UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

Investigation of:	*	
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FATAL NATURAL GAS EXPLOSION	*	
IN SOUTH JORDAN, UTAH	*	Accident No.: PLD25FR001
ON NOVEMBER 6, 2024	*	
	*	

Interview of: [redacted], Operations Foreman
Enbridge Gas Utah

South Jordan, Utah

Sunday,
November 10, 2024

APPEARANCES:

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National Transportation Safety Board

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National Transportation Safety Board

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I N T E R V I E W

MR. LAVALLEE: My name is Scott Lavallee. I am the emergency response group chair for this incident with the NTSB. We're conducting an interview today on November the 10th, 2024 with [redacted] who works for, that would be -- help me out, Reid, what's the --

MR. HESS: Enbridge Gas Utah.

MR. LAVALLEE: Enbridge Gas Utah. This interview is in conjunction with NTSB's investigation of the incident in South Jordan, Utah. The NTSB accident reference number is PLD25FR001.

The purpose of the investigation is to increase safety, not to assign fault, blame or liability.

Before we begin our interview and questions, let's go around and introduce ourselves. Please spell your last name and say your title. I'll start off and pass it to my right.

Again, my name is Scott Lavallee. The spelling of my last name is L-a-v-a-l-l-e-e, and I am the NTSB emergency response group chair.

MR. HESS: Reid Hess, Enbridge Gas Utah, last name Hess, H-e-s-s, region manager for Enbridge Gas Utah.

MR. LYNUM: I'm Sean Lynum, S-e-a-n, L-y-n-u-m, chief of pipeline and hazardous materials at NTSB.

MR. [redacted]: [redacted], [redacted]. I am operations foreman, Enbridge Gas.

MS. [redacted], [redacted]. I'm the director of

operations, Enbridge Gas Utah.

MR. DAWSON: Chris Dawson, D-a-w-s-o-n. I am the fire chief, South Jordan Fire Department.

MR. JORGENSEN: Jacob Jorgensen, J-o-r-g-e-n-s-e-n, accident investigator with PHMSA.

MR. LAVALLEE: Okay, thank you. [redacted], do we have your permission to record our discussion with you today?

MR. [redacted]: Yes, you do.

MR. LAVALLEE: Okay. [redacted], we've also afforded you the opportunity to have a representative with you. Do you have a representative today and who is it?

MR. [redacted]: I do. [redacted] [redacted], [redacted].

MR. LAVALLEE: [redacted], do you understand that the transcripts from our conversation today will be part of the public docket and, as such, I can't guarantee any confidentiality with that docket being available to the public?

MR. [redacted]: Yes, I do.

MR. LAVALLEE: All right, so we'll get started.

INTERVIEW OF [redacted]

BY MR. LAVALLE:

Q. This is Lavallee with the NTSB. I'll start off with just some introductory questions. [redacted], if you could, give me some background in your career in this industry up until this point.

A. I worked for the local gas company for 22 years. I started in Salt Lake as a service tech, worked my way into the

construction operations division of the company. Then in 2014, I became operations foreman and just been in gas that whole time.

Q. Lavallee again, follow-up question on that, [redacted]. Has it been the same company the whole time?

A. No, it has not.

Q. Could you explain that progression?

A. It was Questar Gas when I hired on. They ended up selling out to Dominion Energy, and we just got purchased by Enbridge, Enbridge Gas out of Canada.

Q. Correct me if I'm wrong, with that progression, you've always been in the same location?

A. Yes.

Q. But the ownership --

A. Just management changed.

Q. -- and management has changed?

A. Yes.

Q. Copy that. All right. Any training, particular training or certifications that you possess currently for your job? Really certifications, right, that's what I'm kind of getting to.

A. Obviously, my OQ qualifications. Training on, on-job trainings, certified welder.

Q. Point of clarification, [redacted]. This is Scott with NTSB again. You mentioned OQ, what is OQ qualifications?

A. OQ is, in [redacted]'s terms --

Q. Yeah, in your words.

A. -- it's federally required. Basic education required to do the tasks and task qualifications for certain --

Q. Task qualifications to perform the job?

A. Yes.

Q. I'll get one more question in, [redacted], before I pass it on. Describe your day the day of the incident, which would have been the 6th, right, what time did you start, go ahead, and what were you doing up until that point?

A. Woke up 6:00. I got a phone call from my supervisor at 6:45 and asked if I could respond to the house fire in South Jordan.

Q. Point of clarification, [redacted]. Scott with NTSB. You said you woke up at 6:00 then got a call at 6:45. Would that be a.m. or p.m.?

A. A.M.

Q. A.M.

A. I responded to the scene. I was met by my management team on site. They instructed me for my supervision on site. They had gas in the road on 3200 West, they instructed me to basically get my bearings of the scene and decide where I was going to dig a hole.

While I'm talking to other colleagues on site, we determined a certain location we were going to start at, and I proceeded away from my Blue Stakes to get current. Assuming my Blue Stakes were current, I proceeded to dig in the road.

Q. I'm going to hold you there for a second, [redacted]. Scott from

NTSB. You mentioned your blue sticks [sic], could you describe what blue sticks you're talking, what are they?

A. Blue Stakes is a law that's, in the State of Utah, we have an 811 you're required to call any time you're going to dig a hole in the road. It gives other utilities, other facilities, cities, entities to be able to come and mark their stuff that's underground before I proceed with putting a shovel in the ground or excavating with a tractor.

Q. Copy that. Thank you for that clarification. And one more point of clarification, I have that our explosion incident happened on the 6th, right, in the afternoon so I'm guessing and would like you to confirm that the phone call that were received at 6:00 a.m. would have been on the subsequent day, the 7th, is that correct?

A. Yes, that is correct, it was on the 7th, morning.

Q. Okay, thank you. Please continue.

A. After excavating the hole, eight-foot long, three-foot-wide hole, we determined that that wasn't the cause of the leak, that area was not leaking. We continued to bar holes in both directions within that hole.

We did have a South Jordan water line crossing us. We made the decision to dig south towards that water line to investigate if that was the cause of the leak, and we did not find anything going south of that hole.

So, we made the decision to continue north along our main, on

along the top of the main to a service line to 10593 South, 3200 West home. We dug that up. We found side saddle on that, and that was not the leak.

At that point, we decided to step back and punch more holes in the asphalt, punch holes meaning core a hole in the asphalt to give us a location to pull readings from.

We continued that, going north to the next service, the neighbor's house. The readings all were a higher level reading so we decided that we should just continue extending our trench that we had opened up. We just continued digging north until we come across a scab.

Q. [redacted], Scott from NTSB. Just to recap before I pass it on. I want to make sure I'm clear.

You arrived on the scene, got your bearings, kind of got filled in on the incident in hand, I'm sure we'll get more into that later, and started or taking efforts based on some of the readings from the bar hole readings.

It sounded like first we went south. We dug an initial trench eight by three, did some more readings in that trench and around that pipe, determined that that was not the leak.

Then went south to an area near where a water line, I believe you said kind of intersects or crosses under or over your line there, that was also not the leak.

Then went back north and continued that way. And going north, you decided to go back north again because your gas

readings were increasing as you were going north, is that correct?
A. Yes, that is correct.
MR. LAVALLEE: I'm going to pass it off at this time to Reid.
MR. HESS: [redacted], I don't have anything for you right now but I may.
MR. LYNUM: Sean Lynum, NTSB. Just a few questions.
BY MR. LYNUM:
Q. Who's your direct supervisor?
A. [redacted] (ph.)
Q. And was he on scene with you, or were you essentially running it yourself on scene?
A. He was not on scene. He just dispatched me from my home. He was in the office.
Q. Can we talk a little bit about your duty hours, work schedule and on-call rotation, just talk about how that works for you, you know, you're on and off, that kind of thing, or how's that --
A. So, I work 6:30 to 4:00 (indiscernible) with every other Friday off. I take the rotating on calls every 7 weeks and fill in where needed.
Q. For that morning, you said you woke up at 6:00, had you had a good night sleep the night before?
A. Yes.
Q. What areas do you cover?
A. I'm responsible, my operation area that I manage is Cottonwood, Sandy, out to Murray area.

Q. About, and again, just to try to get an understanding of it, can you guestimate about how many square miles that is, or just a, it's a tough kind of --

A. A pure guess, I'd say 30 by 30 area.

Q. One last question before I'll hand it off and I'm going to come back later, is about how long does it take for you, on average, to get to a home when you get dispatched?

A. Within a half an hour.

MR. DAWSON: Dawson, South Jordan, no questions at this time.

MR. JORGENSEN: Jorgensen with PHMSA, no questions.

MR. LAVALLEE: Okay, back to Lavallee, NTSB.

BY MR. LAVALLEE:

Q. [redacted], from previous testimony, I believe you had stated that you had received a phone call, your 6:00 a.m. phone call, that was from your supervisor?

A. Yes.

Q. Okay. That was not from the normal dispatch center or anything like that?

A. No.

Q. Had you worked the previous day?

A. Yes, I did.

Q. So, when you received that call at 6:00 a.m., were you aware of the incident already?

A. Yes.

Q. And by saying aware of it, I don't mean every single detail,

right, of what had happened through the night. I just mean that you're generally aware that there was an incident that would --

A. I knew there was an incident in South Jordan, that's all I knew.

Q. When you arrived on scene and received your bearings, do you remember who would have been the primary person briefing you in on what had been done so far?

A. [redacted] and [redacted] were on site, and [redacted] I talked to [redacted], was on site too.

Q. Okay. Thank you for that. Just in short detail, what's the gist of that briefing that they gave you, what information were they able to provide you with?

A. Upon arrival, they pointed me to a section in the road and instructed me that they had started the bar, that road, that line in the middle of the road, and they were indicating to me that they were having a certain percentage across the top of that main.

Me and the supervisor looked at a map and decided that we had a work order division where two job sites had come together that we decided that that was the location to begin the investigation on the ground.

Q. Let me ask for some clarification on that. You said you had a work order division where two of them had kind of butted up against each other.

Does that mean that, like, in the past, maybe that pipeline in question had been unearthed for work to be done on it or around

it, and that's why we're starting there because we know that there had been something going on with the pipe at that location previously?

A. Yes. The work order division is where you have two lines of coming together, they installed one line at a certain date, and they installed another line at a different date. And, usually, at that location, we'll have fittings on the pipe, or we could have squeeze marks on the pipe.

It was just a good location to begin the excavation because of how many fittings were in the area.

Q. Am I correct in saying that that would be an area where we have a known joint or union and would just be a logical place that a potential leak may occur so that's where we're going to start, is that correct?

A. Yes, exactly.

Q. Thank you. Again, not being a first responder to this as far as I've been led to believe so far by your testimony and your statements, did you have any communication with either your company dispatch or the emergency services dispatch?

A. No, I did not.

Q. Okay. Did you have any direct interaction with the fire department or EMS when you arrived on scene?

A. No, I did not.

Q. In the briefing that you received to start your work, were you given the contact information of, say, the incident commander

on scene for the fire department when you got there?
A. No, I was not.
Q. Is that unusual? Would you think during an incident, hey, who's my point of contact for this group or that group?
A. No.
Q. No, there wouldn't be any -- okay.
MR. LAVALLEE: I'm going to kick the can down the line again and turn it over to Reid.
MR. HESS: Thank you. Hess from Enbridge. I do have a few questions.
BY MR. HESS:
Q. [redacted], you arrived that morning sometime between 6:00, 6:30, you talked to [redacted] [redacted], what's [redacted]'s title?
A. [redacted] [redacted] is my, a supervisor in my office.
Q. Did you have support from [redacted] during the day as the activities were, your activities were going on?
A. All day long, I was in communication with him, relaying what I had found, what our next step was going to be throughout the day, yes.
Q. Is it normal for you to receive a call from your supervisor versus dispatch for the type of work you were going to be doing that morning?
A. Yes.
Q. Okay. Were you present when the first bar holes were placed on 3200 West?

A. I was not.
Q. Were you given information on how much gas was in each of those bar holes and if --
A. Yes. I was given information about that.
Q. Was the indication that the gas was isolated to a small area, was there a large amount of gas across a large area?
A. I was instructed that there was a large amount of gas within a 30-foot area.
Q. So, in cases where multiple bar holes have very high readings of gas, similar readings of gas, is it easy to tell where the leak may be coming from?
A. It is not.
Q. Is that the reason you decided, hey, this is a logical point to go ahead and start digging is where that work order division --
A. That is exactly what we do.
MR. HESS: Nothing right now, thank you.
MR. LYNUM: Sean Lynum, NTSB.
BY MR. LYNUM:
Q. When you arrived, were there any other utilities there? I know you had the blue markers there for, but were there any other groups out there along with you marking or digging?
A. No, there was no other utilities working. While I was on site waiting to start my excavation, I did have a stake center locating company come through, South Jordan city water department locater came through and marked lines. But as far as the locating

companies, I had no other.
Q. And can you walk us through what other Enbridge employees were there with you, what they were doing? Just describe the, just what it looked like.
A. So, I had a service foreman there. He was monitoring the reads for us on that, on the main road, [redacted]. I have my operator, [redacted], was on site with me, he was manning the shovel, watching me dig with the tractor. He was facilitating whatever needed to be done along the trench.
[redacted] (ph.) was another one of my helpers. He was on site facilitating whatever needed to be done, hand digging, looking, hand digging. Like, the water line we were looking for, we'd hand dig down to it just try to find it and exposing the gas main as we went further north.
Q. I think someone mentioned a mini excavator, was that there?
A. Yes.
Q. Were you operating the mini excavator?
A. Yes, I was.
Q. Just if you could describe a little bit, when you're operating a mini excavator, how far down, how much are you digging up with that, with the bucket of that mini excavator versus hand digging, how does that work?
A. So, with the mini excavator, we use a jack hammer attachment, and I will jack hammer the road surface to basically make it accessible.

I will then put a bucket on, and we will excavate the trench down to 18 inches, pull the asphalt back, remove the road base, get down to where we feel we have virgin soil.

At that point, the guys will then get in and hand dig down 'til we can get down to either sand or until we encounter the pipe.

Q. Is it normal for the main to be under the road, or is it typically in a setback away from the road?

A. It can be either or.

Q. Either or. Would it be typical for an older main to be under a road versus a newer main being down under a road?

A. Yes, it's typical. Older mains are usually under roads.

Q. And as your team was excavating and digging, can you describe the soil conditions that you were experiencing after you got through the asphalt?

A. The soil conditions that I would, once we got through the road base, we started getting down to virgin soil, Type C type soil, it's already been disturbed, it was clay based in a section, had a little more clay to it.

In a certain section as we went further north, we started encountering, I would consider it like a river bed, a cobbly sandy area. Yeah, other than that, it's --

Q. You described cobbly sandy area, is that pretty common for the type of soil once you get below whatever people bring in to build a road or whatever?

A. Yes, depending on areas, right. Certain areas within the valley have different types of soils. Sandy has a lot of heavy sand. Cottonwood has a lot of cobble-type rock in the ground. We did come across cobbly sandy (indiscernible) South Jordan, yes.
Q. Just to be clear, for clarification, cobbly, describe what that actually means.
A. I could, the best description is like a river bed. It's got sand, baseball-style rocks up to softball-style rocks, smooth round cobbly rock, yeah.
Q. This will be my last, I'll let some others ask, once you got to the area of the rupture, leak, per se, was that the same type of soil condition there was you saw in other areas of the trench?
A. No. As we dug the first original hole, like I stated earlier, it was more clay based type material and as we continued north, the clay type materials started turning more cobbly rock.
MR. LYNUM: I'll give some others a chance to ask.
MR. DAWSON: Dawson, South Jordan, no questions yet.
BY MR. JORGENSEN:
Q. In your excavating about this area, how much asphalt do you think there was, how thick was that?
A. Thick the asphalt was, was anywhere from four to six inches.
Q. You were talking about the road base, how much road base do you think there was, and what was the road base composed of?
A. One inch minus rock, sand. Usually, on that job, I would say it was six to eight inches thick of road base.

Q. Who was your swamper that was doing the locating for you for the, for checking out the pipe that would be OQ'd as far as for locating the pipe for you while you were utilizing the mini excavator?

A. [redacted].

Q. As far as for the virgin soil that you encountered after the six to eight inches thick of road base, how much was that?

A. Twenty-four, 28 inches.

Q. So, for the depth of cover on the pipe total from the top of the asphalt down to the top of the pipe, how much depth of cover do you think you had on the pipe there?

A. Thirty, we measured it yesterday, it had 34 inches top of asphalt to top of pipe.

Q. So, when you are completing your work normally doing digs in roads, you probably, you do that all the time, that's your daily work, right?

A. Yeah.

Q. If you were to see this scenario, is there any concerns about the depth of cover that you would see in this location?

A. Not on this pipe, no. It had plenty of depth.

MR. JORGENSEN: Okay, thank you.

MR. LAVALLEE: Lavallee, NTSB.

BY MR. LAVALLEE:

Q. So, no issues with the depth of the pipe where it was, but anything anomalous about the four to six inches of asphalt or the

road base thickness, did all that seem normal, what'd you expect?
A. Yeah.
Q. Natural gas, most of us know that it has some sort of odorant, right, to assist with detecting a leak, especially for your homeowner, smell gas in the home.

From when you arrived on scene in the area where you were told to focus your activities because that's where the data had led the previous crew to, were you smelling any odorant at that point?
A. So, I've been going over this in my head for a while.
Q. Sure.
A. The initial location that we decided to break ground on, we had high readings that we should have smelled something.

As we dug that up and got down to the main, exposed the main, soaped the main out, and we proved that there was no leaks on that section of pipe, me and the other guys made comments to each other, like, we just don't smell it.

As many leaks as I've dug in my career, when you're on top of leaking, you're digging a leak, you just can smell the odor and you just know you're close or you're not close and, with that one, it was, it had such a faint smell to it with the readings we had, we should have had a lot more odor smell.

As we continued north along that pipeline, getting closer to said scab leak area, it was getting stronger and stronger, right. So, yeah, that was part of the helping us make the decision on we

need to continue north and keep excavating north.
Q. When you have high readings like you described, that should indicate, that should also be corroborated with an odorant smell, but you don't, or perhaps, you have a very faint, 'cause you kind of described that maybe you guys did smell something but it wasn't as strong as you would expect, is that unusual to have high readings and a very, very faint scent?
So, is that unusual, I guess the second part is, have you ever experienced any situation like that in the past in your experience?
A. No, I can't say I have.
Q. Have you ever heard of anybody say, hey, if you experience these two things combined, a high reading and a faint smell, that might mean this, have you ever had any kind of knowledge of what that might mean either -- and I'm not saying anything like professional, like we've done an in service on this, but anything anecdotal where that had been discussed with you before?
A. No.
Q. Okay. Is it fair to say that the source, as you're on scene and working with your crew, that it's very confusing, right, not fully understanding what's going on as of yet at that point?
A. The scene wasn't acting like a normal scene, I guess, is a normal scene.
Q. That's what I was looking for, thank you. So, just to recap. You did our initial dig, nothing there, and that was at the, where

that work orders come together, the logical place to start, in your opinion, as you've described.

We started moving, trying to chase the gas readings. As you go north, the soil starts to transition from clay to this cobbly rock as you've described, and I'm assuming we -- I don't believe we've talked about it yet, explain to me, describe when we found what would become our leak, describe that, how did we get there?

A. So, as we continued north to that service to the home, 10593 South, we exposed that service and, again, the readings weren't making sense so we put bar holes in the banks in both directions to see where our readings were, if they were climbing or lowering. We, again, made the decision to then continue north of that service.

Q. If I could pause you for a second, [redacted]. So, what I think you're describing, and I want to make sure that those listening to this or reading the transcripts would understand.

The main on 3200 that runs north, south, you have maps available to you where you have service lines branching off of it. It seems to me like you're describing that you're focusing on where those Ts, where those intersections would be maybe, again, based off the idea that leaks can potentially be at joints and those are good places to investigate, am I correct in that?

A. Exactly, yes. On our maps, we can tell where a service line taps onto a hard mains. The first hole, we go after fittings first for possible causes of a leak and once those are eliminated,

we then continued north on our pipeline.
Q. We're kind of hitting joints as they occur in the main, still not finding anything yet, please continue.
A. I was continuing north on the service line, six to eight feet, we started encountering that cobbly rock, sandy rock, and the ground went from a moist, had moisture in it, to a dry dirt, a dry cobbly sand.

That's a telltale sign that that is, what we call is a scab. A scab is an area where the natural gas is leaking from the main, and it dries out the earth around that area.

Once we encountered that, we encountered that, we shut the tractor off, we could hear it hissing. We immediately stopped. All the guys evacuated out of the hole.

We then moved 25 feet to the north all along that same main, and we dug a remote hole to put a squeeze bar on because at that point, we had made the assumption that we have found the leak, this is our location, we need to get out here, we need to move to the north along that pipeline and dig a remote hole. We ended up putting squeeze bars on it to shut it down.
Q. Help me out with a, you referred to a remote hole. Would that be a hole further away from the leak that you could then use to isolate that main?
A. A remote hole is a safe location to shut down the facility, shut down the gas line. It gets the manpower out of the immediate hazard and moves us to a safe location. We dug a hole there to

shut the gas line down.
Q. As I understand your testimony, you come across what you refer to as a scab where you describe the gas is forcing the moisture out of the soil, and that's a telltale sign for you.
While you're doing this and from your initial time on scene, are you or any of the crew members with which you're working wearing any sort of gas monitoring devices?
A. We had a CGI monitoring the hole during the time the guys were in the hole and working, shoveling, looking for the scab.
Q. And point of clarification, [redacted], CGI, what does that mean?
A. Combustible Gas Indicator.
Q. Combustible Gas Indicator.
A. It lets us know the levels that we can be in or out of the hole.
Q. Is there some sort of threshold set on this CGI that would give an alarm, visual, audible, something of that if it reaches a certain point to give you warning?
A. Over one percent, it'll alarm.
Q. Did that CGI alarm for you on that day?
A. Yeah. At the time we uncovered it with the SENSIT hanging in the hole, we have it hanging off the side of the trench, and when they found that, everybody looked at the SENSIT, like, yeah, we're out, and we pulled back from that location.
Q. Once you've determined that this is our likely leak and made the decision to pull your folks out of the hole for safety and to

shut down the mini excavator, I'm assuming to reduce an ignition, potential ignition source, is that correct?
A. Yes.
Q. Were there any notifications then made to anybody else who might still be on the same fire department, utilities, anything of that nature, to kind of warn them?
A. I called my supervisor, [redacted], the supervisor on site, [redacted], he was on the other side of the neighborhood over by the houses. I notified him that we had found the leak, and we were getting ready to put squeeze bars on them.
Q. Would it then be kind of standard practice that you let that supervisor on site know what you found? Would it then be safe to assume that the supervisor would then make any necessary notifications to anybody working in the area from that point?
A. I'm sure he would notify the manager of our area.
Q. Specifically, because without having a map directly in front of me, I don't know how far we are from maybe anybody's still working recovery or, at that point, on the fire scene, was there a danger to any, either EMS workers, fire workers or general public?
A. No, not at this point.
Q. And why would you say that that leak which is causing the alarm to go off wouldn't be posing a risk to anybody in the immediate area?
A. It was alarming saying there's gas in the trench. It was not blowing, to our eyes that we could see. It was just, it was

ventilating out of that area.

Q. So, in your assessment, there wasn't an immediate danger that we've got to evacuate based on this leak?

A. No. We evacuate just for my core guys to be able to get out of that area and get it secured.

Q. Understood, thank you.

A. That's what (indiscernible).

Q. Thank you for the clarification. Earlier, in previous testimony, we had discussed colorant, the color of the pipe, what was the color of the pipe that you observed the leak in, or if you didn't observe it, you can now hear it and what color's the pipe involved?

A. Tan Aldyl A pipe.

Q. I'm sorry, tan what?

A. We call that Aldyl A pipe.

Q. Aldyl A pipe. Is that pipe metallic or is it plastic?

A. Plastic.

Q. Okay.

A. I'm sorry.

MR. LAVALLEE: At this point, I'm going to turn it over to Reid Hess.

MR. HESS: All right. Hess from Enbridge Gas. A couple of clarifying questions.

BY MR. HESS:

Q. A little bit earlier we were talking about the odorant, not

having as much odor, you're not smelling the gas like you thought you would based on the amount of gases being indicated in the area, do you ever recall having been talked to about the possibility of odorant being able to separate from the gas?

A. Yes. Natural gas as it travels through the earth underground, it is very possible that natural gas, the odorant can be stripped out of natural gas.

The odorant is heavier than natural gas so once it hits the atmosphere, it definitely can separate and be stripped out going underground.

Q. Have you ever been instructed to not rely solely on whether there's odor around for --

A. Yes. That's why I rely on my equipment to make sure I --

Q. You were out there that day, your main focus was finding a potential leak on 3200 West, which you found, you found the leak, were others in the area doing any other work at the time away from your job site?

A. Yes. I don't know the exact number and the exact individuals but, yes, there were other individuals over by the homes barring, checking reads, monitoring reads. The guys on my side were taking care of the trenching and monitoring along the top of the road.

So, yes, there was more than just my crew.

Q. You and your crew were responsible for the safety, the safe performance of the work going on, on 3200 West, and there was somebody else on the road that was west, 3210 West, that was

responsible for the safety of those individuals and others in that area, is that correct?

A. Yes, that's true.

MR. HESS: [redacted], I think that's all I have right now, thank you.

MR. LYNUM: Sean Lynum, NTSB. Just point of clarification.

BY MR. LYNUM:

Q. You mentioned earlier about soaping the pipe, can you explain what that means?

A. So, in our policies, it requires us to prove the leak, right. We can't just say we think we found a leak on the pipeline, we have to prove it.

A way that we prove it is with CGI detecting, and we pour leak detection soap on the main and actually physically brush soap on all the fittings, any service Ts, anything that is of concern on the soap, we soap it out to verify that there's no bubbles of the simple (indiscernible).

Q. Let's start talking about you finding the actual leak area. Would you please walk us through, you had everybody get out, and then you came back, if you could give us about the, what that timeframe was when you started going back and re-excavating again to actually get to the source of the leak?

A. So, once we backed out and we were able to, like I said earlier, we moved back to dig another remote hole, a safe location to squeeze the line, that process probably took a half an hour to

expose that section of the pipe to where we could get a guy to squeeze the line down there.

And then by the time we went back to the hole, I would guestimate 45 minutes before we were back in the hole removing more asphalt to get down to the scab.

Q. Squeezing the line, just as a point of clarification, what does that entail, I mean, just walk a lay person through who's reading the statement, what does that mean?

A. We have squeeze tools which is basically what it sounds like. The tool that we can put on the plastic pipe, and we're able to increase the pressure up on that tool and it will actually physically squeeze the pipe and shut the flow of the gas off.

Q. You mentioned, I guess you went north of the hissing sound to do the, to dig the next hole so you could squeeze out the pipe, why not south of that, what was the significance of going north?

A. So, that main has gas pressure two-way feed so I have pressure coming from the south and from the north.

Where we found the leak, we had to go north to isolate the four-inch gas line, and we already had the two-inch gas line to the south exposed so we put a squeeze bar on the four inch on the north and the two inch on the south side of the excavation.

Q. When you squeezed off the south side, was that before you did the north side?

A. Yes, minutes before.

Q. After you've done the squeeze off on both ends, you've

isolated the area where the leak is occurring, walk us through, what do you do next, how do you get to the actual source of the leak?

A. Now that the leak is secured, it's now safe for the guys to enter the trench with the CGI still monitoring. We were able to then just go back upon the top of the leak and continue excavating across the top of the main, start to pull the scab back and give, excavate enough room that we're able to get in there and do the repair.

Q. And how did you know, because you squeezed off on either end, was there still a little of hissing, a little bit of pressure trying to relieve itself?

A. That goes back to that time period of, I would say 45 minutes before we were actually back in the hole on top of the leak.

Once it's closed off, with it hissing, it took matter of minutes and it was done. The line was secured, it hissed out, there's no more gas in the pipe. It obviously vented out and at that point, the readings were that we could get back in and we continued on.

Q. You're isolating where the leak was occurring, how did you know that's where the leak, was the leak on the top of the pipe, side of the pipe, underneath, how did you figure out that that's the source that you no longer had to telltale sign to help?

A. So, as we excavated the scab, we removed, we were in with hand tools removing the scab away from the pipe and once we got to

that, I mean, it's pretty obvious when you see the dry scab area, you know that you can assume it's in there. So, we started to dig at it. You take your glove off, you're able to feel the pipe and you could feel the crack on the bottom of the pipe.

Q. So, there was a crack on the bottom. Did you feel anything else or see anything else around that crack as you guys were excavating around?

A. No. There was no other utility lines crossing that area. There was no damage, like, an old damage from something that might have damaged it. Everything felt smooth except that we just felt a crack on that one spot.

Q. You've isolated, you found this crack, what did you do next after you, you certainly located the crack, I mean, did you, I'll just let you go into detail about how you figured out what to cut out and so on and so forth.

A. Once we isolated the area, we deemed that this was the section that was leaking. Again, we notified supervisors that were on site, [redacted], that we found it. We're sure that this is where it's leaking from. He then had us basically prove it which we put soap on it to basically prove that we had found the leak.

Once we had found the leak and proved it then we asked management how much pipe they wanted from that segment, and they told us, and we just went back and just cut out said section of pipe and bagged and tagged it then waited for instructions to put

it back.
Q. This will be my last one then I'll let it go around. So, how much did they tell you cut out on either side of the crack?
A. Three feet each side of the crack.
Q. Six feet total?
A. Yeah.
MR. DAWSON: Yeah, Dawson, South Jordan Fire.
BY MR. DAWSON:
Q. Just curious, the scab area, how big was that scab?
A. We never put a physical tape to it, but my estimations, it was about six-feet long.
Q. Is it typical, does the scab get bigger depending on the size of the leak, does that correspond?
A. The scab can be varying, right. It depends on the material, it depends on how long it blew for, how much blew, I mean, it's hard to gauge that.
Q. And then do you know, when you come across a leak like this, are there any notifications that are made outside of Enbridge, or is that just internal, like, are there any reporting requirements that you're aware of?
A. Not on this situation, sorry, I do not know.
MR. DAWSON: Okay, thanks. That's all I have.
MR. JORGENSEN: Jorgensen with PHMSA here.
BY MR. JORGENSEN:
Q. Earlier your CGI device that you utilize inside of your

trench, you said that it will tell you something at one percent, can you confirm if that's one percent LEL or volume?

A. One percent gas not LEL.

Q. It's one percent gas, okay, thank you. And then for the pipe that you were working on in the center of the road, how much pressure do you think was on that?

A. At the time, my guy, we put gauges on to verify a pressure to make sure we don't lose other houses when we shut off mains, and I was told that we had 43 psi. I can't, I did not see the gauge, I was just told that, and that's when we made the decision to shut it off, we still had pressure.

Q. So, when the 43 psi was communicated to you, was that at the beginning -- when exactly was that?

A. Right before we put the squeeze bars on the main to shut the line off, we put gauges on to verify that we're not shutting down more than what we need to shut off.

Once the gauges are on, we put the squeeze bars on, we shut the line off, we wait 5 to 10 minutes to verify the gauge hasn't lost pressure, and then we can go ahead and cut out, do our work.

That was the point that he just relayed to me in passing that he had 43 percent on the gauge.

Q. Being that we're in the mountains and I've been talking to a few people, it sounds like there's bedrock underneath a lot of the features around here.

For this pipeline that was inside of the middle of the road,

do you think there was, this is purely opinion on what you saw at the accident site, do you believe that there was any sort of blasting involved with constructing that area where that pipeline was placed?

A. In my opinion, no.

Q. No.

A. I don't know what was done 20 years ago.

Q. Right, but you might have been able to see, like, if you were down deep enough to see the bedrock, you could see potentially holes inside of it or sheer cuts in the rock.

A. I can't answer that, have any knowledge of what's happened in the past. I'm not a geologist, sorry.

Q. Were you able to see the bedrock at all inside the excavation?

A. The bedrock? When you say bedrock to me, that's rock, like, pipe laying on a rock, that's bedrock.

Q. Right.

A. Virgin soil to me is earth that's been there and we've excavated it and laid a pipe in it, that's what I would say was there.

Q. So, in your opinion, the soil about the pipe at the location where the leak occurred, this was replaced Type C soil just as you would see it normally?

A. Yes.

Q. And there was no bedrock that this was sitting on at all?

A. No.

MR. JORGENSEN: Okay, thank you.

MR. LAVALLEE: Lavallee, NTSB.

BY MR. LAVALLEE:

Q. I'm going to go back to odorant just for a second, [redacted], just to kind of clarify maybe what hasn't been said but alluded to.

So, we had in our conversation earlier with our initial few digs that we made on 3200, there was talk of maybe a slight sense of odorant but not what we would expect based on the readings that you were receiving from your measurements.

As you proceeded north to where you eventually found this leak, did the presence of odorant or your ability to smell any odorant, did that change as you went north?

A. Yes. It increased.

Q. Okay. So, as you went north, you were then able to smell the odorant. Would that be consistent in what you know about what Reid had mentioned earlier, that odorant can settle out of gas as it works through soil that as you went north and got closer to what you eventually would find to be your leak, that that would be in line with what you know about odorant lost through soil?

A. Yes.

Q. Let's make sure I don't have anything else here. We kind of described the leak, the scab and then the leak that we eventually found on the bottom of the pipe and it being cut out, if you could describe what you were able to, describe that crack itself?

Approximately how long was the crack, how wide, roughly? I don't know if you took exact measurements of it.

A. I did not cut, physically cut the pipe out. My guys cut the pipe out. I told him how long [redacted] wanted it cut. They cut the pipe out, and we immediately bagged it.

You could fill it, I didn't put a tape measure to it. I'm estimating it was three-to-six-inches long. I visually looked at it quickly as they were bagging it and putting it on the trailer.

Q. Okay. In your opinion, this was something that would be catastrophic, in other words, did that crack happened all at once or would this be something that maybe developed over time? And I realize that this may not be your forte but just what you know about that.

A. My opinion, it's not a boom that happened. I think it happened over time, crazy.

Q. In your past dealings through your career, have you ever experienced a similar crack in a pipe similar to this one?

A. Yes.

Q. With what you know about the similar cracks, to your knowledge, were those cracks that you encountered that were similar, were those based off of a sharp event, right, like a one-time event where it just happens or something that develops over time, or do you even know?

A. I've dug many of those leak, types of leaks up. It can be anything from a rock impingement pushing on the pipe at a certain

spot that will then entail, create a crack. I've seen many of those. I have seen where we just randomly, like, a crack, we found out there so, yes.

Q. Just to kind of support what our colleague from PHMSA had asked, it sounded like you were describing that there was not anything in that hole around the pipe that would have led you to believe that this piece of rock here impacted this pipe and caused it, is that correct?

A. The area we found the leak in was, like I stated before, it was a cobbly, sandy area. There was no three-foot boulder that the pipe was laying on top of, another utility, but there was no defining that was the rock that pushed on the pipe and caused the crack, yeah.

Q. We had mentioned two different diameters of pipe, four inch and two inch, within this main. Earlier, we had stated that there was an abutment of work order boundaries. Was that transition from two inch to four inch pipe, was that at that boundary?

A. Yes, it was.

Q. Okay. That's what I wanted to clarify for myself here.

MR. LAVALLEE: I'm running out. I think that's the last thing I've got. I'm going to send it around one more time to the remainder of the table to my right, and then we should be done.

MR. HESS: All right, [redacted], I've got a few clarifying questions, and thank you. I know we kept you much longer than you had anticipated so appreciate you being here. Hess from Enbridge.

BY MR. HESS:

Q. One of the things I heard, one of the questions asked of you was the pipe rupture or leak, would you consider this a rupture or a leak?

A. I would consider this a leak.

Q. When you hear the word rupture, what do you think of?

A. Like, blow apart.

Q. The pipe's opened up right, each pipe's opened up and it's ripped itself apart, something's ripped it apart?

A. Yeah.

Q. All right, thank you. So, this was definitely a leak?

A. Yeah.

Q. Let's see. Do you recall, what do you estimate the distance of the squeeze bar on the south to the actual leak?

A. My total excavation measured somewhere around 50-feet long from the leak to the south two-inch squeeze bar. I would estimate 40 to 45 feet I believe without measuring.

Q. So, the likelihood of anybody being in danger from the leak while that was being squeezed off 40 feet away is slight?

A. It's rare.

Q. Great. We talked a little bit about reporting information, whether this required reporting, are you aware if any type of reporting occurred prior, the night prior as the leak (indiscernible) you weren't there so you may not know?

A. Yeah, I was not involved with any reporting. I'm sure that

our dispatch takes care of that.
Q. Do you recall what time the leak was secured?
A. Yes. We put the squeeze bars on at 12:16 to 12:18, somewhere in there. It was kind of frantic, everybody's running different directions.
Q. Once that leak was secured, would there have been any type of notification about the secure time?
A. Yes, there is. Obviously, I reported to my superior on site, [redacted], notified him and then they did notify dispatch of the line, that it had been secured out in South Jordan, yes.
Q. Thanks. SENSITs, we were talking about SENSITs and the readings on the SENSITs and yours is set to alarm at one percent, one percent gas not one percent LEL for the situation, are those SENSITs used for different types of work?
A. Yeah, they're used all around.
Q. So, the settings could differ. I guess I should ask, do the settings differ depending on the type of work you're doing whether you're doing leak screening inside a home, leak screening outside a home or monitoring while during excavations.
So, for your particular purposes, it was one percent gas that the alarm, that it would start notifying you there's an issue?
A. Yes.
Q. Thanks. Let's see. You talked about, you've excavated in this area for years, we've talked about bedrocks, bedrock and things, when I hear bedrock, I hear you're digging every, all the

soil out and you've run into one solid ledge of rock. Have you ever seen something like that in this area when you excavated out here?

A. Not in South Jordan, no.

Q. Let's see. Once the repairs were made, what was done to, was there anything done to help assist the gasket out of the ground?

A. Yeah, once repairs were made and I got the approval to start the backfill, my trench was, like I say, it was 50 some odd feet long, we backfilled three quarters of that trench and then we set up an extraction trailer over the original leak location and the location that we put the squeeze bars on. Those were within proximity that we could put a trailer and extract the gas from that area.

Q. Did barring and monitoring occur while that process was going on?

A. Yes, and it still is.

Q. As far as natural gas levels, did they go up again, did they come down, what do you recall?

A. They immediately went down, like, it was, I mean, I can't give you specifics of what the numbers were but, yes, the readings had drastically came down with the trailer sucking on it.

Q. Do you recall would the trailer ever, the trailer ever being shut off and if the natural gas did anything different?

A. So, we shut the trailer off a few different times and readings would stabilize or increase a slight bit, and we turned

the trailer back on and pull it back down. And then there had been certain situations where we shut the trailer off for a couple of hours, and the readings stayed the same.

Q. All right. Do you continue, and you said that it's still going on now, the vacuum trailer's still operating now, is that just to continue ensuring we get the majority of gas out that we can?

A. It's just a way for ensuring, to make sure we get 100 percent of the gas leak out of the (indiscernible).

MR. HESS: Thank, [redacted]. That's all I've got. Thank you.

MR. LYNUM: Sean Lynum, NTSB. Just a few questions more and then, hopefully, we'll be done.

BY MR. LYNUM:

Q. Who took possession of the pipe after you got out of the ground?

A. I turned it over to my supervisor, [redacted] [redacted].

Q. You mentioned that there was, you cut it out and there was a repair that was made, were you there when the repair was done?

A. Yes, I was.

Q. Could you please describe how that repair was done, including the size and the type of pipe that was used to make that repair?

A. Again, going back to the excavation, the trench was 45, 50-feet long. The damaged section or the leak, where the leak was, we cut it out and sent it off but then as we reinstalled, we replaced all the pipe back, going back to the two inch just to

make our system better in that area.

We did not need to do that. That pipe was still, soaped up perfect, but we made the decision to go ahead and replace all that because we had it all opened up.

How we do that is we have new pipe delivered to the job site, we scrape the ends, install electrofusion couplings and we cooked them, cooked the process and installed a new service T to the house that was in the middle of the location.

Q. What size of that pipe, was it two inch or did you do four inch?

A. So, we took out four-inch Aldyl A, and we replaced it with four-inch yellow plastic.

Q. Okay. One of the last questions I'll have is, you mentioned a trailer, I'm just assuming a vacuum trailer, for the lay person, could you describe how that works?

A. Yes. It's an extraction trailer which we can take the open hole that we have, we can put tarps over it and connect a, basically, layman's terms, supersize shop vac, and it can suck the gas from underneath the roadway.

Q. Assuming this is my last one, is that still ongoing, or has that stopped?

A. As of the time I was on site this morning, it had stopped, and they were checking readings.

Q. And the readings are looking where they should be, no more worries?

A. Yeah, they were looking really clear.

MR. LYNUM: That's the last question, that's all I have.

MR. LAVALLEE: Mr. Jorgensen, anything else from PHMSA?

BY MR. JORGENSEN:

Q. When you were completing bar holes on, or when you and your Enbridge staff were completing bar holes near the 3200 West road, so was anyone completing bar holing on the east side of the road at all?

A. At what point is -- sorry.

Q. At any point during the investigation.

A. During the whole time, yes, people were monitoring those readings.

Q. So, like, up by the yards on the east side?

A. Yes.

MR. JORGENSEN: Thank you. That's all I have.

MR. LAVALLEE: Lavallee, NTSB.

BY MR. LAVALLEE:

Q. You had described with the vacuum truck several times after the repair, you'll shut it off for a period of time, monitor the readings, just out of curiosity for the process and, again, for the benefit of the lay person, why would we shut it off and then wait and then take additional readings, what are we looking for?

A. We're looking for letting us know how, it's giving us an idea how you can read how much gas is still in the ground.

When you suck the earth, all that gas comes to the area and

the readings might increase in a certain spot that it was once zero, and that one might climb. The readings might change so by shutting the vac trailer off and letting it relax, we can then tell, okay, we still have X amount of gas here, X amount of gas there, let's turn it back on again, suck for 2 more hours to bring those levels down in those areas.

Q. To clarify for my benefit, when shutting off the vac truck, you may or may not see readings fluctuate slightly, and they're going to eventually stabilize so a certain level of increase might not be out of the ordinary, but a much greater increase might be indicative of there's still another leak or, perhaps, the repair wasn't effective, is that correct to say?

A. It could be possible.

Q. But all the readings and the shut downs and then following readings led you to believe that, yes, that was our source and that we don't have an additional source of leak?

A. Yeah.

MR. LAVALLEE: Thank you. Nothing further from me.

MR. HESS: One clarifying question. You said you were not able to identify a specific rock that may have impinged by it, but there was certainly rock in the area?

MR. [redacted]: Yes.

MR. HESS: And when I say rock, we're talking softball to grapefruit size rock, just cobble rock as you described it?

MR. [redacted]: Yes.

MR. HESS: All right, thanks, [redacted].

MR. LAVALLEE: Okay, [redacted], I always end with just a couple of questions that are just general.

BY MR. LAVALLEE:

Q. Would there be anybody else that you can think of that the panel would benefit from interviewing? I can tell you that we have [redacted] scheduled for this afternoon. Apart from that, anybody else that you feel we should talk to?

A. I think who you have lined up is your best bet.

Q. Okay. We've spent a lot of time asking you questions. Is there anything you would like to tell this panel?

A. No, not at this time.

Q. [redacted], I have your contact information on our pre-screening form, would it be okay if further questions do come up that we reach out to you with those?

A. Yes, of course.

MR. LAVALLEE: On behalf of the NTSB and this panel assembled here today, I would like to thank you for your time and cooperation. I realize you're putting in a lot of hours lately devoted to this, and I and we appreciate that. Thank you so much for your cooperation. That'll be the end of our interview today.

MR. [redacted]: Thank you.

MR. HESS: Thank you, [redacted].

(Whereupon, the interview was concluded.)

CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF:	FATAL NATURAL GAS EXPLOSION IN SOUTH JORDAN, UTAH ON NOVEMBER 6, 2024 Interview of [redacted]
ACCIDENT NO.:	PLD25FR001
PLACE:	South Jordan, Utah
DATE:	November 10, 2024

was held according to the record, and that this is the original, complete, true and accurate transcript which has been transcribed to the best of my skill and ability.

[redacted]

[redacted]

Transcriber