put in place. If they can do it, why can't we? Whatever the reason, or a mixture of many factors, it is certainly not for other landowner, the public, or anyone's safety or rights but their own and the money that they plan to make. Seems as if the only higher power in their world is money.

ALJ HOGAN: Thank you.

Mr. Bender, any questions?

MR. BENDER: I don't have any questions.

ALJ HOGAN: Mr. Pelham. Mr. Bakke.

MR. BAKKE: No questions.

ALJ HOGAN: Mr. Leibel.

MR. LEIBEL: Ma'am, you handed out some -- a photograph here. Can you explain what this is? I mean, it's pretty self-explanatory.

FRANCES ROBINSON: Yes. That is our farmstead and that is our house. The pipeline is planned to go 870 feet from our house. And it has 150-foot variation on that yet.

MR. LEIBEL: And did you -- were you here for the testimony by Chief Briggs from Satartia talking about what he observed?

FRANCES ROBINSON: Yes.

MR. LEIBEL: Do you have any concerns being 870 feet --

FRANCES ROBINSON: Yes. That line comes over the break of a hill. We're on this side. You got big valleys on the other side. Where do you think that's going to go?

MR. LEIBEL: That's all I have.

ALJ HOGAN: Mr. Pranis, any questions?

MR. PRANIS: No, Your Honor.

ALJ HOGAN: Commissioner Christmann.

COMMISSIONER CHRISTMANN: Just trying to put it into perspective here as I page through this book trying

to find your land description.

FRANCES ROBINSON: It's 136-77 --

COMMISSIONER CHRISTMANN: 136-77-26.

FRANCES ROBINSON: Yes.

COMMISSIONER CHRISTMANN: Can you tell me where that is in relation to one of the communities?

FRANCES ROBINSON: It's directly between Hazelton and Moffit about seven miles and then you go west two miles.

COMMISSIONER CHRISTMANN: I just found it. And so -- okay. I don't have any other questions. Thank you.

ALJ HOGAN: Commissioner Haugen-Hoffart.

COMMISSIONER HAUGEN-HOFFART: Mrs. Robinson, thank you for your testimony. I have no questions.

ALJ HOGAN: Mr. Dawson.

SUBSTITUTE DECISIONMAKER DAWSON: Thank you. No questions.

ALJ HOGAN: All right. Thank you, Mrs. Robinson.

Who would like to go next?

Good afternoon. Could I get your names for the record?

BRUCE DOOLITTLE: Bruce Doolittle.

ALJ HOGAN: Do you want to spell your last name?

BRUCE DOOLITTLE: D-O-O-L-I-T-T-L-E.

ALJ HOGAN: Ma'am.

STEPHANIE DOOLITTLE: And I'm Stephanie.

ALJ HOGAN: What's your last name, Stephanie?

STEPHANIE DOOLITTLE: Doolittle.

ALJ HOGAN: Okay. And were both of you in the room this morning when I went through the penalties for perjury in the state of North Dakota?

STEPHANIE DOOLITTLE: One of us wasn't.

ALJ HOGAN: Okay. So I got to run through it. I'm required by law.

So perjury in North Dakota is a Class C felony, punishable by a maximum fine of $10,000, a maximum five years' imprisonment, or both.

And I'll just ask both of you, do you understand what perjury is?

BRUCE DOOLITTLE: Yes.

STEPHANIE DOOLITTLE: Yes.

ALJ HOGAN: And being advised of the potential penalties for perjury, do both of you promise to tell the truth today?

STEPHANIE DOOLITTLE: Yes.

BRUCE DOOLITTLE: I do.

ALJ HOGAN: All right. Thank you. Go ahead.

BRUCE DOOLITTLE,

being first duly sworn, testified as follows:

STEPHANIE DOOLITTLE,

being first duly sworn, testified as follows:

STEPHANIE DOOLITTLE: We have a map right away in the first page. Just to let you know where we farm, we farm southeast of Hazelton or northeast of Linton; our general area. So we thought it might be easy for you to follow. We are landowners in the proposed footprint of the Summit Carbon pipeline project. I've included a map with our property shadowed in yellow.

I have been writing my testimony for months knowing this day would come on the day I would have to sit before you, the Public Service Commission, representing our fourth generation farm and family. I must be honest, I never thought as a private property owner we would need to stand and fight to defend its taking, not in the United States of America. Not in North Dakota.

I've listened to all the PSC hearings and have heard valid and serious concerns about this pipeline and Summit Carbon Solutions that resonate with what we are going through. I would like to share the story of our beginnings and how our lives have been impacted. This pipeline will span over 13,000 feet or approximately two

and a half miles through the heart of all we've built and will pass less than a mile from our home.

We are proud to have received numerous soil conservation awards over the years for our faithful stewardship. Our land has history, history we are here to protect. We have the privilege to have raised our family on land that has been passed down through four generations and acquired through hard work and determination.

My husband's grandfather moved his young family to this location nearly 90 years ago. He had the opportunity and took the risk to purchase flat and fertile ground conducive for growing crops and providing for his family. They staked out a farmstead and planted hundreds of trees that were hand-watered every Sunday to ensure their survival. We now enjoy the benefit of their foresight that provides a refuge we are so grateful for. Their lives weren't easy. Most years were difficult but they persevered. This was a life they chose. One, that would teach their children a love and a respect for the land while building their legacy.

Their life, their legacy is now ours. The fourth generation of the Doolittle family is actively farming and making a way for himself and, hopefully, a family of his own some day. We farm a modest number of

acres and depend on management, fertility, and blessings from above to produce a crop and feed our family and pay the bills. Every acre and bushel are precious. The hours and the money that have been invested to improve our land are immeasurable.

The digging of a trench four to six feet deep to accommodate a 24-inch pipe would be devastating. The topsoil and the organic matter we've acquired over the years forever lost. The 50-foot easement along with area needed for construction could mean up to 75 feet of soil displacement and compaction, if not more. The settling that happens with a newly laid pipe and the erosion that comes from a fast spring thaw or a summer cloudburst is of great concern.

The heavy, large equipment we use in our operation could easily find its way to the top of the pipeline. It's common occurrence during the year to get a piece of equipment stuck just doing the ordinary, everyday field work. Knowing that high pressure 24-inch CO2 pipeline will be under two and a half miles of cultivated ground brings serious concerns.

And I have included some pictures in your packet there and then also a study from Ohio State University regarding soil degradation.

After considering the risk to our family's

safety and the destruction of our land, we declined the 99-year easement thinking our property rights would be respected and our lives would go on as normal. Little did we know that our lives would become a living hell.

In July of 2022, I attended a county commission meeting to hear Summit representatives threaten myself and other landowners with eminent domain. I was sickened.

On July 13th we received a certified letter demanding access to our property. We contacted our local sheriff who created a call for service report and decided it was time to secure legal counsel. Our attorney corresponded with Summit demanding them to relocate and was clear that we were not interested in the project. On Sunday, August 28th, while taking a much-needed break from our busy wheat harvest, Summit served us with papers and forced us into a lawsuit to protect our private property rights.

Our attorney fees to date are over $13,000. The added stress and the emotional burden that Summit Carbon Solutions has brought to our family is unconscionable. Valuable and precious time was taken away from our farming operation and our three beautiful grandchildren so we could attend countless meetings and appointments with our attorney, hoping to find a way to protect the

safety of our family and our property. We will never get back that time that was stolen from us because of this pipeline.

We didn't ask for this. We asked to be left out of the project. We are reasonable people. We have signed numerous easements over the years to ensure our area had rural water, fiberoptics, underground power, etcetera, for the good of the people. Summit Carbon Solutions is a private company and this project is for private gain.

The attacks by Summit Carbon Solutions on the landowners of North Dakota are personal. The lack of respect and consideration for all of us through this whole process is eye-opening. As human beings and Christians, there's a certain amount of understanding, empathy, and just common courtesy that we show our fellow man. This was lacking.

I have concerns for my community and the volunteer fire departments. We have some of the most selfless and compassionate men working together to respond to emergencies in our area. They have sacrificed so much to keep us safe. What a burden to carry knowing you would be expected to respond to a rupture of this high pressure CO2 pipeline.

There has been very little information put forth

by Summit Carbon Solutions concerning safety. We as landowners were never informed that in the event of a rupture our safety and the safety of our neighbors could be affected. I worry that people in our county haven't been able to react to the reality of the project because they aren't aware that there could be safety concerns.

In my opinion, I think the people of Emmons County are comparing Summit Carbon Solutions' pipeline to the existing pipelines in Emmons County. The Dakota Access and the Border States pipelines that most are similar would pose far less safety concerns.

You asked us to tell the truth today, and the passion of that truth is evident. We love and we respect our land and all the goodness it provides. Its beauty, its fertility, and the peace and the calm that working on the land brings.

With all the testimony presented so far, it's clear that this pipeline would have adverse effects on the environment and the citizens of North Dakota. Please follow the facts and deny the permit to ensure the safety of all North Dakotans and to uphold and respect private property rights for all.

Thank you.

ALJ HOGAN: Thank you.

Mr. Bender, any questions?

MR. BENDER: No questions.

ALJ HOGAN: Mr. Pelham.

MR. PELHAM: Thank you, Ms. Doolittle. I'm just wondering, the photographs that you provided, where did you get the photographs from?

STEPHANIE DOOLITTLE: Those are ours. And we even had more we could have shared but -- so it's a common occurrence. It happens seasonally once or twice --

MR. PELHAM: Once or twice a year?

STEPHANIE DOOLITTLE: Usually.

MR. PELHAM: So this is on your field here in Emmons County?

STEPHANIE DOOLITTLE: Yes.

MR. PELHAM: Thank you. No further questions.

ALJ HOGAN: Mr. Bakke, any questions?

MR. BAKKE: Yes. Just briefly.

The map that you provided, so you actually have five parcels where Summit is requesting to put the pipeline through?

BRUCE DOOLITTLE: Actually, six.

MR. BAKKE: Okay. So looking at least at this township or whatever is represented here, it's six out of the seven parcels that you own? It's 75, 80 percent of your land?

BRUCE DOOLITTLE: Right.

STEPHANIE DOOLITTLE: It goes right through the heart of it.

MR. BAKKE: Yes.

ALJ HOGAN: Any further questions?

MR. BAKKE: No.

ALJ HOGAN: Mr. Leibel, any questions?

MR. LEIBEL: So this -- at the end of this packet is a study. Is this -- how did you come across this study?

STEPHANIE DOOLITTLE: I have a friend that loves to research, and so she sent it on to me and I read through it and I thought it was good information. Yes.

MR. LEIBEL: Okay. In your reading of this, what information is in this study?

STEPHANIE DOOLITTLE: It talks about the degradation of the soil and how, when the organic matter is displaced or mixed, that they see a decline in the protein, in the soil. And even with erosion, you know, over new -- where new pipelines have been, that there's the chance of erosion until you get that top built up.

MR. LEIBEL: And I think from your testimony you said that you had some buried utilities on your land already?

STEPHANIE DOOLITTLE: We do.

MR. LEIBEL: Can you tell me the location of where those utilities are buried today?

BRUCE DOOLITTLE: Absolutely. Rural waterline is buried. It's a 6-inch. And still today -- it's been about seven or eight years ago it was buried. Still today it shows up.

MR. LEIBEL: And is that the type of thing that you can see reflected in a reduced yield?

BRUCE DOOLITTLE: Oh, absolutely.

MR. LEIBEL: Would you like these documents to be admitted as exhibits into this proceeding so they're into the record?

STEPHANIE DOOLITTLE: Yes, please.

BRUCE DOOLITTLE: Sure. Why not?

ALJ HOGAN: And just so you know, Mr. Leibel, I've been labeling all the documents that come in as public testimony, I've been putting them in one exhibit.

MR. LEIBEL: Okay.

ALJ HOGAN: And labeling them as an exhibit.

MR. LEIBEL: Okay. I just wanted to make sure that this was admitted.

ALJ HOGAN: Sure.

Mr. Pranis, any questions?

MR. PRANIS: No, Your Honor.

ALJ HOGAN: Commissioner Christmann.

COMMISSIONER CHRISTMANN: I think just one. Does this come near your residence or family members' residences?

BRUCE DOOLITTLE: It's within a mile.

COMMISSIONER CHRISTMANN: Can you tell me on the map, like which section and quarter maybe it would be?

BRUCE DOOLITTLE: We live on section 7, 40 acres. It says Bruce --

COMMISSIONER CHRISTMANN: Okay, yep.

BRUCE DOOLITTLE: -- Doolittle.

COMMISSIONER CHRISTMANN: I see it. Okay. Thank you for being here and your patience.

ALJ HOGAN: Commissioner Haugen-Hoffart.

COMMISSIONER HAUGEN-HOFFART: Yes. In follow-up, you said you have a rural water pipeline and you have reduced yield because of that?

BRUCE DOOLITTLE: Correct.

COMMISSIONER HAUGEN-HOFFART: Can you tell me about what that means, reduced yield? How much?

BRUCE DOOLITTLE: It varies from year to year, but I would say maybe 20 percent less.

COMMISSIONER HAUGEN-HOFFART: And what section is that on?

BRUCE DOOLITTLE: Section 7.

COMMISSIONER HAUGEN-HOFFART: Okay. Are there

any other adverse effects? You said you've given other numerous easements in your testimony, Stephanie. Are there any other adverse impacts or effects on your agriculture land based on the easements you have authorized?

BRUCE DOOLITTLE: I would say no.

COMMISSIONER HAUGEN-HOFFART: Okay. You gave a very detailed history on telling us your story, and you used the word "disrespect." Could you explain more about that disrespect? Define it for us.

STEPHANIE DOOLITTLE: Well, it's just been surprising to me that, you know, Summit Carbon Solutions being an ag company, I would have expected that they would know how attached people are to their property, to their land, farmland. I mean, most of us very seldom take a vacation because our life is our farm and our land. And it's personal. And I just -- I guess I never ever felt that we got any -- they just didn't understand that. You know, I was expecting more or just -- you know, just a little bit of compassion for what we were all going through. And it just never seemed at the meetings that that was apparent.

BRUCE DOOLITTLE: When we told them to reroute, they would not give up. They said, "We -- this is the route we've chosen and that's what it's going to be."

COMMISSIONER HAUGEN-HOFFART: At the meetings, were other routes offered to Summit?

BRUCE DOOLITTLE: No.

STEPHANIE DOOLITTLE: No. In fact, we have -- if you see on the map, we have some state land. There's one quarter that runs on section 16. You know, they knew we weren't interested in the project. And to me, if they would have been, you know, wanting to work with the landowners, wouldn't you think they would have tried to reroute that over onto the university, the state land, you know, so they wouldn't impact another one of our tracts of property? But, no, that was never offered.

There was never any -- we came to numerous county commission meetings hoping that maybe there was going to be a reroute. Because maybe there were some neighbors that were interested in having it. But it never changed. The route didn't change from the day that we were approached by Summit in the beginning well, well over a year ago to today. We've seen no change in our area at all.

COMMISSIONER HAUGEN-HOFFART: And listening to your testimony, your story, I'm unclear. I think you said you weren't interested. There was letter exchanges. Or they sent you a letter and then you

finally went to an attorney. The attorney responded. My question to you, have you -- either one of you or both of you sat down with Summit at any time and talked?

STEPHANIE DOOLITTLE: You've talked, yes.

BRUCE DOOLITTLE: The land agent was at our farm maybe three times.

COMMISSIONER HAUGEN-HOFFART: Okay. So you've had three communications with the land agent and you said you were not interested?

BRUCE DOOLITTLE: The first meeting was more of an informational meeting. I tried to get as much out of him as I could. And the second meeting, I think he gave us an easement to sign and we said we're not interested at that price. And then I think there was a meeting that he wanted a land survey and we denied that -- that access at that time. And then after that we were served papers for the --

STEPHANIE DOOLITTLE: The right.

BRUCE DOOLITTLE: -- court -- the right, yeah.

COMMISSIONER HAUGEN-HOFFART: Okay.

BRUCE DOOLITTLE: Court date.

COMMISSIONER HAUGEN-HOFFART: I have no further questions. Thank you for your testimony.

ALJ HOGAN: Mr. Dawson, any questions?

SUBSTITUTE DECISIONMAKER DAWSON: I have no

questions. Thank you.

ALJ HOGAN: Well, thank you both. And we have extra copies if you want them back.

STEPHANIE DOOLITTLE: Sure. Thank you for your time. We appreciate you being here today.

ALJ HOGAN: Thank you.

All right. Good afternoon. Could I get your names?

KATIE VCULEK: Yes. My name is Katie, Katie Vculek. And I can spell that for you.

ALJ HOGAN: Yes, please.

KATIE VCULEK: The last name is V-C-U-L-E-K.

BRIAN VCULEK: And I'm Brian, her father.

ALJ HOGAN: All right. And were both of you in the room this morning when I went through the penalties for perjury or did you just hear me go through them?

BRIAN VCULEK: Yes. Yes.

ALJ HOGAN: And do both of you understand what perjury is?

KATIE VCULEK: Yes.

BRIAN VCULEK: Yes.

ALJ HOGAN: And being advised of the potential penalties for perjury, do you promise to tell the truth in this case today?

KATIE VCULEK: Yes.

BRIAN VCULEK: Yes.

ALJ HOGAN: All right. Thank you. Go ahead.

COMMISSIONER HAUGEN-HOFFART: Excuse me. Judge, can I say something?

Brian, have you testified before?

BRIAN VCULEK: No.

COMMISSIONER HAUGEN-HOFFART: Okay. My mistake.

KATIE VCULEK: Yeah, this will be our first testimony.

KATIE VCULEK,

being first duly sworn, testified as follows:

BRIAN VCULEK,

being first duly sworn, testified as follows:

KATIE VCULEK: Like I say, my name is Katie Vculek and this is my father, Brian Vculek. We have property in Richland County and Dickey County that are being crossed by this pipeline.

So overall we're not -- we're pro-ethanol. I mean, we raise corn. This is a product that we sell, the corn, and we're -- we have pipelines on our property. We've had experience operating with pipelines and that's something that we're not opposed to.

So today our commentary comes from a point of our experience working with Summit as well as concerns in particular to this property, mostly in Dickey County,

that the route is planned to cross. So carbon -- Summit wants to cross our property. The full legal is provided on the excerpt. It's section 20, just south of Oakes, in Dickey County.

And so I have -- just kind of in the handout, I kind of want to run through just an overview of what that property looks like. So the first one shows in red where Summit Carbon wants to put the pipeline. Figure 2 is an overlaid image that I've done on Google Earth so it shows you exactly where it is.

Figure 3 is -- all of those white lines are our tile. So that is -- that is tile we've installed. And based on estimates, there's 129 lines of tile that are going to be cut as a part of this project.

So Figure 4 adds a green line. That is also a tile line owned by the Dickey-Sargent Irrigation District, owned and operated in our area. So that's also located on that field.

And then, finally, this parcel is irrigated. So that blue dark line is the outline of the irrigated acres on this parcel.

So as you look at this property, I just want to -- everybody understand how much is going on here. And so that's kind of an overview of that property. So like I say, it's extensively tiled. We irrigate it and we

use -- primarily our goal for this property is potato production. Potatoes are our cash crop and that is truly what drives our farm and our operation, and it's the reason we enjoy this parcel. That is our intent. And if we weren't able to raise potatoes on it some day, we wouldn't have as much of a benefit of this property, you know.

So I kind of just want to go through a background of our communication with Summit. And our first contact was back in February 3rd of 2022. We received an email. Basically, they told us the project existed and this is kind of their plan. We received our first easement and compensation offer on March of 2022. And then our first probably substantive contact with Summit via email was on July 16th of 2022.

We had reviewed the easement and we had some concerns so we reached out and specifically identified areas in the easement we weren't content with. We did not receive a response. I responded to the same individual who sent me that information.

So a while later I sent it to a second alternative land agent that had been in contact from the Richland County parcel, trying to get contact. Again, no communication was received until about a month and a half later, a right of way agent -- a right of way

manager contacted us and did address some of those issues and explained why they existed in the easement. So that contact would have been about August 2nd, 2022.

And at that point, after that August initial contact, we've had phone conversations with Summit, we've shared our tile plan with Summit, as well as met with Summit on the property on October of 2022. During that meeting, we met with Summit and we explained the extensiveness of this tile plan. We explained the importance of potato production and irrigation on this parcel and how the tile was specifically impacted. So some of that is kind of what we're going to dive into today.

And like I say, when we had that October 2022 meeting, the nearest recorded easements were 5.5 miles to the east of us and 7.5 miles to the west of our property. So as far as the region, there was nothing, to our knowledge, the best of our knowledge, that was fully recorded and a solid easement obtained by Summit.

During that meeting, we requested that Summit move this pipeline from its current projected location. We requested that they move it north, still on our property. We own the whole east half. We requested it stay on the southeast quarter but to go kind of along that top quarter section line. And the reason we wanted

that is because we felt it would impact our tile less and that was just what we felt was the best option for that property.

We also -- we didn't directly communicate -- and I can't speak for landowners farther to the -- that would be the east of us, but we had heard rumblings that they were also interested in that and we didn't see, just from our general knowledge of the land, that it would be impacting a whole lot more of their irrigation or things like that than what we thought was currently happening. So that was our proposal.

When we -- still on that same meeting, October out in the field, Summit told us that they -- they didn't like to make right-hand -- 90-degree turns so that's something that they would have to look into. And now seeing the map, there's plenty of 90-degree turns and there's even two of them about six miles from this particular property. So that was -- they did tell us that they will look into it and they would get back to us. So that communication we appreciated.

At that point, about a week, week or two later, they -- Summit filed their application which included the map with the Public Service Commission. So at that point we noticed it was filed and didn't quite understand what that meant in relation to our request to

move it. So I reached out to that same land agent and I -- it was a week or two before she got back to me. And I'm going to quote an email here. I didn't bring it with the excerpt, but if you need a copy of it, I can provide that. The email was: "We tried to move the route as of right of way -- we tried to move the route, and as of right now we have not convinced them to move it. I'm not giving up yet. We are trying to get this done for you. I apologize and was waiting until I had better news. Still working on this change for you and your family."

So at that point I responded. I thanked her and I said okay, we'll wait for further communication. You know, we'll see what happens. And that's the last communication we've had with Summit prior to engaging an attorney who reached out around March of 2023.

So that's just a background of kind of our interaction with Summit. And it's troubling for us because they indicate a willingness to collaborate with landowners regarding the pipeline route.

Summit's application also states the company has modified on multiple occasions for constructibility issues including irrigation systems. So for reasons unexplained to us, we were not included in that option of moving. We're not one of those multiple locations

that got -- got moved as a result of irrigation or other constructibility issues.

So in our experience the communication with Summit kind of breaks down if the landowner request doesn't directly align with their best interest or whatever is easiest for them at the time. And like I say, the reason behind it was not communicated. And that's probably why we're most concerned. So that's just a background on our communication with Summit.

Then I'll dive a little bit into drain tile and how we think the pipeline will specifically impact our system. And then my father does a lot of our drain tile systems and he's very active in that area so Brian's going to kind of comment more specific as to why we feel our area is considered a challenging drainage system -- or challenging area to do drainage.

So Summit has communicated at past hearings that they have safety concerns when installing pipelines deeper than six feet. And our tile system on this parcel ranges from nine feet deep to three feet deep. Within the area of the pipeline specifically, we believe it ranges from seven feet deep to five feet deep. So just based on that, where the tile line is itself, if they want a whole foot distance below it, they're already going to be below that six-foot of what's

considered their safety depth for this pipeline. So that's -- that's just something we wanted to bring before the Commission.

And we also -- during the Wahpeton hearing, Ellingson specifically stated that they've had -- they've worked on past repair projects and they specifically referenced that they've reconnected laterals from -- the number of laterals in a project they've repaired were -- ranged from 60 laterals to 80 laterals. As you can see from our system, it's 129. We're significantly beyond what Ellingson specifically said at that hearing is something that they've worked with before.

So that's just -- that's just an example of how complicated this system can be. And every single lateral is an opportunity for a missed connection. And because there's so many, that's a risk that we're taking on and something else we'll have to go after Ellingson or Summit for to ensure that everything's connected properly.

And when you have a lateral disconnect, they cover it in dirt and you don't see it. The first you notice it is what I will reference in figure -- in our handout, it's one of the last pictures. Figure 11 is a picture of what happens when the laterals aren't

connected. And so what happens is the water is basically filtrating through the soil. It pulls parts of the soil into the tile line and then they go into the system. And depending on it's a slope or the -- the (indiscernible) either settles in it or it goes out the outlet. It depends on every system. But those are what's -- what a settling looks like after a lateral is not connected properly.

So that's just another reason that our Dickey County property is of particular concern. And specifically potato production. If potatoes were raised in that area that settling occurred, if there's too much settling -- in general, potatoes raised in low levels or low -- low areas with poor drainage have quality issues with the processor and they don't store to the same capacity.

So in the worst-case scenario, if all of, roughly, seven acres of this easement settled for some reason and had poor drainage, those seven acres' worth of potatoes in our storage bin with the rest of the field cause other rotting issues. If one potato from that area starts to rot, that rot gets on everything else and it's a compounding issue.

So specifically for potato production, drainage is super important for quality as well as storage and

overall business for us, our viability of our business, that's super important.

I also -- one of the last things I want to touch on is that this parcel is irrigated. So the easement area is approximately seven acres. And so in addition to those seven acres, if you see on Figure 6, that -- the white shaded area is what we believe the irrigator will not be able to cover from point of construction until completed restoration. So not only do we lose our easement area, the area they're doing construction in and where the pipeline will be, during that construction until the restoration process, we lose all those -- access for the irrigator to those additional acres which we estimate is 36 acres.

So -- and this parcel, it's extremely sandy. It's highly tiled, it's highly irrigated. That was the point of production on this field. And so that loss of irrigation is -- we definitely cannot raise potatoes on it if we don't have irrigation.

There's also some onions in the area. We haven't had them on this field but that's -- like you can't raise onions on anything that's not irrigated. And the corn, I mean, the corn won't be irrigated. It will be dry land corn. So that's just an additional thing to consider when you're considering land that is

irrigated impacted by this pipeline.

Oh, and in addition, just so when -- when irrigators run in a circle, a lot of times you'll -- this is meant to run in a full circle. When there's something that we don't want to hit, specifically this pipeline construction area, we would most likely put in or request bumpers be placed. Bumpers are about $3,000.

And basically what that is, is you put it in the soil and the irrigator stops. So that ensures the safety of everyone if -- if the irrigator is running longer than you expected, it keeps the irrigator out of the easement area and it protects the pipeline itself as well. So that's an additional cost that we wouldn't have without -- that we wouldn't have if this pipeline wasn't coming through.

And so our tile, cutting the 129 tiles on this quarter section of land creates at a minimum 129 opportunities for this project to negatively impact our operation and in the short and long term and the overall economic success of our family.

Summit's unwillingness to take a real effort to work with us as landowners to move the project off of a portion of heavily tiled -- a portion of heavily tiled land makes us question what other facets of this project aren't being given adequate consideration. Approval of

the proposed route across such a heavily tiled property when we have proposed better options or we have tried to communicate better options is extremely troubling for us.

And, finally, I just want to kind of touch on the time and effort so many landowners have given. It's been mentioned again today, but our family has put in so much time that we did not expect.

So I'll kind of let my dad go over a little bit about what it looks like to tile on this property.

BRIAN VCULEK: Okay. A little bit about -- more about our operation first. I'm probably fourth generation. I think Katie and son Cole are fifth on this farm.

We grow potatoes for the frozen process market, which means French fry potatoes. We store them all. So that means we have to make them store or we don't get paid. We also grow our own seed. And we also grow edible beans, some corn, a few soybeans.

As I mature, I found that tiling is my exit strategy. So when we have labor available and money, I will start a tiling project to keep the men busy and I will usually tile until the money runs out or it's way too cold to expect people to stand out there. So I get about 500 hours per year in the tile plow, which is

about equal to a normal farmer would get in his large frame tractor. So you could consider me a full-time tiler from that aspect.

I'll probably put another 500 hours a year in surveying and design work of these projects. When we design a tile project, the first thing I do is get the John Deere Gator out, ride the field every 60 feet to make a topography survey, bring that survey into the office, create the tile plan, decide whether it needs a lift station.

This particular one gravities out to a ditch that goes to the river. I actually did not need a lift station on this project. One of the few that I've designed that doesn't need a lift station. However, now it will need a lift station if we use the system that Ellingsons are proposing. They call it a "header." I would just call it a "submain." And that's fine. I mean, I think eventually they would probably get it working and everything will eventually work, but you need a little background on the complexity of putting in a lift station in high water table sand in the Oakes area and northwest Richland County where high water table sands are very challenging.

I was able to listen to a lot of the recording of the Wahpeton presentation concerning tile. That's

really what brings me here today. I was troubled by the testimony there. You got a very sugarcoated analysis of tiling and the impact of obstacle like a pipeline creates for a tiling company.

Back to my installing this lift station. So when I have to install a lift station in high water table sand, I will get dewatering wells out. I will dewater for a few days, hoping to get the water table low enough to dig this -- dig this hole because the bottom of your tank has to be four feet below your flow line. Well, you're already in the lowest part of your field and your flow line is probably four foot below the surface at least, usually four to six, so call it six. Now we're ten feet deep. Ten feet deep in the wettest part of your field. And you're digging and you're digging and your sides are caving in. It is more than a little bit challenging.

Figure 7 shows us installing a main line, flexible 15-inch dual wall main line, in a four-foot open cut. And the pipe is going four-foot below that.

Figure 8 is an illustration of repairing a main line on a different project that we failed. I've had my failures. I fix my own. The Ellingson company has put projects in for us. I fix their mistakes too. We are not immune to problems, either of us. But just -- you

can see by the water there, we -- we dewatered that area and it's still that kind of a challenge. Unless you're really there fighting the battle, it's hard to imagine how difficult this can be.

Figure 9, that is installing a main -- a submain. And at that point we encountered electric wire. So that's an obstacle typical of what you would expect if you had to go to a pipeline. We had to dig with the excavator in front of it, behind it. You'll see the red-handled shovel there. You can see the black line at the bottom. That's a power line that we had to avoid. Every time we have to encounter an obstacle, you might as well say it's three hours with all the equipment. It's really painful.

All right. Let me get back to my notes and see what else I missed. So that's -- I hope I impressed upon you how difficult tiling can be in high water table sand. From the recorded testimony, I believe the Ellingson representative could not reference a difficult installation system. They are out there. And they are not immune to them either. Okay.

So this particular system has 129 -- as Katie said, 129 places that Summit wants to cross. So Figure 12 is an overview of the whole quarter. 129 times that have to be repaired.

Now, Roger Ellingson is a friend of mine. I have a respect for their organization. I expect they probably will get them repaired. It's not likely it will be the first time. I would assume it will take multiple visits over the years to get these repaired. The blue lines on this page indicate the lines that will need an additional lift. As the tile plan is designed now, I have no lift.

KATIE VCULEK: The water gravities.

BRIAN VCULEK: The water gravities to the ditch that takes it to the river. After the pipeline comes through, we'll need to lift it.

Page 13 is a little bit more blown-up picture of the same area. So all those blue lines will have to have a submain, or a header, as the Ellingson people call it, go to a lift station to lift it up over the Summit pipeline to get hooked back up to my existing system. Not impossible, but since I'm just a backwoods engineer and I don't do this custom, I had this company called Misselhorn Tile & Excavation critique this project. And their analysis is it will cost $74,600 to repair this project, which will be covered, I understand, but that is still plus power, plus a pump, and pump for 99 years? Who's going to pay for that? How do we adjust that? Okay.

So now let's say there's landowners out there that don't have tile. 99 years is quite a while. Somebody, the next owner, may come along and decide they want to tile it. So if this property is tiled after the Summit pipeline, it would cost $64,000 more than what it did without the pipeline. Plus, again, the electricity and the power line to get to the pump and replacing the pump. These are numbers coming from an engineer, not me. It's significant. Okay.

Now, I will admit this is an extensively tiled system. Many won't go this far. But we do for the storability of the potatoes. Very important to us.

Tom Scherer, Dr. Tom Scherer, also testified in Wahpeton, and I believe he sugarcoated it also. He used the term "header," "submain" I would say, but he did not mention an additional lift station.

When we designed these systems, we pick a control point, the lowest point the furthest away from the outlet. You want to be three feet deep there. Everything is based on that. And quite often you cannot get any lower than you have to get. There's no spare elevation in our area. We need it all. So it's challenging, to say the least.

Even though we separate the soil, topsoil, subsoil, I don't believe we get the full productivity

back for a few years so that's still a disappointment.

I guess that's the most in my presentation. I'll stand for questions.

ALJ HOGAN: All right. Thank you both.

Mr. Bender, any questions?

MR. BENDER: Yes.

Ms. Vculek, just a couple questions. You mentioned in your testimony, in fact I think you read from an email, and it was a female land agent; is that correct? What was her name?

KATIE VCULEK: Julie Demilio (phonetic) was a right of way land manager that we've been in contact with. Probably about the first we communicated with her was a little before that October meeting.

MR. BENDER: Okay. And then you mentioned that, I think it was -- I don't know if it was before your last email with Julie or sometime before, but you retained counsel. Do you remember that testimony?

KATIE VCULEK: Yeah, I remember. Yes.

MR. BENDER: Who did you hire?

KATIE VCULEK: A David Piper out of --

MR. BENDER: Say it again.

KATIE VCULEK: David Piper out of Fargo.

MR. BENDER: Okay. Thank you. That's all the questions I have.

ALJ HOGAN: Mr. Pelham, any questions?

MR. PELHAM: Just a couple.

Did you say that you spoke with Ellingsons about the proposed line through your property?

KATIE VCULEK: Yeah. That was probably -- after initial communication, we did communicate with Ellingson as well. They received our tile -- our tile system and they were -- they have seen it, yes. We communicated with them.

MR. PELHAM: And I think I know the answer to this, but just to be clear, has the company actually given you an answer as the proposed -- your proposed reroute or you're still waiting on an answer?

KATIE VCULEK: No. And -- no, we have not heard back. So -- and to be fair, our attorney did reach out to them but it was over -- I don't remember the exact dates. But, no, from prior to engaging an attorney who reached out in March, we had not heard back from Summit.

MR. PELHAM: Okay. Thank you. I don't have any other questions.

ALJ HOGAN: Mr. Bakke, any questions?

MR. BAKKE: No questions.

ALJ HOGAN: Mr. Leibel, any questions?

MR. LEIBEL: I do have a few.

So if you could turn to your photograph on

Figure 11, which I understand to be -- that's how you can tell when a tile has failed. Can you explain that a little bit better for me? I didn't quite understand.

BRIAN VCULEK: It's really quite simple. That's probably over a main line where you connect the lateral to. And possibly the man in the trench didn't get the fitting in tight enough into the main line. And as the tile plow pulled away it pulled out or when the excavator operator put the soil on the pipe it pulled out.

MR. LEIBEL: Okay.

BRIAN VCULEK: The reason I -- I operate -- one of the reasons I operate the tile plow is because I want to know the job we're getting done. And I'm there doing the best I can to make sure everything is as right as it possibly can be, and we still have issues.

The particular field that Summit is asking to cross we tiled last summer. I've yet to see a sinkhole on that field. Maybe we did a hundred percent. That's almost unlikely but it's a possibility.

MR. LEIBEL: And the question I have, I thought you said earlier that your tiles vary from nine feet and five feet; is that right?

BRIAN VCULEK: Depending on the surface topography. We sometimes have to cut through hills to

stay low enough at grade to get to the low spot on the other side of the hill. I maintain a personal minimum of a tenth of a percent grade on the pipe because my experience has been, when you have a sinkhole and the sand is getting in, if we have a tenth of a percent, there's enough velocity there to continue to wash the sand out of the pipe to the pump or to the river or wherever, the sand disappears, and you're able to find the sinkhole and repair it rather than have a plugged pipe.

MR. LEIBEL: So can these sinkholes, can they be the depth of your tile, so four to nine feet?

BRIAN VCULEK: Unattended, they do go to the depth of the tile.

MR. LEIBEL: Were you here earlier today when we heard from Chief Briggs from Mississippi that talked about a -- when they got a bad rainstorm and it caused a collapse and then a guillotine severing of the pipe?

BRIAN VCULEK: I took that to mean that he -- that he was speaking of a pipeline that ran through a ravine, which would be different than our level ground in southeast North Dakota but -- at least this project in particular.

MR. LEIBEL: Okay.

BRIAN VCULEK: If I understood what he was

saying correctly.

MR. LEIBEL: Okay. And I guess the question that just kind of jumped out at me when I see a picture like this is whether or not putting this type of a pipe underneath or next to tiled where any bad connection can cause instability, is there additional risk there?

BRIAN VCULEK: In my opinion, there is additional risk. And also additional risk for installers. I do the one-call. I try my best to avoid damaging the utilities, but I have hit a pipe -- or not a pipe, but I have hit a power line or two over the last 10, 15 years, or the excavator or you miscommunicate with your operators. Things go wrong. We're human. I -- I anticipate this is a risk, yes.

MR. LEIBEL: Thank you.

ALJ HOGAN: Mr. Pranis, any questions?

MR. PRANIS: No, no questions.

ALJ HOGAN: Commissioner Christmann.

COMMISSIONER CHRISTMANN: Would you tell me the legal description of where this quarter is?

BRIAN VCULEK: Page --

KATIE VCULEK: Page 1. It was printed at the top of Figure 1. Right there.

COMMISSIONER CHRISTMANN: Okay.

KATIE VCULEK: Two miles south of Oakes.

BRIAN VCULEK: Probably four.

KATIE VCULEK: Four miles.

COMMISSIONER CHRISTMANN: Okay. I got it now on this map that I've been dealing with.

What was your reroute recommendation?

KATIE VCULEK: We requested that it move north, still on our property but on -- so it would be on the quarter line but a little bit more -- it would be placed still in the southeast quarter but along that quarter line, if that makes sense.

COMMISSIONER CHRISTMANN: So they'd need to move up almost a half -- because this is crossing on the south side so you're wanting them to move up --

KATIE VCULEK: It would stay in the south half. It would be on kind of -- we said it could still stay on that south half, but we wanted it closer to that quarter line.

BRIAN VCULEK: Preferable to moving it would be not at all. That would be our preference. Next to that is I do not understand how far they can bore. Maybe they can bore all the way under this and not affect us. I don't know that. We've had limited exposure with the land people so -- the land agents.

COMMISSIONER CHRISTMANN: Can I just ask you, what -- over on the -- so the very east side of your

corridor but then jumping over into the next quarter of land, and right down in the corner it looks like some type of a building or home. Do you know what's there?

BRIAN VCULEK: Two residences. One is -- if you're talking about the southeast quarter of section 20, south of the section line is a residence and east of the southeast corner is another residence.

COMMISSIONER CHRISTMANN: Is there up in section 21 as well?

KATIE VCULEK: Across the highway to the east, you mean?

COMMISSIONER CHRISTMANN: Yes.

KATIE VCULEK: Yes.

BRIAN VCULEK: Nearly a mile north. But we were proposing only a half mile north.

KATIE VCULEK: Yeah.

COMMISSIONER CHRISTMANN: No. I mean like near where this pipeline is set to go, down in the very, very southwest corner of section 21, is there something there?

BRIAN VCULEK: Which one is 21?

KATIE VCULEK: Yeah, it's 21 across the highway to the east?

COMMISSIONER CHRISTMANN: Yes.

KATIE VCULEK: So then just -- so in the

southeast quarter, you look south, there's that triangle? That's a yard. And then kitty-corner across from there, is that what you're talking, those two little square buildings?

COMMISSIONER CHRISTMANN: Yes.

KATIE VCULEK: Those are residences.

BRIAN VCULEK: Yards.

COMMISSIONER CHRISTMANN: Okay. Thank you for the very, very good testimony.

ALJ HOGAN: Commissioner Haugen-Hoffart.

COMMISSIONER HAUGEN-HOFFART: Yes, I do have some questions. My first one is a request. You said you did not submit the email from Summit that said they do not like -- they do not like making 90-degree turns. I would like to receive that.

KATIE VCULEK: I didn't get that in email. That's what we were told on -- during the visit in October onsite. And then what I got in the email is that they were -- they couldn't -- they wouldn't allow them to move it and that kind of discussion.

COMMISSIONER HAUGEN-HOFFART: Okay. So that was just a verbal?

KATIE VCULEK: Yep.

COMMISSIONER HAUGEN-HOFFART: Was that from Julie?

KATIE VCULEK: There was Julie as well as Jim Beau (phonetic). I believe Jim Beau is the construction manager of some kind? And if I'm remembering correctly, I believe he made the comment that they don't enjoy or don't like doing 90-degree angles.

COMMISSIONER HAUGEN-HOFFART: Okay. Thank you.

You talked about Ellingsons' testimony about 60 to 80 degrees lateral and you might have many more and that Ellingson would fix it if that was needed, but I would take it, Brian, you would have good oversight of that?

BRIAN VCULEK: Well, I would want to be present some of the time at least. I'm not -- I'm not -- I mean, I don't appreciate being violated across the project that we have here. I don't like that.

But my bigger concern is into the future for the rest of the community that doesn't even know this problem is coming, the next landowner, the next generation that may want to tile and all the added expenses that they don't even know about at this point. That's actually my bigger concern than our own problem here.

COMMISSIONER HAUGEN-HOFFART: Okay. Noted.

You also talked about the impact of the potatoes, that if they're put into storage, they can

impact the other potatoes in the storage.

BRIAN VCULEK: So as we harvest through this field, if there's a -- if there's a spot that has poor drainage, that -- even if it's only 30 feet by 36 feet wide -- we harvest in 36-foot increments -- we go through a 30-foot long spot that's got potatoes that rot, you put that in the bin, mix them all up with everything else, you don't just lose the seven acres that's impacted by this easement. You lose the whole bin.

I mean, this is what, 40,000 a hundredweight. Half a million dollars' worth of potatoes easily you can damage that -- and it's not -- and it doesn't happen all by itself. What really happens is, in a poor market situation, the processors sometimes -- at least it feels to us like they use it as a supply control. If they see you have a problem, they let it sit until it's a bigger problem and it's a bigger problem. If they came and got them the first time you seen the problem, it would go away. But you get used for supply management.

COMMISSIONER HAUGEN-HOFFART: You indicated a half a million loss. Is that the minimum? Average?

BRIAN VCULEK: That's not the minimum. If we were -- and we probably will treat this property as a complete half section. So there will be mile long

rounds. Four or 500 hundredweight per acre times 300 acres. 120,000. 1.2 million to one -- one and a half million dollar exposure here on every potato crop.

COMMISSIONER HAUGEN-HOFFART: Repeat that for me again.

BRIAN VCULEK: One and a half million dollar exposure on this half section on every potato crop.

COMMISSIONER HAUGEN-HOFFART: Okay. Katie, you talked about bumpers that would need to be placed in to direct irrigation not to go somewhere. How many bumpers would be needed and what's the cost of that?

BRIAN VCULEK: Two. You'd need one on each side. My better terminology would be for -- it would -- I would call it a barricade. The irrigator goes up to it, a switch touches, it shuts the irrigator off. Or you can set it so it reverses so it starts watering back the other way.

KATIE VCULEK: What's the cost?

BRIAN VCULEK: Oh, cost. I think they're $3,000 apiece, and I think we'd need two.

COMMISSIONER HAUGEN-HOFFART: Okay. I think that's all I have. Thank you for your detailed testimony.

ALJ HOGAN: Mr. Dawson, any questions?

SUBSTITUTE DECISIONMAKER DAWSON: Yes, Judge.

Why do you need another lift after the pipeline goes through? Is that because you're putting in another header where the pipeline is or --

BRIAN VCULEK: Yes. It would take another header or submain. Every time you hook up to -- when you hook one pipe to another, I always want a drop there, like three-tenths of a foot drop every time you hook up. Well, there's not three-tenths to give up. If you're putting another submain in, you've got to accommodate for that drop.

And I was not a hundred percent sure of that. I was having a difficulty explaining it to Katie, so that's why we brought the Misselhorn people in to explain it. I brought them in to explain it to her. And when they studied the project, they confirmed that we would need a lift for this. And I don't think that this is so unique to the area.

SUBSTITUTE DECISIONMAKER DAWSON: No further questions.

ALJ HOGAN: All right. Thank you both very much.

KATIE VCULEK: Thank you.

ALJ HOGAN: I'll take one more public testimony if there's somebody else that wants to provide public testimony.

Good afternoon. Can I get your name and if you want to spell your last name for the record.

LYLE KENNER: My name is Lyle Kenner, K-E-N-N-E-R.

ALJ HOGAN: Mr. Kenner, did you hear me go through the penalties for perjury earlier?

LYLE KENNER: Yes.

ALJ HOGAN: And do you understand what perjury is?

LYLE KENNER: Yes.

ALJ HOGAN: And being advised of the potential penalties for perjury, do you promise to tell the truth in this case today?

LYLE KENNER: Yes, I do.

ALJ HOGAN: Okay. Thank you. Go ahead.

LYLE KENNER,

being first duly sworn, testified as follows:

LYLE KENNER: My name is -- as I stated before, my name is Lyle Kenner. I'm a veterinarian here in Linton. And what I have to say is probably not real technical, it's more philosophical.

The first time I heard of this pipeline was -- I think it was in May of '22. And we were, I think, semen testing some bulls and a client said, "Have you seen the three billionaires' press conference?" Well, of course

I hadn't. I said, "Well, what is it about?" And so he tells me that, you know, we're going to move carbon dioxide from various places and put it in the ground in North Dakota.

Well, let me back up just a little bit. In some of the local publication for this hearing, it asked for testimony concerning adverse effects upon the welfare of citizens. That's what I'm here to talk about.

My response to my client, which I'm pretty free talking in those situations, I said, "This is ludicrous." Okay. What's the definition of ludicrous? It's something that deserves derision, basically absurd and ridiculous.

Why did I think that? Well, CO2 is a very important atmospheric gas. It's a key ingredient for photosynthesis. You take carbon dioxide, water, sunshine, and you create plant growth. It's not toxic or poisonous in the natural atmosphere.

If you look at air itself, it's about 78 percent nitrogen, 21 percent oxygen, .9 percent argon, and only .04 percent carbon dioxide. Or if you put it in parts per million, it's 400 parts per million. Also you have other gases: Neon, methane, helium, hydrogen, and you have water vapor. These are very small percentages.

But our concern is about CO2. An increase in

CO2 with water, ultraviolet light, you get greater photosynthesis. You get greater plant growth. You get greater food production.

My contention is we're going the wrong direction. All animals consume carbon in various molecular forms. That carbon is metabolized and you have CO2 produced. Every living animal produces CO2. They inhale oxygen and that's the way we get there. I mean, there's very complex metabolic pathways to get there.

It is also ludicrous to me that we are afraid of carbon or carbon dioxide, carbon footprint, carbon neutral, carbon sequestration, carbon reduction. Carbon is a good element. The human body is 65 percent oxygen, 18.5 percent carbon. If you don't have your 18.5 percent carbon, you're not sitting here. It's not a bad thing.

But let's go back a little, if I dare. We had the time of Al Gore. Big promotion of global warming. He also happens to be the inventor of the internet system if you want to believe that. Then we have AOC, Alexandria Ocasio-Cortez. In 2019 she brings forth the New Deal. Many people -- many people said this is ludicrous too. This woman has an alleged economics degree, is an expert in all things concerning climate,

environment, and social engineering. The real truth is she's a radical socialist.

Perhaps the real debate is: do we have a danger of climate change occurring due to human activities? The answer is no.

Now, I realize that's contentious, but in this put-together book I have here, it states that there's 30,000 scientists have signed onto what's called "global warming petition project." The last paragraph says: "There's no convincing scientific evidence that human release of carbon dioxide, methane, or other greenhouse gas is causing or will in the foreseeable future cause catastrophic heating of the earth's atmosphere and disruption of the earth's climate. However, there is substantial scientific evidence that increases in carbon dioxide produce many benefits -- beneficial effects upon the natural plant and animal environment of the earth."

That's the reason I make the statement we're going backwards.

Also, there's been some kind of recent statements that are surprising. On national TV a couple of nights ago Dr. Patrick Moore, who's a co-founder of Greenpeace -- not exactly my type of organization -- but this is what he had to say: Carbon dioxide is not an issue. We could double the carbon dioxide and probably

not affect anything. Climate change is not really occurring, it's not really a concern.

It seems to me that's what this thing is all about, except the money factor. Isn't it ludicrous as Americans to spend vast amounts of money capturing, sequestering CO2 when we are $31 trillion in debt? The general opinion about AOC's Green New Deal is that it would bankrupt the nation. That's in the rearview mirror, that idea.

I find it quite depressing that Senator Hoeven, Governor Burgum, and other leaders have become protégés of AOC and her handlers. I assume that. My understanding, this is all paid by carbon credits from the Federal Government, money that should be sent to the U.S. Treasury. Isn't it amazing the ingenious ways that the politicians have continued to rob the taxpayer?

I seriously question the need for a pipeline. Why not just extract it out of the air at the sequestration site? We wouldn't have this discussion here at all. Just take it out of the air, put it in the ground if that's what you want to do. We extract nitrogen from the air to make various fertilizers. The technology is there. The carbon dioxide from ethanol plants doesn't seem to be causing any local or regional problems. The global winds -- the global wind currents

will continue to distribute it around the globe. It moves. So if you're wanting to drain CO2 from the air, you don't need a pipeline.

My last point. CO2 is potentially dangerous to animal life, of course human life if it displaces oxygen. Now, remember that last part, if it displaces oxygen. Normal air, we don't have displacement of oxygen. Oxygen is one of the dominant -- the second most abundant gas in air. It seems to me, as we've heard today, a pipeline break could be dangerous to the nearby public.

The next thing, the sequestered millions of tons of CO2 that I understand we're planning to put underground, if suddenly released, would be dangerous because it will dissipate -- it will displace oxygen in the air.

To me -- and we deal -- in medicine we deal with PCO2, partial pressure of carbon dioxide, in your blood to determine your acid base and other things. But I think probably the way I -- the first thing that came to my mind is if you're in a CO2 plume, it would be like putting a plastic bag over your head. Pretty soon all you're inhaling is carbon dioxide. Normal circumstances, you exhale carbon dioxide, you inhale oxygen, it's a good thing and it goes forward.

In summary, the whole carbon dioxide pipeline is ludicrous because it's based on the theory that human activity is causing deleterious climate change. That is simply not true. It is founded -- it is funded by the taxpayer by various clever funding systems to benefit those already wealthy. I'm not saying we need a distribution of wealth. I'm just saying: do they really need this money? It is a waste of taxpayer money. We can't afford it. And it has the potential to be very dangerous.

There's one little story. I was talking to an individual just before we went to lunch and he was talking about how some of the local slaughterhouses used to kill pigs. And he was talking about, as a young kid, I think it was in Gackle, they had a small slaughterhouse and they had what they called a CO2 pit. So this kind of pit is filled with carbon dioxide. And you take the pig and you shove him into kind of this wheel that would submerge him into the carbon dioxide gas. And he's in there for 5, 10 seconds, the wheel would bring him up and it would dump him out on the kill floor where they would cut his throat and then send him through a scald bath.

I think that shows the danger of highly concentrated CO2. We can argue about how many feet, we

can argue about how many valves, but in highly concentrated form, it's dangerous.

Thank you.

ALJ HOGAN: All right. Thank you.

Mr. Bender, any questions?

MR. BENDER: No questions.

ALJ HOGAN: Mr. Pelham. Mr. Bakke.

MR. BAKKE: No questions.

ALJ HOGAN: Mr. Leibel.

MR. LEIBEL: No questions.

ALJ HOGAN: Mr. Pranis.

MR. PRANIS: No questions.

ALJ HOGAN: Commissioner Christmann.

COMMISSIONER CHRISTMANN: None. Thank you.

ALJ HOGAN: Commissioner Haugen-Hoffart.

COMMISSIONER HAUGEN-HOFFART: Yes, I do.

LYLE KENNER: Okay.

COMMISSIONER HAUGEN-HOFFART: Mr. Kenner, you said you're a veterinarian?

LYLE KENNER: Yes, ma'am.

COMMISSIONER HAUGEN-HOFFART: How many years have you been practicing?

LYLE KENNER: Since 1980.

COMMISSIONER HAUGEN-HOFFART: Okay. You just touched briefly twice on animal life in your

presentation and then at your story about the CO2 pit and the squealing pig. We have talked today a lot about public health and impacts on agriculture land. Can we just talk a little bit more about livestock?

LYLE KENNER: Sure.

COMMISSIONER HAUGEN-HOFFART: What adverse effects do you feel there would be on livestock if there is a leak? And I'm going to look at in this area. I'm sure you have cattle ranchers?

LYLE KENNER: Uh-huh.

COMMISSIONER HAUGEN-HOFFART: Horses?

LYLE KENNER: Right.

COMMISSIONER HAUGEN-HOFFART: Pigs? Sheep? Chickens?

LYLE KENNER: Uh-huh. I can give you an answer somewhat based on experience. Well, it is based on experience. Any animal that's lying in a low area will be dead. Depends on the heighth of that plume, which I've learned a lot from listening today. If that plume is two feet off the ground, anything that's bedded down, whether it's cattle, calves, chickens on the ground, they'll be dead. Now, if that plume is that two feet and you have a horse standing there, he's going to be just fine.

And I say this because I was called one time to

investigate -- actually, it was the death of an individual, of one of my neighbors. I used to practice in Thief River Falls. And the sheriff's department called me and I was actually at my own ranch working cattle. So I left my truck there, borrowed a car, went to this farm.

And the authorities had already been there, removed the body. So the man that died there was gone. But what we found is there must have been, oh, I would say half a dozen animals that were in the stalls. He had stalled cattle. And for some reason -- he also had some beef cattle, but he had them in the stanchions. And anything that was lying down was dead. The animals that were standing were alive.

Now what really killed them is probably more carbon monoxide than carbon dioxide because he'd left the tractor running. As he went in the barn to clean it, he left the tractor running. We don't know really what happened. I guess they didn't give me that information. I think perhaps the older gentleman had a heart attack and, you know, fell down. Whether he died from the heart attack or he died from the carbon monoxide, carbon dioxide, I don't know.

But without any doubt we -- it's rather interesting, when you open up those animals, the muscle

tissue is the brightest red meat you'll ever see. So we sent some of that off to a diagnostic lab. They confirmed, yes, these animals died of carbon monoxide, CO2 poisoning.

COMMISSIONER HAUGEN-HOFFART: Okay. And just for my clarification, in the summertime ranchers, a lot of times, head their cattle out to different fields and pastures and there's waterholes, some water resource for them to drink from. So it's -- it's more dangerous in the summertime if there's a leak and cattle are by water if there's a leak; correct?

LYLE KENNER: Yes. I would assume that because it's -- the specific gravity relative to air, as we heard earlier, of carbon dioxide is -- it's heavy. So it will go downhill if we got ponds. Yeah, that's where it will go to.

COMMISSIONER HAUGEN-HOFFART: Okay. No further questions. Thank you.

ALJ HOGAN: Mr. Dawson, any questions?

SUBSTITUTE DECISIONMAKER DAWSON: No questions. Thank you.

ALJ HOGAN: All right. Thank you, Mr. Kenner.

LYLE KENNER: Thank you much.

ALJ HOGAN: All right. We'll now move back to witness testimony. And on my list, the next witness I

have is Steve Bakken.

I believe that's your witness, Mr. Bakke.

MR. BAKKE: Yes, Your Honor. In the interest of time, I'm not going to call former Mayor Bakken at this time but reserve the right to do so in Bismarck. If I do, he'll be brief.

ALJ HOGAN: Okay. Thank you.

Then I have John Godfrey as the next witness.

MR. PELHAM: Judge, we may want to -- I don't know. Mr. Leibel's intervenor clients have been here.

Do you want to do yours next? I mean --

ALJ HOGAN: Will there be any objection?

MR. BENDER: I think we'd like Mr. Godfrey to go. We talked a lot about this. I think we had about 20 emails going back and forth and I'd like to stick to the schedule.

MR. PELHAM: Fair enough.

ALJ HOGAN: I'll have you state your name for the record and spell your last name.

JOHN GODFREY: My name is John Godfrey, G-O-D-F-R-E-Y.

ALJ HOGAN: And, Mr. Godfrey, you heard me go through the penalties for perjury earlier today; correct?

JOHN GODFREY: Correct, ma'am.

ALJ HOGAN: And do you understand what perjury is?

JOHN GODFREY: Yes, ma'am.

ALJ HOGAN: And being advised of the potential penalties for perjury, do you promise to tell the truth in this case today?

JOHN GODFREY: I do.

ALJ HOGAN: All right. Thank you.

Who's -- go ahead.

JOHN GODFREY,

being first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. DUBLINSKE:

Q. Good afternoon, Mr. Godfrey.

A. Good afternoon, sir.

Q. Have you -- have you been here at the hearing the entire day?

A. Yes, sir, I have.

Q. All right. We're probably going to test your memory and go back a bit here. Let me start -- tell us who it is that you work for and what your title is.

A. My title is senior principal consultant. I'm an engineer and I work for DNV, which is an international engineering, consulting, advisory firm. We are based in

Norway. We have about 15,000 employees in over a hundred countries. I work for the midstream -- well, the midstream, downstream, and labs business area in the pipeline integrity and regulatory compliance department out of Columbus, Ohio.

Q. Okay. And you're actually based out of where?

A. I'm actually based out of Tulsa, Oklahoma.

Q. Okay. And that was a long description of your title. Tell us on a day-to-day basis what kind of things you do.

A. I work primarily in the pipeline area and I work on pipeline integrity management and pipeline safety and pipeline regulatory compliance. I've been in the pipeline industry for 35 years. The first 22 years of that with hazardous liquid pipeline operators. I worked in pipe manufacturing. I worked in pipe engineering and service providers. And for the last eight years I've worked in consulting across the full spectrum of pipeline operations in North America.

Q. And can you tell me a little bit about your educational background and your professional background in terms of, for example, industry committee work and things?

A. Yes, sir. I graduated from the University of Illinois with -- at the time it was a bachelor's degree

in, quote/unquote, "general engineering," but I specialized in strength of materials and hydraulics. I went to work for the liquid pipeline industry afterwards.

I served as the inaugural chair of the API pipeline integrity committee. I was on the Pipeline Research Council International materials committee as a vice chair. And I worked on the API operations technical committee. Also with the Association of Oil Pipe Lines. And currently I'm involved with DNV's activities at both the Southern Gas Association, the American Gas Association, and API, you know, various research papers and so forth.

Q. And is it fair to say that your role with this project is consulting on pipeline safety and integrity management?

A. That is correct.

Q. Okay. In your professional career, have you had occasion to work with some detail with the PHMSA regulatory process?

A. Yes, sir, I have.

Q. And there was discussion earlier this morning about PHMSA being potentially in the process of reviewing some regulations. Do you recall that?

A. Yes, I do.

Q. Is that a fairly common occurrence of PHMSA?

A. I would say it is. Approximately every four years U.S. Congress reauthorizes the Pipeline Safety Act. And based on the direction of Congress, you know, Congress will direct PHMSA to do various things through legislative mandate, but PHMSA also initiates the rulemaking process in response to either research that is done in the industry or trends that are noticed or observed in the industry or as a result of response to incidents within the industry.

Q. So that would be true, for example, of the recent change in the valve spacing rules?

A. That is correct.

Q. And is it your understanding that Summit Carbon's project will actually be one of the first, perhaps the first, major pipeline project that will actually be following those new valve spacing rules?

A. That's my understanding. They committed to follow the valve spacing rules before the rule actually went into effect, before the effective date of the rule, so they're out ahead of the compliance requirement.

Q. Now, when PHMSA changes rules, whether it's -- so in the normal course, whether it's in response to research, whether it's in response to an incident, does construction of those types of lines covered by the

regulation generally just stop?

A. No, sir, not at all.

Q. If PHMSA thought that it were important for all construction to stop and wait for their next step, could PHMSA do that?

A. I believe they could, yes.

Q. And to your knowledge, have they done that with regard to CO2 pipeline rules?

A. Oh, no, they have not.

Q. Okay. And to be clear, CO2 pipelines are covered under Part 195, like any other hazardous liquid; correct?

A. CO2 pipelines that operate in the supercritical or dense phase are covered as a hazardous liquid pipeline in Part 195. That's correct.

Q. And so the extensive safety regulations that are already part of the federal regulatory framework would apply to Summit's pipeline?

A. That's correct.

Q. There was some discussion this morning, I guess throughout the day, about risk mitigation, and Chair Christmann asked the question about "Can you talk about risk mitigation other than valve spacing?" Do you recall that line of questioning?

A. Yes, I do.

Q. And at the time there was a discussion of several additional risk mitigation techniques. Let me just ask someone that's largely involved in pipeline safety and integrity management. Are there a large number of steps that one can take to engage in mitigation pipeline risks?

A. I would -- large number? I would say a great number of mitigations and preventive actions that pipeline operators can take. Risk is really defined as the likelihood times the consequence. And pipeline operators understand consequence so they can deal with the likelihood.

It's all in the prevention. And prevention starts with selection of materials, design, operating envelope and operating regimens and into your operating procedures, your qualification of your personnel, and then your maintenance activities. The entire integrity management rule and the integrity management industry and majority of my job is built around preventing pipeline releases.

Q. There are several risk mitigation techniques that have been discussed today, but I want to talk about a couple that perhaps haven't been.

This pipeline will be required to be hydrotested; correct?

A. That is correct.
Q. And it will be required to be hydrotested at a higher pressure than what it will actually operate at; correct?
A. Correct. To at least 125 percent of its maximum operating pressure. And that is prior to commissioning and going into service.
Q. And we've talked a little bit about depth of cover, and I believe that Commissioner Goehring talked about he believes it should be four feet or greater. What is the PHMSA rule on depth of cover?
A. The PHMSA rule is 36 inches in normal areas, 30 inches in consolidated rock, and deeper, I believe 48 inches, at crossings of roads or other areas. And then, of course, you have local requirements for depth at road crossings and water crossings.
Q. So Summit has agreed to go deeper than what federal rules would require; correct?
A. That's right. Summit has already committed to exceeding the regulation for depth of cover.
Q. At both what I would call standard portions of the route but also at crossings of various kinds?
A. Yes, sir.
Q. As I recall, am I correct that, in terms of federal regulations on integrity management programs,

that techniques like in-line inspection are only required in certain areas of the pipeline? Is that correct?

A. Yeah, that's correct.

If I could explain, because in-line inspection is another area that I've been involved in for 30 years. In-line inspection is running an instrument and tool through the pipeline to identify anomalous conditions that could be indicative of defects. And that can be a dent, it can be corrosion, it can be potentially cracking.

The federal regulations require that in-line inspections be run in hazardous liquid pipelines that could affect a high consequence area. Summit has committed -- in my discussions with Summit leadership, they've committed to treating the entire system as if it was a high consequence area for the purposes of in-line inspection and response to any anomalies that are identified through the in-line inspection.

Q. And to the extent that there was some discussion earlier about the potential for corrosion, would that be a good way to protect against that risk, for example?

A. It is -- it is a great way to identify any potentially growing or initiating internal or external corrosion on the pipeline.

Q. There was some discussion earlier today about frost heave. Were you here for that discussion?

A. Yes, sir.

Q. Is it accurate to say that you've worked on pipelines in all parts of the country?

A. All parts of the United States, Canada, and Alaska.

Q. In the Lower 48, are you aware of any pipeline incident that has been caused by frost heave?

A. I cannot recall any pipeline incident in terms of a leak or significant damage that I can recall has ever been attributed to frost heave.

Q. I want to talk a little bit about some testimony that was provided by Mr. Jundt. Were you here for Mr. Jundt's testimony?

A. Yes, sir.

Q. My understanding from a discussion Mr. Jundt had with Mr. Mahlberg is that he is of the belief that the CO2 in this line will be what is referred to as combustion CO2, CO2 that is a by-product of a combustion process. Was that your understanding of Mr. Jundt's testimony?

A. That's --

MR. BAKKE: I'm going to --

A. -- my understanding of his testimony, yes.

MR. BAKKE: I'm going to object to that as a misstatement of Mr. Jundt's testimony.

ALJ HOGAN: The objection is noted.

Q. (BY MR. DUBLINSKE) Is that your understanding of the source of carbon dioxide that will be in the pipeline?

A. No, not at all. In my work with Summit and with their leadership, the source of the CO2 is off the fermentation side. And that is extremely different than combustion CO2.

Q. And in what ways is that different?

A. Fermentation will have much less impurities. It's going to be almost completely pure CO2. The only impurities that are known from the fermentation process are some oxygen and some free nitrogen.

On the flip side, combustion CO2 will have what's commonly referred to as "SOx and NOx," sulfur oxides, dioxide, trioxide, as well as nitrous oxides. Those are impurities that present greater hazards. They can change the critical pressure of the CO2, increase its susceptibility to ductile fracture. They can also impact the air dispersion of CO2 and the corrosivity of CO2.

This system, from my understanding working with Summit leadership, will have no combustion CO2. It will

all be from the fermentation side.

Q. In your experience with pipeline safety and pipeline safety programs, is farming routinely done over the top of pipelines after the restoration is completed?

A. Yes, sir. In all areas of the country.

Q. I want to go back for a moment to Mr. Jundt's testimony. At the very end of his testimony he was talking about a hypothetical where he asserted that, well, you know, if there's 10- to 20-mile-an-hour winds, that plume would carry a long ways. Do you recall that testimony?

A. Yes, I do.

Q. Is that how the effect of an increasing wind speed would actually work?

A. No.

MR. BAKKE: Object for lack of foundation. There hasn't been anything to establish that he has any knowledge on what happens during a CO2 pipeline leak, let alone in north Bismarck where Mr. Jundt was describing it.

MR. DUBLINSKE: Your Honor, I think that his background in materials and the impact of materials on pipeline safety is relevant here. There's nothing special about the wind in Bismarck and its effect on concentrations of a gas that's leaking from a pipeline.

MR. BAKKE: Well, Your Honor, if I could, these were the -- the same objections I'm making now are the ones that were sustained in relation to Mr. Jundt. They can't have it both ways.

ALJ HOGAN: Well, I think Mr. Jundt ended up offering the testimony that was proffered anyway. So the objections, all of them are noted for the record. I'll allow Mr. Godfrey to address that issue as well.

A. In my role at DNV as a consultant, I work with a variety of pipeline operators on a lot of different projects and issues. I also work with my colleagues at DNV. DNV produces the air dispersion model Phast. And our risk management group in Houston works to do this exact same dispersion modeling for a number of CO2 operators, HVL operators, NGL operators, natural gas operators. Our dispersion model is referenced by PHMSA and it is accepted for integrity management purposes. I'm very familiar with implementation of the model and I've worked with clients on implementation of the air dispersion model.

His -- his understanding of air dispersion is incorrect. A higher wind speed and a greater wind speed will increase the dispersion. Air dispersion, particularly of CO2, is dependent only upon the atmospheric conditions, the surface roughness, and the

original discharge rate of the release. CO2 will expand over a given area and it will disperse based on those factors.

The length of time of the release doesn't change the distance of the dispersion. Length of time release doesn't make a cloud travel further. And, in fact, a greater wind speed won't take a cloud and move it quicker a longer distance. That distance is defined already. And the distance doesn't increase with time. A greater wind speed will only act to make the cloud disperse faster.

And that's -- that's been something that I think has been misunderstood today, is that the amount of time of discharge after valve closure and the ultimate amount of discharge is not going to change the extent of the dispersion. The distance and the concentration levels of those distances is going to be defined by the atmospheric conditions in the initial release.

MR. DUBLINSKE: I believe that's all I have, Mr. Godfrey.

ALJ HOGAN: Mr. Pelham, any questions?

CROSS EXAMINATION

BY MR. PELHAM:

Q. Good evening, Mr. Godfrey. Do you have an opinion as to the testimony previously by Mr. Jundt as

well as Commissioner Goehring on the spacing of main line valves where Commissioner Goehring indicated a thousand feet between main line valves in a high consequence area? I'm just wondering if you have an opinion on that testimony earlier today?

A. Not specific other than the fact that just to clear up the -- the misconception. What it does is it will reduce the amount of time that the CO2 is discharging. It won't change the limits of the cloud or the concentrations at that distance.

And also point out that after the initial rupture and valve closure, you know, as CO2 decompresses and it changes from the supercritical phase to the liquid phase -- and it doesn't go to solid phase first. It actually goes straight to liquid -- or, excuse me, to gas phase. Let me clear that up too. From supercritical to gas. As that decompression wave moves up the line, the rate of discharge will actually drop. So the concentrations at the greatest distances will start to drop as well. So a plume may be there and it may travel with the wind, but the concentrations are going to be low.

So I, honestly, as a matter of policy, don't have a particular opinion on valve spacing.

Q. Do you know, sir, in your experience, in your

expertise in the pipeline industry, for CO2 lines specifically, what the distances are in a high consequence area for a CO2 line, if that can be generalized at all?

A. Are you referring to distances of valve spacing?

Q. Between main line valves, right.

A. I didn't do any research on that and I -- I do not have that information.

Q. Fair enough.

Did you have an opportunity to see some of the photographs I believe it was the Doolittles had of their farm equipment kind of sinking into the ground? Did you see those photographs?

A. Yes, sir, I did.

Q. Have you -- are you aware of instances where farm equipment, farm machinery, other heavy equipment have caused damage to lines as a result of farming activities after installation of a line, whether it be CO2 line, natural gas, crude oil lines?

A. I am. And I'm familiar of cases where equipment has sunk down into the trench line and contacted the pipeline and caused damage, but most of that is tracked equipment such as bulldozers or trackhoes. Usually rubber-tired equipment such as combines and the spray rig that were photographed, the rubber tires can do

coating damage but typically not do structural damage to the steel.

The only other cases would be rippers, plows, disks where the pipeline is no longer at, you know, depth below cultivation. And that could be due to erosion or just an older vintage pipeline that was installed before the depth of cover requirements. You know, they tend to be hit.

Q. Can that cause a release event in a line?

A. Under the right circumstances with enough extensive damage, yes, it -- it can.

Q. What goes into the design of the line to mitigate the risk of that?

A. First and foremost in agricultural areas is depth of cover. You know, anything getting down below the cultivation depth is your first line of defense.

Second line of defense is your metallurgy, having steel with enough toughness to resist fracture propagation. And all modern pipeline steels are designed that way. That's API specification 5L, PSL2, actually has that extra ductility to allow for fracture resistance. And, interestingly, that's one of the differentiators in the federal regulations for CO2 pipelines, is they have to have a fracture control plan. So they'll all be subject to that pipe specification.

Those are probably the two best ways to prevent it.

Q. As far as the testimony as to tiling, and I won't attempt to pronounce the last name myself, but the father, daughter that testified as to the tiling and as to the potential for sinkholes, are you familiar with irrigation, tiling, and potential sinkholes?

A. Yes, I am.

Q. So in terms of the proposed line in an area that has tiling that is repaired as a result of the line being installed, are you able to testify as to your experiences in having seen that happen before and ways that it can be mitigated and prevented as far as sinkholes?

A. As far as sinkholes from tiling operations --

Q. Right.

A. -- and failure of tiling?

Q. Yeah.

A. I'll defer to the tiling experts and the people who do that on a day-to-day basis. And the gentleman was very articulate in that. And I think he had it spot on, though, that in eastern North Dakota, in the flat land, you know, the sinkholes would present a low risk to a carbon steel pipeline. It's a limited area and it's not a ravine, it's not a high slope area. Probably

very, very low risk.

MR. PELHAM: Thank you, sir. I don't have any other questions for you.

ALJ HOGAN: Mr. Bakke, any questions?

MR. BAKKE: I do, Your Honor.

CROSS EXAMINATION

BY MR. BAKKE:

Q. So, first of all, I didn't hear anything so far in your testimony in response to Summit's attorney about your personal experience with CO2 so I want to explore that. Have you ever designed a CO2 pipeline before in your career?

A. I have consulted on the design of CO2 pipelines from a pipeline safety and regulatory perspective.

Q. And that's what you're doing in this case; correct?

A. That's what I'm doing in this case.

Q. Okay. And so I want to know what your experience is -- actual experience is with CO2 pipelines. Have you ever designed one before?

A. I've consulted with the designers and I've worked with the designers at several different operators on pipeline safety and design issues and -- and regulatory issues as they go through the design process.

Q. Well, you're offering testimony here today on

safety issues and integrity management. My question is more specific. So can you tell me the name of a company where you were involved in designing a CO2 pipeline?

MR. DUBLINSKE: Asked and answered. I mean, this is a semantic game. He said his job is safety and -- safety engineering and integrity management. So, no, he's not a designer. He's answered that. What he's explained is that he's consulted in his appropriate role on the design of that.

Q. (BY MR. BAKKE) And I apologize, but I thought your answer was unclear. Have you ever designed, yourself, a CO2 pipeline?

A. I've consulted with designers on CO2 pipelines, on both their pipeline safety, the design, and the regulatory compliance. I'm afraid -- it's a very competitive market right now. I'm afraid that I'm really not at liberty to disclose all of our clients. That might indicate at what stage of project development they're in. We have non-disclosures with most of them.

Q. Okay. And that wasn't my question, asking you to disclose. My question was: Have you ever designed, yourself, a CO2 pipeline?

A. I can say personally as a designer, no.

Q. Okay.

A. I've answered what I've been involved in.

Q. Have you ever built a CO2 pipeline?
A. A pipeline that was designed from scratch for CO2 service? No, I have not built one.
Q. Okay. Have you ever been called in to an existing CO2 pipeline to offer opinions or guidance in regards to safety issues regarding that existing CO2 pipeline?
A. I have not worked on the operation of an existing operating CO2 pipeline.
Q. And you indicated -- you offered some testimony on PHMSA and those regulations and Summit's plan to comply with those, but isn't that something that we've already heard from in this case in -- on March 14 from Mr. McCown? Didn't he testify to the same topic? Do you know who Mr. McCown is?
A. Yes, I do.
Q. Isn't he someone who said he worked for PHMSA for some time period?
A. Yes, he did.
Q. Okay. And so you're just duplicating the testimony he's already provided, aren't you, on PHMSA?
A. I have been retained by Summit to assist in pipeline safety matters and their -- assisting compliance. And I think in that regard I have a different, more unique perspective into some of the

details around the integrity management planning and some of their risk mitigation strategies.

Q. Well, in relation to these risk mitigation strategies, have you ever contacted PHMSA on behalf of Summit and asked them whether the Summit pipeline was appropriate and met PHMSA standards?

A. I have not talked to PHMSA specific to Summit.

Q. Okay. And PHMSA, to be clear, regulates all types of pipelines, correct, not just CO2 pipelines?

A. PHMSA regulates hazardous liquid pipelines as well as natural gas and hazardous gas pipelines. I would not say all types, because there are a number of pipelines out there that just fall under PHMSA's jurisdiction.

Q. Sure.

A. But, by and large, the vast majority of pipelines in the U.S.

Q. Sure. And your testimony was that you believe that PHMSA's determination to update their rules and regulations wasn't in relation to this incident in Satartia, Mississippi. Was that your testimony?

A. No, it was not.

Q. Okay. Would you look at Exhibit 147? I believe it's the larger binder on your left.

A. Okay. This is when I wish the good doctor had

left his reading glasses a little longer.

(Pause)

A. Yes, Exhibit 147.

Q. And isn't that from PHMSA from May 26, 2022?

And it says "U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration, PHMSA, today announced it is taking steps to implement new measures to strengthen its safety oversight of carbon dioxide, CO2, pipelines around the country and protect communities from dangerous failures"?

A. That's what it says in the introduction, yes.

Q. Okay. And it goes on to discuss that it's in response to the CO2 leak in Satartia, Mississippi; correct?

A. It does, yes.

Q. Okay. And so if we talk specifically about CO2 pipelines and PHMSA's regulations and updating of the rules, at least in relation to the portion of the PHMSA rules and regulations that will apply to CO2, they've gone on record and said, in light of the incident in Satartia and what they call dangerous failures, they're going to be entering into some new pipeline rules and regulations in relation to CO2 pipelines; correct?

A. That was kind of a long question. Could you repeat it or rephrase it, please?

Q. Sure. PHMSA has specifically addressed that they're going to be updating, looking at new rules and regulations in relation to CO2 pipelines in light of the Satartia, Mississippi, incident; correct?

A. I would say that's true in part. As I testified, they update regulations based on experience and based on incidents that occur.

The other thing that's noteworthy is that the existing CO2 regulations only apply to CO2 shipped in the supercritical phase, which is applicable to Summit. That's what Summit intends to do and the regulations are a hundred percent applicable. But they don't regulate currently gas phase or liquid phase. And that's been a topic that's been brought up.

Also, the government right now, through both PHMSA and the Department of Energy, is funding a substantial amount of research into CO2 transportation and CO2 sequestration. And DNV is actively involved in that research through our laboratory system and through our standards group. And that research is designed to also inform the rulemaking process and help PHMSA through this rulemaking. And they're looking to address what, you know, the public and regulators have expressed as concerns about the transportation of CO2, including the bullet points they laid out here more succinctly in

this notification.

Q. Okay. And I think you've gone way beyond my question and offered additional testimony that wasn't responsive to my question, but we're limited on time here so if you could try to answer the question directly, I'd appreciate that.

You said in part that -- did PHMSA say, in Exhibit 147 or in any other publication, that they're only addressing the updates to the CO2 rules and regulations in part because of the dangerous situation in Satartia?

(Pause)

A. I think that's included in the bullet points and can easily be read into those in this advisory bulletin, to strengthen CO2 pipeline safety. And PHMSA's role is through regulations. That's how they strengthen safety. Conduct research solicitations to strengthen pipeline safety of CO2 pipelines. And they also go on to talk about --

ALJ HOGAN: Hold on a second. We need to switch out the recording.

UNIDENTIFIED SPEAKER: We have ten minutes.

ALJ HOGAN: Okay. Go ahead.

A. So to just finish the answer on that, that is included in these bullet points. It just takes a

reading and understanding of the regulatory process and all the other communication, all the other activity that PHMSA is undertaking at this time taken as a whole.

Q. But this bulletin refers specifically to them doing that in relation to the Satartia incident, isn't it?

A. If you only want to read this one bulletin, but it also goes on to say to strengthen pipeline safety, which is their regulatory mandate through the Pipeline Safety Act.

Q. Well, does Summit have --

A. They're conducting research.

Q. Does Summit have some other bulletin from PHMSA that says they're looking at updating the rules and regulations in relation to CO2 pipelines on something other than the Satartia incident?

A. That's my testimony based on my experience with DNV which is participating in research with PHMSA --

Q. So there is another --

A. -- advise under PHMSA contracts and DOE contracts.

Q. Do you have that bulletin with you here today that --

A. It's not a bulletin, sir. It's my testimony that we are participating in that research specific to

CO2 pipelines.

Q. Okay. You talked about your company being based in Norway. Are you familiar with the plume model video that was done in Norway of what happens when there is a CO2 pipeline leak?

A. I'm a member of the North American CCUS coordination group where we coordinate all of our activities across North America and we reach out to our colleagues overseas and participate and --

Q. Can you just answer my question yes or no, you're aware of it or you aren't aware of it?

A. Very aware of it.

Q. Okay. And was your company involved in that?

A. DNV conduct -- we've conducted a large number of experiments on CO2 releases. I guess I'd have to ask you to be more specific, please.

Q. Yeah, the one that's Exhibit 160, the video showing an 8-inch pipeline that was intentionally leaked in Norway to see what would happen.

A. I'm very familiar with that test and that project, yes.

Q. And is what shows in that video, which is Exhibit 160, representative of what will happen if there is a CO2 leak?

A. I would have to caution first, that video was

published on our research page with specific language that says it was not to be used or reproduced without written permission. The version that's been put out in the public, unfortunately, is now public and it was captured off of something that was not an official production nor was the official or the results of the testing included with the video. It has been largely misrepresented.

Q. Okay.

A. The video -- the test itself, one, wasn't done in Norway. It was done at the Spadeadam Test Facility in the United Kingdom. It was done to measure and validate air dispersion modeling as well as ductile fracture propagation, whatever other data could be collected during the testing. The pipeline was intentionally blown up --

Q. Right.

A. -- to get the maximum effect of it. And it was done over a period of time where it was done under absolutely optimal environmental conditions. And the entire site was instrumented and both dispersion distances and concentrations were measured as part of that project. The project was done as part of a joint industry project, or a JIP, for several customers. The data itself is owned by those customers.

Q. I'm not asking who owns it. Anything else responsive to my question --

A. Am I very familiar with the test?

Q. Okay.

A. I'm very familiar with the proprietary test, yes.

Q. Okay. And the video, is the video altered in some way so that the video is not representative of what happened during that plume model test? Is that your testimony?

A. There are several different versions of that video that have been out on the web that are unauthorized. I can't tell you without seeing the one you're referring to and comparing it to the actual test video, if it had been altered or misrepresented in any way.

Q. Okay. Are you aware of the one that the Public Service Commission has received in this case as being altered in any way?

A. I have not seen the one that this Commission has received.

Q. Well, there is a copy available to Summit's counsel. If you believe the video has been altered, can you let your counsel know so he can let the PSC know that you believe that video was altered?

A. I suppose certainly we can do that.
Q. Okay. And was that on an 8-inch CO2 pipeline, the video in Norway -- or I guess the United Kingdom?
A. In the UK, the Spadeadam Test Site. To the best of my recollection, it was 8-inch.
Q. Okay. So a much smaller CO2 pipeline than the one Summit's proposing to build here in North Dakota, a 24-inch pipeline; correct?
A. It's correct it's an 8-inch compared to the 24. Yes, it's smaller.
Q. Okay. And the distance in that video between the start and end point of that CO2 pipeline, how far was that?
A. As I sit here today, I do not recall.
Q. It wasn't 20 miles, was it?
A. No. It wasn't a full pipeline, sir. It was a test rig.
Q. Sure. So a very small area of pipeline; correct?
A. I don't recall the distance of the test rig. I don't recall the linear distance of the pipe in question.
Q. Okay. Do you believe it was less than a mile?
A. It was less than a mile. Of the distance of pipe that was ruptured, I do not recall the capacity or

the size of the storage reservoir that was connected to it.

Q. I didn't ask about the storage reservoir.

A. Well, that would -- that would equate to a hydraulic length.

Q. Okay.

ALJ HOGAN: All right. I'm going to have to interrupt you so that we can switch out the recording. And I think since we have to do that, we might as well just take our lunch break so that we don't use up time switching and the lunch break. So why don't we try to reconvene around 6:30.

(Recess)

ALJ HOGAN: Okay. We're going to get started again. All right.

Mr. Bakke, you can continue. Turn your microphone on, please. Thank you.

Q. (BY MR. BAKKE) Can you tell the commissioners what you're being compensated by Summit in this matter?

A. The billing rate for DNV litigation services, I believe, is 405 an hour, but I'm salaried, sir.

Q. And are you offering testimony or have you offered testimony for Summit in any other states?

A. I have offered written testimony in South Dakota.

Q. And prior to this Summit pipeline project, did you have any involvement with Summit or any of its management or individuals involved with Summit?

A. No, I have not.

Q. You talked about Mr. Jundt in relation to what would happen if a leak occurred north of Bismarck on the current route. And could you look at Exhibit 137?

A. I have 137.

Q. And do you know, is that the route for the proposed Summit pipeline north and east of Bismarck?

A. I'm not familiar with this map or how it was produced. It says the proposed carbon pipeline route was digitized off a PDF map from Summit Carbon Solutions. I have to go by what's on this.

Q. Okay. Well, you're offering testimony here about what you believe would happen if there was a leak north of Bismarck as described by Mr. Jundt; correct?

MR. DUBLINSKE: Objection, Your Honor. I don't recall any time that Mr. Godfrey testified to what would happen if there was a leak north of Bismarck.

MR. BAKKE: Sure, he did. He talked about the winds and you asked him questions about the winds and where would it go and he talked about the low-lying areas.

MR. DUBLINSKE: Just like Mr. Jundt was using a

hypothetical divorced from any specific facts of the case about, look, if the wind's 20 miles an hour, this is going to go 20 miles. My question to Mr. Godfrey was: is that how dispersion in a strong wind works? Nothing to do with what happens if there's a leak north of Bismarck.

MR. BAKKE: Yeah. And I don't think Mr. Jundt was testifying as to some hypothetical situation.

Q. (BY MR. BAKKE) But let me ask you this, Mr. Godfrey. Is it your testimony you don't even know where this proposed route is to go north and east of Bismarck by Summit?

A. I have the general idea of where it is from the exhibits that have been put before this Commission and the exhibits that I've looked at. But have I studied it in sufficient detail to offer an opinion on an air dispersion model? No.

Q. Okay. And do you know enough to know that this is the proposed route shown on Exhibit 137?

A. To the best of my knowledge and to the representations on the top of the page, I believe this is a good representation of the route when this map was produced.

Q. Okay. Were you aware that this was prepared by Mr. Flanagan at Planning and Zoning at Burleigh County?

A. I don't know the name of the person, but it says on the bottom of the exhibit "Map produced by Burleigh County GIS."

Q. And I noticed today when we walked in here and the public walked in here there was a handout at the table here for everyone to look at showing the proposed route. Have you seen that?

A. No.

Q. And on here it doesn't show any of the housing developments north of Bismarck close to the pipeline route. It makes it look like there's really nothing anywhere close to the pipeline other than farmland.

A. I'm not familiar with that map.

Q. Do you know why Summit would keep off the actual development on its map showing where the route is in relation to Bismarck and not include the housing developments and the --

MR. DUBLINSKE: Objection, Your Honor.

Q. -- locations, the schools?

MR. DUBLINSKE: He's already said he's not familiar with the map. He's just testifying now.

MR. BAKKE: I'm asking if he knows why.

MR. DUBLINSKE: He already said he doesn't know the map.

MR. BAKKE: That's not my question.

ALJ HOGAN: He can answer if he knows.

A. That would require me to speculate and I'm not going to speculate, sir.

Q. (BY MR. BAKKE) Okay. And in relation to this pipeline route on Exhibit 137 that you believe is reliable prepared by Burleigh County, when did you either walk or drive or investigate that route?

A. I have not.

Q. Okay. Unlike Mr. Briggs who did go through that route yesterday to try to determine what would happen to the city of Bismarck if there was a release; correct?

A. Mr. Briggs testified that he drove the route in response to a question. I would have no idea what part of the route he drove or how thorough or what he looked at. I would have no idea what he thought. That's speculation again.

Q. Well, he testified that he drove the route north and east in Bismarck. And he was asked by one of the attorneys "Did you drive" -- or perhaps one of the commissioners -- "Did you drive anywhere along that route other than the north and east?" And I think his answer was "No. That's the area I focused on"; correct? Weren't you here for that?

A. I was here and I believe that was his answer.

Q. Okay. And Mr. Jundt, unlike you, would have

intimate knowledge of the topography in this location of the pipeline north and east of Bismarck, wouldn't he?

A. I can't testify as to what his intimate knowledge is. I don't want to speculate on that either. I will confirm that I have no idea of the topography in that part of town. I did not visit it.

Q. Okay. And so doesn't the topography of where a leak occurs have a significant impact on where that CO2 will travel?

A. It's true that it does have an impact since CO2 is denser than air. CO2 will follow the ground terrain and it will follow low areas. But where I was clarifying Mr. Jundt's testimony is it doesn't follow those areas indefinitely. It reaches the limits of its dispersion range, at what point the concentrations start to drop. And that's true over flat terrain or sloping terrain or in valleys.

You know, as the CO2 disperses, it disperses independent of the wind speed. It's only dependent upon, as I said, environmental conditions, surface roughness, which also includes topography, and the initial release rate.

Q. Well, isn't that what Mr. Jundt testified to? He said it would go to the low-lying areas, and one of the main low-lying areas in Bismarck is the Missouri

River? Didn't you hear him say that?

A. I heard him testify to that, yes.

Q. Okay. And wind is going to have some effect on where that CO2 goes if there is a leak; correct?

A. That is correct. It will have an effect on both the direction and the speed at which it disperses.

Q. Okay.

A. The furthest that CO2 will travel based on the research that we have done is based on low wind speeds. So, really, the thought that, you know, a prevailing wind is going to drive it further than --

Q. And that wasn't my question.

A. -- a low wind is not necessarily --

Q. I think you've answered my question and you're going way beyond it and we have limited time. But let me ask you this. The PHMSA report, Exhibit 155, if you would turn to that, page 12 of 21.

A. Exhibit 155? And you wanted page 12?

Q. Right. That's showing the plume model that was prepared by the -- the meteorological data showing the plume model based on the winds in that area, in Satartia. Have you seen that before?

(Pause)

A. Yes. I've seen it as part of this PHMSA report before.

Q. Okay. And are you saying in the Satartia incident the plume from the leak from the Denbury CO2 pipeline did not follow that plume model and the distance -- not plume model but actual plume data?

A. I'm sorry, could you rephrase your question, please?

Q. That was --

A. I'm not sure I understood.

Q. Do you disagree with the meteorological data showing the path of the CO2 on the date of the leak in Satartia based on the existing weather conditions at the time?

A. Well, this is -- this is NOAA's modeling of the plume based on their observations of weather conditions at the time, including wind and wind speed. It doesn't say, though, what model they used and it doesn't say if they took into account any of the surface features that were involved. So I can't say if this is really accurate of what happened. And, you know, there was no actual air monitoring that was done during the initial response so there was nothing that really validates the modeling. But this is the best modeling that was available at the time.

Q. Okay. And so you don't know whether this is accurate or not?

A. I can't testify whether this met the real world conditions at the time of the release or not.

Q. Okay. And in that situation, they've indicated the CO2 plume went almost 25 miles, correct, including through the village of Satartia?

A. Well, you also have to take a look at what the concentration levels are for this plume because this --

Q. My question is --

MR. DUBLINSKE: Your Honor, can we instruct Mr. Bakke to let the witness answer the question? These are not just yes or no questions. This is a complicated subject. Mr. Godfrey is an expert and he should be allowed to give the information that the Commission will need.

MR. BAKKE: And, Your Honor, in all due respect, he's not answering the question. He goes on to something else. I'm just trying to get through this quickly. And I think these are, for the most part, yes or no questions. And if he says he disagrees, I'll do a follow-up question.

ALJ HOGAN: Well, I think you perceive them as yes or no, but I don't think that our witness perceives them as yes or no. So, you know, I -- I would ask Mr. Godfrey to try to keep your answers to the question, but I think he needs a little bit of latitude to explain

if he doesn't think it's a yes or no question -- or answer.

THE WITNESS: Yes, Your Honor.

A. Could you repeat your question, please?

Q. (BY MR. BAKKE) Sure, I can. And if you can, answer yes or no.

In this plume data information from the meteorological service from Satartia on the date of the leak, it shows that the plume of CO2 traveled approximately 25 miles; correct?

A. It shows a plume of low-level concentrations could potentially travel that distance.

Q. So now are you changing your testimony from before when you said you don't know whether this is representative of the plume and now you're saying it's not?

A. No. That's incorrect.

Q. Now, in relation to the low-lying areas, let's look at Exhibit 137. Have you reviewed any data in this case to try to determine where a leak of CO2 would go in the event of a failure of the CO2 pipeline?

A. No, I have not reviewed any of the specific modeling or validated any of the specific modeling that's been done.

Q. Okay. Do you know if modeling has been done by

Summit?

A. I believe that's a best -- that's a question best asked of a company representative.

Q. Well, you're here testifying on behalf of Summit as an expert, including on where it might go -- the plume might go under certain conditions. Are you aware of a plume model being done by Summit for the Summit pipeline?

A. Summit has indicated previously that they've been or are in the process of doing modeling. I do not know the extent of what their activities are at this point in time. I was asked to testify about atmospheric dispersion modeling and plume modeling in general and specifically to CO2 as would be applied to any CO2 pipeline in the course of, you know, pipeline safety considerations.

Q. Okay. So you don't know, if Summit did, in fact, do a plume model on the Summit pipeline, which location on the pipeline they did it for?

A. I wouldn't have the details on that. That's not my area --

Q. Okay.

A. -- to be that specific.

Q. And you don't know whether they did one plume model, if they did, on the entire 2,000 miles plus of

this proposed Summit pipeline. Is that true?

A. I believe they modeled it in more than one location, but I can't tell you where specifically, how many. I did not review that information and did not prepare for that.

Q. Okay. Do you agree that the topography in relation to the Summit pipeline over 2,000 miles can be different in different locations along the pipeline?

A. The -- yes.

Q. Okay. Do you agree that there can be different prevailing wind directions at different locations along the 2,000 miles plus of the pipeline?

A. Yes.

Q. Do you agree that you need to consider a number of factors in trying to determine plume modeling and how CO2 will be dispersed in the air?

A. I believe I already testified to that and answered that question.

Q. Leak profile; correct?

A. Excuse me?

Q. The leak profile?

A. I'm not sure I understand what you mean by "leak profile."

Q. Well, I'm taking that language from your report you gave to the Public Service Commission in South

Dakota in your sworn testimony. You said one of the factors is a leak profile. Isn't that what you said?

A. Is my testimony an exhibit here?

Q. It is not. You just tell me whether you remember saying that or not.

A. I don't remember everything in the written testimony.

Q. Okay. Do you remember that you said one of the variables that needs to be considered in dispersion modeling of a CO2 leak is wind speed and direction?

A. As I sit here today, I can't remember exactly all of the testimony I filed in South Dakota.

Q. So was that one of the things that needs to be considered in doing a plume study?

A. Wind speed and direction?

Q. Yes.

A. Yes, it is.

Q. Okay. And is atmosphere stability something that needs to be considered as part of the plume study?

A. That is a consideration, yes.

Q. Humidity?

A. Yes.

Q. Land use?

A. Yes.

Q. Okay. Topography?

A. Yes.

Q. Okay. And you don't know any of that information in relation to any given location along this 2,000-mile-plus Summit proposed pipeline, do you?

A. I was not retained to do an air dispersion study for Summit nor to evaluate their air dispersion study. And that would -- to look at every spot along the line would require a very detailed evaluation.

Q. Is CO2 that's going to be contributed in this Summit pipeline in a dense phase or a gas phase?

A. Dense phase, which is also synonymous with the supercritical phase. They're used interchangeably.

Q. Okay. Do you agree that stopping or preventing ductile fractures in pipeline transportation of CO2 has proven to be more challenging than in transporting natural gas?

A. CO2 behaves differently than natural gas. It has different critical pressures. It has different bulk modulus and density. When -- if a fracture were to occur in a CO2 pipeline, based on the material properties, ductile fracture does have to be considered. Ductile fracture is an event where the energy in the crack tip exceeds the -- or the pressure in the pipe and the energy in the pipe exceeds that required at the crack tip to grow the crack. In essence, the speed of

the crack goes faster than the wave of decompression in the CO2 and the crack can run for a very long distance. And that's -- that's required to be addressed in Part 195 for all CO2 pipelines.

Q. Okay. So let's try to answer my question. It's a very specific question. And my question is: do you agree that stopping or preventing ductile fractures in pipeline transportation of CO2 has proven more challenging than in transporting natural gas?

MR. DUBLINSKE: Objection, Your Honor. Asked and answered. I understand what he thinks he's asking, but when he says "more difficult," Mr. Godfrey is trying to explain that it's not that simple. Who is it more difficult to? What do we mean by "more difficult"? Mr. Godfrey is giving the considerably more useful answer of what is actually going on as a matter of material science behind that question.

MR. BAKKE: And I used the words "more challenging," not "difficult." So I'm just noting that for the record.

ALJ HOGAN: Oh, okay. Well, I think he did address that issue so --

Q. (BY MR. BAKKE) Well, the reason I ask that is there's an article from your company, DNV, that is available from your engineers at DNV, that specifically

says that stopping or preventing ductile fractures in pipeline transportation of CO2 has proven to be more challenging than in transporting natural gas. Do you disagree with DNV's own engineers on that topic?

A. Do you have that as an exhibit so I can see it in context?

Q. I do not, but I can certainly provide it to the commissioners.

A. Because I think I'd have to take a look at the reporting context and not just rely upon the one sentence. I also have to look at it in terms of were they talking about legacy materials, modern materials. I would agree it's more challenging, in some ways it's different. But modern pipeline steels, by and large, ductile fracture can be controlled in new modern pipeline steels relatively easily.

Q. Okay. Do you agree Summit can't build a pipeline to try to comply with the new PHMSA rules and regulations on CO2 pipelines that have not yet been issued or identified?

A. Are you asking me to speculate on what the PHMSA's rulemaking process will be after it goes through the administrative rule process and public comment and research?

Q. No.

A. Because I can't speculate on what PHMSA's considering or what they're going to pass as rules in two or four years.

Q. Sure. And that's my point, is until PHMSA issues the new rules and regulations to address the dangerous condition of a CO2 pipeline, there's no possible way Summit can assure the public or assure the Public Service Commission that their plan, their engineering, design, and construction of the pipeline, meets those new standards by PHMSA; correct?

A. PHMSA's been regulating CO2 pipelines now for approximately 40 years. The United States has the longest track record in the world of regulation of CO2 pipelines and most experience in operating CO2 pipelines.

Q. That's not my question.

A. The regulations for dense phase or supercritical CO2 as proposed by Summit are established. They are the same stringent regulations that cover the transportation of other highly volatile liquids such as propane, ethylene, butane, as well as gasoline and diesel fuel. They have proven to be effective in producing a very good safety record for both hazardous liquid pipelines and carbon dense phase pipelines specifically.

If PHMSA felt that a moratorium or a pause on

new construction was required to allow regulations to catch up, it is within their purview, and it is within Congress's purview, to act on that. The fact that multiple projects are currently ongoing with PHMSA knowledge and participating and there's no suggestion from PHMSA that projects should slow down or stop while they go through the regulatory process, I think speaks for itself.

Q. Okay. And let me try again, because I didn't ask about a moratorium or a pause. My question was very simple.

Isn't it true, Mr. Godfrey, that there's no way that Summit can assure the public or the PSC that its pipeline will comply with new PHMSA regulations to address dangerous conditions in a CO2 pipeline before they're issued? Isn't that true?

A. That would require me to speculate on what the new regulations would be, and I can't do that.

Q. Okay. You don't believe that Summit, if it hurried up and built this pipeline, would somehow be grandfathered in if the new PHMSA regulations required something more stringent or different than Summit had built the pipeline to?

A. Again, you're asking me to speculate on what the outcome of the regulatory process would be. And I don't

want to speculate if PHMSA would allow grandfathering in this case or not. I would have no idea. It's within their purview to enact regulations that have compliance requirements, even for existing pipelines. They have done that multiple times over the years, including with integrity management regulations and operator qualification regulations and cathodic protection regulations. It happens all the time.

Q. And I think you just agreed with me, but let me make sure. What you're saying is that PHMSA regulations, even new ones, apply to existing CO2 pipelines; correct?

A. No. I said I wouldn't speculate on what any new regulatory requirements would be.

Q. Okay. So you don't think new PHMSA regulations will apply to existing CO2 pipelines? That's your testimony?

MR. DUBLINSKE: I'm going to object, Your Honor. While certainly some discussion of PHMSA is appropriate and the regulations, the Commission doesn't have jurisdiction over PHMSA. The Commission has jurisdiction over North Dakota law as applied. So I think that there's certainly some leeway. And I think Mr. Bakke has asked this witness quite a bit about PHMSA, but I think at some point that leash should be

pulled back. So I'm going to object.

MR. BAKKE: And I apologize, Your Honor. This is my last question on PHMSA, but I am having a great deal of difficulty getting the witness to answer my question.

ALJ HOGAN: Well, let me tell you what I understood, because I think he has answered this. I think he said he can't speculate to what the new rules are, but that they can either make them applicable to existing pipelines or not, and that's within PHMSA purview, and he won't know that until the rules are complete.

Q. (BY MR. BAKKE) Is that your answer?

A. Yes.

Q. Does PHMSA indicate that, in terms of doing frost heave studies and other soil studies, that those should be done by a geotechnical engineer?

A. PHMSA has issued an advisory bulletin to that effect. I believe, yes, they have issued an advisory bulletin on that issue.

Q. Okay. And a geotechnical engineer is an engineer that specializes in soils; correct?

A. In -- in part, in general, yeah. I'm sure it's a lot -- I'm sure if there was a geotech engineer in here, he would argue with me that it's a lot more

important than that.

Q. Okay. And you're not a geotechnical engineer?

A. I am not.

Q. Okay. And are you aware of any geotechnical engineer hired by Summit who has done any soils analysis along the Summit pipeline route or has been involved in any frost heave study?

A. In my discussions with Summit management, leadership, and the engineering staff, they have engaged geotechnical engineers to look at different soil conditions and geotech conditions along the pipeline route as well as to address the concerns from the North Dakota state geologist that they filed in the docket, I believe. And they're actively engaged in doing that.

I cannot say for certain as I sit here today if frost heave is specifically included in that, because as I testified before, there's multiple ways that pipelines address frost heave and there's been no real record, to my knowledge, of any pipeline damage or failures of welded steel transmission pipelines in the U.S. or Canada due to frost heave.

Q. So to your knowledge, Mr. Ammerman who prepared the frost heave study for Summit from Gulf Interstate Engineering, he's not a soils engineer; correct?

A. I don't know.

Q. Let's talk briefly about valve spacing. Do you agree that distance between the valves on a CO2 pipeline can affect the total volume of CO2 released in a leak?

A. Yes. It will affect the total volume between valves that can be released. Yes.

Q. So as an example, if you have two valves that are 9.55 miles apart, like in Satartia on the Denbury pipeline, that's going to release less CO2 under a similar or identical leak scenario than a 20-mile pipeline. Is that true?

A. In terms of total volume?

Q. Yes.

A. Yes. It will be more volume the greater the valve spacing.

Q. Sure. And that greater distance between the valves on a CO2 pipeline can also affect the duration of the release of CO2; correct?

A. I believe that's what I testified to earlier, that the valve spacing affects the duration of the release.

Q. Sure. And if the valves are further apart, you're going to have a longer duration of the leak and the CO2 inside the pipeline being released, assuming identical leak scenarios; correct?

A. Well, that's a leak scenario that changes over

time between different lengths between valves. The leak will be occurring longer, but the dispersion and the plume will not grow any larger and will decrease in time as the line decompresses. So it will not remain at a constant elevated threshold at each location for the entire time. Regardless of the length of time, as the line decompresses, whether it's half an hour, one hour, two hours, that concentration level is going to change and is going to be reducing as it goes on.

Q. And that wasn't my question, was the concentration level. My question was a simple question that you're going to have a longer duration -- assuming a similar leak scenario, you're going to have a longer duration of that CO2 releasing to the atmosphere when there's a greater distance between the two valves than a shorter distance between the two valves; correct?

A. CO2 will come out of the pipe at the location of the release for a longer period of time.

Q. Okay. Do you know what a high consequence area is?

A. Yes.

Q. And what's a high consequence area?

A. High consequence areas are defined in 49 CFR Part 195, the hazardous liquid rules. They're comprised of high population areas and other populated areas as

defined by the U.S. Census Bureau, commercially navigable waterways as defined by the Bureau of Transportation Statistics, and USAs, or unusually sensitive areas, which is a second or a separate section of Part 195 from the integrity rules. And that incorporates sole source drinking aquifers, sole source drinking water resources, aquifers, certain threatened and endangered species. And I'd have to refresh myself on that section of the rule, but that's essentially the environmental impacts. And that's defined at the state level.

Q. And part of the definition of a high population area is a location that has 50,000 or more people; correct?

A. Are you referring to a specific part of the regulation you can cite to me to confirm?

Q. I'm just asking you a question, whether you agree or disagree.

A. I can't recall exactly what it is. It's defined by the Census Bureau based upon the regulations.

Q. Okay.

A. I can't remember the exact definition of threshold of population.

Q. And would you agree Bismarck qualifies as a high population area under the definition of a high

consequence area under the federal rules?

A. I couldn't tell you if the entirety of Bismarck as it's incorporated would qualify as a high population area, but it would certainly qualify as an other population area based on its corporate boundaries and would be considered an HCA.

Q. Now, there's been testimony in this case that there are approximately 5,150 miles of CO2 pipeline in the U.S. Does that sound accurate to you?

A. Yes, it does.

Q. In fact, that's what you told the South Dakota equivalent of the Public Service Commission in your sworn testimony in that matter; correct?

A. As I sit here today, I don't recall the exact number in the testimony, but I did cite the number, and the source was PHMSA at the time the testimony was written.

Q. Okay. And in those 5,150 miles of existing CO2 pipeline, there have been 102 leaks of CO2 pipelines; correct?

A. I don't recall as I sit here today what the numbers were at that time for that mileage.

Q. Isn't that the testimony you offered to the South Dakota Public Service Commission, is there had been 102 leaks of CO2 pipelines in the U.S. out of those

5,150 miles?

A. I'm really good at remembering a lot of numbers, but I'm just missing that specific one today. You know, it -- that was taken from PHMSA data on the date and the time that the testimony was filed, and that's updated, you know, monthly. So I -- I do not recall the specific number that was included.

Q. Okay. And we can get the South Dakota PSC report to the commissioners here in North Dakota. But if I do the math, what that tells me is, of CO2 pipelines that exist in the U.S. as of your testimony fairly recently, just a couple months ago in South Dakota, 2 percent of those CO2 pipelines in the U.S. have had a release; correct?

A. I'm sorry, you said 2 percent of those pipelines? I'm not sure that I understand what you mean by that.

Q. Well, if I do the math and I take 5,150 miles of pipeline, that tells me that there's been -- and that's 102 leaks, 2 percent -- 102 leaks on 5,150 miles is 2 percent. Do you see the math I'm doing?

A. Yeah, but that math is oversimplified because it doesn't take into account what those specific leaks were. I was more specific in my testimony, whether the leaks were from line pipe or whether they were fully

contained on operator facilities from things like pump stations and compressor stations. That's the majority of leaks, are small leaks that occur at facilities or occur during the course of maintenance. The number of leaks on line pipe out on the right of way, which would be comparable to your line pipe mileage, is a different statistic.

Q. And that statistic is 37 leaks on CO2 pipelines where it's actually in the pipeline itself, not at a valve station or some other location; correct?

A. I don't recall the exact number as I sit here and I don't recall over what time frame that is either.

Q. Okay. Regardless of the time frame, there's only 5,150 miles of CO2 pipeline; correct?

A. That's the approximate mileage of operating pipeline.

Q. Would you agree with me that 102 leaks of CO2 pipelines over 5,150 miles of CO2 pipelines in the U.S. is very concerning?

A. As I sit here today, I can't recall exactly what the source of all of those releases were. And I think if it was really highly concerning, I would have testified to that.

Q. Well, those releases were of significant quantity that they were reportable releases of CO2 to

PHMSA; correct?

A. They were classified as reportable releases, yes.

Q. Sure. And in order to be a reportable release of CO2 at a pipeline or a valve station along the pipeline, it has to meet a certain quantity for the release of CO2; correct?

A. I believe quantity is one of the specifications or one of the requirements for release reporting, yes. I don't have that regulation right in front of me.

MR. BAKKE: Okay. That's all the questions I have.

ALJ HOGAN: Mr. Leibel, any questions?

MR. LEIBEL: Yes, Judge.

CROSS EXAMINATION

BY MR. LEIBEL:

Q. So Summit filed their application in North Dakota with the PSC on October 17 of 2022. Can you identify what part of the application you worked on?

A. The application that was filed originally?

Q. Uh-huh.

A. No, I can't. I don't remember working on any of the language in the application itself.

Q. Okay. Were you working for Summit prior to October 17th of 2022?

A. As I sit here today, I don't recall. It's been -- it's been well over a year. I just can't recall the exact date.

Q. Okay. Well, what I'm getting at is, I mean, at the time the application was filed, they've come up with a business plan, the engineering is done, the safety's done, I assume the plume dispersion is done, all of the planning is done. Did you have any part in any of the planning for Summit's project?

A. I've been consulting with Summit on safety issues and on compliance issues. You know, they have -- we've sat down and discussed some of the issues that are here before this Commission. We've discussed some of the issues that have come up in prior public hearings and ways to address it. My job is to offer advice as a consultant and ideas. What's actually incorporated by Summit is -- is the operator's purview.

Q. Well, and what I'm getting at is did you offer that advice after the cake was already baked and you're just here to testify today?

A. I don't think I'd characterize it that way because they've been very open about taking suggestions and ideas. And a lot of what you say is cake is baked in here, there is still a lot of detail that I think goes into the engineering design and goes into your

operating procedures and goes into your integrity management program and goes into things like your public education program and your community outreach programs. Those are things that are detailed and in-depth. And based on my review of the application, you know, it doesn't go into that level of detail that you would expect to have for an operating pipeline system. So as a consultant, I hope they take my advice before they get to operations, yes.

Q. Did you provide any of that advice prior to October 17th of 2022?

A. I -- I said I can't recall the exact date I was retained.

Q. How many hours --

A. It's been quite some time.

Q. How many hours have you put into this project?

A. I don't recall.

Q. Have you testified in front of any public service commission in other states for other pipeline companies?

A. Yes, I have.

Q. Is that your primary role as an expert, is to testify in front of regulatory commissions?

A. Expert testimony and expert witnessing comprises no more than 20 percent of my daily activities. And it

involves both permitting and public commissions such as this one as well as various litigation matters.

Q. We've heard some testimony about the 500-foot setback that's required in North Dakota generally for pipelines, setback from a residence. Is it your opinion that a 500-foot setback is adequate for a -- yeah, for a CO2 pipeline?

A. A CO2 pipeline? There are -- and I apologize to the Commission in advance. I can't answer that question just as a yes or no. There are pipelines that operate, like I said, hazardous liquid pipelines, highly volatile liquid pipelines, that operate all the way across the United States in all sorts of environments and in densely populated areas and other populated areas. There is no universal setback requirement at any point in time.

It really -- it really boils down to managing the risk of the pipeline and working through the preventive measures, that the best -- in my opinion, the best integrity management programs prevent leaks, that the potential consequences of a leak are used to inform your preventive measures, and then you spend your effort to stop the pipeline from leaking to begin with.

Q. Well, and part of the reason I'm asking this question is we've heard some testimony in other hearings

that 500 feet was safe. And today we heard Chief Briggs testify that within a thousand feet the ground was still frozen in Mississippi. And I'm asking you, is a 500-foot setback going to protect someone if there is a catastrophic failure within 500 feet of their house?

A. There are too many variables involved there. That would be a lot of speculation. I -- just -- just too big of a question.

Q. And I agree with you. And you haven't looked at this particular route with relation of the pipelines to where people's houses are along the route. Is that fair?

A. No, I have not.

Q. You haven't tracked the 300 -- whatever the 300 miles in North Dakota, to look and see or to advise the Commission as to this particular person, this particular person, this particular person are potentially within a likely danger zone?

A. I haven't tracked -- likely danger zone? I haven't looked at the route to see what the distances are from residence to the centerline of the pipeline.

Q. Okay. So when --

A. So I -- in terms of likely danger zone, I've also testified that I haven't looked at their dispersion analysis or any specifics about the route.

Q. Because you've never even seen their plume study; right?

A. No, I have not reviewed in detail their plume study. That is not what I was retained to do.

Q. And so when different members of the public testify that they're concerned about their house being, you know, 650 feet from the pipeline because they're at the bottom of a slope on the east side, you have no basis of assuring them that "Don't worry, you'll be all right"; right?

A. Well, that would -- that would require a couple of highly improbable things happen at the same time. One, that whichever pipeline you're referring to has a failure and the failure is large enough to create a worst case type of discharge plume, which is highly improbable based upon pipeline safety record and modern designs of pipeline and modern construction techniques and materials. You know, the probability of pipelines failing, they're the safest mode of transportation out there. So it's extremely unlikely. That's highly unlikely scenario one.

Highly unlikely scenario two is you have optimized weather and site conditions that the release would not disperse readily and that it would travel and it would be following terrain, which would have to be

another combination of factors that was a perfect storm, as we heard described earlier today.

Q. So when you testified earlier that you look at risks versus consequences, you don't know what the plume study looks like; right?

A. I think I've said many times I haven't been retained to study their -- or to look at the details of their plume study along the entire route. No, I have not.

Q. So you're comfortable with the risk to other people; right?

A. I think that's a misrepresentation of my testimony. I'm testifying on pipeline safety and pipeline safety considerations. And risk is a combination of likelihood and consequence. And I've testified that pipeline operators and the regulatory focus is on preventing pipeline releases, and then through, you know, public education and community awareness, to help mitigate any potential release should that highly unlikely event occur.

And I believe that Summit has got that focus. They've gone above and beyond and they have testified and they've made plans to include a number of preventive measures that exceed regulations to make sure that they work on the prevention side of the risk equation and

preclude the risk from happening in the first place.

Q. And I don't want to argue with you, sir, and I'm going to wrap up right now, but my point is, is you're saying that Summit has gone above and beyond when you haven't seen the dispersion, you didn't start consulting on the project until the application is done, and then you say, "Don't worry, everything's safe." That's --

I have no other questions.

ALJ HOGAN: Mr. Pranis, any questions?

MR. PRANIS: Yes, Your Honor. I'll keep it very brief.

CROSS EXAMINATION

BY MR. PRANIS:

Q. A question, sir, on risk mitigation. I assume that one component of risk mitigation from the PHMSA and the pipeline integrity perspective is ensuring that the pipeline is properly constructed. Is that fair?

A. That is correct.

Q. And so when we're talking about elements of proper construction of a pipeline, would you agree that the trench construction, including the -- both the excavation and the backfilling of the trench once the pipe is placed is critically important to the safe operation of a pipeline?

A. Yes, I would.

Q. And would you agree that the handling of the pipe is critically important, you know, including but not limited to the movement, movements of pipe, you know, from the truck to the machine, lowering in the pipe, the storage of the pipe, all of that can affect the integrity of the pipe and ultimately the safety of the pipeline?

A. Yes. I very much agree.

Q. And the same thing with the welding and the coating process. In order to ensure that the welds are properly constructed and that the coating is thorough in order to prevent corrosion, that's also an important part of pipeline integrity?

A. Yes, sir.

MR. PRANIS: All right. Nothing else.

ALJ HOGAN: Commissioner Christmann.

COMMISSIONER CHRISTMANN: How many jurisdictions that you're aware of, when it comes to CO2 pipelines, either out in the country or in high consequence areas, you can answer how you please on that, but how many jurisdictions require more than the PHMSA minimum block valve spacings?

THE WITNESS: On CO2 pipelines specifically? I'm not aware of any.

COMMISSIONER CHRISTMANN: What about natural

gas? Is that common or --

THE WITNESS: Natural gas comes under an entirely different code. And those requirements do vary by population, by class location. So spacing is -- varies by class location. I can't remember the exact requirements off the top of my head as I sit here today, but it is different from the liquid requirements.

COMMISSIONER CHRISTMANN: Okay. Now, I want to get back to some of the testimony as far as our ag producers that we heard earlier. And I just need a perspective from you. Like large pipeline projects, whether they'd be gas, oil, CO2, whatever, how many different large projects, 50 or a hundred miles or something or longer, would you say you've consulted on in the last ten years?

THE WITNESS: Dozens.

COMMISSIONER CHRISTMANN: Okay.

THE WITNESS: In various -- various aspects, but yeah.

COMMISSIONER CHRISTMANN: Do you recall the testimony earlier from the Doolittles?

THE WITNESS: Could you refresh my memory?

COMMISSIONER CHRISTMANN: Do you have this book of the maps, the Summit --

THE WITNESS: Maybe. Oh, is that the Doolittle

exhibit? Okay.

COMMISSIONER CHRISTMANN: That one will work if you have it or I can give you the page number in the big book. Whichever one you have in front of you.

(Pause)

THE WITNESS: Okay, Commissioner.

COMMISSIONER CHRISTMANN: If you're looking at what I think you're looking at, up in the upper left-hand corner you see a couple of sections of land. There's section 6 and 8 out of that township and the pipeline going through it; correct?

THE WITNESS: Yes, sir.

COMMISSIONER CHRISTMANN: Okay. Out of those dozens of pipelines, I don't know how many different state jurisdictions those would fall in -- I assume numerous.

THE WITNESS: Yes, sir.

COMMISSIONER CHRISTMANN: How many allow projects to just meander like that where they're almost perfectly going through quarters and whole sections of land from corner to corner instead of trying to follow and stay near edge lines?

THE WITNESS: There are a lot of considerations in pipeline routing. I can't answer specifically if the final route was -- was mandated by a jurisdiction or not

or by a particular -- I'm just not aware of any particular rule that would preclude that, but I know that it's strongly encouraged in some --

COMMISSIONER CHRISTMANN: Strongly encouraged to?

THE WITNESS: Yeah. To try to -- to try to minimize impacts where possible in some places. There are a lot of other considerations other than the plat. You know, what's the terrain like? Could you have waterways that you have to get permits for? Hills? Slopes? What about vegetation? What about land use? A lot of considerations that would go along with that.

COMMISSIONER CHRISTMANN: I understand that, but -- and we've never really mandated much in that regard, but as I look through these maps and hear testimony from people, it seems like, for the most part, it's kind of getting from point A to point B at the shortest distance. And I'm not sensing much of an effort to work with these landowners.

And I'm wondering, with your expertise of working with dozens of projects, how often you see things like this where mile after mile there's very little indication of an effort to go straight east and west or straight north and south.

THE WITNESS: Again, my experience is that the

final route usually depends on a lot of constructibility features and, you know, individual landowner negotiations may start straight but -- start straight and try to stay straight, but I don't know of very many that truly do end up as a perfect straight line. A lot of considerations.

COMMISSIONER CHRISTMANN: They don't end up as a straight line -- I'm going to try this one more time -- but do you see very many that are like this where it's almost the exact opposite of the -- of a straight line as far as north and south and east and west? It's just running at a nearly perfect 45-degree angle?

THE WITNESS: Maybe the better way to answer it is I don't know very many that actually run straight north, south, east, west and follow that grid. Almost all of them are at some sort of an angle and from point A to point B.

COMMISSIONER CHRISTMANN: Okay. And then I want to ask you about one other situation. Do you remember the Vculeks' discussion with their irrigation?

THE WITNESS: Yes, sir.

COMMISSIONER CHRISTMANN: In your projects that you've worked on -- because in my area of North Dakota there is almost no tiling. I know it's common in the east. Have you worked on a lot of projects involving

tiling?

THE WITNESS: Worked with a lot of pipeline operators, existing operators, with concerns to tiling. Because one of the big concerns in hazardous liquid pipelines, of course, is if you have a release, will it get in the tile and where will it go? Because the tile directs water in different places. And I think testimony was, you know, we're trying to direct it towards the river or we're trying to direct it towards another location.

The pipeline operators are required by regulations to consider drain tiles and the effect of drain tiles on a potential spill. So work with a number of them on their integrity management plans to help them understand where tiles are and what the impacts would be on emergency response and preparedness. Also, I --

COMMISSIONER CHRISTMANN: So you --

THE WITNESS: I'm sorry.

Also -- yes, also on construction quality to make sure the drain tiles are addressed during construction.

COMMISSIONER CHRISTMANN: So you have worked with multiple projects dealing with tiled fields?

THE WITNESS: I can't -- I can't recall if any of the projects that I've worked on had -- I know I've

worked on several and I've been involved in a couple of cases involving tiled fields.

We also produced construction quality management guidelines as part of a PHMSA research project. It's published on PHMSA's research page. It's a DNV product. And we talk about construction quality management and steps to build quality pipelines. And addressing drain tiles is one of the issues that we published work on. I was involved in that as well.

COMMISSIONER CHRISTMANN: And did you hear the testimony on the Vculeks' irrigation field where they raise potatoes?

THE WITNESS: Yes, sir.

COMMISSIONER CHRISTMANN: The revenues on a field like that are in the six and even seven digit category --

THE WITNESS: I heard that, yes, sir.

COMMISSIONER CHRISTMANN: Did it surprise you? Have you worked on projects, ever anything like that?

THE WITNESS: It surprised me because I hadn't realized potatoes was that good. Maybe I ought to get out of the horse business. But, yes, I was very surprised at the numbers and the detail that went into the potato farm. I was -- I was impressed.

COMMISSIONER CHRISTMANN: And did it surprise

you to hear that they would have that volume of parallels which is -- I don't remember what number we heard in Wahpeton, it was kind of a common number of parallels going across tiled fields, but in this irrigation field, I'm thinking it was about double the number. Did that seem astounding?

THE WITNESS: It struck me at the time as a very high number, but I don't know their exact, you know, soil morphology or what the drainage is or what sort of moisture content they're trying to maintain, but it sounds like they have a plan.

COMMISSIONER CHRISTMANN: And so knowing they have a plan like that and being surprised at the production of a field like that, do you find it kind of shocking that Summit would choose to go diagonally across a field like that rather than finding a route around it?

THE WITNESS: Well, that gets beyond my expertise in pipeline safety, but it was eyebrow-raising, yes.

COMMISSIONER CHRISTMANN: No other questions. Thank you.

ALJ HOGAN: Commissioner Haugen-Hoffart.

COMMISSIONER HAUGEN-HOFFART: Yes, I do.

You started your testimony, I think, about two

hours ago, and I need to go back to your very beginning, just to clarify. You have been hired by Summit; correct?

THE WITNESS: Yes, ma'am.

COMMISSIONER HAUGEN-HOFFART: You have been hired to do what specifically for them?

THE WITNESS: To provide pipeline safety and integrity management consulting and regulatory compliance consulting services for the pipeline project, inclusive of permit applications.

COMMISSIONER HAUGEN-HOFFART: So you've already addressed that you have not reviewed the application. So I want to go back to the beginning of your testimony --

THE WITNESS: Let me clarify that, ma'am. I did review the application. I think I testified I didn't participate in developing the application. I have reviewed the application.

COMMISSIONER HAUGEN-HOFFART: You have reviewed the complete application by Summit?

THE WITNESS: I've reviewed the summary of the application and many of the exhibits, and I've reviewed most of the exhibits that have been presented here.

COMMISSIONER HAUGEN-HOFFART: Okay. At the beginning -- this has to do with a safety concern. At

the beginning we talked about risk mitigation. And you said a great number of mitigation can be taken into account and you said prevention begins with selection of material. I wrote that down.

THE WITNESS: Yes, ma'am.

COMMISSIONER HAUGEN-HOFFART: Isn't the first mitigation risk that should be taken into account is the route, reduce as much risk as possible? I mean, you haven't even got the -- it approved --

THE WITNESS: Yeah.

COMMISSIONER HAUGEN-HOFFART: -- the first thing, and you're talking pipeline safety and you're talking the first thing is selection of material?

THE WITNESS: Well, it's an iterative process, right? Because, one, you start off with a moving product from point A to point B, and you have to figure out, well, how much product do I want to move from point A to point B? And then that's a combination of, well, what diameter line against what operating pressure and how many pump stations do I have to put into it and then, you know, how long is that route going to be from point A to point B and what are the considerations? And it becomes an iterative process between the conceptual design of the line, including materials and the route.

And my testimony -- a lot of it -- once the

pipeline is in place, you know, and once the pipeline is constructed, a lot of its preventive measures really start with selection of materials, you know, the toughness, durability, corrosion resistance.

I wasn't trying to minimize route selection at all as a mitigation, but it would be -- it would be hard-pressed in that process to choose, you know, one over the other at the beginning.

COMMISSIONER HAUGEN-HOFFART: I would choose people over material any day.

THE WITNESS: Yes, ma'am.

COMMISSIONER HAUGEN-HOFFART: Yep. Did you say that you are consulting with PHMSA in relation to their -- the Exhibit 145 on taking steps to implement new measures to strengthen safety oversight, did you say you were consulting with PHMSA?

THE WITNESS: DNV is through our -- our labs and through PHMSA research projects and grants on studying the effects of CO2.

COMMISSIONER HAUGEN-HOFFART: So the company you work with is consulting?

THE WITNESS: Yes, ma'am.

COMMISSIONER HAUGEN-HOFFART: Is anyone from DNV participating in the training that PHMSA is putting on the end of May, 31st, and June 1st?

THE WITNESS: I -- as I sit here today, I do not know. I would have to look into that.

COMMISSIONER HAUGEN-HOFFART: Is there a way you can get me that information, if anyone from your company is participating in that? Because it has to do with CO2 pipelines.

THE WITNESS: Yeah, I'm not -- if we get the -- a note on what the date is and location.

COMMISSIONER HAUGEN-HOFFART: Can you give me details on, like, who from your company is attending and their title?

THE WITNESS: I can if we -- if we are participating in the PHMSA training. PHMSA is -- they're -- if I'm not mistaken, they're restricted on having people come and present at their training sessions. They -- they limit that so that they aren't, you know, accused of playing favorites with one party or another. So I'd have to look and see if we've been asked to. I know that --

COMMISSIONER HAUGEN-HOFFART: I asked if you're attending or participating --

THE WITNESS: Oh, I'm sure there's attendance.

COMMISSIONER HAUGEN-HOFFART: Okay.

THE WITNESS: Guarantee the attendance.

COMMISSIONER HAUGEN-HOFFART: Either one I would

like to know --

THE WITNESS: Okay.

COMMISSIONER HAUGEN-HOFFART: -- who from your company is attending or participating in training.

THE WITNESS: Absolutely.

COMMISSIONER HAUGEN-HOFFART: Okay.

THE WITNESS: I thought you meant attending as a trainer.

COMMISSIONER HAUGEN-HOFFART: Well, if you're consulting with them, I'm unclear -- I have to say I don't know with a hundred percent certainty what the training is all about, but I know it has to do with CO2 pipelines.

THE WITNESS: Yes, ma'am.

COMMISSIONER HAUGEN-HOFFART: So if you're consulting with them, you would think that there would be some participation in some capacity.

THE WITNESS: Yeah.

COMMISSIONER HAUGEN-HOFFART: That's all I have. Thank you.

ALJ HOGAN: Mr. Dawson, any questions?

SUBSTITUTE DECISIONMAKER DAWSON: Judge Hogan, I do have one or two questions.

And can you just run through how you test for corrosion on the inside of a pipeline? Is that mainly

through pigs or is there any other method?

THE WITNESS: There are other methods. You can -- you can test the product stream for water content and impurities. You can put in internal corrosion coupons, which are essentially a coupon of metal inserted into the stream that's removed periodically and weighed to determine any metal loss on the coupon. You can do it through indirect methods where you estimate from aboveground surveys or locations where low spots may be where corrosion may occur, and then you may go in and do direct examinations such as a UT ultrasonic wall thickness exam that would check for internal corrosion. But, by and large, the most effective and most commonly used is in-line inspection.

SUBSTITUTE DECISIONMAKER DAWSON: And then how do you check for external corrosion?

THE WITNESS: The same tools, sir. It will measure both internal and external wall loss.

SUBSTITUTE DECISIONMAKER DAWSON: We talked about corrosion and it being caused in the alcohol plants, the -- the ethanol plants. And there was a distinction made between whether the carbon dioxide came from the burning of the gas or it came from the fermentation process, and I'm still not clear in my head.

So if I make a still in my house and I put a Bunsen burner under a beaker, is the carbon dioxide coming out of the top of the beaker or is it coming out of the -- from the -- and maybe that's not a good analogy.

Can you dumb it down for me so that I understand?

THE WITNESS: The fermentation process is enclosed and the gas coming off the fermentation process in the enclosed container is the CO2 that's captured.

If there's natural gas used to heat that, that -- and I'm not an expert in ethanol production. You know, you've got the extent of my knowledge on it here. There would be flue exhaust gases from a combustion process, but those have to be -- those would be kept away from your fermentation because you don't want to contaminate your end product anyway.

So the fermenter would be enclosed. Gases coming off the fermentation would be captured.

SUBSTITUTE DECISIONMAKER DAWSON: Fair enough. Thank you.

ALJ HOGAN: All right. Any redirect?

MR. DUBLINSKE: Just a couple, Your Honor.

REDIRECT EXAMINATION

BY MR. DUBLINSKE:

Q. Mr. Godfrey, do you still have Exhibit 155 in front of you?

A. Yes, sir.

Q. And you had some discussion earlier about the NOAA model of the plume in Satartia. Do you recall that?

A. Yes, I do.

Q. I'll let you page to 12 of 21 of that, which is where I believe that was.

(Pause)

A. Okay, sir.

Q. And I believe you had started to talk about the fact that that plume can involve very low concentrations. And we had a sidebar debate about the nature of the question and whether or not you were going beyond it. Do you recall that?

A. Yes.

Q. And then the examination went a different direction and you didn't get to finish that answer; is that correct?

A. Yes.

Q. Would you like to explain what you were saying about the plume allegedly being 25 miles?

A. Yeah. There's maximum and minimum concentrations listed here on the right-hand side and there's a color scale that is not applicable to it, but it would indicate that the minimum concentration is 4.2 times 10 to the minus 10th ppm. In terms of percent volume, that's extremely low. And in terms of any sort of impact to people or the environment, that's negligible. This is basically trace amounts. You know, how far can a trace amount of CO2 that's just above normal atmospheric concentration, how far out could you measure it?

Q. That does not represent necessarily a plume of consequence?

A. That's correct.

Q. And it occurred to me when we were looking back at that, would you agree with me that that model shows the plume going generally to the north, northwest?

A. Yes. Yes, sir.

Q. You were here for Chief Briggs' testimony; correct?

A. Yes, I was.

Q. Do I recall correctly that he said several times it was his belief the plume went to the northeast?

A. I -- I believe so. I can't recall that specifically, but I do know that -- that one of the

locations where he talked about, you know, rescuing the three individuals from the vehicle was more to the northeast of that direct line than it was to the northwest.

MR. DUBLINSKE: Nothing further, Your Honor.

ALJ HOGAN: Mr. Pelham, any additional questions?

Mr. Bakke.

MR. BAKKE: Just briefly, Your Honor.

RECROSS EXAMINATION

BY MR. BAKKE:

Q. In relation to this issue of trace amounts in the plume, you heard Chief Briggs' testimony that in three plus miles from the leak location there were individuals who had symptoms of exposure to amounts of CO2 significant enough that they had to go to the hospital. You're not suggesting by your testimony that that was trace amounts, are you?

A. I recall his testimony specifically being people that -- that said they had difficulty breathing and that were taken to the hospital at their request. I also recall him saying that they didn't have any air monitoring devices. They weren't monitoring for any concentrations. And at the time that he was responding, they didn't have a confirmation of what the gas was that

was released. So I don't know how you could get to an answer that they were exhibiting symptoms of CO2 exposure or the concentration. I didn't hear any of that, sir.

Q. Okay. So the testimony by Mr. Briggs that there were individuals in the village of Satartia 1.3 miles away, whatever Mr. Briggs testified to, who went unconscious, is it your testimony that wasn't as a result of the CO2 leak?

A. I recall him testifying that there was -- when he went into Satartia, there was a deputy there that was exhibiting symptoms. I recall him testifying that there was a family barbecuing and a lady walked out of their house and found three of their family or guests passed out in the yard. I don't recall him saying if that was in Satartia or someplace else. And I don't -- you know, it was obviously -- you know, any of those things were from the result of the release from the pipeline.

Q. The CO2?

A. Well, there was a big question too about -- and this is included in the PHMSA report, that the reservoir from which Denbury pulls has naturally occurring H2S, that the initial response and the initial reports were consistent with H2S being in the cloud. I know Mr. Briggs testified that to his opinion it didn't look

like H2S exposure, but also testified there was -- there was no testing for H2S until, you know, several hours after the initial -- after the initial release.

Q. Well, I don't think that's correct. Page 8 of 21 of Exhibit 155 in relation to that topic of H2S said, quote, "The monitoring equipment's detection limit for H2S was 0.1 parts per million," end quote.

Would you agree 0.1 parts per million of H2S cannot cause the symptoms described by Chief Briggs?

A. Could you point me to the page and paragraph again, please?

Q. Page 8 of 21 pages, right above -- the sentence right above "Summary of Return-to-Service." Quote, "The monitoring equipment's detection limit for H2S was 0.1 parts per million."

Have I read that correctly? That's my only question, did I read it correctly?

(Pause)

A. Did you read the paragraph --

Q. Did I read that line that I just quoted correctly from the PHMSA report on the Satartia CO2 leak event?

MR. DUBLINSKE: Your Honor, the witness should be allowed to read the context instead of just having to, you know, confirm something completely

cherry-picked.

ALJ HOGAN: I think we're all looking at the report and it says what you've read.

A. Yeah, it says it, but it's also taken entirely out of context. Yes, the --

Q. I don't have another question for you on that topic, but I do want to follow up on a question raised by Commissioner Christmann. And he asked you about whether there are any states in the United States where they have indicated valve distances that would be appropriate.

Do you have a copy of Exhibit 176? It should be in your binder.

A. Yes.

Q. And do you see that that is a law, legislative law, that passed in the regular session of the California Senate and was passed on September 16, 2022, where it lists the status on the first page?

A. Yes. This appears to be a report of the California Senate bill that was -- that was -- that was approved by the governor in September of 2022.

Q. Okay. And if you look at the last page, 7 of 7, under the section of that statute that was passed in California in September of 2022, California passed a law that says, under Section 71465, "Pipelines shall only be

utilized to transport carbon dioxide to or from a carbon dioxide capture, removal, or sequestration project once the federal Pipeline and Hazardous Materials Safety Administration has concluded the rulemaking regarding minimum federal safety standards for transportation of carbon dioxide by pipeline and the carbon dioxide capture, removal, or sequestration project operator demonstrates that the pipeline meets those standards."

Is that correct?

A. That's what this paragraph says.

Q. And so California has, in fact, said they're not going to allow any CO2 pipelines or sequestration locations until the new PHMSA standards come out no matter how far apart or how close those valves are; correct?

A. I thought you asked -- I thought the question was, was I aware of any states that required a valve spacing different than the PHMSA requirements.

Q. No. My question was California has said -- they have a law now that says, regardless of whether you have those valves on a CO2 pipeline close to each other or further apart, we're simply not going to allow any CO2 pipelines to be built in California until the new PHMSA regulations governing CO2 pipelines is issued; correct?

A. California has put a moratorium on permitting

new CO2 pipelines until the PHMSA regulations have been issued, but it's not specific to valves.

COMMISSIONER CHRISTMANN: Your Honor?

ALJ HOGAN: Yes.

COMMISSIONER CHRISTMANN: I asked what I asked. And I'm capable of asking what I want to ask. And I don't need Mr. Bakke to ask a different question about California and reflecting -- and reflect on it that it's based on my question. My question was my question. He answered it. I wasn't exactly thrilled about the answer, but then don't go off into a whole different topic, which is what he's done here, and do it based on my question.

MR. BAKKE: Okay. I apologize. It was a follow-up question that I was trying to clarify that issue. So I apologize that I incorporated your question in there.

That's all the questions I have.

ALJ HOGAN: Mr. Leibel, any other questions?

MR. LEIBEL: None.

ALJ HOGAN: Mr. Pranis.

MR. PRANIS: No.

ALJ HOGAN: Any other commissioner questions?

COMMISSIONER HAUGEN-HOFFART: I do.

ALJ HOGAN: Go ahead.

COMMISSIONER HAUGEN-HOFFART: Sir, how many employees are there at DNV?

THE WITNESS: Approximately -- worldwide or -- midstream, downstream, and labs, the business area that I work in, there's approximately 125 spread between Columbus, Ohio, Houston, Texas, and Calgary, Alberta. And then those of us who work remote, you know, outside of the main offices.

COMMISSIONER HAUGEN-HOFFART: Okay. So those 125 employees that you identified would consult on like what we talked about, attending the PHMSA training or participating or reviewing or assisting PHMSA with their regulatory?

THE WITNESS: I'll expand that a little bit as well and say, yes, that's the group I work for that's specific to and would work on pipeline stuff. Now, our air dispersion modeling and the people that produce the Phast software, they're a different business unit, but they would work and train with PHMSA as well. So let me bump that number up to about 150.

COMMISSIONER HAUGEN-HOFFART: Okay. Thank you.

THE WITNESS: Yes, ma'am.

COMMISSIONER HAUGEN-HOFFART: No further questions.

ALJ HOGAN: All right. Thank you, Mr. Godfrey.

THE WITNESS: Thank you, ma'am -- Your Honor.

ALJ HOGAN: All right. Next witness I have on my list is Mr. Oakes. And it's my understanding he's testifying remotely.

MR. DUBLINSKE: That is correct, Your Honor. And I saw him pop up there on the test so, hopefully, that is working.

ALJ HOGAN: Can you hear me, Mr. Oakes?

PHIL OAKES: I can, Your Honor. Can you hear me?

ALJ HOGAN: Yes, but you're quiet and I don't know if that's on our end or your end.

PHIL OAKES: I've been told I have both the voice and the face for radio so it may be on your end.

ALJ HOGAN: Can you say something again, Mr. Oakes?

PHIL OAKES: Certainly. You can hear me now?

ALJ HOGAN: It's a little better. Now we got an echo.

PHIL OAKES: Testing 1, 2, 3, 4. I'll speak up a little louder, see if that helps. How are we doing? Are we good? Can you hear me?

ALJ HOGAN: Can you say something again?

PHIL OAKES: Testing 1, 2, 3, 4, 5. Can you hear me?

ALJ HOGAN: That's a lot better. All right.

Mr. Oakes, I'll have you start by stating your full name and spelling your last name for the record.

PHIL OAKES: My name is Philip Oakes, last name O-A-K-E-S.

ALJ HOGAN: Mr. Oakes, before you testify today, I'm required by law to advise you on the penalties for perjury in the state of North Dakota.

Perjury is a Class C felony, punishable by a maximum fine of $10,000, a maximum five years' imprisonment, or both.

Do you understand what perjury is?

PHIL OAKES: Yes, ma'am.

ALJ HOGAN: And being advised of the potential penalties for perjury, do you promise to tell the truth in this case today?

PHIL OAKES: Yes, Your Honor.

ALJ HOGAN: All right. Thank you.

Go ahead.

MR. DUBLINSKE: Thank you, Your Honor.

PHIL OAKES,

being first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. DUBLINSKE:

Q. Mr. Oakes, can you hear me okay?

A. I can, yes, sir.

Q. And I appreciate your joining us even though you couldn't be here in person. Can you tell the Commission where you, in fact, are today?

A. I am actually coming to you from my dorm room at the moment at the National Fire Academy where I am attending a hazardous materials roundtable discussion with representatives from PHMSA, representatives from the EPA, and representatives from the International Association of Fire Chiefs and others, discussing hazardous material policies around the country.

Q. And, Mr. Oakes, what is it that you do for a living?

A. I am a trainer slash -- well, my official title is the chief of operations and training, which I do on a contractual basis for the National Association of State Fire Marshals. In that role, I manage their pipeline emergency response training program. That is something I have done for the past 12 years. I also work as the

chief of training for the Florida Fire Marshals and Inspectors Association, again under a contractual basis.

Q. And can you tell us a little bit about your education and relevant work background?

A. Certainly, sir. I was a volunteer firefighter in the state of Wyoming, in a rural area outside of Sheyenne, Wyoming, for over 20 years. In that time our jurisdiction grew from about seven to eight or nine pipelines that were in it. Also during that time my paid job, I worked for the Wyoming State Fire Marshal's office for five years as the State of Wyoming fire -- Fire Marshal's office as the state fire training director.

When I left that office, I went to work for the National Association of State Fire Marshals and have been conducting their pipeline training program for the past 12 years. I also am a certified Fire Officer III, certified Firefighter II, certified Hazardous Materials Incident Commander, carry degrees in fire science and business administration, and have been a volunteer EMTB, although that certification is not current at this time. It expired when I moved from Wyoming to Florida.

Q. Despite being remote, and I apologize for the inconvenience of this, but were you able to watch Chief Briggs' testimony today?

A. I was, sir. I did.
Q. And he listed a large number of training programs that he has been through. Are those -- the things that he was listing, are those the sort of training programs that you teach?
A. Yes, sir. Some, and some we get a lot more extensive with, yes.
Q. And in fact you teach a course, I believe it's through the National Association of State Fire Marshals, specifically on pipeline incident response; correct?
A. Correct, sir.
Q. And that course includes information about carbon dioxide; correct?
A. Yes, sir, it does some. Yes, sir.
Q. Is it your experience as someone that trains on pipeline safety, that hazardous liquids pipelines can, in fact, be operated safely?
A. Yes, sir.
Q. And is it your experience that even when releases do occur, they can be responded to in a manner that maintains public safety?
A. Yes, sir. That is what we teach as part of our curriculum.
Q. And let me talk a little bit about how that happens. Chief Briggs, this morning, talked about a

couple of things that he found to be obstacles in dealing with the Denbury pipeline. One of those was that there had been no outreach, that he and other people in his position in adjacent counties weren't aware the pipeline was there. From your perspective, is that a failure of best practices?

A. Yes, sir, that is.

Q. Are outreach to local responders and local communities a key part of what you train?

A. Yes, sir. As a matter of fact, part of our training includes a discussion of API's Recommended Practice 1162, which is covered by DOT PHMSA regulation, and it mandates how pipeline companies are supposed to reach out to first responders.

Q. And that outreach and training isn't necessarily something that happens once in the beginning, that is an ongoing process; correct?

A. Correct, sir. It can be, depending upon the pipeline, everywhere from every six months to a year to every two years on the pipeline, pipeline type, and the company involved.

Q. And that community outreach can start with and includes meetings like this one that the North Dakota Public Service Commission has opened up around the state for the public to participate in; correct?

A. Correct.

Q. Let's talk about equipment. Chief Briggs mentioned that they did not have air monitors or gas monitors in their set of tools. I assume that that also is contrary to best practices?

A. Yes, sir. There is only one true way to determine a plume or where your red zone, your hot zone, is when you are responding to a hazardous materials incident, and that is with a properly functioning air monitor that is used by somebody who has been trained on its proper usage and it has been maintained properly.

Q. Talking about equipment, I assume that an important part of that with regard to pipeline work is also an SCBA, a self-contained breathing apparatus?

A. Yes, sir. One of the tenets that we teach in the pipeline emergency's curriculum is the 8-step process. And one of those is selecting your -- one of those eight steps is selecting the appropriate PPE, and at a bare minimum, all firefighters working on hazardous materials should be equipped with fully functioning PPE structure gear and SCBA.

Q. To be clear, however, the SCBA is not specific or unique to dealing with pipelines, right? That is a standard part of firefighting gear?

A. Yes, sir. It's used for structure fires. It is

used for hazardous materials response. It is used when a carbon monoxide detector goes off in your home.

Q. And did you hear when Chief Briggs testified that other pipeline companies, in fact, had conducted the outreach, had met with the counties, told them about where their pipeline was, what the product was?

A. Yes, I did hear him say that. Yes, sir.

Q. In your experience, is that more commonly done than not done?

A. Oh, absolutely. Absolutely.

Q. So the fact that that was not done in Mississippi by a particular pipeline company is an outlier in your experience?

A. Yes.

Q. Is it common in your experience that fire departments along a pipeline would not have access to air monitors?

A. It would depend on the fire department. And allow me to explain. There are several rural, smaller fire departments financially that may have difficulty acquiring the air monitoring that they need. So in those cases they will take extensive measures to stay out of the plume or stay further back from an incident scene until such air monitors could get on scene, such as, for example, from what I've heard today in the

testimony, you know, a rural department waiting for the Bismarck Fire Department to show up. That would not be uncommon. For example, our department that I was in, we would isolate and deny entry to an extensive area and then wait for air monitoring to show up from the city of Sheyenne and their hazmat team.

Q. Several people today have used the term "explosion" in association with a CO2 pipeline release. Do you agree that that's an accurate use of the term?

A. I do not.

Q. Can you explain why?

A. It's a bit of a personal experience on my part, but basically an explosion involves a large violent noise, a lot of light, and a large energy release. That's typically the definition in an explosion.

Having been on the scene of explosions, I do not classify that as an explosion. I would term it as a rupture, I would term it as a leak, but I would not term it as an explosion. A rupture is a breaking or, you know, a separation like a crack or something like that, but it is not an explosion.

A good analogy of that would be a crude oil pipeline. When a crude oil pipeline leaks, we don't -- you don't typically will hear that in first responder community saying that is a -- an explosion. It's not.

It's a rupture of a pipeline. Because there's no large energy release. There is no, you know, fire or -- that sort of thing going on.

Q. If Summit were to commit to meeting with county emergency management groups along the pipeline discussing whether or not they have air monitors, making sure they do, discussing their other equipment needs, providing information about the location of the pipeline and its product, and coming back to check on calibration and maintenance and what have you of the air monitors, would that approach conform to best practices for pipeline safety?

A. Absolutely. It's been something that I've actually taught at several conferences around the country as a best practice for pipeline operators.

MR. DUBLINSKE: No further questions, Your Honor.

ALJ HOGAN: Mr. Pelham, any questions?

MR. PELHAM: I don't have any questions.

ALJ HOGAN: Mr. Bakke, any questions?

MR. BAKKE: Yes, Your Honor.

CROSS EXAMINATION

BY MR. BAKKE:

Q. Mr. Oakes, have you ever responded to a CO2 leak before?

A. Not a CO2 leak, no, sir.

Q. And you talked about this air monitoring equipment and the emergency personnel waiting until that air monitoring equipment arrives. If you wait, depending upon the length of the wait, could it be too late to save the victims or assist them before they experience further adverse health effects?

A. Sir, the basic tenets of every firefighter that is taught from day one is life safety -- sorry, incident stabilization and property conservation. If you can save a saveable life, you will do so and you will threaten your own life to do so. So what you're -- what you're trying to say is if we can see a saveable live, we will go in to save a saveable life.

Q. Okay.

A. So if we have to wait for air monitors to get further in where we can't see a saveable life, we will do so. But if we can see someone who can be saved, we will take that action.

Q. Or if you're advised that there may be individuals who are in harm's way?

A. Correct. Just as the chief testified earlier today.

Q. Okay.

A. He was advised and took the -- took that action.

Q. Okay. And you talked about the difference between an explosion and a release. And do you agree there was no flames or explosion reported in Satartia, no fireball?

A. Correct.

Q. Okay. Do you agree the event that occurred in Satartia, Mississippi, was a release of CO2 from the Denbury pipeline?

A. Yes, sir.

Q. Okay. You talked about Summit and the efforts that they plan to make with local fire personnel along the route and EMS. Have you been given any information to indicate that that has been done by anyone at Summit, for instance, with the Bismarck Fire Department?

A. I believe the question I was asked was, if Summit was to do that, would that be a best practice? And that would be a best practice. I was not told or indicated if that had occurred yet, just simply asked if it was a best practice.

Q. And are you aware of any location along the proposed Summit pipeline route where they have actually reached out and communicated with a local fire department or emergency management services regarding training and providing information to them regarding the Summit pipeline?

A. Again, sir, I was only asked, if they did it, would that be a best practice. I have not discussed with Summit if they have done that or not. I was just asked if it would be a best practice.

Q. Okay. In relation to the Satartia incident, do you have any dispute that the individuals that were exposed to the CO2 had their symptoms because of the release of the CO2 by the Denbury pipeline?

A. Sir, I was not on the scene of that incident and that would be somewhat speculative on my behalf so I don't feel comfortable in answering that.

Q. Okay. Thank you.

MR. BAKKE: That's all I have.

ALJ HOGAN: Mr. Leibel, any questions?

CROSS EXAMINATION

BY MR. LEIBEL:

Q. So Summit submitted their application in this -- to the PSC on October 27th -- or October 17th of 2022. Were you hired or consulted with Summit prior to the date that that application was submitted to the PSC?

A. No, sir.

Q. Have you reviewed that application in detail?

A. No, sir.

Q. So this information that you're telling us about best practices, have you ever told that to anyone at

Summit?

A. I have at -- yes. Yes, I have.

Q. When?

A. We attended an API conference just last week where I encountered an individual from Summit and we discussed best practices then. Because we were displaying our pipeline emergencies curriculum at that time.

Q. So the first time you've communicated anything that you've communicated to the Commission today was a week ago?

A. No, sir. The first time I discussed it with Summit was your question.

Q. Okay. And let me state it -- the first time you advised Summit any of those best practices that you discussed with the Commission today was a week ago?

A. Yes, sir.

MR. LEIBEL: I don't have anything else.

ALJ HOGAN: Mr. Pranis, any questions?

MR. PRANIS: No questions.

ALJ HOGAN: Commissioner Christmann.

COMMISSIONER CHRISTMANN: I'm still a little perplexed at what you're recommending as best practices. And when you have some pretty high population areas, I'm hearing you talk about the first responders being able

to have breathing apparatuses and such, but what about all these people in their homes or -- what do they do until help arrives?

THE WITNESS: Some of the information that has been provided today has discussed -- for example, reverse 911 or notification systems to the public so that the emergency responders could contact the public. A lot of what the public should be told to do by the response agencies is based upon the product that is being released, based upon any knowledge that the responders have of the incident in question. So those best practices -- well, actually, let me back up a little bit.

A lot of the best practices that are occurred are also part of that outreach activity that is governed by PHMSA as far as what pipeline operators are supposed to do. So a lot of the public will get some of that basic information in the meantime.

But should an event occur, that is the local emergency response agency to make those decisions and those determinations and communicate that to the public. And there's a lot of ways to do that, not just the reverse 911, but you would be amazed at how quickly things spread through social media these days along with various other means of communication. You can just --

so, I mean, I hate to just rely on the reverse 911, but you also have the alert systems that come across your phone. In my small community, honestly, over loud speakers throughout the town as well that were not just for the tornado sirens. They were for other methodologies. So we have that as well.

COMMISSIONER CHRISTMANN: And for the people who are maybe out in that potato field working or something and don't have a shelter to take to. We heard discussion earlier of vehicles that had just stopped and other vehicles that continued on but didn't run well. How do you recommend to the first responder people that you're training how they get around to rescue people if their vehicles don't work?

THE WITNESS: Sir, there are a lot of different ways to accomplish that, not the least of which, unfortunately, would be by foot, but there -- one thing you'll -- you learn quickly in the response communities is to be creative. So it would not surprise me that if response agencies have these situations, they will come up with a way to accomplish exactly what they need to do.

So regardless of if their vehicles don't work, they will find a way to make it work. They will find a way to get in and get out, even if it involves foot

traffic and having to lug equipment. I have done that personally myself over an extended distance, but it was for other related incidents such as a wildland fire.

COMMISSIONER CHRISTMANN: Doesn't it seem like responding on foot and lugging people around might be effective if they -- someone has suffered a heart attack or something and you're dealing with one or two victims, but if you're dealing with multiple residences within a pretty concentrated area in your community, that that is not going to be very effective, going around house to house and checking on people?

THE WITNESS: With a monitor in place? You may not have to go house to house. You may be able to search a larger area because you can determine where the gas is going, where it is not, and you can quickly rule out certain areas.

There are other things that you can do. People mentioned golf carts. Like I said, it is a creative process on firefighters, fire departments, emergency responders, law enforcement as far as what they will do and what they will come up with.

Now, I agree it is not an efficient process to do everything manually, but it is the lowest common denominator that you're guaranteed will work.

COMMISSIONER CHRISTMANN: No other questions.

ALJ HOGAN: Commissioner Haugen-Hoffart.

COMMISSIONER HAUGEN-HOFFART: Thank you.

You sat and talked about in your testimony best practices with Summit meeting with the county EMS; correct?

THE WITNESS: With emergency management, first responders, yes, Commissioner.

COMMISSIONER HAUGEN-HOFFART: Yes. So along with that best practices and the equipment needs, is it appropriate for Summit to cover those costs if the -- like a rural fire -- a rural volunteer fire department does not have that equipment?

THE WITNESS: It is -- it's speculative because it depends on if the fire department is going to use that equipment for other means. And allow me to explain.

SCBAs are basic firefighter equipment that all fire departments should have. There are federal grants that are available that they can apply for through the Assistance to Firefighters Grant Program to get those paid for. My own fire department, we actually applied for a state grant through energy development, through the taxes that the oil companies pay to the State of Wyoming. That's how we acquired our SCBAs.

Gas monitors, if they don't have and they need

them because of that and that's the only thing they will use them for, I can see that as being an instance, but if they're going to use them for other things such as a standard carbon monoxide response at a house or a natural gas leak that is occurring in your front yard because you were digging your garden and you hit the gas line that goes into your house, I could see that as being a shared responsibility.

COMMISSIONER HAUGEN-HOFFART: So I heard you correctly, it could be -- you would agree that a best practice maybe would be a shared responsibility of those costs?

THE WITNESS: Yes. A best -- a best practice would be a shared responsibility.

COMMISSIONER HAUGEN-HOFFART: Okay. We're in a smaller community and I don't know the population -- could someone shout it out? -- in Linton.

Let's say a thousand. Okay. And it's a rural community and we are what, 45 minutes from Bismarck? An hour? Okay. Sorry. I'm not very good with numbers.

But I am pretty certain that this is a volunteer fire department and I'm sure a lot of the people work or farm full time. And so if during the summer they're busy out in the field so we have a decrease in responders and if we have to rely on Bismarck, the

metropolitan area, to respond and it's an hour away, tell me about some of the best practices taking from a rural area versus a metropolitan area on responding to a CO2 leak.

THE WITNESS: The description you just made was a description of my fire department's situation in Wyoming. We were a rural department that was 45 minutes to an hour outside of Sheyenne. If the call went off, regardless of what the call was, on, say, noon on a Tuesday, we might be lucky to get one to two people to show up.

So you fall back on your basic training, which is isolate, deny entry, keep everybody away from it as far as you think you need to keep people away from it. And if the best you can do is to block a road and keep people from moving into it, that's what you need to do until help is on the way.

Because the other part of it is call for help from everywhere you can get it. Now that might, in your case, be Bismarck, North Dakota. It's also going to be the pipeline operator and it's going to be anybody else that you could possibly get ahold of that you need to have help. The local law enforcement, the local EMS, those sorts of things.

In our case it was the Laramie County sheriff's

office. I could be calling pipeline companies that come from Denver, Colorado. But if the best I could do for a best practice was, again, to keep everybody away from it until I had enough manpower to appropriately act in a safe manner, then that's all I could do.

And while that sounds somewhat defeatist, the simple fact is that life safety, that includes the responders, does take a bit of precedence there. And part of that is not just a problem that we see in the West. It is a problem that is nationwide with the volunteer fire service in that it's a diminishing trade. You used to have 1.2 million volunteer firefighters in the United States, and now I believe some of the polls that are coming in now saying there's about 600,000 to 750,000 at best.

So you've got an awful diminished route there, but it is what -- and I really hate to say it. It is what we who live in the rural areas are willing to have. If we don't, for example, raise mill levies for a full-time rural fire department, that's what -- that's why we go to the rural areas. We don't want our taxes to be that high. But those are the consequences for living out there, is that you have those smaller fire departments. You have those longer response times.

It's the same concept that we had before with

the risk management. You want to live in the rural area because you want these certain things, but those are the risks that are associated with living in that rural area, unfortunately.

And does that mean that your responses are going to be slower and take a little bit longer? Absolutely. The ambulance ride alone, if you need to go from my jurisdiction to Sheyenne, was one hour after you were picked up. That's just a fact of life when you live out there. But this -- again, the people wanted to live out there because of the area, the fact that they could have land and be away from everyone. So it was the risk that they were willing to absorb.

COMMISSIONER HAUGEN-HOFFART: Thank you.

I just have one comment. I want to thank you for your service on being on the volunteer fire department. I know that's a lot of commitment. I have no further questions.

THE WITNESS: Thank you.

ALJ HOGAN: Mr. Dawson, any questions?

SUBSTITUTE DECISIONMAKER DAWSON: No questions.

ALJ HOGAN: Is there any redirect?

MR. DUBLINSKE: Just a little, Your Honor.

REDIRECT EXAMINATION

BY MR. DUBLINSKE:

Q. Mr. Oakes, the discussion you were just having with a couple of the commissioners about risks and some of the issues of rural volunteer fire departments and things, those are not unique to carbon pipelines; correct?

A. That is a nationwide problem, sir. Certainly not unique to the situation, to carbon pipelines or any specific situation whatsoever. That is a nationwide problem that we are trying to address at all levels of the fire service.

Q. Well, and this issue that, you know, containment and isolation may be all that you're able to do in this situation may also apply to an incident on a gasoline pipeline, it may apply to a wildfire, it may apply to any number of natural disasters, it may apply to a violent chloride train that breaks open; right?

A. Yes, sir. It may apply to a train wreck. It may apply -- it may even apply to a vehicle fire. If you are the only one to arrive on scene and you only have one truck and you've got a semi truckload of hay that's on fire, there's not a whole lot you can do with that so it's not unique to that situation. It is the situation that we are forced to deal with with several

of the rural fire departments around the country. I mean, many, many.

Q. I want to go back to a discussion that you had with Mr. Bakke about Satartia. And have you had occasion in your professional activities to come across the PHMSA incident report for that?

A. Yes, sir.

Q. And are you at least somewhat familiar with that?

A. Yes, sir. I have reviewed it. I wouldn't say in depth, but I have reviewed it, yes, sir.

Q. And you heard Chief Briggs refer to that as the perfect storm or the worst case; correct?

A. Correct.

Q. And we had heard a number of 45 persons went to the hospital. According to the PHMSA report, do you know how many were actually admitted to the hospital?

A. The PHMSA report, if I recall correctly, sir, said one unrelated to the pipeline was admitted to the hospital, I believe was the terminology the report used.

Q. I think that's all I have. Again, thank you very much for your patience today and for going through the logistical hoops to be able to join us remotely from your conference.

ALJ HOGAN: Mr. Pelham, any further questions?

Mr. Bakke, any additional questions?

MR. BAKKE: Just one.

RECROSS EXAMINATION

BY MR. BAKKE:

Q. In terms of the PHMSA report you just referred to, which is our Exhibit 155, would you defer to the language in the report as to how many people were sent to the hospital and/or treated at the hospital?

A. Again, if I recall the report correctly, it was 45 individuals were taken to the hospital, one, again, unrelated to the pipeline was admitted.

Q. But whatever it says, it says in the report; correct? You haven't done any independent investigation of your own on how many people were hospitalized or went to the hospital?

A. No, sir, I have not done any independent review of that. It's in the report.

MR. BAKKE: I have no further questions.

ALJ HOGAN: Mr. Leibel, any other questions?

MR. LEIBEL: I have none.

ALJ HOGAN: Mr. Pranis, any questions?

MR. PRANIS: No, Your Honor.

ALJ HOGAN: Any further commissioner questions?

All right. That's all we have for you, Mr. Oakes. Thanks for taking the time to testify for us

tonight.

THE WITNESS: Thank you.

MR. LEIBEL: Judge, before we go to intervenors, is there a time deadline we're under? I know at one of them we had a 9:00.

ALJ HOGAN: Not that I'm aware of.

MR. LEIBEL: Okay. Well, I'll still move but I -- 9:00 is a little different than --

ALJ HOGAN: Sure. Do you need a few minutes to get your clients ready or are you ready to go?

MR. LEIBEL: I think we're ready.

ALJ HOGAN: Okay.

MR. LEIBEL: If I can -- I'm not going to call anyone that's not on this list, but I know they've discussed with me who wants to go first.

ALJ HOGAN: Sure. Absolutely. I'm not going to hold you to the order they were submitted to me.

MR. LEIBEL: We'd like to start with Kevin Bernhardt.

ALJ HOGAN: Good evening, Mr. Bernhardt. Could you state your full name and spell your last name for the record?

KEVIN BERNHARDT: Kevin Bernhardt, B-E-R-N-H-A-R-D-T.

ALJ HOGAN: Mr. Bernhardt, did you hear me go

through the penalties for perjury earlier today?

KEVIN BERNHARDT: I did.

ALJ HOGAN: And do you understand what perjury is?

KEVIN BERNHARDT: I do.

ALJ HOGAN: And being advised of the potential penalties for perjury, do you promise to tell the truth in this case today?

KEVIN BERNHARDT: I do.

ALJ HOGAN: All right. Thank you.

Go ahead, Mr. Leibel.

KEVIN BERNHARDT,

being first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. LEIBEL:

Q. Mr. Bernhardt, where do you live?

A. I live northeast of Linton approximately 17 miles.

ALJ HOGAN: Mr. Bernhardt, do you want to pull that mic a little bit closer to you?

THE WITNESS: I'm sorry. How's that?

ALJ HOGAN: Just pull the whole thing. There you go.

THE WITNESS: Okay.

ALJ HOGAN: That's better. Thank you.

THE WITNESS: Looks like it's going to eat me.

Q. (BY MR. LEIBEL) Mr. Bernhardt, I know the Commission is going to ask this. Can you give me a more specific legal description of where your land is located?

A. My land is on section 7 of 133-74. If you look at the map that I handed out, it shows Kevin's place and Eric's place and it shows 6. Section 7 is where my place is at. Eric's place is on section 6. And we're exactly a half a mile apart.

Q. Okay. Who is Eric?

A. My son.

Q. Okay.

A. He farms with me.

Q. And so where this document that has "Kevin" and "Eric" written on it, I'm guessing that the bottom one indicates your homeplace?

A. Yes. You can see where the numbers go through the farmyard, the trees. And then if you look at Eric's place, you can see a building where he lives and some bins and stuff so...

Q. Now, one of the things that there's been a lot of testimony about is that the minimum setback is 500 feet.

A. Correct.

Q. Do you have a residence located -- or you or Eric, are you located within 500 feet of the proposed pipeline?

A. Well, according to the measurements here with the GIS, Eric's place is, roughly, 315 feet from the pipeline. Mine would be 1,298 feet.

Q. Now, Eric's place, do you know if that's a 911 address or was that just a separate place you built for your son?

A. My son built that. He started two years ago. And he is planning on building a house there. There's a shop with an office and a living quarters there. He's planning on building a house there in the near future.

We have plans for section 6 and section 7, which I, if I have time, I'd like to get in a little more depth with it here, but that's the future plans, yes.

Q. Okay. And let's talk about your future plans for section 6, because I think that is relevant to a lot of the issues that the Commission needs to --

A. Okay.

Q. -- consider.

A. If you look closely at section 6, you can see there's a row of trees to the north. It's hard to see, but there's a little green strip that kind of goes at an

angle. About five years ago we started planting trees three quarter mile long, five rows wide. Quite a few trees. All hand-planted, all taken care of, watered and weeded.

Because the plan for section 6 is we want to put a feedlot there. We have a cow/calf operation plus we have grains. So we want to move some of our feedlot to section 6. So if this pipeline is allowed to go through there, it's going to pretty much stop the progress of that.

And if we do have to go through it with this pipe here, wherever we pound a post in or put up a cement pad or whatever we do, it's going to cause great difficulty. Because it was talked about earlier about the pipeline being four feet. Well, we've been putting feedlots in and corralling up all our lives. And we put pipe down five to six feet in the ground to hold what's on top: Panels, gates, and stuff. So four feet is not near enough. You can't go four feet because you'd only be three feet because you'd have to stay away from the pipe. So you can see -- with that pipe that close in that area, it's going to stop pretty much a lot of growth no matter what we do.

And my son wants to put a house there. At 315 feet away? I know there was a lot of testimony

earlier here with the fire departments and stuff so I'm just going to ask -- say this here. I'm not an expert, but I'm smart enough to know that a 24-inch pipe leaks or ruptures, I'm a dead man, or my son or my family, before any responder gets there.

We're 17 miles from any rural fire department. It's all gravel. It's hills. It's turns. It's not like get on a highway and go. When I leave my place to get the 17 miles to the closest town, it takes me a half hour. So a truck or a first responder vehicle or something, minimum, a half hour. And that's before anybody knows there's something going on here because it's colorless, it's odorless. Something has to show up before people respond.

So this is really -- why would somebody do this to my family? We've been here -- I'm a third generation farmer. My sons are fourth. My grandpa and dad farmed on this same land. My dad was farming on this land. He got drafted into the Korea War for two years. Went over there and fought for our freedoms, for property rights. Came back and continued to farm.

And, boy, are you guys lucky he's not here today to give you a history lesson on property rights, because that's all he's preached to us after he came back from the war. You guys got to respect your freedom, your

property rights. Take care of it. That's all we have here. You lose that, we have nothing.

Q. Now, as part of your development on section 6, are you also contemplating, you know, additional infrastructure, power, water, that --

A. Absolutely. Because with a feedlot you would have to have power, water, drainage. There's a lot involved. And it takes -- it takes time to plan all that. And you want to do it right because you're going to do it once and you're not going to redo it.

So now this pipe going through, it's very, very difficult -- it's many, many nights of sleepless nights of worrying.

I'll give you a little background of when we were first approached by Summit. Four people contacted me. Two came to my residence and two on the phone. The first two came to my residence were from Texas. I mean, each one came separate, one at a time.

They came to me, the first one, and asked me -- was going to give me a little history, what they're doing. I questioned about it. I didn't know nothing about it. He told me what their plan was. And he showed me kind of a rough draft where it's going to go. And I shared my concerns that it's way too close. Look at where this is at. I'm not comfortable with this. He

didn't care. He didn't want to listen about that. All he said is this is the route that they chose. If we don't sign this easement, they will use, and can, eminent domain on us. Well, that's where the conversation left, because after I heard that, I wasn't going to take it any further.

The next person came, I don't know, probably a month later. It was a gal from Texas. She did the same thing. I shared the same concerns. Didn't care.

Two people contacted me on the phone. Same conversation. Didn't care. All they said was "You're going to -- once we file this permit with the PSC, we can use eminent domain and you will lose because this is the route."

And then we denied surveying access because they wanted to come on my land to survey and they weren't willing to work with me so it shut me down. It's like, no, I'm not going to let these people on my land. So then I get a letter in the mail that I'm being sued. We're being sued today. We had to hire an attorney.

It's my property. I've never been in trouble with the law my whole life. Tried to respect my neighbors, my community. Now I have to hire a lawyer to defend my property because I said no, this is too close to my farm?

And consider the future generations. 30, 40 years from now, people that want to be on this -- my sons or their kids. They're going to have to live with this pipe on this area with no compensation. The little bit of compensation that Summit is trying to offer us for three years of crop damage, it's pathetic. It's going to take -- it's a 99-year lease that we have to have permission every time we do something here.

And, also, any time you dig a trench, move the earth, do something to it, you can try to put it back together as good as you can -- because we've done this. We've done waterlines. We -- I rent land where they put electricity in, and it's never the same. I'll guarantee you the first five years you're going to lose 80 percent of production on that piece where they put it back. Then it's going to probably get to be 50 percent. The best you're probably ever going to get it to is 20, 25 percent, probably the best. You can do everything you want. It's never going to be the same. You can ask any farmer out there. This is just the way it is.

Q. Now, one of the things that Commissioner Goehring talked about is he didn't think that there would be any impact on land value if there was an easement and the pipeline went across. Is yield something that a farmer takes into consideration when

either renting or buying a piece of land?

A. Absolutely. And I have to disagree with Commissioner Goehring. If you look at the other map I gave you on section 36, it shows section 36 there, and if you look very closely, the circled area is a 10-acre wetland and then there's a line that goes from corner to corner. That's where the pipe is running. It's kind of difficult to see, but if you look close, you can see it.

Okay. This is a very highly productive quarter of land with a little 10-acre wetland in it. It's a designated wetland from the Soil Conservation. I can't do anything with that. I have to keep it as a wetland. If I want to do anything with it, I have to get a special permit or I have to ask permission to do anything.

Now Summit can come and put that pipe right through that wetland with no concerns? And now you look at that quarter. What do you think that's going to do to that production? How much production am I going to lose by that going right through the heart of that quarter of land? Quite a bit.

Now, I own this section. I also rent land. Say now I'm going to go rent a quarter of land with that pipe going through knowing that 50 feet wide or 70 feet wide, whatever the width is going to be that Summit is

going to have for their -- where their pipe is going to lay, how much production do you think a guy is going to lose over that over a 99-year easement? Quite a bit. It's going to be half of what the other stuff produces.

And that's my living out there. I need every bushel, every acre, every bit I can get, I need that, especially with inflation, high cost of fertilizer, whatever we're doing out there. We're trying to do the best we can, keep the land the best we can, get as much organic growing on there, take care of it so we can feed the people of the world.

That's what we do out there. We feed people. I have a passion for that. I love that. That's why I'm doing this my whole life. I ain't doing it for the money. I love being outdoors. I love feeding people. I love taking care of the land.

I'm a third generation farmer. My dad, my grandpa worked their fingers to the bone to get where we're at. My sons are taking over. They're fourth. I'm very proud of that. And I want to keep it that way.

Q. And I want to go back a little bit. So when we're talking about a reduction in yield, is that something that is recorded, for example, for crop insurance purposes?

A. Yes. Every year after we're done producing a

crop, we have to give our yield to the crop insurance. We have to take our yield, what it did, and report it to crop insurance. Because if you have a dryer year, you get compensated for the bushels, your guaranteed yield that you have on that piece of land. And they'll take like a five-year average. So you have a good year, you produce way more than your averages, great. But now you have a strip like this in here, that's going to cut the average down pretty -- quite significantly.

And there's nothing you can do to improve that. It can rain all it wants. You can fertilize it all you want. It's going to take a lifetime. You have to put manure on it. You have to do so many things to try to get that to produce somewhat what the other land has the capability of doing.

Q. And so that yield information, is that publicly available?

A. Yes.

Q. And is that yield information something that you look at every time you're thinking about buying a piece of property?

A. Absolutely. Every time there's a piece of land for rent or for sale, your land agents, that's the first thing they do. They'll go and they'll look -- they'll announce the history of the land, the soils, the

production. That's all part of it. That's huge, what people look and how much they want to pay per acre or pay per rent.

Say this quarter of land now, it's highly productive. If I rent this out, I could get maximum dollars for it in our area, but now the guy that wants to rent it is going to come to me and say, "What about this line that's going through it? We have to deduct for that." And I would have to because you cannot rent full value on something that will not give you full value back.

Q. And what you're talking about -- your land is in Emmons County; right?

A. Correct.

Q. But what you're talking about is not unique to Emmons County?

A. No.

And then another statement I want to make, I also rent pasture because we have a cattle operation. The same thing. A few years -- it's probably five years ago, a part of land that I rent, the pasture, the wind towers went through and buried electrical line. Well, it's probably 50 feet wide. To this day -- they reseeded, but to this day there's no grass, native grass, on that piece. The little bit of stuff that they

seeded comes up. The cows go on it, they chew it down. It's black all summer. The weeds are growing. You can't fence it off so it grows because the cattle can't get back and forth. That whole year I couldn't use that pasture, I couldn't put my cattle in because the trench was open all summer. I paid rent on that land that I could not use.

What's going to happen again with this pasture that I have, mine, or that I rent? I can't take my cows out. I can't keep them from going in that trench or crossing the water. And not only that, I paid full rent. Now I'm not getting the production from that part of the land that they're using.

This is my living. It's not fair. I didn't ask for this. It's one thing if I would say I'll take the easement, sign it, and I'd accept it. But when I say I don't want this, it's too close, let's go around it or -- there's plenty of people out that they claim want this on their land. Why not go there? Why take my property rights away? Why force me to have this?

And my future. Not just for me. I mean, I'm not going to be around much longer. I'm up there in age. But my sons, their kids, the future. It's going to raise havoc with them for generations. Why would somebody want to do this to somebody that's feeding

people, people that aren't causing any problems? We're just out there doing what we love to do. Why would anybody allow this to happen to some people that are trying to just make a living?

MR. LEIBEL: I have no further questions.

ALJ HOGAN: Mr. Leibel, I know you weren't in at the last two hearings, but I believe for your firm's clients, the documents, we've been labeling them with their initials, so like KB1.

MR. LEIBEL: Okay.

ALJ HOGAN: Would that be --

MR. LEIBEL: That would be good.

ALJ HOGAN: -- acceptable?

MR. LEIBEL: Yes.

ALJ HOGAN: And I'll just ask if there's any objection to the admission of the maps.

Mr. Bender?

MR. BENDER: No objection.

ALJ HOGAN: Mr. Pelham.

MR. PELHAM: No objection.

MR. BAKKE: No objection.

ALJ HOGAN: All right. Then KB1 is admitted.

Mr. Bender, do you have any questions?

MR. BENDER: Yeah, just a few questions.

CROSS EXAMINATION

BY MR. BENDER:

Q. Thank you, Mr. Bernhardt. Just a couple questions. I want to make sure that I understand, and I'm looking at your colored exhibits so maybe you could just direct your attention to that.

A. Sure.

Q. You have labeled, looks like it may be an 80-acre tract that you have labeled "Eric's place." Do you see that?

A. Correct.

Q. Okay. And I think you said there's an office there. Is that office in something that may look like a machine shed or --

A. It's a machine shed and the -- it's hard to see, but the office is on the side of it.

Q. Okay.

A. And I don't even know, this might be an older map where it's not even on there, but there's an office on the side of this building.

Q. Okay.

A. Living quarters in it.

Q. And you said that your son is planning on building a home there some day?

A. That's correct. We are -- he's planning on

building a home there in the near future.

Q. Where would he be building the home? Would he be building it on the north end of that 80-acre tract or does he know at this point in time?

A. Well, at the time before this pipeline route came, he was going to put it right in the corner where the pipeline is running, because that's where the road is. That blue line is the gravel road that goes by.

Q. Okay.

A. So that's about where --

Q. I'm sorry, I didn't mean to interrupt you. Go ahead.

A. That blue line that you see is where the gravel road is. So he was going to put his house close to that corner of that blue line with the corner where the pipe is at.

Q. And what are those structures that are to the south and to the east of the machine shed?

A. Them are hopper bins and grain bins.

Q. Okay. And do you understand that even though there's a 500-foot setback from the pipeline when the pipeline is built, that your son would not be prohibited from building his house closer to the pipeline if he would like to?

A. Well, absolutely, but who in their right mind

would do that? I mean, that's a death sentence. I have a death sentence right here already. I mean, if this goes through --

Q. I didn't ask you a question so please just answer --

A. Okay. I apologize.

Q. That's fine.

Does your son primarily live at home and he's just going to build his home over there sometime down the road?

A. No. My son lives in Bismarck today. His wife is graduating actually this weekend to be a doctor.

Q. Okay.

A. And when she graduates, their plans are to come back to a rural community and practice.

Q. Okay. Thank you for that.

And then if I can direct your attention to this exhibit which has, I think, section 36 on it.

A. Yes.

Q. I'm not sure that I followed you, and I'm not trying to be difficult, but I --

A. That's okay.

Q. -- do want to understand. That's a quarter section in section 36, but it's not a state section; is that correct?

A. Correct. It's 160 acres.
Q. And you own that?
A. Yes, I do.
Q. And explain to me, you said the circled area is a wetland?
A. If you look -- it's hard to see, but, yeah, there's a little piece in there. It's not the whole circle. You can just kind of see the difference in coloration of the map.
Q. Yes.
A. That's ten acres that is deemed a wetland.
Q. Okay.
A. And most of the time of the year it has water in it.
Q. Okay.
A. Then when it dries up in the fall, if it does, we're allowed to hay it. That's all we can do with it with the Soil Conservation. If we want to do something else, we have to get permits or we have to do something special.
Q. And you don't -- I'm sorry. You don't believe that putting a pipeline through there, if this application is approved, would prevent you from haying that area, do you?
A. It wouldn't. But, again, tearing a pipeline

through a wetland and my cropland, it's going to cut the production down quite a bit again because -- and it's going to be rough. Because it never goes back the same as it was.

Q. What if they were to bore the wetland, would that have a negative impact on your hay production?

A. I'm not familiar with boring. I would say it's going to be better than with digging, absolutely.

Q. Okay.

A. But I'm more concerned about the quarter of the high productive land too. That's -- look at where it's going. It's going through the whole -- the heart of the cropland.

MR. BENDER: No further questions.

ALJ HOGAN: Mr. Pelham, any questions?

MR. PELHAM: No questions.

ALJ HOGAN: Mr. Bakke, any questions?

MR. BAKKE: No questions.

ALJ HOGAN: Commissioner Christmann.

COMMISSIONER CHRISTMANN: So I think I understand where Eric would like to build and where you're at. Where did you say it is you're wanting to construct the feedlot?

THE WITNESS: On section 6 where the pipe -- where you see the blue road where Eric's place is at --

COMMISSIONER CHRISTMANN: I don't have color but I assume --

THE WITNESS: Oh, you don't have color. I apologize.

COMMISSIONER CHRISTMANN: -- that's the road in between your place and --

THE WITNESS: Yes.

COMMISSIONER CHRISTMANN: Between 6 and 7.

THE WITNESS: My place and Eric's place is exactly a half a mile apart.

COMMISSIONER CHRISTMANN: Okay.

THE WITNESS: And then if you look close, you can see the treeline to the north there. It's a little green strip.

COMMISSIONER CHRISTMANN: Correct.

THE WITNESS: From that treeline, the road, between his place and my place is where we would like to construct a feedlot.

COMMISSIONER CHRISTMANN: When you say the treeline, are you talking the kind of shorter road just starting at your place and going west --

THE WITNESS: No.

COMMISSIONER CHRISTMANN: -- north side of the road, the --

THE WITNESS: If you look north --

COMMISSIONER CHRISTMANN: -- long one over the whole length of that --

THE WITNESS: Yeah. If you look north where it has 1,298 feet -- does yours have 1,298 feet written on it?

COMMISSIONER CHRISTMANN: Yes.

THE WITNESS: Right above that you can see a little green strip.

COMMISSIONER CHRISTMANN: Yep.

THE WITNESS: That whole three-quarter mile is where we planted the trees to protect -- to get it started, so we have north winds, to help protect the feedlot.

COMMISSIONER CHRISTMANN: Okay. Because I do the same thing. I do agree, four feet is a minimum but typical --

THE WITNESS: Well, when you --

COMMISSIONER CHRISTMANN: -- on those kind of structures.

THE WITNESS: Nowadays when you construct corner posts or anything, it's all pipe, it's all metal. There's no wood anymore. And you tamp these down five to six feet because there's a lot of weight hanging on top. And to get them so they don't move, you have to.

COMMISSIONER CHRISTMANN: Okay. No further

questions. Thank you, Kevin.

ALJ HOGAN: Commissioner Haugen-Hoffart.

COMMISSIONER HAUGEN-HOFFART: Yeah. I just want some clarification on Eric, that living quarters. That's a machine shop and he's got living quarters in there? He lives there at times?

THE WITNESS: Yes, especially during the busy time like seeding now and spring and calving. Instead of driving back to Bismarck every night, he'll stay there.

COMMISSIONER HAUGEN-HOFFART: And you see a lot of shops with living quarters in now.

THE WITNESS: Correct, correct.

COMMISSIONER HAUGEN-HOFFART: Have you communicated that to Summit, that that is the living quarters?

THE WITNESS: Yes, I have.

COMMISSIONER HAUGEN-HOFFART: And how did they respond?

THE WITNESS: They had no concerns at all. They just want it -- they said the route is the route, they're not changing it, and they threatened me with eminent domain. And to this day we have never gotten a contract or easement from them. It's all just been verbal. I have never received anything other than a

letter in the mail that we're being sued. And that's when we had hired an attorney.

COMMISSIONER HAUGEN-HOFFART: Okay. No further questions. Thank you.

ALJ HOGAN: Mr. Dawson, any questions?

SUBSTITUTE DECISIONMAKER DAWSON: Thank you for your testimony today. I appreciate it.

ALJ HOGAN: Any -- go ahead, Commissioner Christmann.

COMMISSIONER CHRISTMANN: When you say you're being sued, are you talking about for access for surveying --

THE WITNESS: Yes, when we --

COMMISSIONER CHRISTMANN: -- or for the actual right of way for --

THE WITNESS: Access for surveying.

COMMISSIONER CHRISTMANN: Okay. I wanted to clarify.

THE WITNESS: Yes. I apologize. I probably wasn't very clear on that.

COMMISSIONER CHRISTMANN: Thank you.

ALJ HOGAN: Mr. Leibel, any redirect?

MR. LEIBEL: No.

ALJ HOGAN: All right. Thank you, Mr. Bernhardt.

THE WITNESS: I just have one more comment. I find it interesting, down there by the door, someone has a sign up. It says "Driving the future of agriculture." Kind of correct, but in my case it's driving the future of my agriculture place out of business by putting a pipe there where it's going to be not good.

And then why would -- the plants need CO2 for survival. It's no secret. So they're taking a very valuable product out of the air that the plants need. So how is that helping agriculture?

That's just a comment I have. Thank you for the time tonight.

ALJ HOGAN: Thank you.

THE WITNESS: Appreciate it.

MR. LEIBEL: Judge, we'd like to call Kevin's wife. Ann would also like to --

ALJ HOGAN: Okay. All right. Good evening.

ANN BERNHARDT: Hi.

ALJ HOGAN: Can you state your full name for the record?

ANN BERNHARDT: I'm Ann Bernhardt. I'm Kevin's better half.

ALJ HOGAN: And, Ms. Bernhardt, were you in the room earlier when I went through the penalties for perjury?

ANN BERNHARDT: I was.

ALJ HOGAN: And do you understand what perjury is?

ANN BERNHARDT: I sure do.

ALJ HOGAN: Being advised of the potential penalties for perjury, do you promise to tell the truth in this case tonight?

ANN BERNHARDT: Absolutely.

ALJ HOGAN: All right. Thank you.

Go ahead, Mr. Leibel.

ANN BERNHARDT,

being first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. LEIBEL:

Q. So you obviously heard Kevin's testimony. Did you agree with everything that he had related about your farm and your concerns about this?

A. Absolutely. He's way too kind because it works me up way more than it does him. He was born and raised out there, I was -- I was raised next to the swimming pool, but that farm is my farm. I worked hard for that farm, and it bugs me that somebody can just take it from me.

Q. And so one of the things -- and I'm kind of

going to summarize a little bit to keep us moving. So one of the things the Commission is considering and looking at is the adverse effect on, you know, the individuals imposed by the pipeline, does this route minimize that effect. And so Kevin had testified that, you know, his concern was if that pipeline goes in right there, you know, his son and his wife aren't going to build a house there or won't want to. How does that affect you?

A. Well, I'm hoping they're going to give me some more grandchildren. I'd rather have them living close to home than in Bismarck.

It's just not fair. It's -- it's our dream. It's our plan since my boys were little boys. We're going to farm together. We're going to do something together. And it changes everything.

Q. Okay. Now, one of the things that Kevin talked about is that the pipeline going through the -- you know, going kitty-corner through your section 36 is going to impact the yields. Have you ever observed where a pipeline was put in and the ground above it didn't recover?

A. Yep. I can see it. Most people can. If you come out, I mean you -- it's obvious. If you know anything about land, if you know anything about farming,

it's obvious when you -- when you enter a field that it's there. You can see it.

Q. And so when you talk about, you know, that it's going to impact either yields or rental value or land value, can you explain what you mean by that?

A. Yeah. And I've heard that it doesn't affect land values. It does. I'll give you an example. Let's say there's two quarters of land right next to each other, identical. I mean, you're not going to find identical, but they're identical. You know, they're both cropland, they both have the same soils, they're both the same size. Mine has a pipeline going through it and the other one doesn't. We're both asking $4,000 an acre, but you can only buy one. Which one are you going to buy? You're going to take the one without the pipeline. So you tell me mine isn't worth less. Absolutely.

Q. Now, one of the -- your husband talked a little bit about, you know, how he didn't feel that Summit respected your desires to improve your land. Could you elaborate on that a little bit?

A. It's black and white. I can't -- the maps that my husband handed out, that should shock you all. It's obvious. It's black and white. They're going right through our yard. They had no concern. You'd even,

like, let me show you where it's at. They didn't care. It wasn't on their maps. They used old maps. They didn't care. And I'm like, just look here, right there is my son's place. Wasn't on their map. They didn't care. The route was the route.

Q. Now, you provided to the Commission your 2022 Emmons County real estate tax statement, which I'm going to mark as AB1?

ALJ HOGAN: Can I just do KB2?

MR. LEIBEL: Sure. That will work.

ALJ HOGAN: Okay.

Q. And what was -- what's the purpose of -- what did you want the Commission to take away from that tax statement?

A. Okay. You guys have heard it all today. I mean, you've heard all the logistics, all the -- I don't know. You've heard the safety, everything else, but you haven't heard a lot about property rights.

When you look at my property taxes, it's obvious, Kevin and Ann Bernhardt own that land. You don't see Summit Carbon Solutions' name on my property tax statement. You don't see the PSC's name on there. I don't see Harold Hamm's, Gary Tharaldson, or Governor Burgum's. That is my land.

We made monthly payments for that land. We paid

the taxes for years and years. We broke that land over -- we broke the land open, we leveled that land, we picked rocks. We worked day and night to make that land our land. We weren't going to be the generation -- we're a fourth generation farm. We weren't the ones that were going to lose it. We worked hard. I remember many nights going to bed and crying because I was that tired. We worked that hard.

And we made it. Kevin and I made it and we own that land. But what does that mean? What does it mean when you own your land when these billionaires, these big investors can come in and tell you what they're doing, when they're doing it, what they're doing, how little they're going to give you? I don't understand how you can say I own the land when somebody else can come in and do what they want to it. That blows my mind. It's my land. Them property taxes say it. The deeds in the courthouse say it.

You guys have to protect us. If we want the pipeline, that's one thing, but we don't. And obviously there's a lot of people that do so reroute it, but protect us. It's our land.

MR. LEIBEL: I have no further questions.

ALJ HOGAN: And you're offering KB2?

MR. LEIBEL: I am. Yes. Sorry.

ALJ HOGAN: Any objection to the exhibit?
MR. BENDER: No objection.
ALJ HOGAN: Mr. Pelham.
MR. PELHAM: No objection.
ALJ HOGAN: Mr. Bakke.
MR. BAKKE: No.
ALJ HOGAN: Okay. KB2 is admitted.
Any questions, Mr. Bender?
MR. BENDER: No questions.
ALJ HOGAN: Mr. Pelham.
MR. PELHAM: No questions.
ALJ HOGAN: Mr. Bakke.
MR. BAKKE: No questions.
ALJ HOGAN: Commissioner Christmann.
COMMISSIONER CHRISTMANN: I do not, but thank you for being here, Ann.
ALJ HOGAN: Commissioner Haugen-Hoffart.
COMMISSIONER HAUGEN-HOFFART: Yeah, just a comment. I had to step out. I promise I'll go and review your complete testimony.
THE WITNESS: Thank you.
COMMISSIONER HAUGEN-HOFFART: Thank you.
ALJ HOGAN: And Mr. Dawson.
SUBSTITUTE DECISIONMAKER DAWSON: No questions. Thank you.

ALJ HOGAN: All right. Thank you.

THE WITNESS: Can I add one comment? I found this very interesting. Do you know that Harold Hamm is worth $49.3 billion? And yet he feels he needs part of my farm. I find that amazing. As well as Gary Tharaldson, the wealthiest person in North Dakota, and he wants a piece of my land. It's amazing.

ALJ HOGAN: Next witness, Mr. Leibel.

MR. LEIBEL: Steve Laine.

ALJ HOGAN: Good evening, Mr. Laine. Could you state your full name and spell your last name for the record?

STEVE LAINE: Steven Laine, L-A-I-N-E.

ALJ HOGAN: And, Mr. Laine, were you in the room earlier when I went through the penalties for perjury?

STEVE LAINE: Yes.

ALJ HOGAN: And do you understand what perjury is?

STEVE LAINE: Yes.

ALJ HOGAN: And being advised of the potential penalties for perjury, do you promise to tell the truth in this case tonight?

STEVE LAINE: Yes.

ALJ HOGAN: All right. Thank you.

Go ahead, Mr. Leibel.

STEVE LAINE,

being first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. LEIBEL:

Q. Mr. Laine, before we get started on the specifics, you have prepared some documents with kind of some summaries of some of the points you wanted to make. And you prepared two that are stapled together; is that right?

A. Yes. There's two documents in there that I'd like to discuss, two sets of documents I mean.

I apologize for my voice. I have some voice issues so I'll try to keep the volume up.

ALJ HOGAN: That's fine. We'll let you know if we can't hear you. Okay?

THE WITNESS: Okay.

Q. So, Mr. Laine, can you tell me, first of all, where you own property?

A. I own property in Emmons County. It's on the PSC map page 22. And the legal description is the southeast quarter of section 26, township 134, range 75.

Q. And I'm looking at your -- one of the packets that you prepared, and it says "Steve and Pam Laine Family Trust" --

A. Yes.

Q. -- "SCS Pipeline Easement." And this first page, does this list -- well, tell us what these documents are.

A. I'll start with the documents that are enclosed include a copy of the PSC map which is found on the first page of that document. The second page is a GIS map from the Emmons County GIS where I drew in the approximate location of the pipeline easement. So you can see it in relation to the -- that quarter also has a couple of wind farm towers and the adjoining land has a pasture well that's probably 2 to 300 feet from the proposed pipeline at a lower level than the pipeline. And also it's -- you can vaguely see it, but there's a collection easement for the wind farm that crosses from the towers across the pasture that I own and additional pasture owned by my nephew --

Q. I'm going to back you up for a second. So one of the issues that has come up today is this idea of whether or not a pipeline or a power line, an underground easement affects the value of land.

A. Yes.

Q. Do you have an opinion as to whether or not that affects the value?

MR. BENDER: Your Honor, I don't have any

problem with him offering opinions with respect to his land, but I don't want him speculating with respect to other lands that he has no knowledge about.

ALJ HOGAN: I'm just paging through the exhibit here. I assume that's the testimony he's going to offer.

MR. LEIBEL: Yes.

MR. BENDER: I don't believe that was the question he asked him, Your Honor. I think he asked him does he have an opinion as to whether it affects the value of land. And once again, if he's going to focus on his land, I have no objection.

ALJ HOGAN: Do you want to clarify your -- what you're asking?

MR. LEIBEL: Okay. Yeah, I can try to do that.

Q. (BY MR. LEIBEL) So you have granted easements on your land.

A. Yes.

Q. Is that right?

Have the easements you granted affected the value of your land?

A. I believe they have, but -- and there's been a lot of talk about how it affects the value, but what I'm trying to talk about here in my documents is how it affects my income now and my future income --

Q. Okay.

A. -- for the life of this easement.

Q. So explain to us how you've come to that conclusion.

A. Okay. Well, if you look at the attached pages in front of you, there's -- they're all numbered. If you go to page 4, that shows -- in the lower left-hand corner is a corner, it's part of the southeast quarter of section 26 that the pipeline is proposed to cross. And that's pasture where it's showing there. You can vaguely see there's kind of a light-colored strip that runs diagonal across that into section 25 which is land owned by my nephew and my sister. And that -- that is a collection easement from the wind towers progressing to the next wind towers on the adjoining -- the land north of this.

Now, if you turn to the next page, page 5, you'll see a landscape picture. But that's a picture of what the land looked like last year, in the spring. And just kind of confirms what Kevin Bernhardt was talking about trying to explain to you what his pasture looks like where the collection easement crosses his pasture.

What that's -- there's -- from the land that I own where it crosses here, there's three acres of land that we don't collect any rent on because it doesn't

produce enough to support any cattle so we've just -- we deducted that from our income.

Q. So did you actually -- do you charge your renters less because of that easement that was granted?

A. Right. Normally we're getting $30 an acre for our rent. That's three acres that we're not charging rent on those three acres.

Q. So you've calculated how wide --

A. Yes.

Q. -- that dead spot is and then the length of it?

A. Yes.

Q. And you've determined that's about three acres?

A. Yes. So we've -- we've deducted that from our rental bill.

Q. And did that particular company, when they put in that collection line, was it your understanding that that was remediated with -- the topsoil was returned and it was seeded?

A. Well, the unique thing about this is, when they put in these cable -- these underground power lines, they plowed them in with a cable plow so it was minimal disruption of the soil, which sounded good. And then because it was a construction easement, the traffic and stuff on the easement, that damaged the grass so they went in and reseeded it. It's -- on the average, it's

about between 35 to 40 feet wide. It was -- it's a 50-foot easement and they damaged 35 feet of it, about 35 to 40 feet wide.

Q. And so --

A. And that's left the land basically -- this is -- you know, this is after three years and we're going -- now this year is the fourth year and there's -- because we've had some moisture now there's a little bit of grass, minimal grass coming, but this is just for three-year -- it's a 99-year sentence for me.

Q. And on the second page of this document which I'm going to call SL1 --

A. Yes.

Q. -- you have a summary of what you believe a 99-year loss would be on your property?

A. Yes.

Q. And can you explain how you reached that number? Just generally. I mean, they can ask you specific questions if they want.

A. I took the amount of money that Summit is offering on their easement offers and I use their production -- their -- what they were -- reimburse for production, and then the length of the -- the length of the pipeline, which is 2,042 feet on my land, and I calculated what those -- worked those out to a

cost-per-foot, and then multiplied by the cost -- I mean the length of the pipeline. And I did the same thing for lost rental income.

Q. And so I believe that you had indicated that you've -- in your document, you say that you're currently retired?

A. Yes. I retired two years ago.

Q. And do you rely on this rental income as your source of income?

A. Yes. That's part of what enables us to have retired somewhat comfortably.

Q. Okay. You also had, in your second packet of information, you had put together a summary of your -- concerns you had in 49 CFR 195.

A. Yes.

Q. Now, just so we're clear, the Commission doesn't have the ability to read or interpret the federal regulations.

A. Right.

Q. And so I wanted you to just summarize part of your concern.

A. Well, part of my concern -- well, in all the talk about CO2 pipelines, I decided to look at some historical things. And in 1991 the CO2 was included -- was added into the PHMSA regulations. And what they

did, they took the basic pipeline regulations that cover oil pipelines and similar hazardous material pipelines, and they were mandated by Congress prior to that to start to regulate CO2 pipelines.

Q. Would you like to see the Commission delay consideration or final approval of Summit's plan until PHMSA reissues their regulations?

A. Yeah. I think that would be the most prudent thing to do in that they are moving forward as was discussed by Mr. -- I can't remember the guy this morning that was from Bismarck, the engineer, and Mr. Godfrey this afternoon.

I don't have the expertise they do, but it's -- I always have -- things like this interest me so I wanted to see how things -- the things that stood out to me so I made note of those for you to look at. But also, as PHMSA is moving forward --

And not to correct you, Commissioner Haugen-Hoffart, the CO2 meeting that you're talking about PHMSA having on May 31st is a public safety meeting. They're gathering public -- information from the public to help them determine what -- what they need to do to address CO2 pipeline safety issues. And that's an unprecedented thing. PHMSA has never done that before. They're doing it in Des Moines, Iowa, on

May 31st and June 1st.

And part of that is so that they can move -- normally when they do this, they go through to make changes in regulations, it's a 2- to 4-years process. They're doing this public input to try to speed that process up.

I hope we have it by mid -- mid to late 2024, which is well ahead of the deadline when these pipelines have to be started. So it gives you plenty of time to determine what's the proper thing to do for North Dakota and it gives the company time to still start their pipeline project and get it completed if it's approved.

Q. Is there anything else you would like to add, that you would like to say specifically to the Commission about your land or your concerns?

A. My biggest concern is that, like Kevin and Ann were talking about, I'm a non-resident landowner, but the land is -- the land my wife and I have is something that still -- it's something for our future generations, for our sons and daughters, for our grandchildren and for future generations that we hope that we can pass on to them. And it's not a lot of income, but it's something that gives them extra to make life more secure for them, and I hope to pass that on.

MR. LEIBEL: Your Honor, I would move the

admission of SL1 and SL2.

ALJ HOGAN: Any objection to the exhibits, Mr. Bender?

MR. BENDER: No objection.

ALJ HOGAN: Mr. Pelham.

MR. PELHAM: No objection.

ALJ HOGAN: Mr. Bakke?

All right. SL1 and SL2 are admitted into the record.

Mr. Bender, did you have any questions?

MR. BENDER: Yeah, just a couple.

CROSS EXAMINATION

BY MR. BENDER:

Q. Sir, could you take a look at this exhibit? I think it's the first you discussed and I --

A. What's it say on the top of the first page?

Q. It says "Steve and Pam" --

A. Okay, I got it.

Q. -- "Laine Family Trust, SCS Pipeline Easement."

A. Yes.

Q. Is that in front of you?

A. Yes, I have that here.

Q. Did you prepare this?

A. Yes.

Q. Okay. Let's go to page 2 --

A. Okay.

Q. -- paragraph 4. I want to make sure I understand this. Under subsection (a)(i), it says "100 percent loss of rental income on pasture acres, 3.96 acres." Do you see that?

A. Yes.

Q. And is that where the roads are located going -- where the collection lines were -- not the roads, excuse me. Is that where the collection lines are located?

A. These -- these refer to the acreages that are involved in the Summit pipeline.

Q. Okay. So what you've done is you made a calculation, the fact that the pipeline would take 3.96 acres. So if you calculated that hundred percent loss; is that correct?

A. Yes, of pasture.

Q. And that's for 99 years?

A. Yeah. Because I -- you saw the dirt, the cattle are grazing dirt right now. I have -- the picture that was on page 5, that was a picture of the dirt that the cattle get to graze.

Q. But the picture of the dirt on page 5, that's for the collection lines, isn't it?

A. Yes. But that's -- I expect the same result on the Summit pipeline.

Q. Yeah, I understand that. So you're saying that that land will basically produce 0 for 99 years?

A. Well, that's what it looks like to me.

Q. Is that your assumption, sir?

A. Yes.

Q. Okay. And then --

A. Unless Summit wants to pay -- to get it to produce, I have to pay for it. Summit's not going to do anything.

Q. I understand. Let's go to the next one. You've got 50 percent loss of forage production on the pasture acres, but you don't have any acres there. How many acres are you talking about there?

A. Well, that's the pasture of 3.96 acres.

Q. You got 3.96 acres above that for the loss of rental income.

A. Yeah, I'm losing all the rental income. I did give them some -- there is some grass coming back, and I gave them the allowance that -- about 50 -- I was generous and I said I'll -- I assume there will be about 50 percent grass in the future. The rental income is lost. I'm not going to charge for land that they can't graze.

Q. But you've got -- and I'm trying not to make this difficult, but I am confused. A hundred percent

loss of rental income on pasture acres, and that's 3.96 acres; correct?

A. Right.

Q. Okay. And then let me finish. And then the next item is you have 50 percent loss on forage production on the pasture acres but you don't have any acres. And you're saying that's 3.96 as well?

A. Well, I -- I apologize for not -- it's a reference to the item number one where it talks about the three point -- a hundred percent loss of rental. Number two is production, not rental. Because the land still has some grass that's growing. And they assign the $800 -- or $267 per year of production reimbursement, so that was the numbers -- and that's explained in some other sheets in packet two.

Q. Would you agree with me, sir, that what you're doing is you're doubling up on this?

A. No.

Q. You're saying a hundred percent loss on the rental income and then you turn around and say 50 percent loss on the forage production on pasture acres? But that's land that you rent, isn't it?

A. Well, yes. The rental income is lost income. You send a bill to the renter, he sends you a bill -- he sends you a check for the rent. What I'm talking about

is how much the land would produce, and that's -- you can raise so much grass if you're making -- it's the same thing on grain. So if you can get a hundred bushels of corn, and after they run the pipeline through you get 75, that's the reduction. So after they ran the pipeline through -- ran the easement through for the wind farm, I've lost half my grass. So I've lost 50 percent of my production. That's what that's talking about.

Q. But you were renting it out; correct?

A. Yes.

MR. BENDER: Okay. No further questions.

ALJ HOGAN: Mr. Pelham, any questions?

MR. PELHAM: No questions.

ALJ HOGAN: Mr. Bakke, any questions?

Commissioner Christmann.

COMMISSIONER CHRISTMANN: There's a lot to study here, Your Honor, but I don't think I have any questions right now. Thank you.

ALJ HOGAN: Commissioner Haugen-Hoffart.

COMMISSIONER HAUGEN-HOFFART: Steven, thank you for the detailed reports, but I have no questions.

THE WITNESS: Okay.

ALJ HOGAN: Mr. Dawson, any questions?

SUBSTITUTE DECISIONMAKER DAWSON: Thanks for the

information. No questions.

ALJ HOGAN: Any redirect, Mr. Leibel?

MR. LEIBEL: No.

ALJ HOGAN: All right. Thank you.

THE WITNESS: Can I make one more statement?

ALJ HOGAN: Sure.

THE WITNESS: And in the -- totally, you know, I only have five -- five and a quarter acres or about 5.3 acres, but when I calculated all these losses out and take it out for 99 years, my loss is almost $270,000. It's not a small -- it's not a piece of small change to me. It's a lot of money for me and my family.

And they don't -- also, one thing they don't deal with is access to their pipeline easement. And they have to cross land that -- they say, because they give me -- they're not going to pay me for it, but they're going to cross as much of my land as they need to to get to it, which is going to be -- that's going to add about another $60,000 in loss because that land will be destroyed just as well.

So the losses are significant. I only have five acres. You look at people that have thousands of feet of this pipeline. They're losing millions of dollars. And I feel it's not a thing that's fair to the people of North Dakota, especially for the people that are

directly affected.

Thank you for your time.

ALJ HOGAN: All right. Thank you.

COMMISSIONER HAUGEN-HOFFART: Can I ask one question?

ALJ HOGAN: Hang on, Mr. Laine.

COMMISSIONER HAUGEN-HOFFART: Steven, I have a question for you. I apologize. You have not signed an easement with Summit; correct?

THE WITNESS: No. I've had four easements and I went -- I went through the last easement with a fine-tooth comb and I have five pages of concerns. If you want to see them, I can give them to you. When I saw that, I just decided to sign up with the North Dakota easement team and Mr. Jorde as my -- as an attorney so that -- because I don't want to try to fight this alone.

COMMISSIONER HAUGEN-HOFFART: Okay. No further questions. Thank you.

THE WITNESS: Thank you.

ALJ HOGAN: Next witness.

MR. LEIBEL: Linda Gayman.

ALJ HOGAN: Good evening. Can I get you to state your full name for the record and spell your last name?

LINDA GAYMAN: Linda Gayman, G-A-Y-M-A-N.

ALJ HOGAN: And, Ms. Gayman, were you in the room earlier when I went through the penalties for perjury?

LINDA GAYMAN: Yes.

ALJ HOGAN: And do you understand what perjury is?

LINDA GAYMAN: Yes.

ALJ HOGAN: And being advised of the potential penalties for perjury, do you promise to tell the truth in this case today?

LINDA GAYMAN: Yes.

ALJ HOGAN: All right. Thank you.

Go ahead, Mr. Leibel.

LINDA GAYMAN,

being first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. LEIBEL:

Q. Ms. Gayman, have you had -- so we've had a long day today. And I know you came in with a number of things you wanted to address. Do you feel like most of the concerns that you've -- your biggest concerns have already been voiced?

A. Yes. Yes, I do.

Q. One thing I know, there's been some discussion about whether or not you -- whether or not the Commission should delay any consideration or further consideration of the application until PHMSA has had a chance to revisit this and issue new regulations. Do you believe that the Commission should wait?

A. Yes, I do. I don't think we should go with a minimum -- I mean, this is a new adventure. I mean, this is all new to a lot of people. We really need the best to go in. We don't need the least to go in. It's because my family deserves the best. So let's not go with the least, the lowest. Let's really make this safe since -- I mean, we -- I mean, I don't want it, but let's make this safe as possible.

Q. Okay. And before I let you -- I know the Commission is going to ask, where is your land located?

A. I didn't pass that out. Do you want me to pass that out or just read it? I'm from Dickey County. Do you want me to pass it out?

ALJ HOGAN: How many copies do you have? Let me ask you that.

THE WITNESS: I have lots of them.

ALJ HOGAN: Oh, yeah. You might as well give us a map if you've got it.

THE WITNESS: Okay.

(Pause)

Q. (BY MR. LEIBEL) And I have what I'm marking as LG1, which is your initials and the number 1. Can you identify for the Commission, please, where your land is located?

A. It's in section 30, township 129, range 62, quarter southwest, Dickey County.

Q. Okay. And just so the Commission is clear, the property that you own, is that located within the corridor of where Summit is putting their pipeline?

A. Just the corridor, according to the map. This piece of land here, you can tell we're -- our family has been here for a while. It has just been a handshake on where the quarter section line is so I will be hiring a surveyor to come in and vouch where that land is, you know, so we can all be sure where it is.

Q. And how far is your residence located?

A. It's not my residence. It is on the map. Let's see. If you look on the last page with the photo of the family, if you go down the road, there's -- it's the bottom left-hand side, there's a farm there. That's where my nephew lives with his two children.

Q. Okay.

A. Our home farm is a little bit lower on the state line.

Q. Okay. And you had also included on this page that shows your family a picture of a -- it looks like a hole with some keys next to it?

A. Yes. That was actually -- those are test holes that were done about 550 feet north of the state line right -- if you see that photo butting up against where that section line is, that's -- if you just shoot down where that little burst is kind of pertaining -- that's where the test site was.

Q. Okay.

MR. LEIBEL: I would move the admission of LG1.

MR. BENDER: No objection.

ALJ HOGAN: Mr. Pelham.

MR. PELHAM: No objection.

ALJ HOGAN: Mr. Bakke?

All right. LG1 is admitted.

Q. (BY MR. LEIBEL) And did you give permission for that borehole?

A. No.

Q. I'm going to kind of ask -- since most of the issues that you had intended on talking about had been addressed, I'm going to ask just a final, like a summary, is there anything you'd like to tell the Commission?

A. It's a little frustrating. My neighbor actually

got my land description with her name on it. So I actually had to go to Oakes and that's where I found out I was actually in the pipeline end corridor. And then when they filed, that is when I found it was on the section line. Just so much better.

But it's -- I guess I'm a little disappointed that it was -- this -- we feel like we were ambushed. You know, this didn't come through the State. Nobody represented it, you know, came down, "Hey, this is going to come through. What are your concerns?"

And, you know, it's eminent domain. You know, there's nothing -- at the Oakes meeting, you know, even though it was like "Well, gee, we hate to admit this, you know, we don't -- you know, we'd like to work with you but, you know, we hate to do the eminent domain," well, then that just blows everybody out of the water. There's nothing passive about eminent domain.

And unfortunate -- you know, it's for 99 years. And the pipe's not going to last that long. So if they're going to continue it, if this is a continuance thing, that means they're going to have to come back in. That means they're going to have to dig it up. How many times within 99 years? In all reality, how long is this process going to be? So when they do offer people things, is it really going to cover all that traffic,

all that repair? I mean, how many times? This pipeline is not going to last 99 years.

And I -- but we don't know how long they're going to operate it. Over at Oakes they said, "Well, you know, hey, maybe five years and we might turn around, you know, someone else will take it over." That also scared us. You're either in the long haul or you're in the short haul. We want safety in the long haul.

So I don't think we -- you know, it's other people and their political game and their money game. We're not part of it. We're the victims.

Q. Thank you.

MR. LEIBEL: I have no other questions.

ALJ HOGAN: Mr. Bender, any questions?

MR. BENDER: Yeah, just a couple.

CROSS EXAMINATION

BY MR. BENDER:

Q. Ma'am, I'm looking at the first page of your exhibits and I want to make sure that I understand. The south half of that section that's in the middle, that's -- let me rephrase that. That section that's in the middle, that's section 30; is that correct?

A. Yes.

Q. And is it your testimony that you own the south

half?

A. Yes.

Q. Okay. Do you own the north half?

A. No.

Q. Okay. Who owns the north half?

A. That is Chad Durheim. I believe you guys have already been working with him.

Q. Have they signed an easement?

A. Things are kind of quiet with that group. I have no idea.

Q. Okay. And then where is your home located? Is it in section 30 or is it --

A. No.

Q. -- to the section to the south?

A. I live in town. It's my family that farms this out here and lives out here.

Q. How far is your family farm from the pipeline, not the corridor but the pipeline?

A. Okay.

Q. Approximately.

A. Okay. If you finish -- it's a mile and a half.

Q. Okay. So is it your testimony that because you own land adjacent to the pipeline, the Commission should prevent the owner in the north half from signing an easement?

A. No, no, no, no. That's not what I'm saying.
Q. That's fine.
A. I'm just --
Q. That's all the questions I have.
A. Okay.
ALJ HOGAN: Mr. Pelham, any questions?
MR. PELHAM: I don't have any questions.
ALJ HOGAN: Mr. Bakke, any questions?
Commissioner Christmann.
COMMISSIONER CHRISTMANN: Yeah, I'm a little confused, and actually, the first time I went through these bigger maps in the book, I wondered about this spot too because I couldn't figure out which half of the section it was on.
So I'm understanding, is that your concern, that actually you feel that it may be on your side?
THE WITNESS: It could, it could not be. That's why I want to get -- hire a survey. And there's also the term that they could move it, adjust it here and there. So what is that? Is it going to -- are they going to surprise me at the end and put it down with me? I notice that, you know, thank heavens, they're aiming for the section line, but do they deal with the people in the corridor or are they only dealing with the people in the -- in the actual pipe?

COMMISSIONER CHRISTMANN: Are you under the belief that at least the corridor part of it would be on your side?

THE WITNESS: Yes. Yes. That's why I kind of blew up the other map. But, again, you don't go by this. You got to go by the legal description. And that's what I am trying to also figure out. But I believe -- it looks like, if you go by the second page and flip it -- like I said, we eyeballed this. Now it's getting technical. You got a pipeline. You don't eyeball this anymore. And it looks like half of --

COMMISSIONER CHRISTMANN: So I --

THE WITNESS: -- south half might be -- of the corridor might be in.

COMMISSIONER CHRISTMANN: I'm really glad you were patient and waited this out so I could ask someone this. When that pipeline is on -- when the corridor potentially, if it's on two different people's property, I'm not sure what happens then, if they just pay on the side where the actual -- we call it the route, is where the pipeline would be.

THE WITNESS: Okay.

COMMISSIONER CHRISTMANN: So have they made an offer to you for something -- for the corridor? Are they trying to get an easement from you for that or --

THE WITNESS: Oh. No contact.

COMMISSIONER CHRISTMANN: Okay. Thank you for clarifying that for me.

ALJ HOGAN: Commissioner Haugen-Hoffart.

COMMISSIONER HAUGEN-HOFFART: I have no questions, but thank you for your testimony.

ALJ HOGAN: Mr. Dawson.

SUBSTITUTE DECISIONMAKER DAWSON: No questions. Thank you.

ALJ HOGAN: All right. Thank you.

THE WITNESS: Thanks.

ALJ HOGAN: Next witness.

MR. LEIBEL: Yes. The last intervenor is David Locken. David, I know, was talking about -- might have to run home to work so --

ALJ HOGAN: Is he coming back or do you know?

MR. LEIBEL: I don't think so.

ALJ HOGAN: Okay. All right. So that's all your witnesses, Mr. Leibel.

Mr. Pranis, you still want to put your witness on?

MR. PRANIS: Yes. I'll keep it quick. Mr. Whiteford.

ALJ HOGAN: Good evening, Mr. Whiteford. Can you state your full name for the record and spell your

last name?

EVAN WHITEFORD: Evan Whiteford, W-H-I-T-E-F-O-R-D.

ALJ HOGAN: Mr. Whiteford, did you hear me go through the penalties for perjury earlier tonight?

EVAN WHITEFORD: Yep.

ALJ HOGAN: And do you understand what perjury is?

EVAN WHITEFORD: Yep.

ALJ HOGAN: And being advised of the potential penalties for perjury, do you promise to tell the truth in this case today?

EVAN WHITEFORD: I do.

ALJ HOGAN: All right. Thank you.

Go ahead, Mr. Pranis.

MR. PRANIS: Thank you, Your Honor. Commissioners.

EVAN WHITEFORD,

being first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. PRANIS:

Q. Mr. Whiteford, you've testified before in these proceedings at the hearing in Gwinner; is that correct?

A. Yes, I have.

Q. And just for anyone who wasn't in Gwinner, can you briefly describe your current role and experience in the pipeline industry?

A. Right now I'm a bargaining representative for the Laborers International Union of North America. And I monitor a lot of pipelines all over the state, projects that are going underway, not only ours but other projects as well.

Q. And your past experience with pipelines?

A. Past experience in pipelines, ten years of working in the field installing pipelines, anywhere from being just basic labor to running my own crews, more specifically doing tie-ins.

Q. Okay. So I'm going to just -- we're going to go quickly through this since it's late so I'm going to jump right to the important matter. Do you know what pipeline contractor Summit has indicated they intend to use to build the main line portions of the pipeline in Emmons and Burleigh County?

A. I believe that would be Pumpco.

Q. Right. And do you have any firsthand experience with Pumpco pipeline construction projects?

A. I do. I do. I come across a couple Pumpco right of ways here in North Dakota, Williams County.

Q. Okay. And can you describe where and when

you've observed Pumpco pipeline construction projects?

A. So it was October 2020. And that would have been approximately 30 miles east of Williston, North Dakota, off of Highway 1804.

Q. And could you describe the -- to the best of your knowledge, describe the type of project that was being built?

A. So it would have been a steel oil pipeline.

Q. Do you have any estimate of the size of the pipeline?

A. Yeah. It wasn't a very big one. I want to say 10 inches; 10, 12 inches is about what stands out in my mind. That was a few years ago and didn't really think I'd be up here talking about that today.

Q. So did you make any observations with respect to the excavations that you saw on that project that you witnessed?

A. I did. I did. So I didn't -- I wasn't able to see a whole lot of this project, but what I did see from the project from the road, I did identify a couple of tie-in locations where the bell holes were not sloped properly, individuals working in these unsafe excavations with not quite but pretty close to vertical walls.

Q. And what's the cause of concern with a vertical

wall in a bell hole?

A. Well, it would be more or less a trench collapse and killing individuals.

Q. And what would, in your experience, a responsible contractor do differently on projects that you've worked on in constructing a bell hole?

A. Well, the correct way to do that would be to properly slope the bell holes out to allow that not to cave in and collapse.

Q. And in your experience, why would contractors not build the bell hole properly and slope it and, instead, build a fairly vertical wall?

A. That comes down to about two different reasons why. One would be crews in a hurry and they're just slapping that pipe in the ground and going. The other is inexperience of the individual digging these bell holes.

Q. Okay. Now, I also want to ask on that project if you had any observations with respect to the treatment of the pipe that you saw?

A. Yes. That is one that stands out pretty bright in my mind. I noticed three different tie-in sections where they had -- the company had went ahead and welded the tie-in sections together, which is not uncommon, but what wasn't right was these tie-in sections that were to

be tied in to the main line were laying right on the ground.

Q. All right. And what would be -- why would that be a cause for concern, that the pipe would be left laying on the ground?

A. Well, the general focus for these steel pipeline jobs has typically been the welds. One that I've only heard one other person today even bring up, and that would have been our ag commissioner, would be the actual pipeline coatings and the integrity of the coatings. So when these pipeline -- or when these coatings are compromised, it just allows for faster corrosion of the pipe and eventually could lead to pipeline failure.

Q. And what's the connection between the corrosion on the pipe and leaving pipe on the ground?

A. Well, when you set pipe on the ground like that, you've got an abrasive surface, rocks, gravel, any debris, and it will ding up the coating and leave pitholes in there to where moisture and oxygen can penetrate the surface of the pipe and create corrosion.

Q. And when you -- in your experience building pipelines, working for responsible contractors, did you see any stored pipe -- in terms of storage, did you see any of it on the ground in the right of way?

A. Every job I've been on, every project I've set

foot on and worked on, the only thing that touched the ground were the pup sections that weren't long enough to be reused somewhere else in the pipeline.

Q. Okay. And then have you seen any other evidence that suggests poor construction practices by Pumpco?

A. Well, I did see a handful of ranchers dragging a bull out of a slurry pit that was utilized for what I assume to be used for directional drilling mud.

Q. Okay. And what was the -- and what was the context of that? How did you come to see that incident where the bull was dragged out of the slurry pit?

A. Well, I guess where it all started was, you know, meeting with ranchers on this project and visiting with them, and then it was presented to me that this bull was in the slurry pit that they then had to use the company's excavator to drag the bull to the side of the slurry pit, dig a ramp so it can get out to where the bull had to lay there for several hours to recover to hit its feet.

Q. Now, what should have been done in that situation to prevent the bull from ending up in the slurry pit?

A. So the reason why the bull ended up in the slurry pit is the slurry pit was right in the middle of a pass-through. And the fence that they -- that the

contractor had put up around this slurry pit consisted of some T-posts loosely slapped into the ground and one strand of wire going around the pit on these T-posts and was not tight by any means.

Typically, if you're going to do something like that with an open excavation in a pasture that's got cattle in it, you're going to put a little better fence in there using multi strands and probably something a little more rigid in your corner posts like wooden posts. I don't necessarily think, for a temporary excavation like that, that full-fledged H braces would have been needed but something with a little more beef to it to hold these cattle out.

Q. And so based on your limited experience, your direct experience with Pumpco, would you have concerns about Pumpco being directed to build the largest and most sensitive portion of this pipeline?

A. In my opinion, Pumpco is a JV contractor that -- can they put a pipe in the ground? Yes. We've seen this happen. We've seen this happen in Texas. We've seen this happen here. We've seen this happen in a lot of places. Is it a contractor that I would recommend? I wouldn't want them on any of my assets, much less one that's got this much of a spotlight on it. I don't believe that they're the contractor that we need working

on this project.

Q. All right. Thank you very much.

MR. PRANIS: No further questions.

ALJ HOGAN: Mr. Bender, any questions?

MR. BENDER: Just a couple.

CROSS EXAMINATION

BY MR. BENDER:

Q. Mr. Whiteford, I understand from your testimony that you want to make sure that, if a pipeline is installed, it's installed properly; is that correct?

A. Yes, sir. That is 100 percent. We --

Q. Okay.

A. So a pipeline is what's given my family an income for lots of years.

Q. Mr. Whiteford, I apologize, but we've been here for a long time so --

A. I know we have, but this is important. So we need to protect this industry across the board. We keep having these slapshot contractors come through and just throwing pipe in the ground. That's going to make this process even longer in the future, this right here. It's going to be harder and harder to get approvals and permits to get these pipelines in the ground. So, yes, I take this really serious.

Q. I understand.

A. I want to see the future of this pipeline stick around.

Q. Okay. So, Mr. Whiteford, I think you've indicated both by answering my question and the statement that you made, that making sure the pipe is installed properly is very important to you; is that correct?

A. Yes, sir.

Q. And I think one of the examples you gave is the pipe -- you're concerned about some of the coating being scraped off the pipe and that's a concern for you; is that correct?

A. That's a big concern.

Q. Pardon me?

A. That's a big concern.

Q. When you saw this happen on this 30-mile pipe, I think you said it was east of Williston, did you report it to anyone?

A. Who am I going to report it to?

Q. Did you report it to anyone?

A. No, I did not.

MR. BENDER: Okay. No further questions.

ALJ HOGAN: Mr. Pelham, any questions?

CROSS EXAMINATION

BY MR. PELHAM:

Q. As far as your knowledge, sir, of where Pumpco is getting its workers in North Dakota, if you know?

A. I cannot see that -- I can't tell you where they come from. I can tell you that there's a lot of out-of-state license plates floating around the job sites.

Q. Do you know if Pumpco hires union or non-union workers?

A. Non-union.

MR. PELHAM: I don't have any other questions. Thank you.

ALJ HOGAN: Mr. Bakke, any questions?

MR. BAKKE: No questions.

ALJ HOGAN: Mr. Leibel, any questions?

MR. LEIBEL: No questions.

ALJ HOGAN: Commissioner Christmann.

COMMISSIONER CHRISTMANN: None, but thanks for hanging around, Evan.

ALJ HOGAN: Commissioner Haugen-Hoffart.

COMMISSIONER HAUGEN-HOFFART: No questions. Thank you so much.

ALJ HOGAN: Mr. Dawson.

SUBSTITUTE DECISIONMAKER DAWSON: No questions.

ALJ HOGAN: Any redirect?

MR. PRANIS: Just briefly.

REDIRECT EXAMINATION

BY MR. PRANIS:

Q. Mr. Whiteford, have -- in the past when you've noted problems on pipeline projects, have you brought those to the attention of authorities or of pipeline owners or contractors?

A. I have, if I know who to contact. This was a particular project owner that I have no experience with and so, therefore, I have no contact info within that company.

Q. And in your experience, generally when you've brought these to the attention of companies or authorities with whom you don't have a relationship, has it resulted in any changes to the project?

A. It has. If I can throw an example out there. There was a situation where I was driving down a road, and next thing you know, a big drag section, which would be the pipe that's going in for a directional drill, is hanging over the road and the flaggers are directing traffic under this pipe as they're hanging this over the road. From there I was able to contact the company representative that I knew and notified him of the issue, I showed him pictures and a short video, and

within minutes that -- that whole evolution was shut down until they could reconvene and figure out how they're going to do this a safer way.

Q. But that was a case where you had an existing relationship with the owner of the pipeline; is that correct?

A. Yes, it was.

Q. Right. But, generally speaking, pipeline contractors and owners are not taking advice from you on how they should build their projects?

A. Typically, no. I've told them about other things in the past and they've just kind of shrugged that off.

Q. Thank you.

ALJ HOGAN: All right. Mr. Bender, did you have any other questions? I know you were the only one who asked the first time.

RECROSS EXAMINATION

BY MR. BENDER:

Q. Have you ever witnessed a situation where a union pipeline company has made some errors?

A. Well, yeah. I mean --

MR. BENDER: No further questions.

ALJ HOGAN: All right. Thank you, Mr. Whiteford.

THE WITNESS: You done with me?

ALJ HOGAN: Yep.

THE WITNESS: Great.

ALJ HOGAN: Do we have any other individuals that want to provide public testimony tonight? Okay. A couple?

Okay. You want to come forward. We're going to finish up public testimony.

Good evening. Could I get your name and if you could spell your last name for the record, please.

ARLENE MEISSEL: Arlene Meissel, M-E-I-S-S-E-L. I'm a resident of Bismarck, but I'm a landowner here in Emmons County.

ALJ HOGAN: All right. And, Ms. Meissel, were you in the room earlier when I went through the penalties for perjury?

ARLENE MEISSEL: Yes.

ALJ HOGAN: And do you understand what perjury is?

ARLENE MEISSEL: Yes.

ALJ HOGAN: And being advised of the potential penalties for perjury, do you promise to tell the truth in this case today?

ARLENE MEISSEL: Yes.

ALJ HOGAN: All right. Thank you. Go ahead.

ARLENE MEISSEL,

being first duly sworn, testified as follows:

ARLENE MEISSEL: Okay. I am the sister to Mike Rohrich who spoke earlier today. So he's already described the real estate that's involved here. It's -- we own six quarters and four of those are impacted by this project.

Now, I believe most of you know or have heard of Lloyd Omdahl. You're in that era. He was one of North Dakota's 34th lieutenant governors under Governor George Sinner. Prior to that, he's a professor of political science at UND and he writes opinions and they're published. Seldom do I read these, but this one jumped out at me.

I'm going to read what was published very recently, on April 27th, 2023, in the edition of The Bismarck Tribune about our North Dakota legislature which just recessed. When he references the legislature and classes of people, exchange those with Summit, the PSC, and the landowners and the public, because much of what he says can apply here. And maybe some of you saw his opinion. It's entitled "North's Dakota Legislature Waging Class Warfare."

"If little else, the North Dakota Legislature is giving us a classic example of class warfare. Of

course, those benefiting from the conflict are quick to deny its existence because it reveals their greed and selfishness. Intelligent observers untouched by the issue have confirmed that there is a long-standing conflict between the wealthy ruling class and the poor.

"The ruling class is that class which controls the state and owns the means of production, including the land, natural resources, oil, workshops, factories, giant retail businesses, and financial institutions. On the other hand, the actual producers of wealth are those in the lower class who have nothing but their ability to work and are therefore practically owned as slaves. According to Rosseau, the thoughts of the upper class are, quote, 'You have need of me because I am rich and you are poor. Therefore, I will permit you to have the honor of serving me.'

"In Federalist No. 10, James Madison affirmed the existence of a class conflict, quote, 'the most common and durable source of factions that have -- has been the various and unequal distribution of property. Those who hold and those who are without property have ever formed distinct interests in society,' unquote.

"In the contemporary world, billionaire philanthropist Warren Buffet told the New York Times tongue-in-cheek, quote, 'There's class warfare all

right, but it's my class, the rich class, that's making war, and we're winning.' He often complained that his secretary was paying more taxes than he was.

"Because there are no poor people in the Legislature, it enacts laws that are suited to the middle and upper classes. Even though some of these laws would be turned over if the public was given a chance to vote on them, the Legislature is determined not to hear the voice of the lower class. Every session, the Legislature has sought to shut the people out by curtailing the initiative and referendum. With no effective opposition party, the Legislature will get away with it and the state will move further down toward authoritarian government.

"One of the big issues in the Legislature has been two kinds of tax cuts, income tax and property tax. Both are structured to give the biggest windfalls to the wealthy. The upper class legislators were more excited about the tax cuts than about the needs of thousands of low-income people who are working two jobs to make it through the month. That is class warfare.

"Nothing was said about giving every failing student tutoring to make them more productive in later life. We are deserting them.

"In 'Moral Man and Immoral Society," Reinhold

Niebuhr said that, quote, 'It has always been the habit of privileged groups to deny the oppressed classes every opportunity for the cultivation of innate capacities and then accusing them of lacking what they have been denied.' This is class warfare.

"On the whole, the Legislature has been focused on economic programs that eventually benefit the wealthy. There has been practically no discussion on the human needs in the state. That is class warfare.

"Free lunches in the schools for all children was dropped at one point because it would cost 10 million. This is when the Legacy Fund is brimming with over 9 billion with cash carryover to the next biennium is another 2.5 billion. This is class warfare.

"As I have noted in the past, this money belongs to every person in North Dakota and not the privileged few. So where are the benefits for the struggling lower class? Why aren't the kids of today as entitled as kids 20 years from now? This is class warfare.

"No one will answer these questions because the legislators are not held accountable in their home districts."

Now, related to what -- his opinion, the legislature had a number of bills to act on this year regarding the landowner rights which would have helped

what we are dealing with here today. I sat in hearings where the rooms were packed with many landowners. The big company lobbyists won. As referenced in what Omdahl said, I think had some of those bills gone to the public to vote, the outcome would have been totally different.

Omdahl's article states the legislature has been focused on economic programs that eventually benefit the wealthy. That is what we have here. Summit's pockets are deep and never-ending and threaten to use eminent domain to get what they want, and they want the landowners and we're losing.

If the government tax credits were not behind this project, would Summit and its investors have started the unsafe project or go through -- go to all the ends to get the land that they want and need? If this project should be permitted and completed, as Omdahl said, this economic program will benefit the wealthy as they are set to make billions on this project.

At one of the Senate hearings I attended, I sat beside a banker. And I wish I would have asked his name and which bank he was affiliated with. He was telling the landowner next to him that their board had recently met and they were going to require extra collateral or extra money or collateral to finance land that was going

to have a CO2 pipeline on it. If that is the case, it's going to hurt the beginning farmer and it will benefit the large landowner who can provide the collateral that's needed. Another example of benefiting the wealthy or making the rich richer.

There's talk of the government tax credits Summit's to receive in this property or real estate taxes they allegedly will pay each county. However, Summit personally will not be paying those taxes for ten years. They will submit that bill to the State of North Dakota and it will be paid from the State's general fund to each respective county. Any references made to the government and to taxes, that is us. That's you and me. It's our money. Those of us that actually pay taxes.

I, like many, do not have the luxury of write-offs and I pay taxes. I am like Warren Buffett's secretary, pay more taxes than many of the wealthy, and likely more than many of those that are investors in this project, which information Summit has not fully shared.

Speaking of taxes, if this project is permitted and completed, landowners, residential and farmland, likely will be going to the county assessors to have their property which has a CO2 pipeline devalued. This will result in less revenue for the county. How is that

revenue going to be made up? Very likely, an increase in mill levies. Again, the landowner is losing.

As for production of the land, Kevin -- the land Kevin was talking about, the pasture with the trench on it, that's our land that he rents. I have pictures of it if you want to see where, yes, you can -- this distinctly -- they were taken yesterday where -- and they are very good stewards of the land. It's not overgrazed, the pastures and so forth, but you can see where that will never be the same.

And NextEra, when we -- I guess if I'm going to compare NextEra and Summit, when NextEra came to us for the wind towers -- we have two wind towers and they asked -- well, we had this cabling put on -- through, they were very transparent, very good to work with, up until it came time when this pasture -- there's a trench. Like Kevin said, it went all summer. Kevin talked to them and I talked to them. Fill that trench and to fix the fence so he could put his cattle in there. Not until -- I think it was September, now it's getting too late for Kevin and Ann to use that pasture. Not until I threatened to proceed did they finally fix the -- fill the trench and fix the fence. But because they were not able to use it -- my mother at that time was still alive -- we went ahead and I asked that they

refund us so that we could refund Kevin, he has to pay the rent, that they finally did. They were, like I said, transparent up to that point.

Different than what Summit is from the beginning. If we had this problem with NextEra who was allegedly a good company, what problems or what -- how is Summit going to fulfill their promises that they say they are? No. I don't trust them.

Going on. I guess talking about frost and not heaving so much, but I remember -- and I guess this is where we got our work ethic from our parents and stewards of the land. Each spring we would be out there before rockpickers. We'd have the tractor. One of us would drive and two or three of us were in the front of the farmhand and -- every year we joke about that rocks grow. And it's from the frost. And we'd swath up and down, back and forth until those rocks were picked. We did this every year.

And I could go on, but I'm going to end with, I guess -- I'm going to go on and end with what is being said that you, the Public Service Commission, you have a large -- you haven't had such a large issue since DAPL. And this is one of the larger headaches and a different headache than what you had with them.

The rumor on the street is you have your minds

made up on this permitting with Summit long before these hearings are even started because of the dollars and the people behind it. Don't prove much of what Lloyd Omdahl has had in his article to be true. Stop having North Dakota being the dumping ground. Stop the wealthy from becoming more wealthy on the backs of the landowners. This is not economic development for North Dakota. Prove the rumors wrong. This project is not safe. And it's going to devalue our property.

I urge you not to permit this project. And if not for -- and if for some reason you feel that you must, please do not do so until PHMSA has filed new regulations, the updated regulations, and place whatever restrictions you must to make this pipeline safe for all of North Dakota.

And if you'd like to -- and I welcome you -- Kevin, I'm sure, and Ann would take you there too, but if you want to see the land that this trench is on to show it's never going to be the same, you are welcome to go out there at any time.

And I'm open for any questions.

ALJ HOGAN: All right. Thank you.

Mr. Bender, any questions?

MR. BENDER: No questions.

ALJ HOGAN: Mr. Pelham. Mr. Bakke. Mr. Leibel.

MR. LEIBEL: No questions.
ALJ HOGAN: Commissioner Christmann.
COMMISSIONER CHRISTMANN: None, but thank you for hanging around. Appreciate it.
ARLENE MEISSEL: Thank you.
ALJ HOGAN: Commissioner Haugen-Hoffart.
COMMISSIONER HAUGEN-HOFFART: Thank you so much, Arlene.
ARLENE MEISSEL: Thank you.
COMMISSIONER HAUGEN-HOFFART: No questions.
ALJ HOGAN: Mr. Dawson.
SUBSTITUTE DECISIONMAKER DAWSON: Thanks.
ARLENE MEISSEL: Thank you.
ALJ HOGAN: All right.
ARLENE MEISSEL: I'll be at the Bismarck hearing.
ALJ HOGAN: All right. Do we have others that want to provide public testimony tonight?
UNIDENTIFIED SPEAKER: (Inaudible).
ALJ HOGAN: I hear somebody, but I can't see you. Are you going to be able to get up the stairs over there?
MERRICK HOPKINS: We'll find out.
ALJ HOGAN: We can maybe move a mic down.
Good evening. Could I get your name and if

you'll spell your last name for the record, please.

MERRICK HOPKINS: Merrick Hopkins, H-O-P-K-I-N-S.

ALJ HOGAN: Mr. Hopkins, were you in the room earlier when I went through the penalties for perjury?

MERRICK HOPKINS: Yes. I seen them on TV.

ALJ HOGAN: Okay. And do you understand what perjury is?

MERRICK HOPKINS: Yes, I do.

ALJ HOGAN: And being advised of the potential penalties for perjury, do you promise to tell the truth in this case today?

MERRICK HOPKINS: Yes, I do.

ALJ HOGAN: All right. Thank you. Go ahead.

MERRICK HOPKINS,

being first duly sworn, testified as follows:

MERRICK HOPKINS: Okay. I work out on the water treatment plant, South Central Regional Water system. And there was a lot of problems with the hook-up out of the river where they come up at a 45-degree angle when they should have been at 22, so they had to tear everything back out of the river. They lost the barge, sank to the bottom. Had to fish all their equipment off, that's including a trackhoe on there and other stuff. That was with industrial -- American Industrial,

I believe.

And then King Industrial was putting the pipeline across Beaver Bay. They laid out probably two miles of pipe on the south side of Beaver Bay and they could never get it hooked up because they couldn't get across the river. They found out they were hitting a train abutment for the bridge for the old train. So meanwhile their pipe laid there. They didn't do anything about it. They eventually just gave up and drove off, packed up their stuff, drove off. That's where King took over. King put it through in a day. Didn't use any of that pipe that was two and a half miles drug out, already put together.

Inside the water treatment plant, they had valves blow off from people doing incorrect things with the valves, not closing the right one and opening the wrong one, and they had valves just explode on the start of the treatment plant. They almost -- you know, it could have killed some people but, luckily, nobody was injured. These are hundred-pound valves, just exploded like grenades inside the plant.

From what I've seen in Strasburg and around here when the oil pipeline went through, they were a bunch of 20-year-old kids, never been to college, were just out there to -- I kind of drove by and watched them. They

had no idea what they were doing. These are 18-year-old, 20-year-old kids out there spinning a fire wheel to heat up the pipe and other guys welding it together, but these 18, 20-year-old kids, they don't know what they're doing heating this pipe up. They don't know the optimum temperature of it.

As far as the waterline goes, we had major breaks. There was 1.5 million gallons missing in Emmons County. They're still not sure where it went. They found 200,000 gallons of it just outside of here, just past the bridge. I'm not sure where they found the rest, the other 1.3 million gallons.

There was a leak just outside of town here on 13 and 83 where I walked for two days, 20 miles, looking for the leak, to find out that where they started me from was where it was. I was standing on top of the start, but they made me walk in 98 degree weather for 20 miles finding this thing over two days.

So how easy is this to find? Do I got to walk 20 miles just to drop dead somewhere out in the middle of a field, nobody comes to find me or -- or we should have all died right on the spot where the leak was.

And another thing to say. I seen on Karen Kingston's Substack that there's a new plant out that Bill Gates is involved with that takes carbon dioxide,

produces it into mRNA instead of producing oxygen. So what do we need the pipeline for? Oh, I guess to remove the carbon dioxide, I guess. Because the new plants are going to not produce oxygen, which we all need. That's why when you yawn, you're short of oxygen. I seen a bunch of you yawning earlier, so you're short on oxygen. So if you're going to pump it out of the air, then what are you going to breathe? If nothing is making it, the plants need it to make it.

ALJ HOGAN: All right. Anything else, Mr. Hopkins?

MERRICK HOPKINS: No, I guess not. I'm just an Emmons County house owner and I live in Strasburg and I built a lot of waterlines all over. I've got ten years or more in.

ALJ HOGAN: All right. Well, thank you.

Mr. Bender, any questions?

MR. BENDER: No questions.

ALJ HOGAN: Mr. Pelham. Mr. Bakke.

MR. BAKKE: No questions.

ALJ HOGAN: Mr. Leibel.

MR. LEIBEL: No.

ALJ HOGAN: Commissioner Christmann.

COMMISSIONER CHRISTMANN: No, but thank you, Mr. Hopkins.

ALJ HOGAN: Commissioner Haugen-Hoffart.

COMMISSIONER HAUGEN-HOFFART: No, but thank you so much.

ALJ HOGAN: And Mr. Dawson.

SUBSTITUTE DECISIONMAKER DAWSON: Thanks.

ALJ HOGAN: All right. Thank you so much.

JEFF MAGRUM: Good evening.

ALJ HOGAN: Good evening. I'll have you state your full name for the record and spell your last name.

JEFF MAGRUM: For the record, I'm Jeff Magrum, M-A-G-R-U-M. I'm the senator for District 8. And glad to see that the two hearings you had in District 8, we get to stay up all night. You only have one left so...

ALJ HOGAN: All right. Senator Magrum, were you in the room earlier when I went through the penalties for perjury?

JEFF MAGRUM: Yes, I was.

ALJ HOGAN: And do you understand what perjury is?

JEFF MAGRUM: Yes, I do.

ALJ HOGAN: Being advised of the potential penalties for perjury, do you promise to tell the truth in this case?

JEFF MAGRUM: Yes, I will.

ALJ HOGAN: All right. Thank you. Go ahead.

JEFF MAGRUM,

being first duly sworn, testified as follows:

JEFF MAGRUM: Well, why I'm here tonight, because I already testified before you in Bismarck, is to just make you aware that -- the commissioners aware that there was two laws that were just passed and signed by the governor concerning -- one is concerning foreign adversaries owning real property and another one is foreign governments owning ag land. And so I would like to present these to the committee here so they're aware of what we just got passed. And the one just got signed by the governor.

(Pause)

JEFF MAGRUM: So mostly I heard the concern this morning about the investors in the pipeline. And so with these two laws that have been passed, I would expect that they would -- Summit Carbon Solutions would now have to disclose who their investors are so we know who -- if it's a foreign adversary.

Now the six foreign adversaries that are on the list of the United States is: The People's Republic of China -- we know China has been really trying -- not only are they trying to buy up our land in America and in North Dakota, but they've been attacking our state internet system to the tune of thousands per day of

attacks on our IT system; as well as the Republic of Cuba; Islamic Republic of Iran; Democratic People's Republic of Korea, North Korea; the Russian Federation; and the Venezuelan politician Maduro. Those are the six that can't own land in North Dakota.

Now, there's -- there is a component in there to ask the attorney general for his opinion. Then he can investigate if this company qualifies with their investors, which we don't know, because many people have asked who the investors are and we -- I personally have not heard who the investors are.

So that's what I'm here for, just to keep it short and sweet.

ALJ HOGAN: All right. Thank you, Senator.

Any questions, Mr. Bender?

MR. BENDER: No, I don't have any questions.

ALJ HOGAN: Mr. Pelham.

MR. PELHAM: No questions.

ALJ HOGAN: Mr. Bakke. Mr. Leibel.

MR. LEIBEL: No questions.

ALJ HOGAN: Commissioner Christmann.

COMMISSIONER CHRISTMANN: So on either or both of these, who brings the investigation? If any investment -- if just someone accuses that there might be foreign investment involved in it, then that brings

the attorney general into it to do an investigation? It seems like most investigations have to start with somewhere, and I'm -- I haven't had the time to read these so I'm wondering what the beginning point of that is.

JEFF MAGRUM: Well, Commissioner Christmann, I'm assuming that's up to you folks to -- that's why you get the big bucks, to figure out who the investors are, being it's a law, and I do know that you have to follow the law.

Although, I hope that this Commission is looking at the public testimony as a strong part of the -- I mean, not just the law, because we have had overwhelming opposition to this pipeline in District 8 and there's over 60 miles of it. We have not, in this hearing or in Bismarck, had any supportive testimony from landowners. And I hope that you're taking note of that. And I've watched diligently and I haven't seen any support of landowners. The ones that have signed up, some of them have expressed to me that they wish they would have never signed up.

So I guess as far as finding who -- I know the question was asked by Mr. Bakke earlier who the investors are, and I think he got overruled. I don't think that the question was ever answered as to who the

investors are, but I assume it's your duty to find out before you can issue a permit if this company is partially owned by foreign adversaries. Because they are taking up a large swath of land in North Dakota as well as the Midwest.

But our concern is -- my concern is my -- the people I'm supporting because I did take the oath to life, liberty, and property to protect those three things for the District 8 people. And they elected me to do that and I intend to do that. So that's why I'm here, to support their land and their freedom and their lives, of course.

So anyway -- and if I can help in any way, I do have the ability to ask the attorney general for his opinion. And if that's the direction that you would like for me to go, I would surely do that.

COMMISSIONER CHRISTMANN: I don't have any other questions. Thank you.

ALJ HOGAN: Commissioner Haugen-Hoffart.

COMMISSIONER HAUGEN-HOFFART: Thank you, Senator, for your testimony. I have no questions.

ALJ HOGAN: Mr. Dawson.

SUBSTITUTE DECISIONMAKER DAWSON: Thank you for coming.

JEFF MAGRUM: I want to thank you folks for your

thorough job you're doing, especially in District 8 here. And I know you were in Wahpeton and Gwinner. I didn't catch Gwinner, but I did watch Wahpeton. But you've done a good job of listening and being patient. And I'm sorry District 8 keeps you up all night, but I'm sure you'll come out with a good decision for us. Thanks.

ALJ HOGAN: Thank you, Senator.

Is there anyone else?

Can I have you state your name and spell your last name for the record?

ERIN MAGRUM: My name is Erin Magrum, M-A-G-R-U-M.

ALJ HOGAN: Mr. Magrum, were you in the room earlier when I went through the penalties for perjury?

ERIN MAGRUM: Yes, I was.

ALJ HOGAN: And do you understand what perjury is?

ERIN MAGRUM: I do.

ALJ HOGAN: Being advised of the potential penalties for perjury, do you promise to tell the truth in this case?

ERIN MAGRUM: I will.

ALJ HOGAN: All right. Thank you. Go ahead.

ERIN MAGRUM,

being first duly sworn, testified as follows:

ERIN MAGRUM: So my name is Erin Magrum. I am a landowner and business owner in Emmons County. I'm also the chairman of the Emmons County Commission.

I took my time today debating if I even wanted to testify or not because we had so much good testimony, people that are -- have been waiting to basically have their opinions heard. I think the landowners did a good job of relaying their concerns so I'm not going to repeat all the safety issues. And I agree with everything. I've heard this testimony several times.

We -- before I get too forgetful, I would like to invite the commissioners especially, we have a YouTube channel. And Emmons County did have an extensive public hearing on our setbacks that Mr. Bakke had brought up earlier. BEK actually broadcasted it so it's actually in pretty good quality. And it's about two hours. And it mirrored today.

We just -- there's just no support for this project in Emmons County. I mean, I shouldn't say "no support." Obviously there probably is some out there, there's some easements signed and stuff, but when you have meetings like this, there's just no support. I mean, at what point are we going to recognize that this

project is just not wanted by the people? I think Emmons County's Commission has done a very good job in recognizing that its constituents do not want this project.

As far as the county's stance on it, the only thing I would just say to try to offer new testimony on a very long day -- and I've sat under those lights on that stage and it's not comfortable, and I only did it for two hours so you're doing a heck of a job today. But Emmons County has taken a firm stance against eminent domain.

I know that's not a purview of yours, but I think it needs to be said for the record, that our constituents feel like they've been let down at every level of government so far. They feel like their pleas to the legislature were ignored. The lobbyists took it over. A lot of them don't probably feel like there's a lot of hope in this process.

That's no insult to you. That's just the wheels are moving. I mean, look at the room. Summit almost has more employees here than people that came today. I mean, that's the kind of machine we've been up against this entire time.

We're a small county. We don't -- we don't have a staff of experts, you know. Every time someone comes

up and says something that's remotely controversial, you get questioned on your expertise.

Now what about the people? And that's where us as county commissioners have taken in. And the one thing I would like to add is just nobody's brought up today the authority of the counties. And I know that doesn't seem like much when you're throwing around the PSC and the legislature and all this, but to my understanding, generally these projects usually got local permits first before they even went to the PSC, which is very confusing in this entire process, is that we haven't even hardly been talked to. The only time we see Summit is when we start considering stiffening any of our rules or changing any of our ordinances. That's pretty much a guarantee that they're going to show up. Otherwise, there's almost no contact.

It's the same as the landowners, the way they feel like they've just been given an offer, and if that offer isn't taken, there's another route that will be taken without really any input.

And so the county commissioners have taken it upon themselves, we have taken it upon ourselves, to defend our county. So that's why I will defend our setbacks and our ordinance changes that we've done because we feel like we are on our own. And so whether

or not anybody agrees with it or not --

And if you watch our public hearing what we had, which was our public hearing for the second reading -- or the first reading of our ordinance, we follow the same similar public hearing scenarios where you let people speak. We gave Summit well over a half hour.

And if you watch it, you'll see. And it's the similar type scenarios that played out today. Every time there was a tough question, plume studies, opinions on setbacks, it's always a redirection. "I can't give you an answer, I'm not that guy, I'm" -- whatever variety you want to have. And the same expressions that were -- the same frustrations that went that day happened today. People in the crowd going "At what point do we get an answer?"

I mean even myself as a county commissioner, I mean if you don't want to give answers to the general public because you fear trade secrets or rebellion, misinformation, whatever you want to call it, but at what point do the people that are supposed to be making these decisions, the long-term decisions, for the benefit of our jurisdiction, when are we privy to any of this information? And it's just never really come.

And today is a perfect example of what our public hearing was just like, was just this -- just this

redirect, conversation about something else, and zero support from anyone that really doesn't work from Summit.

So another frustrating point that happened today is the testimony of Mr. Godfrey, which he got labeled as an expert for safety and this -- he's a consultant for the pipeline, yet he apparently didn't know much about the plume information, or very little, didn't seem to know anything about the route.

I'm not trying to insult anybody, but I've been here since 8:30. I don't have any more answers than I did when I got here. And I don't have any more information than our last public hearing. How am I supposed to respond as a local official having to make similar decisions you guys have to at the same point? We're siting a project within our own county. We have no information. And we get treated like we're not worthy of the information or we wouldn't understand it anyway so you just don't get it. So it's just a lot of frustration from a lot of landowners.

I know Emmons County has amended its ordinances that we're demanding a hundred percent voluntary easements. I can tell you that we will stand by that. We are not going to tolerate eminent domain in this county. I can't speak for the commissioners as a whole,

but the decisions that have been made up to this point, the ordinance changes have reflected unanimous decisions. And we're going to defend our landowners.

And, honestly, even if you grant a permit to them, they need to come to Emmons County for their conditional use permits and other permits. And if they do not abide by our setbacks or they do not abide by our demands on the eminent domain, they're probably not going to get a permit. And I believe Emmons County is prepared to explore the limits of its jurisdictional authority no matter where that takes us.

So with that, that's all I have to say.

ALJ HOGAN: All right. Thank you.

Mr. Bender, any questions?

MR. BENDER: Just a couple questions.

Commissioner, I think I heard you say a couple times that there's zero support for the pipeline. The only support for the pipeline in Emmons County is from the Summit employees. Are you familiar with how many right of way miles there are in Emmons County?

ERIN MAGRUM: Not exactly.

MR. BENDER: Okay. If I told you it was a hundred and -- excuse me -- 37.1 miles, would you have any reason to dispute that?

ERIN MAGRUM: No. That sounds about right.

MR. BENDER: Okay. And if I told you 23.19 miles of right of way has been acquired in Emmons County, would that surprise you?

ERIN MAGRUM: No, but it's not enough.

MR. BENDER: Okay. Well, but that's -- that's 62 percent. How can you stand up here and testify that it's zero support when 62 percent of the right of way has been signed?

ERIN MAGRUM: Because I haven't met any of them.

MR. BENDER: Okay. No further questions.

ALJ HOGAN: Mr. Pelham, any questions?

MR. PELHAM: Yes, I have a few.

Commissioner, I'm just wondering about the CUP application process, if you could explain that, and whether or not any inquiry by the company has been made as to the CUP application process.

ERIN MAGRUM: I believe there's been inquiries made to our auditor just as far as the process, how we handle things, which is -- it's Emmons County. We're very informal. It's a rural county. You know, like I said, our state's attorney's office is an office of two. I mean, our commissioners and individual offices, you know, we kind of have a lot of hats so -- I think inquiries have been made on that point but as far as --

MR. PELHAM: No application, though?

ERIN MAGRUM: Not to this point.

MR. PELHAM: To your knowledge, no. Is there like a zoning administrator or is it handled by the auditor?

ERIN MAGRUM: Well, we do have a GIS coordinator who is our building inspector/zoning official. Like I said, we're a pretty simple county. But, yes, we do -- we share duties amongst the GIS office and the auditor, the state's attorney. They all have different expertise that they rely on each other to fulfill whatever obligations they have.

MR. PELHAM: So what other permit other than the CUP would Emmons County require of the company?

ERIN MAGRUM: Well, the other permits would just be the -- like haul road use agreements. We are a part of the LoadPass Permit system. So if there's any overweight permits, obviously those would come after a permit approval, but those are just the subsequent permits, typical zoning type permits, culverts, anything out of the order that we demand a permit for.

MR. PELHAM: Thank you, sir. I don't have any other questions.

ALJ HOGAN: Mr. Bakke, any questions?

MR. BAKKE: I have no questions for you, Mr. Magrum, but certainly appreciate your concerns and

testimony today. Thank you.

ERIN MAGRUM: Thank you.

ALJ HOGAN: Mr. Leibel, any questions?

MR. LEIBEL: No, no questions.

ALJ HOGAN: Commissioner Christmann.

COMMISSIONER CHRISTMANN: I don't think I have any questions, but I'm going to tell you, Erin, that you might consider Emmons a simple county. It's kind of my kind of simple county. This is the second time we've been down here for a long, long hearing. You have maintained an old facility for many years in beautiful condition. You welcome us in and allow us to stay late into the night and get good testimony. You have great security people here in your county. The other county staff that I run into in the halls are always friendly and everything. And I think you have a lot to be proud of in Emmons County.

ERIN MAGRUM: Well, thank you. We take pride in serving the people the best we can.

ALJ HOGAN: Commissioner Haugen-Hoffart.

COMMISSIONER HAUGEN-HOFFART: I think Commissioner Christmann said it very well as far as being welcomed here. And to the people sitting out in the audience who have stayed here all day to learn the process or be engaged is most appreciative. So job well

done. Thank you.

ERIN MAGRUM: Thank you.

ALJ HOGAN: Mr. Dawson.

SUBSTITUTE DECISIONMAKER DAWSON: Thank you for your testimony. Appreciate it.

ERIN MAGRUM: Well, thank you for hanging with us, and it's always a pleasure to have the PSC at Emmons County. So every time you come, we try and make it a little bit better. I know Randy's been here a few times. Some of you others have been. Maybe we had some lights or we try and make a table a little bigger. So every time we do it, we get a little better. In another couple of years, you might have it really comfortable here. So thank you.

ALJ HOGAN: Okay. Thank you.

UNIDENTIFIED SPEAKER: Can I say something once again?

ALJ HOGAN: We need to move on, Mr. Hopkins.

UNIDENTIFIED SPEAKER: Okay.

ALJ HOGAN: Is there anybody else that wants to provide testimony?

All right. Seeing none, that will conclude our public testimony for tonight. I'm just going to go around and ask all the parties one last time if there's any closing remarks or anything else they want to put on

the record tonight before we conclude.

Mr. Bender, do you have anything?

MR. BENDER: Nothing this evening. Thank you.

ALJ HOGAN: Mr. Pelham.

MR. PELHAM: I don't.

ALJ HOGAN: Mr. Bakke.

MR. BAKKE: Nothing, Your Honor.

ALJ HOGAN: Mr. Leibel.

MR. LEIBEL: Nothing further.

ALJ HOGAN: All right. And I'll just ask if the commissioners have any closing remarks that they want to --

COMMISSIONER CHRISTMANN: May I ask a question first?

ALJ HOGAN: Sure.

COMMISSIONER CHRISTMANN: I thought Mr. Bakke had a bunch of witnesses and took a great deal of time and excruciating detail with earlier witnesses this morning, and I thought once we had the public testimony wrapped up, that others would follow. Are they being -- is he done with his witnesses now or --

ALJ HOGAN: I believe --

COMMISSIONER CHRISTMANN: -- or are we just delaying more for the next hearing?

ALJ HOGAN: Maybe -- I'll tell you what my

understanding is, and then Mr. Bakke can correct me, but I believe he was asked to bring some of his Burleigh County witnesses to this hearing to take the load off the last hearing, but it's my understanding you're going to have additional witnesses for the Bismarck hearing?

MR. BAKKE: Yes, that's correct. The only one I didn't end up calling today that I had indicated that I was likely to call was former Mayor Bakken. And as I mentioned, if he testifies in Bismarck, he'd be very short.

COMMISSIONER CHRISTMANN: Okay.

ALJ HOGAN: Any closing remarks, Commissioner Christmann?

COMMISSIONER CHRISTMANN: No. I don't really except to just re-emphasize what I told Commission Chairman Magrum. Thanks to everyone, the citizens and taxpayers of Emmons County, for hosting us with a great facility here and appreciate all the information.

ALJ HOGAN: Commissioner Haugen-Hoffart.

COMMISSIONER HAUGEN-HOFFART: Thanks, everyone. The only thing I will say is may all your travels be safe and we'll see some of you in Bismarck.

ALJ HOGAN: Mr. Dawson.

SUBSTITUTE DECISIONMAKER DAWSON: Thanks again. Your kindness and hospitality is noted.

ALJ HOGAN: All right. Then I will just note for the record that it's 10:39 p.m. and we will stand in recess in Case No. PU-22-391.

CERTIFICATE OF TRANSCRIPTIONIST

STATE OF NORTH DAKOTA) ss.

I, Lisa A. Hulm, CET-783, a certified electronic transcriber, do hereby certify that the foregoing is a correct transcript from the electronic sound recording of the proceedings in the above-entitled matter, to the best of my professional skills and abilities. I further state that I was not present during these recorded proceedings, and I am only the transcriber of the recorded proceedings.

I further certify that I am not a relative or employee or attorney or counsel of any of the parties hereto, nor a relative or employee of such attorney or counsel; nor do I have any interest in the outcome or events of the action.

Dated this date of August 25, 2025.

Lisa A. Hulm
LISA A. HULM, CET-783

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