

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

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Investigation of:

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HOUSE EXPLOSION IN FIRESTONE,  
COLORADO, APRIL 17, 2017

\* Accident No.: DCA17FP005

\* \* \* \* \*

Interview of: JOE MacLAREN

Frederick-Firestone Fire Protection  
District Business & Education  
Center  
Longmont, Colorado

Friday,  
May 12, 2017

## APPEARANCES:

RAVI CHHATRE, Investigator in Charge  
National Transportation Safety Board

GBENGA AJIBOYE, General Engineer  
Pipeline and Hazardous Materials Safety Administration  
(PHMSA)

MICHAEL LEONARD, Quality Assurance Professional  
Colorado Oil & Gas Conservation Commission

MATTHEW LEPORE, Director  
Colorado Oil & Gas Conservation Commission

DOUG PRUNK, Fire Investigator  
Frederick-Firestone Fire Protection District

DAVID McBRIDE, Vice President of Health, Safety &  
Environment  
Anadarko Petroleum Corporation

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I N T E R V I E W

1  
2 MR. CHHATRE: Good morning. Today is Friday, May 12, 2017.  
3 We are currently at Frederick-Firestone Fire Protection District  
4 Business & Education Center located at 8426 Kosmerl Place,  
5 Longmont, Colorado. We are meeting regarding the investigation of  
6 explosion of a house located at 6312 Twilight Avenue, Firestone,  
7 Colorado that occurred on April 17, 2017.

8 My name is Ravi Chhatre. I am with, I am with the National  
9 Transportation Safety Board in Washington, D.C., and I am  
10 investigator-in-charge of this accident. The NTSB investigation  
11 number for this accident is DCA17FP005.

12 I would like to start by notifying everyone present in this  
13 room that we are recording this interview, and we may transcribe  
14 it at a later date. Transcripts will be provided directly to the  
15 interviewee for review and identifying any typographical errors.  
16 The transcript may be posted in NTSB's public docket.

17 Also, I would like to inform Mr. Joe MacLaren that you are  
18 permitted to have one other person present with you during the  
19 interview. This is a person of your choice -- your supervisor,  
20 friend, family member or, if you choose, no one at all. Please  
21 state for the record your full name; spelling of your name;  
22 organization you work for and your title; business contact  
23 information, such as mailing address, telephone number, email; and  
24 whom you have chosen to be present with you during your interview.

25 MR. MacLAREN: My name is Joe MacLaren. I work for the

1 Colorado Oil & Gas Conservation Commission.

2 MR. CHHATRE: Spell it.

3 MR. MacLAREN: MacLaren is spelled, M-A-C, capital L,  
4 A-R-E-N. And my title is engineering integrity  
5 inspector/engineering technician. I would request to have  
6 Director Matt Lepore stay present in the room with me.

7 MR. CHHATRE: Okay. And your business contact information,  
8 please?

9 MR. MacLAREN: And my business contact information. My cell  
10 phone is (970) 382-1680.

11 MR. CHHATRE: Okay. Thank you very much. Now I'd like to go  
12 around the room and have each person introduce themselves. Please  
13 state your name, spelling of your name, your title and the  
14 organization that you represent, and your business contact  
15 information. Starting from my left.

16 MR. AJIBOYE: My name is Gbenga Ajiboye, spelt G-B-E-N-G-A,  
17 A-J-I-B-O-Y-E. I work for the DOT PHMSA with the Western Region.  
18 My cell phone number is [REDACTED]. My email address is first  
19 [REDACTED]. And I'm an engineer with PHMSA.

20 MR. PRUNK: Doug Prunk, division chief, Frederick-Firestone  
21 Fire Protection District, [REDACTED].  
22 Area code [REDACTED]. Email address is [REDACTED].

23 MR. LEONARD: Mike Leonard. That's L-E-O-N-A-R-D, with the  
24 Colorado Oil & Gas Conservation Commission. I'm the quality  
25 assurance professional. Email address is [REDACTED].

1 [REDACTED] Cell phone [REDACTED].

2 MR. LEPORE: My name is Matt Lepore. I am the director of  
3 the Colorado Oil & Gas Conservation Commission. Business address  
4 is [REDACTED]. Telephone number is  
5 [REDACTED]. My email address is [REDACTED]  
6 [REDACTED].

7 MR. McBRIDE: My name is David McBride. It's M-C, capital B,  
8 R-I-D-E. I am vice president of health, safety and environment  
9 for Anadarko Petroleum Corporation located in The Woodlands,  
10 Texas. My contact information is [REDACTED].com.  
11 Telephone number, [REDACTED]. Office line is [REDACTED].

12 MR. CHHATRE: Thank you.

13 INTERVIEW OF JOE MacLAREN

14 BY MR. CHHATRE:

15 Q. Mr. MacLaren, for the record, just tell us your background,  
16 any formal education, informal trainings, formal trainings, and  
17 your work history.

18 A. Sure. I've got a Bachelor's of Science degree in geology  
19 from Fort Lewis College down in Durango, Colorado. I've worked in  
20 the oil and gas industry for about 25 years. And I've been on,  
21 mainly on the contract side. I've been with the Commission now  
22 for about 2½ years.

23 Q. And with your title, is it engineering technician? Is that  
24 correct?

25 A. Yes. Correct.

1 Q. Is that an OQ job? Operator qualification job? Did you need  
2 to --

3 A. It is -- there are qualifications that needed to be met for  
4 the application process. But no, it's not --

5 Q. OQ.

6 A. -- OQ.

7 Q. Okay. They do some yearly training to keep your  
8 qualifications current or --

9 A. Yes. Yes. I set training goals.

10 Q. Okay. So going back to April 17, the day of the accident,  
11 how was -- what was your involvement in that accident? What was  
12 going on?

13 A. Well, I was not aware of it on April 17. But on April 18,  
14 Tuesday, April 18, I became aware of it. I received a call from  
15 my supervisor, Mark Schlagenhauf.

16 Q. Spell the last name?

17 A. That's going to be --

18 MR. LEPORE: Good luck with that.

19 MR. CHHATRE: Okay. Just be, just be close enough, thanks.  
20 That'll be fine.

21 MR. MacLAREN: S-C-H-L-A-G-E-N-H-A-U-F. I think I hit it on  
22 the money.

23 MR. CHHATRE: Thank you.

24 MR. MacLAREN: And he informed me on Tuesday, April 18 of a  
25 house explosion in the Firestone area at about 10:30 a.m. in the

1 morning. He also informed me that there were flowlines and wells  
2 in relatively close proximity and asked me to stop by and take a  
3 look at the situation.

4 BY MR. CHHATRE:

5 Q. So just walk me through your entire involvement.

6 A. Okay. I showed up at the police and fire barricade at  
7 approximately 11:45 Tuesday, April 18. And I took a look at the  
8 house and the devastation from the, from the police barricade.  
9 And at that point, I was just looking around the area and I  
10 noticed a well in relatively close proximity to the house. There  
11 were some, there were some -- what appeared to be workers around  
12 the wellhead on the location, conducting some work. And at that  
13 point, I decided to become engaged. I grabbed my notebook, my  
14 camera, my personal protective equipment, and I walked over to the  
15 well itself near the house.

16 At that point, I introduced myself to the folks that were  
17 actually closing the gate around the wellhead. And they were  
18 contract employees that had just finished up a flowline pressure  
19 test on the active flowline running between the wellhead and the  
20 separator. I asked them about the results of the test, and they  
21 said that it had passed, and had informed Anadarko personnel, who  
22 were no longer on the scene.

23 I requested to the contractors that I get in to take a look  
24 at the wellhead, and they opened the gate. I took a look at the  
25 well. I identified that active wellsite flowline. And then I



1 also noticed what appeared to be an abandoned 2-inch carbon steel  
2 flowline riser just south of the wellhead. And alongside of that  
3 riser was a 1-inch carbon steel riser that was connected to the  
4 wellhead by 3/8-inch stainless steel tubing. I asked the  
5 contractors whether they had addressed what appeared to be an  
6 abandoned flowline, referring to the 2-inch line, and whether that  
7 had been pressure tested or located. And they had said no, it  
8 wasn't pressure tested and they were unaware of whether or not it  
9 was located at that point. I also asked about the 1-inch line,  
10 and they were unaware of any kind of, any kind of investigation by  
11 company personnel regarding that line.

12 At that point, I walked away from the well and quickly met up  
13 with fire department personnel, Doug; Public Utility Commission  
14 personnel, Joe Malloy (ph.); the PHMSA folks; and the Black Hills  
15 Energy folks that had responded to the accident and were onsite  
16 conducting their investigations. I spoke with Joe Malloy and --  
17 about what I had observed at the well and asked him if he -- and  
18 we discussed what Anadarko folks had responded to the incident.  
19 And he quickly picked up the phone and called one of the Anadarko  
20 supervisors, who came back to the location soon thereafter to  
21 address the questions that I had onsite. And that, and that was  
22 Bret Schissler.

23 I asked Bret -- I informed Bret that I would need to witness  
24 a pressure test conducted on the active wellsite flowline. I  
25 requested that the 2-inch abandoned line that I had observed with

1 the riser be located. And then I also asked that the 1-inch riser  
2 be located, and that it was confirmed that there was a tie-in down  
3 at the separator.

4 Bret had some other folks with him, employees, and they  
5 started to conduct that work. Took about a couple hours. I took  
6 some photos of the site, looked around. I walked down where the  
7 active wellsite flowline had been located. I observed a storm  
8 water drainage that was relatively deep along -- that was, that  
9 was in the area where that flowline, the active wellsite flowline,  
10 had passed. Made some general observations, waiting for them to  
11 do these locates and waiting for them to get prepared to run the  
12 pressure test, retest the wellsite flowline.

13 At that point, about, oh, another hour, 2 hours later, so at  
14 this time, about 2 o'clock p.m., they were able to locate the  
15 abandoned 2-inch carbon steel flowline. They were not able to  
16 locate the 1-inch line because it turned into polyethylene down  
17 belowground. There was no tracer wire with it, so they were not  
18 sure where it went. One thing they did confirm, though, was that  
19 they did not see a riser and tie-in at the horizontal separator  
20 west of the well. At that point, we became suspicious that, based  
21 on the two risers being located right next to one another, that  
22 they possibly ran in the same trench. We had located the 2-inch  
23 line. It went in a western direction for a short distance, where  
24 it turned back to the north and intersected the back fence and  
25 foundation area of the house, 6312 Twilight Avenue.

1           At that point in time, we still did not know where the 1-inch  
2 poly line ran. We were suspicious that it possibly paralleled and  
3 ran in the same trench with the 2-inch line, so we all decided to  
4 -- that the next step in the process would be to do some potholing  
5 with a hydro excavator to take a look at the 2-inch line and see  
6 if the 1-inch line was running in the trench with it. Anadarko  
7 made some calls to their contractors, and they, and they called in  
8 a hydro excavation truck. And so we waited for that to arrive.  
9 At that point in time, I ran the wellsite, the active wellsite  
10 flowline test between the wellhead and the separator. We metered  
11 it on both ends, and based on our rules, I deemed it satisfactory.

12           So time went by. I was down on -- at the facility that is  
13 associated with this well, where the horizontal separator and the  
14 tanks, the production tanks, are located. There are two  
15 additional wellheads down close to that facility. I decided to,  
16 while we were waiting for the hydro excavation to happen, I  
17 decided to take a look at those wells. On one of the wells, the  
18 core is 6-13. I noticed that there were, that there were two  
19 risers over there that were very similar to the ones that were  
20 observed on the core's 6-14 wellhead. I requested to the Anadarko  
21 personnel onsite that we locate those lines as well and get an  
22 idea of where those are running. At that point in time, they did  
23 the locates. They were once again able to locate the carbon steel  
24 2-inch line. The 1-inch line turned to polyethylene underground,  
25 so they weren't able to locate it laterally. But we did locate

1 the 2-inch line, and it traveled in an eastern direction back  
2 towards 6312 Twilight Avenue.

3 They continued to trace that line. They traced it all the  
4 way back to the point where the abandoned flowline from the 6-14  
5 turned in a north direction towards the house, and this one did  
6 the same thing. And we were assuming that it turned the corner  
7 and then was located in the same trench traveling in a northern  
8 direction towards the back foundation of the house. At that  
9 point, the hydro excavator showed up. At this time, it's about  
10 6:00 p.m. Hydro excavation activities commenced at the, at the --  
11 just adjacent to the privacy fence south of the foundation of 6312  
12 Twilight Avenue. And by about 7 o'clock p.m., we were able to see  
13 two carbon steel 2-inch flowlines down in the excavation and one  
14 polyethylene 1-inch line traveling down in the excavation as well.

15 At that point, we weren't -- we were suspicious that this  
16 line was the one coming from the 6-14 wellhead, but we were not  
17 able to confirm it that day. And we did not see the ends of the  
18 lines that night. Any cut and no-cut ends of lines were observed  
19 that night.

20 Q. Do you mind maybe drawing a sketch and, kind of, go through  
21 what you saw, if you feel comfortable?

22 A. Sure.

23 Q. Showing those -- you know, the separators and all the  
24 different -- if you only -- you can use horizontally. It doesn't  
25 matter.

1 Q. Okay.

2 UNIDENTIFIED SPEAKER: You want a pencil so you can erase?

3 MR. MacLAREN: I can (indiscernible). You know, I got it.

4 Okay.

5 UNIDENTIFIED SPEAKER: We could have Doug draw it for you.

6 (Indiscernible). Take it home, put it on the fridge

7 (indiscernible).

8 UNIDENTIFIED SPEAKER: Did you?

9 MR. MacLAREN: Oh, okay.

10 MR. LEPORE: Is that to scale?

11 MR. MacLAREN: Is this going to be adequate?

12 MR. CHHATRE: Yeah.

13 MR. MacLAREN: Okay.

14 MR. CHHATRE: We're supposed to get some drawing, but I mean,  
15 if we had a big drawing, I would have given it to you.

16 MR. MacLAREN: And actually, we do have that. Stuart  
17 Ellsworth, out -- who you're going to interview next, has that.

18 MR. CHHATRE: (Indiscernible)?

19 UNIDENTIFIED SPEAKER: Yeah. (Indiscernible).

20 MR. CHHATRE: Yeah, he can go over.

21 MR. AJIBOYE: Where's he at?

22 MR. MacLAREN: He's out in the lobby.

23 MR. CHHATRE: (Indiscernible). Okay, hold on. We're going,  
24 we're going to destroy that and --

25 MR. MacLAREN: Okay.

1 MR. CHHATRE: Yeah. That means (Indiscernible) you don't  
2 have to write so much stuff, then.

3 MR. MacLAREN: Exactly. The work's been done, and it's to  
4 scale.

5 MR. CHHATRE: Yeah. Great. In the meantime, let me ask you  
6 a few questions.

7 MR. MacLAREN: Okay.

8 BY MR. CHHATRE:

9 Q. But I don't want to disturb your chain of thought here. How  
10 do people knew it was a plastic poly line going underground? At  
11 least not exposed, but -- and I was there. The only thing you can  
12 really see is a carbon steel, right?

13 A. Correct.

14 Q. So how would they know that even the line goes anywhere  
15 (indiscernible) --

16 A. When they were, when they were unable to locate it, they were  
17 -- they became aware -- it's typical, it's typical construction  
18 for the industry, I think, for Anadarko. They've got other  
19 assemblies that are similar. So and then they confirmed that.  
20 When they were unable to locate it any distance laterally, then  
21 they assumed that it -- there was a carbon steel to poly  
22 transition down under the ground.

23 Q. Okay. So here are the sketches.

24 A. Yeah, so here are the sketches.

25 Q. I think there are more than one copy of --

1 A. So yeah, I think Keith (ph.) got -- let's see what he got  
2 here. (Indiscernible). Okay. I think this is best to work off,  
3 right?

4 Q. Okay.

5 A. Yeah. So here is --

6 Q. (Indiscernible) Page 72 of 72 or -- what is the number here?  
7 I just need to look here. I cannot see from here. How do I  
8 identify this -- oh, right here. Yeah, 72 of 72. Okay. Go  
9 ahead. And now I need a pencil.

10 A. Okay. So here is 6312 Twilight Avenue.

11 Q. Okay, I can sight it. Yeah.

12 A. Right. Here is the existing gas well. This is the active  
13 wellsite flowline, then risers.

14 Q. Write down the well number on here so we know.

15 A. Okay.

16 UNIDENTIFIED SPEAKER: (Indiscernible) 6-14.

17 MR. MacLAREN: IJ?

18 UNIDENTIFIED SPEAKER: I thought it was Ji.

19 MR. MacLAREN: Ji.

20 UNIDENTIFIED SPEAKER: Capital J, little i.

21 UNIDENTIFIED SPEAKER: Capital J, little i.

22 MR. MacLAREN: Okay. Okay.

23 BY MR. CHHATRE:

24 A. So here is the existing cores V6-14 Ji wellhead right here.  
25 The active flowline is marked here, and it runs adjacent to and

1 virtually parallel to a privacy fence that runs at the back of  
2 these residences. Here is 6312 Twilight Avenue. Okay?

3 Q. Let's make an X in there. Okay.

4 A. This was the line that I pressure tested as it ran from the  
5 production equipment here --

6 Q. Entirely from here to here.

7 A. From here to here. Okay? That's deemed satisfactory. This  
8 is the 2-inch carbon steel line in what we later found the 1-inch  
9 poly line running parallel with it that ran to the west and then  
10 swept up to the north. And ran --

11 Q. Okay. We're going to mark it down here as 2-inch. We can  
12 call it abandoned if you want.

13 A. Yeah.

14 Q. Right now, I am understanding what you're saying, but I'm not  
15 sure when I go back and look at it 3 weeks later. If you want to  
16 get your highlighter too.

17 MR. LEPORE: Did this (indiscernible) that we did the other  
18 day?

19 MR. CHHATRE: Yes --

20 MR. LEPORE: Are we able to get a copy of that?

21 MR. CHHATRE: I have an electronic copy of it, but I haven't  
22 been able to --

23 MR. LEPORE: No, that would be awesome if --

24 MR. CHHATRE: Yeah. And like I said, (indiscernible). And  
25 we'll just send it to everybody. My problem here, I get so many



1 emails from headquarters and from everybody here that I haven't  
2 been able to catch up with the -- Sunday probably will be a good  
3 day for me to catch up with a lot of stuff because we have no  
4 interviews scheduled, so --

5 UNIDENTIFIED SPEAKER: (Indiscernible).

6 MR. LEPORE: Well, I could if he sent it. I could probably  
7 print (indiscernible) print some of those.

8 MR. CHHATRE: Okay, I can do that during the break.

9 MR. LEPORE: Sure. Sure. Might be a little less  
10 (indiscernible).

11 BY MR. CHHATRE:

12 Q. I think it's a duplicate, right?

13 A. No, it's two sets.

14 Q. Oh, it's two different sets?

15 A. Yeah.

16 Q. Oh.

17 A. This is -- they call it Filing 2 and this one is Filing 1, I  
18 believe. Okay.

19 Q. Okay.

20 A. Okay, so --

21 Q. If you want to come --

22 MR. LEPORE: I know it.

23 MR. CHHATRE: Okay, okay.

24 MR. LEPORE: Been there done that.

25 MR. CHHATRE: I know.

1 MR. MacLAREN: Okay, so there's your wellhead, and then  
2 here's where we located that carbon steel line.

3 MR. CHHATRE: Right. Okay.

4 MR. MacLAREN: And then we did that potholing here up against  
5 the privacy fence that night. That's where we were able to  
6 identify --

7 BY MR. CHHATRE:

8 Q. So the first potholing was next to the privacy fence.

9 A. Correct. That's where we were able to locate this line.  
10 This is the other 2-inch abandoned line coming from this core 6-  
11 13. And then there was one poly line, 1-inch poly line, in the  
12 trench.

13 Q. So you could see all three.

14 A. All three.

15 Q. Actually, you could see all four or all three?

16 A. All three. Just, there was only one 1-inch poly. Okay?

17 Q. No, but I was thinking, what about the active 2-inch? Could  
18 you see that also in that pothole?

19 A. No. Oh, did we -- I don't know that I saw it. Okay?

20 Q. Okay.

21 A. Yeah, so I don't -- I left, and they continued to work  
22 towards the privacy fence that night. So I did not, I did not see  
23 it. What other questions do you have? This is -- yeah, so this  
24 --

25 Q. So you -- this pressure test was okay. And you saw this poly

1 here. And that's the thing I'm going to ask you about this case.

2 So you continue now on that --

3 A. Right. Right. Okay.

4 Q. Before I interrupted you, you were saying you required the  
5 hydro test, the hydro test held.

6 A. Correct. Yeah.

7 Q. And then you had just the excavation going on, and then you  
8 located the three lines.

9 A. Correct. Yes.

10 Q. Okay. Then what happened? (Indiscernible), you said?

11 A. Yeah, it was late. I left at about 7:00 p.m. that night. I  
12 returned the next morning and met with Mike Leonard.

13 Q. Was there any game plan discussed for the next day before you  
14 left?

15 A. Yeah. During this whole, during my whole day's involvement,  
16 I communicated with COGC [sic.] staff at the Denver office and let  
17 them know what I was seeing and finding. And then we discussed a  
18 game plan for the next day, which included Mike Leonard meeting me  
19 onsite in the morning. We did that, and that was on Wednesday,  
20 April 19. I brought Mike up to speed on what -- on the events  
21 that had happened the previous day. That morning, there -- I  
22 observed a security fence had been installed around the perimeter  
23 of the entire, the entire disaster area, which included -- which  
24 encompassed the well and that excavation. So I believe we were  
25 not able to get in there that next morning to take a look at it

1 right away.

2 I brought Mike up to speed. We went over to the production  
3 facility. We started doing some investigation and some, and some  
4 research into looking into if there was an abandoned facility that  
5 had not yet been identified. We were working on that. And by  
6 about midmorning towards noon, I left the site and Mike took over  
7 from there.

8 Q. Okay. Now when you said earlier, separator, were you talking  
9 about this facility here?

10 A. Yes.

11 Q. And so if I --

12 A. Right. So Anadarko personnel assumed that the 1-inch line  
13 was a gas supply line and was tied into the horizontal separator  
14 down at this facility. When they went down to take a look, they  
15 could not find that tie-in. And then --

16 Q. You lost me. So yeah, which line here? And Anadarko was  
17 thinking the same line runs here?

18 A. Right. So the 1-inch -- we were looking for the other  
19 endpoint for the 1-inch line. And typically, that would be  
20 located down at the production facility at the horizontal  
21 separator, because they would be tying into a dry gas supply  
22 source to run dry dehydrated gas back to the wellhead to operate  
23 the production equipment at the wellhead. They were unable to  
24 locate that tie-in down there.

25 Q. But once you see a 1-inch poly here, do you still expect the

1 line to be near the wellhead here?

2 A. No, no. So that had taken place, and then when we saw the 1-  
3 inch poly here, we became suspicious that that was our line. We  
4 did not confirm it when I was out there. The goal -- the next  
5 step was going to be to find an endpoint on that line, and then  
6 use compressed air to blow back through the line in the direction  
7 of the wellhead to see if we had communication from end to end.

8 Q. Okay. Okay, so what happened after that? After 19, you  
9 investigated this and you are looking for the facility here,  
10 abandoned facility. Did you find it?

11 A. Yes. So we were able to, yeah. We looked, we looked at some  
12 historical field and -- COGCC field inspection reports. And one  
13 of them had indicated that this well in fact did produce to a tank  
14 battery facility located to the north. So we came up here, and  
15 this site had been abandoned and reclaimed, reclamation -- and  
16 gone through a final reclamation process. And a well that was up  
17 on this, on this site as well had been plugged. So we went up and  
18 took a look at that, and just made some general observations on  
19 that historical wellsite.

20 Q. You share what you found? I mean, anything --

21 A. Really all we saw was the monument for the well that had been  
22 plugged. There's a monument with some welded -- the welded well  
23 name and company name and some information like that. And then  
24 the flat location that had been revegetated or in process of being  
25 revegetated. And that's about all we saw up there.

1 Q. Okay. So on the April 18, what was your chain of thought?  
2 Did you suspect anything that this well might be supplying gas?  
3 Why you were doing all this investigation?

4 A. I was doing that investigation because, for me, just testing  
5 the active wellsite flowline wasn't going to be good enough. I  
6 was going to identify the roots and endpoints of all of the lines  
7 associated with this well, so we could either say this is still  
8 part of the investigation, or based on what I'm seeing through my  
9 field inspection process, we could start to rule out whether or  
10 not that was a contributing factor in the accident.

11 Q. So the purpose of the work then, if you (indiscernible) that  
12 means that there was a chain of thought that this may be, may be  
13 involved in the accident? Is that why you are doing the test?

14 A. Exactly.

15 Q. So that is a thought, that this could be a source of fuel.  
16 Is that --

17 A. Sure. Sure.

18 Q. But I don't -- the (indiscernible).

19 A. Yeah, so -- yeah.

20 Q. But I am just suspicious. I don't understand why you would  
21 do the testing here--

22 A. I'm doing that testing there because in, because -- yeah, I  
23 want to know. I've seen the two pipe risers that have not been  
24 addressed, so I want to know where those go. That's just part of  
25 my standard field inspection process. At this same point in time,

1 Black Hills Energy is doing their investigation. And all of the  
2 investigators out on the site are communicating some findings, and  
3 they are, they are becoming -- they are communicating to me that  
4 it does not look like they have an issue with the domestic gas  
5 supply on their side.

6 Q. So were you aware by that time, I think maybe 6:00 or 7  
7 o'clock, that the Black Hills did the pressure test or pothole  
8 test, and they came out negative? Did you witness any of that, or  
9 were you aware of what Black Hills was doing?

10 A. Yeah, yeah. I was aware of what they were doing. I know  
11 they were doing soils, taking soils, gas readings. They were  
12 doing some pressure testing. I was not getting direct results  
13 from them because I was busy doing my own work.

14 Q. Sure. So you were aware that their test came out negative?  
15 Because I think you mentioned earlier --

16 A. Yeah.

17 Q. -- that you said looks like their gas is not involved, or  
18 something like that, right?

19 A. Yeah. They're telling me that -- they're giving me some  
20 tidbits of information. I'm hearing some hearsay, you know, some  
21 things that I'm not sure that could be confirmed. But they're  
22 saying that, yeah, their pressure test looks good. They've looked  
23 at records for gas consumption within the residence leading up to  
24 the accident and explosion. And it looked like the 2 days prior,  
25 from what I remember, there was no natural gas use by that house,

1 in that house. But I'm just looking, I'm looking at the wells in  
2 close proximity, this well in particular, the core of 6-14. And I  
3 want to make sure that I do my job with the production that's in  
4 the vicinity of the house explosion.

5 Q. So is this your routine? Are you assigned a certain area  
6 that you are responsible for the wells of that -- I'm confused as  
7 to what your assignments are.

8 A. Okay. So I am our engineering integrity inspector. We have  
9 a designated group of three of us that work as part of our  
10 engineering team. And we look at specific -- specifically at  
11 flowlines and production facilities, and work to -- work with  
12 operators to ensure compliance with our 1100 series rules  
13 regarding flowlines and integrity management.

14 Q. And you're responsibilities for -- what area?

15 A. I'm responsible for the field inspection part of what we do.  
16 And my responsibilities are statewide.

17 Q. Okay, so --

18 A. Yeah.

19 Q. -- the entire state you cover.

20 A. The entire state.

21 Q. Okay. Do you know roughly --

22 A. Yeah.

23 Q. -- how many wells that entails?

24 A. About 54,000. But I have assistants with our other staff.  
25 My primary, my primary workload exists here on the, on the front



1 range and in the Wattenburg DJ basin. We conduct integrity  
2 audits, flowline integrity audits with operators across the state.

3 Q. And how do you -- just for the record, what is a flowline?  
4 What is a return line? How do you define in your integrity  
5 management which is which?

6 A. So the way we define flowlines are they are, they are part of  
7 the production line that -- well, we define them different ways.  
8 A wellsite flowline is one that is a production line from the  
9 wellhead to a separator. Jurisdictionally, we cover everything up  
10 to a custody transfer point or where it turns into gathering. And  
11 then at that point, it becomes the jurisdiction of the Public  
12 Utility Commission.

13 Q. Okay. So from the wellhead through the separator.

14 A. Correct.

15 Q. And what is the endpoint then? And I understand from  
16 wellhead going to separator --

17 A. So then we --

18 Q. -- (indiscernible). Where the gas goes then?

19 A. So yeah, so then we oversee the dump lines that go from the  
20 separator to the production tanks.

21 Q. Tell me what a dump line is.

22 A. A dump line is -- there's a -- the separator separates gas  
23 and liquids, so a three-phase separator takes -- separates oil,  
24 produced water and gas. And the dump lines send the crude oil to  
25 the crude oil production tank and produced water to a produced

1 water vault. Tank.

2 Q. Now is the separator typically reverse flow or your gas  
3 coming in, reverse reaction and the moisture gets out? Or is it a  
4 dehydrator of some sort or --

5 A. Yeah. Exactly. So it helps to dehydrate the gas. And then  
6 from that point -- and it varies from operator to operator across  
7 the state -- that gas is then -- goes down a gas sales line to a  
8 gas meter. And then, from the gas meter, it's parted -- it ties  
9 into a gathering system that becomes the responsibility of the  
10 PUC.

11 Q. So in the integrity management program, just walk me through.  
12 When you say the flowlines are included in it, that's your primary  
13 responsibility.

14 A. Correct.

15 Q. What is it that you look for?

16 A. So we look for compliance with our 1100 series rules, which  
17 includes -- in particular, 1101-E is our pressure testing rule.  
18 We require that operators pressure test their flowlines annually.  
19 We want to ensure that operators are proactive in maintaining good  
20 integrity of their flowlines by implementing corrosion protection  
21 programs. We ensure that they are members of 811 Call.

22 Q. So they are required to be a member of 11 call.

23 A. Yes. Correct. And then we --

24 Q. Is that an 800 number or a --

25 A. 811.

1 Q. 811. Okay.

2 A. Yeah. And then we oversee, we oversee abandonment of  
3 flowlines as part of our 1103 rule. And then, and then also in  
4 that is maintenance, construction as part of the 1100 series rules  
5 as well.

6 Q. That's quite a bit of responsibility. For 55,000 wells, you  
7 said? Statewide?

8 A. Yeah. Well, we have -- yeah. So we have field inspection  
9 staff across the state. So yeah. It's what -- we are -- yeah, we  
10 are focused on reaching out to operators across the state. The  
11 inspection part of that, obviously, has its challenges.

12 Q. So who does the inspection? You said -- what do the field  
13 inspection staff do? What are, what are they responsible for?

14 A. Our field inspectors are responsible for inspecting wells and  
15 facilities across the state and ensuring compliance of all of our  
16 roles in this --

17 Q. So pretty much they do the same thing like you do, or they --

18 A. They do, but they look, they look at everything from drilling  
19 to completions to -- all the way through production to  
20 reclamation. So they have a lot more encompassed with what they  
21 do. Our group is more focused.

22 Q. We can, we can -- these are some questions for, I guess,  
23 somebody else. But do you know how many people are in that field  
24 inspection staff?

25 MR. MacLAREN: What do we have? Twenty-eight?

1 MR. LEPORE: Thirty.

2 MR. MacLAREN: Thirty.

3 BY MR. CHHATRE:

4 Q. Now your integrity assessment on -- what is your title?  
5 Integrity (indiscernible) you are responsible for integrity?

6 A. My title?

7 Q. Yeah.

8 A. My official title -- I'm an engineering  
9 technician/engineering integrity inspector.

10 Q. Okay, okay. So if you go to a well, what you are looking  
11 for?

12 A. So what -- so I do different types of inspections. I witness  
13 flowline pressure testing.

14 Q. Okay. That yearly test? You do yearly test?

15 A. Yeah, that's part of the annual pressure testing requirement.

16 Q. So you witness those, is what you're saying.

17 A. Yeah. Yeah. So I witness those with operators. I do  
18 inspections to identify the root cause of flowline failures and  
19 document the mechanisms that cause failures of flowlines,  
20 resulting in spills. And then I document and verify repairs made  
21 on flowlines. I witness abandonments. And I do new construction  
22 inspections as well.

23 Q. Okay. So the regulation requires you to go and visit each  
24 well or a number of random wells? Or how does that -- what does  
25 the regulation look like? I don't have -- I mean, I was just

1 issued a copy of your regulation. So walk me through it, I mean,  
2 what the regulation requires you to do for the operators.

3 A. Well, we're a relatively new group, so we've only been -- the  
4 three of us have been working as part of the engineering integrity  
5 team for just, for about a year and a half.

6 Q. Okay. So are there any, are there any firm guidelines for  
7 you to do for each operator, each well? I'm trying to understand  
8 with --

9 A. Right. Yeah.

10 Q. -- what the regulation requires you to do as an integrity  
11 person. That you shall inspect so many number of wells each year  
12 or do so many inspections?

13 A. Right. So yeah.

14 Q. I'm just trying to understand what --

15 A. So I've got an inspection count goal as part of, as part of  
16 my performance and evaluation with my supervisor.

17 Q. Okay. And what that goal is? I mean, as of the date of the  
18 accident.

19 A. I can't say what my goal is. As far as --

20 Q. I guess -- I know there's the goal, but I don't know what  
21 that goal means.

22 A. Right. Right.

23 Q. That there's a certain number of wells you need to inspect,  
24 or the --

25 A. Yeah, so I've got a certain number of inspections to conduct

1 and then --

2 Q. And what that number is?

3 A. And then, and then I've also got -- and then I target  
4 response to reportable spills that come in as a result of flowline  
5 failures.

6 Q. So there's no -- I mean, that's your goal, but the regulation  
7 doesn't require you to --

8 A. No.

9 Q. -- conduct so many inspections per year?

10 A. There is not a hard count number for me, no.

11 Q. Okay. Now as far as the reportable incidences, what are,  
12 what are the criteria on -- what is a, what is a reportable  
13 incident and what is not a reportable incidence?

14 A. So we receive notices of -- to report of what we deem a  
15 reportable spill on a Form 19 spill report. And those come in,  
16 and those are spills, liquid spills, that are greater than one  
17 barrel outside of containment per our rule.

18 Q. One barrel outside the containment.

19 A. Yeah.

20 Q. Okay. And for the gas?

21 A. This is, this is just for liquids and --

22 Q. So who takes of the gas spills? What are, what --

23 A. Generally, the gas is addressed by our field inspection unit.  
24 I do some of that as well through FLIR camera documentation.

25 Q. Okay. So as a group of --

1 A. Right.

2 Q. -- (indiscernible) established in 18 months, that doesn't  
3 cover anything the gas spill?

4 A. That's not -- no, that's not true. I'm still looking at gas  
5 flowlines, but gas releases are pretty rare across the state  
6 historically, based on my experience. And so yes, I look at those  
7 as they come up and are reported to us via either an accident  
8 report or through some sort of spill reporting, or notice directly  
9 from an operator that there has been a flowline with an, with an  
10 associated gas release. So all -- I will do an inspection.

11 Q. But help me out. What an operator is required to do for a  
12 gas release? What does, what does the regulation require me as an  
13 operator -- what I'm required to report and what I do not have to  
14 report for the gas release? Is there, is there a regulation for  
15 that, or specific, or there is nothing?

16 A. They do report that --

17 Q. No, no. That's not my question. Does the regulation require  
18 them to report to you certain incidents, and certain incidences  
19 they don't have to report? I know what you do and what you may  
20 want to do, but --

21 A. I don't have the answer to that question.

22 Q. Okay. Should I take that as the regulation does not require?

23 A. No. No.

24 Q. Because if the regulation required --

25 A. Yes.

1 Q. -- you probably will know, right? I can give you the  
2 (indiscernible) to me. But unless I don't understand what the  
3 regulation requires and what the -- I mean, if an operator decides  
4 not to report a gas release. In this case, there's an accident.  
5 But if there's no accident, let us suppose. There is no blow up  
6 of the house. Were Anadarko required to report to you guys? Or  
7 they can just say, well, we took care of it? You see what I'm  
8 saying?

9 A. No, no, yeah.

10 Q. You see what I'm saying?

11 A. Right. Yes, I --

12 Q. So are they, are they (indiscernible) --

13 A. They are required to report to us. Unfortunately, I cannot  
14 cite that rule.

15 Q. Can you get back to me on that, if they do?

16 A. Can I ask, can I --

17 Q. I agree with you that you may not remember everything, and I  
18 --

19 A. Right.

20 Q. Don't take that wrong. I mean --

21 A. No, it's fine.

22 Q. I don't expect you to remember each and every sentence from  
23 this. What I'm really looking for is, if there is a regulation,  
24 (indiscernible). That's all I'm asking for. And you can get back  
25 to me. Leisurely. Like, 8,10 days.



1 A. Okay.

2 Q. Is that fair?

3 A. Yeah.

4 Q. But that's what I'm trying to understand.

5 A. I mean, there may be people in the room right now that can  
6 answer that question quickly.

7 Q. No. You are integrity person, right? So I want to know what  
8 you are absolutely required to do in that year and a half. I'm  
9 going to ask questions of everybody, but different questions. I  
10 just want to make sure. But I mean, you are the gatekeeper, the  
11 way I look at it, right? You go in the field. And you are  
12 enforcing the rules, correct?

13 A. Right. Yeah.

14 Q. So now --

15 A. I am noticed on gas releases, yeah. As far as rule-based, I  
16 just --

17 Q. I guess what I'm, what I'm really trying to find out is, if  
18 (indiscernible) an operator -- like take this incidence. If there  
19 is no devastating accident here, were the operator required to  
20 report to you as the regulator? Because there is no accident, the  
21 operator takes care of this, pinches line, plugs line, and that's  
22 the end of the story, is what I'm trying to understand.

23 A. Right. I'll get back to you. Yeah.

24 Q. So you get, you get what I'm saying?

25 A. Yeah.

1 Q. I don't expect you to remember, but if there is rule like  
2 that--

3 A. Right.

4 Q. -- then I'm hoping that you would remember -- I mean --

5 A. Right.

6 Q. -- you do have so much stuff. I'm very impressed, to be  
7 honest with you. So now going back to --

8 A. Fair enough. I'll get back, I'll get back to you on that.

9 Q. Yeah, please. Now going back to the integrity group, is  
10 there a requirement, a procedure that says, well, you shall do  
11 some surprise visits to the operator and actually find out that  
12 they are meeting your goal as a regulator?

13 A. Absolutely. Yeah. Random inspection. Yeah.

14 Q. Random inspection is part of the regulation.

15 A. Absolutely.

16 Q. And how many of those you conduct?

17 A. I've conducted in the last year and a half approximately 400  
18 inspections.

19 Q. Random inspections. Okay.

20 A. As far -- percentage-wise? I would say about 50% of those --

21 Q. Are random.

22 A. -- are random.

23 Q. Okay. And going back to -- because this is a gas accident,  
24 I'm mainly focusing on gas, but this -- my question is to both gas  
25 and liquid. So don't just focus on gas, but --

1 A. Right.

2 Q. For the operator, do they require to submit annual reports to  
3 you as the regulating agency? Like fumes are required as an  
4 operator to submit annual report, do --

5 A. Production reporting?

6 Q. Yeah.

7 A. Yes.

8 Q. I mean, the incident reporting. What is the --

9 A. Yes.

10 Q. And what is the incident report criterion per se?

11 A. For in this case?

12 Q. Yeah.

13 A. For an accident report? They will file, they will file an  
14 accident report with us. I can't remember what form number it is.

15 Q. Okay. That's okay. That's okay.

16 A. But yes, the --

17 Q. Don't worry about the form numbers as long as there is a  
18 form.

19 A. Yes, that is required.

20 Q. Okay. Like, PHMSA requires an operator to file a report for  
21 a certain number. Release volume, or whatever the case may --

22 A. Right.

23 Q. So do you have certain regulations like that? The operator  
24 has to submit something for the gas? If there's a flowline  
25 release, there's a liquid line release --

1 A. Right.

2 Q. -- is there a number that --

3 A. Yeah. And I've given you the number for the liquid line.

4 Yeah.

5 Q. Okay. Yeah. (Indiscernible). So there is a number for  
6 that.

7 A. Yeah.

8 Q. They are required to file a report to you guys. Annually?  
9 Every incident? How does that work?

10 A. Yeah. If it's, if it's a release, an expected release of gas  
11 or liquid, yes, then they report that to us.

12 Q. Now are they required to mark their buried lines -- and  
13 they're not gathering, but flowlines.

14 A. Flowlines?

15 Q. Like, PHMSA requires a gas line or a liquid line to be marked  
16 with markers.

17 A. Right.

18 Q. Are you required to have the operator mark the lines so that  
19 the public knows that there is something --

20 A. Yeah, that is part of our rule for -- we have a -- there's a  
21 section on that in our 1100 series rules. Typically for well  
22 signs and we -- well, flowlines that we deem offsite flowlines,  
23 that leave a well pad and travel a distance.

24 Q. And did you observe any markings in this particular case on  
25 your active 2-inch line?

1 A. No.

2 Q. Now is that a violation of your --

3 A. Well, we --

4 Q. Or it is not a violation of your rule?

5 A. We talk -- our rules, our 1100 series rules talk about  
6 pipeline markings. Generally speaking, flowlines across the  
7 industry are not marked. They become marked at that point where  
8 there's that custody transfer.

9 Q. Okay. Now tell me what a custody transfer is.

10 A. That's a change, that's a change in --

11 Q. (Indiscernible) trying to learn the --

12 A. That's a change in ownership of that petroleum asset or that  
13 product.

14 Q. But again, I'm -- going back with PHMSA, though, because I  
15 think I'm more familiar with those than your rules.

16 A. Right.

17 Q. But PHMSA requires, whether they did a custody transfer or  
18 not, the gas lines or the liquid lines be marked with markers. My  
19 question was before --

20 A. Yeah.

21 Q. -- are you guys required to have the flowlines being marked  
22 so that people know that there is something underground? And you  
23 said yes, right?

24 A. Well, I said that our 1100 series rules talk about pipeline  
25 marking. But we are -- no, we do not actively enforce marker --

1 flowline marking. No, we don't.

2 Q. But the regulation requires them to mark.

3 A. I would have to look back at how that rule reads. It talks  
4 pipeline and not flowline.

5 Q. So what is a, what is a pipeline, then? What would you  
6 consider a pipeline and what would you consider a flowline?

7 A. I would consider a pipeline --

8 Q. By regulation, not by your opinion, is what I'm asking.

9 A. Right.

10 Q. I'm really focusing on that. Yeah.

11 A. Yeah. Right. So that flowline, again, goes to a custody --  
12 it's part of the production process from the wellhead through the  
13 production facility to a point of custody transfer. A pipeline  
14 would be part of the gathering and transportation of that --

15 Q. But then that's a PHMSA, right?

16 A. That's PUC or PHMSA, depending on the -- yeah.

17 Q. But no, I'm saying in your jurisdiction, you only control  
18 flowlines up to the --

19 A. That's -- right. Custody transfer.

20 Q. Yeah. Of the, of the product. Right? Because you are using  
21 the custody transfer also from the asset to asset. So I'm just  
22 trying to make sure, for the record. So when you say custody  
23 transfer, you are talking about the product from the production,  
24 either gas or liquid, going into the gathering line. So before --  
25 so I guess I'm trying to understand. When you say define pipe,

1 than what is a pipe? In your regulation, you said your regulation  
2 says pipeline should be marked. Your regulations. In your  
3 regulations, what is a pipeline? Flowline, you said flowline is  
4 different than pipeline, right?

5 A. Right. Right.

6 Q. So what is a pipeline in your regulation?

7 A. The way that our rules were written and have developed over  
8 time, the language has changed. So where terms were stated as  
9 pipeline, they -- the heading of our 1100 series rules is labeled  
10 as pipeline rules, but our -- jurisdictionally, we oversee  
11 flowlines. There is some language discrepancy that has occurred  
12 during rulemaking, historically.

13 Q. Okay. So when does -- when you say rulemaking, so which --  
14 when the rules were established? Historically even, how far back  
15 we are going? See, I mean -- maybe not. I know when PHMSA  
16 established. I know when NTSB established, right?

17 A. Right.

18 Q. So when you say historically, when the, when the rules  
19 started in general?

20 A. So our flowline rules were established -- yeah. Early '90s.

21 Q. 1990s.

22 A. Yeah. I mean, they were, they -- we had pipeline rules, I  
23 want to say, late '80s, early '90s. They started to -- they were,  
24 they were written and then they were modified through that early  
25 '90s period. Again modified in 2002, the abandonment rule. And

1 then have been left in place as is.

2 Q. So me as an operator, if I read the regulation -- and you  
3 guys are more familiar with that than I am, but if I read the  
4 regulation and it says pipelines should be marked, if I interpret  
5 that my flowlines need not be marked, am I wrong? I mean, you are  
6 integrity person. So I'm just asking you.

7 A. Right.

8 Q. If your regulations say as pipeline should be marked, and you  
9 are telling me the pipelines are different than flowlines. So me,  
10 if I am Anadarko, should I say that, well, I don't have to mark my  
11 pipelines because it's a flowline? Is that a correct  
12 interpretation, me as an operator?

13 A. I'd have to read back on the rule.

14 Q. But I thought you just told me that pipelines are different  
15 than flowlines.

16 A. They are.

17 Q. So what -- who is going to tell you differently than what I'm  
18 asking you?

19 A. Once again, because a pipeline is going to travel a distance  
20 across, you know, numerous surface owner properties to a central  
21 gathering point. So they travel a much greater distance,  
22 typically, than flowlines.

23 Q. I'm really lost. You've really got to get back to me on  
24 this. Because what distance has to do with the risk? I mean, the  
25 risk is still the same. So I --



1 A. Right. I mean, if you looked at the percentage of flowlines  
2 associated with production across the state, most of that is going  
3 to stay per well count. It's going to stay on that, on that  
4 individual well pad. Right? There are certain --

5 Q. Well, I mean, I don't know. Like I said, I mean --

6 A. Yeah. No, so there are circumstances where there are offsite  
7 flowlines as part of, say, a water flowline gathering system that  
8 occurs -- that travels some distance in terms of miles --

9 Q. And you can get back to me on this one.

10 A. -- to a point to where it gets on the (indiscernible). Sure.

11 Q. Because I'm really trying to understand the big distinction  
12 between a pipeline and a, and a flowline and the markings on this.  
13 So in your -- before a new group is established 18 months ago or  
14 so, who handled the responsibility of auditing, inspecting the  
15 various operators? For exactly the same thing you are doing.  
16 Surprise inspections, audits to make sure the lines, you know,  
17 look at the -- whatever. Abandoned lines --

18 A. That would have been our engineering group and our field  
19 inspection unit in combination.

20 Q. But they still follow the same rules that you are following  
21 now?

22 A. Correct.

23 Q. Correct?

24 A. Yeah.

25 Q. Okay. So with your experience -- and you're here longer than

1 a year and a half. How many incidences where the -- you see the  
2 leaks in the flowlines, both gas and liquids? I mean, do you  
3 compile the data?

4 A. Yes, I do. Yes. Yeah. And we've got that in our database  
5 as part of our public record. But I -- how many incidents have I  
6 personally seen in my, in my tenure? That's your question.

7 Q. Well, my question was, number one, do you keep the data as to  
8 how many leaks are happening per year.

9 A. Yes, we do.

10 Q. Number one. And you already answered that, yes.

11 A. Right.

12 Q. You had the database. And number two I asked, I am asking  
13 you is how many you have seen in your tenure in last -- I would  
14 say go back only for 18 months, because that's what you are part  
15 of that group. How many you have seen for the gas and liquid  
16 leaks?

17 A. So total number of reportable spills? You know, I leave -- I  
18 mean, our integrity engineer --

19 Q. Just ballpark number. I mean, less than 100? Thousands and  
20 are only --

21 A. Hundreds.

22 Q. Hundreds. Okay. And that's for gas and liquid together --

23 A. Um-hum.

24 Q. -- or just gas and then -- okay.

25 A. Primarily liquids.

1 Q. Primarily liquids. What about gas? How many gas leaks --

2 A. Yeah.

3 Q. -- have you guys seen?

4 A. Less than 100.

5 Q. Okay. In the 18 months. Okay. And are they on the  
6 flowlines some distance away from the well? Are they -- can you  
7 just give me a general idea as to where they are generally and --

8 A. Yeah. I mean, I would say -- and it's far less than 100.  
9 I'd say -- I've only seen a handful of gas releases.

10 Q. And is the operator then required to analyze and find out why  
11 or what happened?

12 A. Absolutely. I mean, that's part of -- so I would respond to  
13 that, once noticed, either by someone within the commission or the  
14 operator directly, where that release happened and what well it  
15 was associated with, I'd respond to it via field inspection,  
16 schedule permitting. And then look at root cause, again, root  
17 cause of failure leading into release.

18 Q. Does that require to file a report to your office, that leak  
19 -- this particular line was caused by corrosion, third-party  
20 damage, whatever the reason may be? But the regulation requires,  
21 then, if there's a release, that they shall analyze it for the  
22 root case? Operator? Or the regulation does not require them to  
23 find the root cause?

24 A. The regulation requires them to maintain integrity.

25 Q. Yeah, but I mean, that's different.

1 A. No.

2 Q. What I'm saying is --

3 A. There is no language in our rules that says find root cause.

4 Q. Find root case. Okay. So then of course there is no  
5 language. That means they don't have to --

6 A. In the rules. As part of our program and our outreach, yes,  
7 there is that language.

8 Q. Okay. So what's the difference? Outreach versus regulation?

9 A. Well, you know, within the commission, we go through  
10 rulemaking. You know, in the relatively near future, we're moving  
11 in the direction to have rulemaking for our flowline rules, right?  
12 That language would be incorporated, and that and other languages  
13 would be incorporated at that point in time. But at this point in  
14 time, what we're doing now as we're outreaching to operators, the  
15 three of us within our integrity group requesting that this  
16 information is documented and sent to us.

17 Q. So do you remember -- and maybe I asked you and maybe I did  
18 not, because -- what is the reporting criteria for a gas release?  
19 What kind of release -- liquid, I know. But do you ever get --

20 A. You've already asked, you've already asked me that question.

21 Q. Let me back up. Yeah. So let me, let me back up. Do you  
22 ever get calls from the operators telling you that, hey, I had a  
23 gas release and I took care of it? Or do they file an electronic  
24 reporting to you? In the last 18 months, have you seen any? Any  
25 operator telling you that --

1 A. Yeah. You know, it depends. We will, we will use our FLIR  
2 camera as part of the field inspection process to identify gas  
3 release. Then we will, we will put that down as documentation on  
4 a field inspection report as an action required item, indicating  
5 that we've identified a gas release at this well or facility and  
6 repairs need to be made to prevent it -- stop and prevent the  
7 release from occurring.

8 Q. Okay. But you -- let me repeat the question. In your 18  
9 months in the integrity group, do you recall any operator calling  
10 you, saying hey, forget about -- you trace the leak and you call  
11 the operator. But have you ever (indiscernible) an operator  
12 saying, excuse me, but I had a gas release --

13 A. Yeah.

14 Q. -- and I fixed it. On their own. Not because you followed  
15 through your --

16 A. Well, we had a -- yeah. We had a gas release resulting in a  
17 fire. And that was provided to us as part of our accident  
18 reporting program. And then I responded to that to identify --

19 Q. Maybe I'm not asking the question right. Did the fire -- and  
20 there's an accident, right?

21 A. Right.

22 Q. So operator reported it.

23 A. Right.

24 Q. If the operator wouldn't, somebody else would. What I'm  
25 saying is, if an operator has a gas release, they find out --

1 A. I'm going to have to get back to you on that. Like we  
2 discussed before.

3 Q. I'm losing track of how many things we'll get back from you,  
4 but (indiscernible) --

5 A. That's the, that's the same question.

6 Q. Okay.

7 MR. LEPORE: May I?

8 MR. CHHATRE: Sure. Identify.

9 MR. LEPORE: Oh, sorry. This is Matt Lepore.

10 MR. CHHATRE: So the transcriber can --

11 MR. LEPORE: Sure. Matt Lepore from the COGCC. I think it  
12 might be useful, Ravi, if you would define what you mean by a gas  
13 release or a gas spill.

14 MR. CHHATRE: Sure. Okay, let the --

15 MR. LEPORE: So because --

16 MR. CHHATRE: Go ahead.

17 MR. LEPORE: -- there are fugitive emissions of gas from  
18 connections on equipment, for example, and from storage tanks.  
19 Those things occur routinely, I guess I would say, and Joe  
20 referenced the use of FLIR cameras to identify those. So there's  
21 not a quantitative amount that an operator is required to report  
22 to us.

23 MR. CHHATRE: But that's all, that's all I'm asking. Okay.

24 MR. LEPORE: Right.

25 MR. CHHATRE: Exactly what I'm asking.

1 MR. LEPORE: So that's very different, I think -- in our  
2 thoughts, a liquid spill is easy to quantify, and we have  
3 quantification requirements. Gas spills -- and that's why, that's  
4 why I'm asking you to define.

5 MR. CHHATRE: Sure. Yeah.

6 MR. LEPORE: There's a fugitive emission, comes off a tank.  
7 We identify that with a FLIR camera. For one thing, that's not in  
8 the COGCC's jurisdiction. That's in the Department of Public  
9 Health and Environment's jurisdiction. So they have specific  
10 regulations about frequency of those inspections with the FLIR  
11 cameras and so forth. So I think, I think the trick -- the hard  
12 part here is help us understand what you're talking about as a gas  
13 release --

14 MR. CHHATRE: Sure. Okay. I mean, that's what I was --

15 MR. LEPORE: -- and we would respond to it and that, and that  
16 operators would tell us about.

17 MR. CHHATRE: Fair enough. Fair enough. Fair enough.

18 MR. LEPORE: Does that help?

19 MR. CHHATRE: (Indiscernible). Yeah.

20 MR. LEPORE: Because I can think of loss of well control  
21 incidents --

22 MR. CHHATRE: Okay. Sure.

23 MR. LEPORE: -- pipeline hits with equipment that -- those  
24 get reported to us.

25 MR. CHHATRE: Yeah. Fair enough. Yeah. Like I said, in

1 this case -- let us take this case --

2 MR. LEPORE: Yeah.

3 MR. CHHATRE: -- where there is a gas release.

4 Unfortunately, there is an ignition and there is an explosion,  
5 whatever. If you take a similar incidence, and I'm not even  
6 assuming at this point that this release caused --

7 MR. LEPORE: Sure.

8 MR. CHHATRE: -- the explosion. I'm not even assuming that.

9 MR. LEPORE: Right.

10 MR. CHHATRE: But for the sake of argument, in this case, and  
11 there's a gas release and there is no explosion. There are no  
12 fatalities. In similar situations like that, how many cases --  
13 calls you get or reports you get saying, I had a gas release? Or  
14 this release then will fall under the Health or whatever the other  
15 regulation you said? That is all I'm asking. Am I, am I clear  
16 now?

17 MR. LEPORE: Yeah, and Joe can answer to the best of his  
18 ability and (indiscernible).

19 MR. CHHATRE: Yeah. Sure. Am I clear now? And your comment  
20 is well-taken.

21 MR. LEPORE: Yeah.

22 MR. CHHATRE: I mean, I just want to make sure that --

23 BY MR. CHHATRE:

24 Q. So many of those calls you get from the operator ever? Or  
25 no? I mean, I'm just trying to get some magnitude here.



1 A. A fewer amount than liquid releases.

2 Q. You do get. I mean, there is, there is some kind of a record  
3 that you got a call from a certain operator that there was a  
4 release, and you guys, and the integrity group took some action.  
5 And if there is none, there is none.

6 A. Right. Yeah.

7 Q. I mean, you know, I'm not saying there has to be or  
8 something. I'm just trying to -- this is, that's a gathering  
9 thing for me. So I'm just trying to find out if this thing  
10 happened or it doesn't happen.

11 A. It happens in some circumstances. I don't think it always  
12 happens.

13 Q. Okay. Okay, fair enough. So what's your inspection when you  
14 go on -- what do you inspect when you go to an operator? Do you  
15 inspect their operating and maintenance procedure for flowlines as  
16 a regulator?

17 A. Um-hum. When we meet with an operator or a field, or a field  
18 inspection?

19 Q. No, I'm just trying to understand what -- (indiscernible)  
20 field inspections, field -- whatever terminology you use.

21 A. Yeah.

22 Q. But if you go to an operator and you are looking at a  
23 wellhead's flowlines, what you are looking for? What you ask them  
24 question-wise?

25 A. We look at everything from operating parameters, pressures,

1 flow regime, materials used, integrity management program. We  
2 want to know how -- you know, we want to know historically what's  
3 occurred on these lines. Have they had issues with failures?  
4 Root causes? Have we replaced, repaired lines? All of the above.  
5 And do we have abandonments taking place.

6 Q. Okay. But they are not required to tell you if the certain  
7 lines are abandoned per your regulation?

8 A. Yeah, they -- yes, they do. They do report that to us on a  
9 Form 42.

10 Q. Okay, great. Okay. So that is covered.

11 A. Yes.

12 Q. Is covered. Okay. Now does your flowline require to have  
13 cathodic protection if it's a carbon steel?

14 A. No.

15 Q. They are not required.

16 A. No.

17 Q. Do you have any idea as to how many corrosion leaks these  
18 lines, the flowlines have in different failures?

19 A. It depends upon the age of the well. It depends upon a lot  
20 of different factors. Age of well, production, volumes -- yeah.

21 Q. But that -- I guess my question is do you see any corrosion  
22 leaks? But I -- no, I'll take it back, because they are not  
23 required to do analysis, so you would not even know what the --

24 A. But I'm --

25 Q. -- cause of the release is.

1 A. But I'm responding to some of those, so yes, I know that -- I  
2 do see corrosion leaks.

3 Q. But there is no CP requirement on the lines?

4 A. I'm not going to say blanket no. Some operators, yes, in  
5 certain parts of the state do use cathodic protection. Not all  
6 operators.

7 Q. True. But I mean, regulation-wise, they are not required.

8 A. Yeah. Correct.

9 Q. Okay.

10 MR. CHHATRE: I'm going to stop right now. I'm still going  
11 to digest, but I'll just pass onto PHMSA.

12 MR. AJIBOYE: Yeah, I have -- this is Gbenga from PHMSA. I  
13 just have a couple of questions for you.

14 BY MR. AJIBOYE:

15 Q. Can you please elaborate on your abandonment procedure? Can  
16 you walk us through what --

17 A. Sure.

18 Q. -- they are required to do?

19 A. So operators are required to disconnect, isolate the  
20 flowline, purge the flowline of any hydrocarbons, cut the flowline  
21 3 feet below grade, and cap and seal the ends.

22 Q. Now they are meant to report that to you guys once all this  
23 is done?

24 A. Yeah. So yes. Once a flowline is properly abandoned, then  
25 yes, we require that notice of flowline abandonment.

1 Q. And how long has this abandonment procedure been in place,  
2 this --

3 A. To the best of my knowledge, since 2002.

4 Q. Okay. 2002. Okay. So you also said, in the custody  
5 transfer, the operators are required to mark the lines. That's  
6 where the line markers are required by the code, right?

7 A. You'd have to ask PUC or PHMSA that question, but yes.

8 Q. But you mentioned that, though. That's -- during the custody  
9 transfer from --

10 A. I meant -- yeah, I mentioned that based on my industry  
11 experience that that's typical. Yes.

12 Q. Oh, not based on COGCC requirement?

13 A. No, we have no jurisdiction beyond the custody transfer.

14 Q. Okay. For flowlines --

15 A. Correct.

16 Q. -- there's a custody transfer from one operator to the other.  
17 Are you guys required to -- do you guys require them to identify  
18 the lines, whether abandoned or active?

19 A. We have that pipeline marking section. I would have to look  
20 back and read the rule. It's not typical for flowlines to be  
21 marked unless they're offsite flowlines traveling a distance. In  
22 that case, as part of a flowline gathering system, we would expect  
23 to see markers.

24 Q. I guess my -- I probably misunderstood something. Because  
25 when you were talking about chain of custody transfer, it sounded

1 to me as if the code required the operators to mark the flowlines  
2 at that point. That's what I gather from what you explained  
3 earlier.

4 MR. AJIBOYE: Ravi, is that the impression you got?

5 MR. MacLAREN: Can we read the rule?

6 MR. AJIBOYE: Okay.

7 MR. LEPORE: So read -- tell the transcript what you're  
8 reading.

9 MR. MacLAREN: I'm reading the COGCC Rule 1102-C: Marking.

10 MR. AJIBOYE: Okay.

11 MR. MacLAREN: "In designated setback locations and where  
12 crossing public right-of-way where the utilities met, markers  
13 shall be installed and maintained and identifying the location of  
14 pipelines.

15 "Number 2. The following shall be written legibly on a  
16 background of sharply contrasting color on each line marker:  
17 Warning, Caution or Danger; followed by the words Gas or name of  
18 natural gas or petroleum transported; Pipeline. In letters at  
19 least 1 inch high with 1/4 inch stroke and the name of the  
20 operator and the telephone number where the operator can be  
21 reached at all times."

22 MR. AJIBOYE: Okay.

23 BY MR. AJIBOYE:

24 Q. So now going back to abandonment procedure, right? You just  
25 mentioned that the line is going to be disconnected, isolated and

1 cut above grade, right?

2 A. Below grade.

3 Q. Below grade.

4 A. Yes.

5 Q. And once that is done, are those records transported to  
6 COGCC?

7 A. Correct.

8 Q. So in the case of this particular where we are talking about,  
9 do you guys have record of the abandonment procedure being  
10 followed? Was it inspected by you guys?

11 A. We do not have record of it.

12 Q. Okay. You also said you are -- your background -- okay.  
13 When you went to identify the flowlines up north, you said that  
14 the monument has the historical -- it has the name of the --

15 A. A well that had been plugged.

16 Q. Do you remember the name of the operator when you went to  
17 physically inspect?

18 A. I've got a photo of that. I do not recall what was on the  
19 monument.

20 Q. Then my last question is, your background is -- you say you  
21 have a geologist's background, right?

22 A. Right.

23 Q. And so you probably know some few things about soil? Can you  
24 describe to us when the line, the line that was dug, the soil that  
25 was dug behind the privacy fence that you witnessed, can you walk

1 us through what your observation, or what you think the soil looks  
2 like when it was being dug? Is that typical of that area, the  
3 kind of soil that was excavated?

4 A. Well, it looked like there had been some imported fill  
5 brought into the area. You know, based on a couple of things:  
6 depth of cover and compaction of the soil. So we know there was a  
7 percentage of imported fill, or we suspect that, as part of the  
8 development of that subdivision. As far as -- if you want a --  
9 geologically speaking, I mean, soil was relatively granular. You  
10 had a moderate water content to it. And relatively low cohesion.

11 Q. Okay.

12 MR. AJIBOYE: Yeah, that's all my questions.

13 MR. CHHATRE: You can ask questions. You are a part of the  
14 --

15 MR. LEONARD: I'm next? Doug's not next?

16 MR. CHHATRE: I'm just following my --

17 MR. LEONARD: Oh, okay. Sorry.

18 MR. CHHATRE: -- routine thing, and we are now going to go  
19 around the table.

20 MR. LEONARD: Yeah, I mean, I do, I do have some questions.

21 MR. LEPORE: Can I ask a clarifying question, Ravi?

22 MR. CHHATRE: Sure, sure.

23 MR. LEPORE: As his representative, am I also asking  
24 questions? Okay.

25 MR. CHHATRE: Party rep can ask questions.

1 MR. LEPORE: Okay. Can we take a break?

2 MR. CHHATRE: Sure. Absolutely. I mean, any time you need a  
3 break, you tell me. Just (indiscernible). Off the record.

4 (Off the record)

5 (On the record)

6 MR. CHHATRE: Back on the record. I'm sorry. I do not  
7 remember did I say that or not. The person will not otherwise  
8 create the transcript, so go back and ask the questions again.

9 MR. LEONARD: Start over.

10 MR. CHHATRE: Yes, sir.

11 MR. LEONARD: Okay. All right. So Mike Leonard again.

12 BY MR. LEONARD:

13 Q. So Joe, in the rules, in the COGCC regulations, the term  
14 flowline and pipeline are used -- are interchangeable; is that  
15 correct?

16 A. Correct.

17 Q. Okay. At the time that this line -- we know the well was  
18 drilled in 1993. We assume the lines were put in at the same  
19 time. At that time, would there have been any requirement to mark  
20 that line?

21 A. I do not believe so.

22 Q. Okay. So currently, if that line were to be installed under  
23 the current regulations, would it have to be marked?

24 A. Yes.

25 Q. Because it is in --



1 A. It crosses a public right-of-way and designated setback  
2 location.

3 Q. Okay. And there is a definition of designated setbacks in  
4 COGCC's rules, correct?

5 A. Correct.

6 Q. I don't think we need to read that. That can be followed up  
7 on. There was a question earlier about corrosion prevention, I  
8 believe?

9 A. Um-hum.

10 Q. So in the 1102 rules -- and I'll just show you the rule here  
11 -- does it not say each operator shall take reasonable precautions  
12 to prevent failures, leakage and corrosion?

13 A. Correct.

14 Q. So I think you stated that -- you may have stated that --

15 A. Yeah.

16 Q. -- there was no rule, but there actually is a rule.

17 A. Yeah, there is a rule.

18 Q. You take some type -- and it's not specified what they use to  
19 prevent that corrosion, correct?

20 A. That is correct.

21 Q. Okay. Going back to the reporting requirements -- oh, okay.

22 Yeah, let me, let me ask one more question about the flowlines.

23 So if an operator -- again, the rule says whenever an operator  
24 discovers a condition that would adversely affect, they have to --  
25 the pipeline they have to correct that within a reasonable time.

1 A. Yes, that is correct.

2 Q. That's in the rules. Okay. Let me go back to the reporting.  
3 There was some question about reporting of gas leaks -- or gas  
4 releases. I'm sorry. Leak is the wrong word. So the rules --  
5 Rule 906, I believe. Does it not indicate that operators should  
6 report anything that could be a significant impact?

7 A. Yes, it does.

8 Q. And in this instance, this would be considered a significant  
9 impact, right?

10 A. Absolutely.

11 Q. So if this happened in another place, the operator would have  
12 to notify of that gas leak.

13 A. Yes.

14 Q. Okay. So you have been flowline integrity inspector for the  
15 last 18 months, correct?

16 A. Correct.

17 Q. And prior to that, what was your job title with COGCC?

18 A. Southwest field inspector.

19 Q. So you were a -- I hate to use the word normal, but a normal,  
20 a normal field inspector.

21 A. That is correct.

22 Q. And your duties included more than just flowline inspection,  
23 correct?

24 A. Correct.

25 Q. So you looked at the whole gamut of production, drilling.

1 But during your production inspections or during your,  
2 potentially, construction inspections, you did look for -- and a,  
3 and a normal inspector would look for flowline connections,  
4 potentially flowline leaks?

5 A. Yes, that is correct.

6 Q. Okay. So there are other people out there looking at this on  
7 a daily basis.

8 A. Right.

9 Q. Okay. You mentioned that you did not see the active flowline  
10 in the trench that was exposed the night that you all exposed that  
11 trench. Did you see that active flowline the next day when you  
12 met with me?

13 A. Yes, I did.

14 Q. So it was, and it was running --

15 MR. PRUNK: (Indiscernible).

16 MR. LEONARD: I got to look at Doug, because he's doing the  
17 -- we did the map thing yesterday.

18 UNIDENTIFIED SPEAKER: (Indiscernible) perpendicular.

19 BY MR. LEONARD:

20 Q. So it was perpendicular to the other two lines, correct?

21 A. That is, that is correct.

22 Q. And within, would you say, close proximity?

23 A. Yes.

24 Q. Okay. Within inches, feet of the other two lines?

25 A. Yes.

1 Q. Okay. Yes. Inches, feet. Yes. All right. So --

2 MR. CHHATRE: Wait, was it inches -- this is Ravi. Was it  
3 inches or was it feet?

4 BY MR. LEONARD:

5 Q. Yeah, in inches or feet. Yeah. I mean, you best guess.

6 A. Probably inches.

7 Q. Within inches. Okay. So probably -- and I know you may not  
8 be able to answer this, but probably in the laying of the new  
9 flowline, they would have exposed the old ones.

10 A. That is correct.

11 Q. Okay. Is this -- and I'm going to show you a photo. Is  
12 this, is this the photo you took of the wellhead?

13 A. Yes, it is.

14 MR. CHHATRE: Write down the date.

15 MR. LEONARD: It's timestamped on the -- it's timestamped.

16 MR. AJIBOYE: It's timestamped.

17 MR. CHHATRE: Okay, no, no, no. Today's date.

18 MR. LEONARD: Oh, today's date.

19 MR. CHHATRE: And your name on it, because it'll go in an  
20 exhibit, then, attached to the transcript.

21 MR. MacLAREN: Twelve.

22 MR. LEONARD: Today's --

23 MR. MacLAREN: Or 12, yeah.

24 MR. LEONARD: So the -- yeah, the 12th. They all run  
25 together for me, so don't ask me. So this is an accurate -- I

1 mean, this is how you found the wellhead when you did the second  
2 pressure test? I mean, when you did the witness pressure test,  
3 this is the way you found the wellhead.

4 MR. MacLAREN: That is correct.

5 MR. LEONARD: Okay. Did you -- my first question is, did you  
6 ask them to alter that wellhead in any way before you left? Let  
7 me back up. Did you ask them to alter the 1-inch line in any way  
8 before you left?

9 MR. CHHATRE: Can you clarify as to who them is?

10 MR. LEONARD: Did you, did you ask Anadarko or Anadarko's  
11 representatives to change the configuration of that in any way?

12 MR. MacLAREN: Of the 1-inch line.

13 MR. LEONARD: Yeah.

14 MR. MacLAREN: After we -- when we could not find the  
15 endpoint of the 1-inch line, I asked them to disconnect the gas  
16 supply to the 1-inch line.

17 MR. LEONARD: Okay, so -- and just to be --

18 MR. MacLAREN: And of all tie-in connections.

19 MR. LEONARD: Specific for the people in the room, can you  
20 point to the lines you want -- you asked them to disconnect?

21 MR. MacLAREN: Yes. All of the 3/8 stainless steel tubing  
22 tie-in.

23 MR. CHHATRE: Why don't you just circle somewhere on the line  
24 and that way we'll know which ones you are showing?

25 BY MR. LEONARD:

1 Q. So all of those tie-ins were -- what about the positioning of  
2 the valve? Did you, did you ask for the valve to be left closed  
3 or open?

4 A. I asked for the valve to be left open.

5 Q. Okay. And your thought process there was --

6 A. My thought process was, if there was any residual gas in that  
7 line that was still moving in a direction -- possibly moving in a  
8 direction towards the neighborhood, the house, that that would  
9 prevent any migration of additional residual gas and relieve any  
10 pressure in the line.

11 Q. Okay. Did you -- and I don't know. Did you notice any  
12 pressure on that line when it was opened? Was there any --

13 A. I did.

14 Q. So can you give us an estimate? I mean, there was no gauge  
15 on it, but is (indiscernible) --

16 A. I asked Anadarko personnel to -- after I had completed  
17 witnessing the active flowline pressure test, I returned to the  
18 wellhead. The valve was in a closed position. I asked that it be  
19 moved to an open position, and at that time, there was a puff of  
20 gas released from the 1-inch valve.

21 Q. So it was an audible gas release?

22 A. It was something that you could smell.

23 Q. And something you could smell. Okay. Earlier, you said that  
24 you noticed workers down around the wellhead, in the wellhead  
25 area. And as you approached they were leaving, and you asked them

1 to re-access that. Was there -- did they have to unlock the gate  
2 to get in? Do you remember --

3 MR. CHHATRE: Excuse me. They meaning, again --

4 MR. LEONARD: I'm sorry. The Anadarko workers.

5 MR. CHHATRE: Okay. Only because there are too many people  
6 on the scene, so I just want to make sure.

7 MR. LEONARD: I get it. Yeah.

8 MR. MacLAREN: Yeah.

9 MR. LEONARD: I'm sorry.

10 MR. MacLAREN: Anadarko contract personnel. Yes, I believe  
11 they opened the gate. They were in the process of locking it.

12 MR. LEONARD: They were in the process of placing the lock?

13 MR. MacLAREN: They were closing the gate. Yes, they had  
14 completed their pressure test. They were carrying the remainder  
15 of their tools and supplies out, and they were closing the door.

16 MR. LEONARD: But you don't know if they physically put a  
17 lock on the gate.

18 MR. MacLAREN: I don't remember that.

19 MR. LEONARD: Okay. I think that's about all I have at the  
20 moment.

21 MR. CHHATRE: Okay. Go ahead.

22 MR. PRUNK: I have nothing. That last little bit went back  
23 to the wellhead. That's what I wanted to just --

24 MR. CHHATRE: Anadarko?

25 MR. McBRIDE: Hi, this is David McBride.

1 BY MR. MCBRIDE:

2 Q. I want to go back to some of the discussion around the poly  
3 lines in general. And you mentioned that the start of that was a  
4 steel line at the service, then they go down a few feet and it  
5 turns into a poly line. Is that something you've seen in common  
6 practice that was used in the old field --

7 A. Yes.

8 Q. -- in your experience?

9 A. Yes.

10 Q. Is it associated with a particular type of well, or is that  
11 still used today in newer wells, or is that associated with older  
12 wells? Just in your experience and seeing -- doing inspections.

13 A. Based on my experience, it's primarily associated with older  
14 wells. However, the practice is still in place where poly line is  
15 needed to surface for whatever reason on well production for well  
16 production purposes. The surfacing of that line will result in --  
17 generally results in the addition of the carbon steel riser.

18 Q. Okay. You said the what kind? What surfacing of that?

19 A. The operation of the well. Surface.

20 Q. Surfacing. Okay. Because I was wondering why you would use  
21 a carbon steel -- I guess we can ask somebody else that question  
22 if you don't know, but why use carbon steel at the surface and  
23 poly below? I didn't know if it was from a frost line issue or  
24 something like that or --

25 A. It would (indiscernible) --



1 Q. If you don't know, it's okay.

2 A. Well, no, you -- because you know, based on my experience,  
3 you need the structural, the strength --

4 Q. Oh, the strength.

5 A. -- of the, of the carbon steel riser --

6 Q. Got you.

7 A. -- to allow you to tie in or access --

8 Q. Got you.

9 A. -- the contents of that poly line.

10 Q. Thank you. Okay. And typically, I understand those lines do  
11 run in the same trench or next to the steel, 2-inch flowlines; is  
12 that right?

13 A. I think that varies, but --

14 Q. Okay. Are you -- do you know if they do run trace on those  
15 lines or -- and when I say trace, that's something that's steel  
16 wire that you can run so you can detect it with a magnetometer or  
17 a line locator? Is that something that's in common practice on  
18 the newer ones?

19 A. Yes.

20 Q. Okay. Because I'm aware that the older ones typically don't  
21 have that feature associated with them; is that right? Or is that  
22 something you know or don't know?

23 A. That's correct. I would say that that's correct.

24 Q. Was that an engineering practice that COGCC --

25 MR. CHHATRE: Excuse me. This is Ravi. What is correct,

1 that you do not know or --

2 MR. MacLAREN: No, that there was no tracer wire historically  
3 installed on older wells. Newer wells, it's required.

4 MR. CHHATRE: Okay.

5 BY MR. McBRIDE:

6 Q. So the development of that practice of time, are you aware of  
7 how that came about? Was it just a good engineering practice, a  
8 best practice, or was that a suggestion or a practice that evolved  
9 out of COGCC? You know, how did that come about, or do you know?

10 A. I do not know.

11 Q. Okay. When you respond to a leak or do an investigation of a  
12 flowline leak or a problem with an operator and you guys work  
13 together to figure out what happened, which I know you guys do,  
14 right?

15 A. Um-hum.

16 Q. And you resolve an issue and -- do you resolve things to the  
17 point where you would come up with a root cause analysis or  
18 corrective actions that an operator would need to take to remedy a  
19 problem?

20 A. Yes. So we look for a root cause analysis, and we request  
21 that information in as much detail as we can get from the  
22 operator, if lab analysis is involved in that interpretation, that  
23 assessment.

24 Q. Because I'm trying to get a better understanding of the cycle  
25 that happens, okay? So let me just put the, you know, theoretical

1 that I'm sure it's based in reality and just tell me -- walk  
2 through this. Operator has a leaky flowline, okay? And let's say  
3 it's a liquids leak in this case. And they discover it and call  
4 you and have to report it, because it's a reportable event, okay?  
5 And I would assume that you would, you would get involved as the  
6 integrity, you know, manager for the, for the department and do an  
7 inspection and verify it, and then would, you know, start an  
8 enforcement action or something on that, and you would have to go  
9 through some type of analysis of what happened, right? And  
10 wouldn't there be a process in place where an operator would have  
11 to submit to the agency a plan, a corrective plan to keep it from  
12 happening again, or what they were going to do to remedy that  
13 situation or --

14 A. Yeah, so what I would do is I would conduct the field  
15 inspection part of that.

16 Q. Yeah.

17 A. I would make observations and identify what was available  
18 onsite at that time and add that information to my field  
19 inspection report. Depending upon the situation, then there could  
20 be corrective actions that are required by the operator to  
21 complete, including communicating the root cause of failure, a  
22 description of all repairs made, measures taken to prevent the  
23 accident from, the issue from reoccurring again, and follow-up  
24 pressure testing to confirm the integrity of the repairs  
25 completed.

1 Q. Okay. Now would you stay with that project completely  
2 yourself, or would that be something that you might hand off to an  
3 enforcement person or somebody else at a different group? I mean,  
4 I'm just trying to get a better understanding of your  
5 (indiscernible).

6 A. Generally speaking, my goal is to stick with that project  
7 myself. Again, with time constraints, it could be -- somebody  
8 else could be involved.

9 Q. So multiple folks from within COGCC could be involved.

10 A. Could be involved, yes.

11 Q. Okay. And last thing about that. When you guys go through  
12 that process and you come out with a recommended action and an  
13 operator incorporates it, is there any methodology that you use to  
14 help share that learning within the industry or encouragement that  
15 an operator use some format to share that learning? You know, if  
16 there are learnings that come out of that event, to share it  
17 within the industry or --

18 A. Absolutely. Yeah.

19 Q. How do you, how do you do that?

20 A. We do that through industry outreach meetings. We've got our  
21 GORT meeting, what we call our GORT regulatory meeting down in the  
22 southwest part of the state.

23 Q. What is that again?

24 A. It's called GORT.

25 MR. LEONARD: For clarification, that's the -- this is Mike

1 Leonard. That's the gas and oil regulatory team meeting that is  
2 required by COGCC order to be held -- I believe it's four times a  
3 year.

4 MR. McBRIDE: Okay.

5 BY MR. McBRIDE:

6 Q. And do operators attend that?

7 A. Yeah. We have, we have a similar meeting on the west -- for  
8 western slope operators in Rifle, Colorado. And then we do the  
9 same thing on the eastern slope.

10 Q. Okay. Good, thank you. Are the poly lines treated any  
11 differently than flowlines under the rules?

12 A. No.

13 Q. I mean, prior to this event?

14 A. The only way that a poly line would be treated differently is  
15 if it falls under a 15 PSI operating maximum, where it would be  
16 exempt from pressure testing requirements per our rule 1101-E.  
17 However, that carbon steel line could fall under that same  
18 guideline. We have a 15 PSI exemption. Any lines that operate  
19 under that pressure don't -- we don't have the requirement for the  
20 annual pressure testing.

21 Q. Now when an operator does their annual pressure test, do they  
22 have to submit those records to COGCC?

23 A. We request that they do in certain -- they are not required  
24 to. As part of our integrity outreach, we request records and we  
25 are conducting audits and reviewing records that are held within

1 -- in-house.

2 Q. Okay. And is mapping of flowlines required by COGCC?

3 A. Mapping of flowlines is not required under rule as we sit at  
4 this point in time, but we are moving in that direction.

5 Q. Okay. You know, when an operator -- and I want to go to the  
6 concept of abandonment at this point, okay?

7 A. Okay.

8 Q. And I've heard, you know, some discussion. I'm sure we'll  
9 have more as we go, but I want to get a little insight from you on  
10 what your experience has been.

11 MR. McBRIDE: Yes, sir.

12 MR. CHHATRE: Speak louder.

13 MR. McBRIDE: Okay, I'll speak louder.

14 BY MR. McBRIDE:

15 Q. I wanted to go to the concept of an abandonment here and kind  
16 of get some insight from you on what your experience has been.  
17 When we -- when I think of an oil field upstream facility, I think  
18 of the wells, the flowlines, these 1-inch return lines.  
19 Everything that's connectivity between those wells and the first  
20 level of processing, which typically is separators, tanks, and  
21 everything within what we'll call containment, which is that SPCC  
22 or spill prevention countermeasures and controls facility, okay?  
23 The firewall that's built around the, that's built around a  
24 facility.

25 So given that, just that piece of the oil field for right

1 now, there's a number of different pipes and risers and things  
2 that'll connect up those things. And in my experience, sometimes  
3 operators will abandon or semi-abandon pipes and things so that  
4 the facility is not abandoned, the well is not abandoned, but  
5 they'll replace lines, replace equipment and different pieces and  
6 parts of that facility that might be regulated. Is that -- what  
7 part of that is considered abandonment by COGCC? Is it an  
8 individual line? Is it the whole facility? Is it a well? So the  
9 concept around abandonment, I'm trying to get a better handle on.

10 A. Well, we approach that in numerous ways. I mean, there's  
11 well abandonment, where a well is plugged and abandoned, and the  
12 (indiscernible) process is pursued by an operator in that case.  
13 Flowline abandonment is -- it can be part of that and is done, and  
14 then we're notified on the Form 42. So there's well abandonment,  
15 facility abandonment and flowline abandonment.

16 Q. Okay. Well, if an operator was going to abandon the  
17 flowline, are they required to notify COGCC before they do the  
18 abandonment?

19 A. No, once the abandonment's complete.

20 Q. So it's only upon completion.

21 A. Um-hum.

22 Q. So theoretically, could an abandonment of a flowline or a  
23 well or a facility occur across multiple operators, and COGCC be  
24 unaware?

25 A. Yes.

1 Q. Okay. Okay. We use --

2 A. But unaware, let me, let me clarify that. I mean, based on  
3 timing, sure, but we still require that notification.

4 Q. At the end, once the abandonment's complete.

5 A. Once the abandonment's been completed.

6 Q. Yeah. Yeah. Yeah, because I was trying to, trying to  
7 understand --

8 A. So this --

9 Q. -- if there was, like, a trigger point at the beginning when  
10 you were notified that an operator was going to commence an  
11 abandonment process, which would then start a clock.

12 A. Well, that trigger point would be -- could be the plugging  
13 and abandoning of the wells.

14 Q. Yeah.

15 A. And at that point in time, that would start a clock and that  
16 would be on our radar.

17 Q. Okay, and would it -- is there a clock, really, within COGCC  
18 that says once you start an abandonment, you must complete it by  
19 XYZ date? And if you don't know, it's okay.

20 A. Yes. Yeah.

21 Q. I mean, if there is one, we can get to it later if you don't  
22 know the answer.

23 A. I don't know specifically, but yes, I believe so.

24 Q. Yeah. Yeah, we can, we can follow up with that, you know, at  
25 some point. I heard you mention about flowline integrity, and you



1 used the term reasonable precautions. Can you tell me what  
2 reasonable means?

3 A. Reasonable would be -- I don't know how descriptive I should  
4 be on this, but reasonable would be reacting to known flowline  
5 integrity issues, circumstances of multiple failures appropriately  
6 would be maintaining the -- using maintenance practices to  
7 maintain the integrity of flowlines and infrastructure.

8 Q. Somewhat negotiated with the operator on a case-by-case  
9 basis, or is it something that's -- that an operator -- how does  
10 an operator know what reasonable means to COGCC?

11 A. I think that it means that they're following the industry  
12 best practices, and they are, they are minimizing integrity risks  
13 on their wells, flowlines and systems. And they are reacting to  
14 issues that they're seeing in the field.

15 Q. Okay. The other thing you mentioned about gas releases in  
16 Rule 906, you said anything that could cause a significant impact.  
17 And my question is similar there. How does an operator know what  
18 a significant impact is? You know, what a small impact, medium  
19 impact and large impact? I mean, I'm -- you know, I'm not, and  
20 I'm not being facetious --

21 A. Well, it's written for liquid releases.

22 Q. Yeah. Okay.

23 A. And for gas releases as identified, you know, it's -- we rely  
24 on the industry's expertise to recognize what would be deemed  
25 significant and follow through with the appropriate reporting.

1 Q. Okay. Are you familiar with the CDPHE?

2 A. Yes.

3 Q. Can you tell us what that stands for?

4 A. Colorado Department of Health and Environment.

5 Q. And they do have a significant level of authority over area  
6 missions; is that correct?

7 A. That's correct.

8 Q. Yeah. So a lot of the gas-associated regulation is actually  
9 in the CDPHE's authority, if I'm correct.

10 A. That is correct.

11 Q. Okay. So I just wanted to --

12 A. Yeah. Yeah.

13 Q. -- let, you know, folks here know that there's another agency  
14 that also regulates the gas side of the equation, so it's -- CDPHE  
15 and COGCC regulate, kind of, with each other as far as an operator  
16 goes. So there's another agency involved as well, so we have Reg  
17 7 to deal with. We can get -- we'll talk about that.

18 MR. McBRIDE: That's all I got. Thank you, Joe. Appreciate  
19 it.

20 MR. MacLAREN: You bet.

21 MR. CHHATRE: This is -- go ahead.

22 MR. LEONARD: So yeah, I just, I have a few follow-up  
23 questions.

24 MR CHHATRE: Identify.

25 MR. LEONARD: Oh, I'm sorry. Mike Leonard. I have a few

1 follow-up questions.

2 BY MR. LEONARD:

3 Q. So Joe, just to clarify, in the 1100 series rules, COGCC  
4 rules, pipeline and flowline are an interchangeable word; is that  
5 correct?

6 A. That is correct.

7 Q. Okay. So when an operator reports that they've had a  
8 flowline leak to you, do you -- the root cause analysis, how is  
9 that reported? Is there a, is there a form that you ask them to  
10 fill out?

11 A. Correct. Yes, I ask them to add that information to our  
12 Supplemental Form 19 report.

13 Q. Your Supplemental Form 19 report.

14 A. But I may ask for that to be conveyed directly to me and/or  
15 the other members of the integrity group.

16 Q. But it is documented in the database --

17 A. Yes.

18 Q. -- the root cause.

19 A. Yes.

20 Q. You were talking about poly lines, and you said that they're  
21 treated differently only in the pressure testing. But do they  
22 have to be marked, tracer wire marked?

23 A. Yes.

24 Q. So if they're alone in the ditch, no other metallic pipes,  
25 they have to have a tracer wire to mark them?

1 A. That is correct.

2 Q. Okay. I'll get to this other one in just a second. So we  
3 were talking about -- David was talking about unused lines or  
4 lines that were taken out of service. Would those lines be, under  
5 COGCC rules, considered unused equipment and required to be  
6 removed?

7 A. Removed or properly abandoned.

8 Q. Yeah. Removed or properly abandoned.

9 A. Right.

10 Q. So it basically falls under an unused equipment rule --

11 A. Yes.

12 Q. -- and they don't -- they're not allowed to be there. And we  
13 were talking about abandonment of wells and equipment. In the  
14 1104 series rules, the reclamation rule, it does state that  
15 flowline risers have to be removed within 3 months of the plugging  
16 of the well, correct?

17 A. Correct.

18 Q. And that would include removal of the, of the other end of  
19 the riser at the separators or any production equipment, something  
20 like that.

21 A. That is correct.

22 Q. Okay. So COGCC, as stated before, doesn't regulate air  
23 emissions, right?

24 A. Correct.

25 Q. But a release or a leak would be considered a violation of

1 the 600 series safety rules, mechanical -- I don't remember the  
2 rule right offhand, but where it says all pipes and fittings must  
3 be maintained --

4 A. Correct. I believe it's 603-G, and yes, that is --

5 Q. So all pipes and fittings have to be maintained. I believe  
6 the rule says fastened, which is interpreted to mean screwed  
7 together properly, properly plumbed.

8 A. That is correct.

9 Q. Okay. Lastly, we've talked about custody transfer a lot, and  
10 we just want to, want to clarify that. So there's three common  
11 terms used in the industry: upstream, midstream and downstream.  
12 Correct?

13 A. Correct.

14 Q. So the upstream, the production -- the exploration and  
15 production portion of it, when that product, whether it be gas,  
16 oil or even in the case of water, becomes the product of another  
17 party, that is the custody transfer; is that correct?

18 A. Correct.

19 Q. So when it, when Anadarko sells or transfers through that  
20 meter run to DCP, that is no longer Anadarko's product; that's  
21 DCP's product. That's now in a different phase --

22 A. That is correct.

23 Q. -- and that's the custody transfer.

24 A. Yes.

25 Q. Okay. We were talking about outreach a little bit. Have you

1 heard of cases or instances where, as part of a settlement  
2 hearing, the operator has been required to present at COGCC  
3 hearings or at other venues, public venues, the root cause of the  
4 incident?

5 A. Yes.

6 Q. Okay. And that's happened for -- to the best of your  
7 knowledge, that has happened for pipeline, flowline incidents?

8 A. Yes.

9 Q. Okay.

10 MR. LEONARD: That's all I have for right now.

11 MR. AJIBOYE: Yeah, I have a follow-up question.

12 MR. CHHATRE: Identify.

13 MR. AJIBOYE: This is Gbenga from PHMSA.

14 BY MR. AJIBOYE:

15 MR. AJIBOYE: You just talked about running tracer wire if  
16 the poly line is by itself. So is that historical, or is that --

17 MR. MacLAREN: Tracer wire is required with poly line  
18 regardless of what else is in the trench.

19 MR. AJIBOYE: Yeah, but you said that was not a historical  
20 practice before?

21 MR. LEPORE: Do you know when that requirement began?

22 MR. MacLAREN: I do not. There was -- yeah. That was added  
23 during rulemaking historically. I'm not sure of the date.

24 MR. AJIBOYE: Okay, and --

25 MR. LEPORE: We can find out the date if you would like.

1 MR. AJIBOYE: Okay.

2 BY MR. AJIBOYE:

3 Q. And when the flowline is abandoned, is there a form that the  
4 operator needs to fill and send to COGCC?

5 A. Form 42.

6 Q. Okay. And in that form, they will state what has been  
7 isolated, do they?

8 A. No, they would, they would just mark a box that says, notice  
9 of flowline abandonment.

10 Q. So is this something you guys follow up in time of  
11 inspection, to verify that a form is correct to --

12 A. Sure. Absolutely.

13 Q. If a line is abandoned, it should not be connected in any  
14 way.

15 A. Correct. There should be no -- yeah, no risers.

16 Q. No riser, no connection to it, nothing.

17 A. Right.

18 Q. And say in the future, a line is abandoned and somebody  
19 peradventure leaves a riser behind and is about to be put in use,  
20 is there a procedure that they have to take to put that abandoned  
21 well back in use or line, or flowline?

22 A. To put it back in service?

23 Q. Yeah, just back in service, yeah.

24 A. If they were to approach something like that, we would  
25 require -- we would want to have them run a pressure test to

1 reconfirm that the line's got adequate integrity to be put back in  
2 service.

3 Q. Okay. Okay.

4 MR. AJIBOYE: That's my question.

5 MR. PRUNK: Okay. (Indiscernible) can I --

6 MR. CHHATRE: Sure. Identify.

7 MR. PRUNK: Yeah. Doug Prunk with the fire department.

8 BY MR. PRUNK:

9 Q. I'm really enthralled with all this regulation. Can I ask  
10 about the scene that day real quick? You said you met with the  
11 contractor, Anadarko, and then Bret Schissler was requested to  
12 come back, and that was -- was he your main contact from Anadarko  
13 that day?

14 A. Yes.

15 Q. Can you describe any conversation that you had had about well  
16 maintenance or anything with that particular -- the core's V 13  
17 well? Was there any discussion with him about maintenance issues  
18 or anything -- is it 13?

19 A. Are you talking about the well in question? That's the V 14.

20 Q. 14. Sorry.

21 A. Because 13 is the west one so --

22 Q. Yes. So the one that's next to the house. Was there any  
23 discussion about maintenance or any discussions at all with Bret?

24 A. At that point in time, we just discussed the situation at  
25 hand, and the lines that were being tested and located.



1 Q. Okay.

2 MR. PRUNK: Okay. All right, thank you.

3 MR. CHHATRE: This is Ravi, NTSB. Just want to clarify the  
4 question real quick. I think the question was did you discuss  
5 maintenance of that well, and you are saying -- the short answer  
6 is yes or no?

7 MR. MacLAREN: Maintenance of the well?

8 MR. CHHATRE: Wasn't that the question?

9 MR. PRUNK: Maintenance, or if there was any recent issues  
10 noted with that well.

11 MR. CHHATRE: So would -- the answer is yes or no? You  
12 discussed that with -- whatever the gentleman's name --

13 MR. PRUNK: Bret. Bret Schissler.

14 MR. MacLAREN: With Bret?

15 MR. CHHATRE: Yeah. Did you discuss about the maintenance  
16 and -- was that the question?

17 MR. PRUNK: Yeah. Yeah.

18 MR. CHHATRE: What is the short answer, yes or no? Not the  
19 lines and all that. The well is the question.

20 MR. PRUNK: Yeah. Any problems discussed about maintenance  
21 or mechanical issues in the well confinement?

22 MR. MacLAREN: Yes. And we had some general discussion about  
23 the well. Limited information was communicated. Bret didn't have  
24 well history readily available.

25 BY MR. CHHATRE:

1 Q. Can you tell us what you asked him?

2 A. So I was specific about the lines in question. Specifically,  
3 maintenance of the flowline.

4 Q. No, not -- forget the lines. We are talking about the well.  
5 You said you asked him -- there was discussion about general. So  
6 what -- do you remember what you asked him?

7 A. I do not.

8 Q. Okay. So there was no discussion on the well, right?

9 A. Correct.

10 Q. Right?

11 A. Yeah.

12 Q. Okay. So now going back to regulations, 1100 you're  
13 referring to a lot. Do you know when they became effective? You  
14 are enforcing it, so I'm just trying to understand. Do you, do  
15 you when it became effective?

16 A. I know that they'd been in place for over, for over 20 years.

17 Q. And if you don't know, if you don't know, you don't know.

18 But I'm --

19 A. But I don't know when that rulemaking, the actual rulemaking,  
20 took place.

21 Q. Rulemaking takes a long time.

22 A. Right.

23 Q. I'm just asking when it became effective that, as a guardian  
24 of --

25 A. Many years.

1 Q. -- or gatekeeper, when you had to start following that? What  
2 is the effective date of 1100? Do you know or you don't know?

3 A. Twenty-plus years.

4 Q. You don't know. Right? Twenty-plus can be 30 years, can be  
5 50 years. Right?

6 A. Sure.

7 MR. LEONARD: This is Mike Leonard. I believe he's asking,  
8 Joe, do you know the specific date when these --

9 MR. CHHATRE: I don't need to know the day and month.

10 MR. MacLAREN: Yes.

11 MR. CHHATRE: I just need to know the year.

12 MR. LEONARD: The year.

13 MR. MacLAREN: I'm going to say 1992. Three. Two or three.

14 MR. LEONARD: So to the best of your knowledge, approximately  
15 1992.

16 MR. MacLAREN: That is correct.

17 MR. CHHATRE: Okay. Okay.

18 BY MR. CHHATRE:

19 Q. Now when you went back to your office, do you generally do  
20 any paperwork of your work on the scene for a day, day and a half,  
21 whatever you were?

22 A. Yes.

23 Q. Can we get a copy of that?

24 A. Yes.

25 Q. Okay. Have you done any past inspections on this well in

1 question?

2 A. No.

3 Q. Has anybody, to your knowledge, in your organization has done  
4 this inspection on this particular well?

5 A. Yes.

6 Q. Do you know who did it?

7 A. I do not.

8 Q. Okay. Can you find out and get back to us?

9 A. Uh-huh. I know it was inspected in 2014.

10 Q. 2014. Okay. As the party coordinator, can you get that  
11 person so we can talk to that person? I mean, not  
12 (indiscernible), like, now, but --

13 A. If that person, if that person is still with the agency, yes.

14 Q. Okay. If not, can we get any documentation that person may  
15 have generated?

16 A. We do -- there is a field inspection report in the database.

17 Q. Okay. If we can get a copy of that?

18 A. Sure. No problem.

19 Q. And any and all. I mean, just --

20 A. I'm sorry? You can have any document that is in our database  
21 that relates to that well.

22 Q. Yeah. That would be great.

23 A. Any single -- yeah, anything.

24 Q. Yeah, that would be great. Now when you -- you said  
25 something about enforcement actions in your audits, that you guys

1 take enforcement actions?

2 A. We can.

3 Q. Have you done any of the enforcement actions in the past 18  
4 months to any operator?

5 A. Regarding audits? No.

6 Q. Yeah. So you have not found any fault with any of the  
7 operators in the 18 months that you had to take, as an agency,  
8 enforcement actions.

9 A. Well, I've issued action required items on a field inspection  
10 report.

11 Q. Okay, then --

12 MR. LEPORE: Explain.

13 BY MR. CHHATRE:

14 Q. Educate me.

15 A. Once again, what I --

16 Q. Tell me what an, what an enforcement action is to you.

17 A. An enforcement action, to me, would be documented  
18 noncompliance that goes before the commission as part of a hearing  
19 that may result in a fine.

20 Q. Okay. And so is there enforcement action taken on any and  
21 every regulation (indiscernible)? So what triggers enforcement  
22 actions?

23 A. Documented noncompliance.

24 Q. Give me a specific example, because that's very generalized  
25 (indiscernible).

1 A. Yes. So an operator has a reportable release from a  
2 flowline, and there is documented -- through our inspection  
3 process and involvement with our -- with both our engineering  
4 group, environmental group and other parts of our organization, we  
5 conclude that he -- the operator has not met the requirements of  
6 the rule in this circumstance and/or has not met a deadline for an  
7 action required item outlined on a field inspection report, and  
8 there is, there is -- we'd look at that as a noncompliance, and  
9 that would lead to an enforcement action and notice of alleged --

10 Q. Please help me out, please help me out --

11 A. -- and notice of alleged violation, and then what we call an  
12 NOAV. We would write an NOAV, and then that would be reviewed,  
13 and then it would be -- it could go, it could go -- then it is  
14 referred to the enforcement group team.

15 Q. Help me out. Again, to me, it's extremely general, because  
16 you are saying if this -- give me a particular example. It can be  
17 an imaginary example if you want, but give me a simple example  
18 that, if an operator did this, this and this, then it becomes an  
19 enforceable action. Just give me -- I'm going to get my arms  
20 around the general statements you made.

21 A. Okay. And in a --

22 MR. LEPORE: Can I make a suggestion?

23 MR. CHHATRE: Sure. Identify.

24 MR. LEPORE: Yeah. There are a couple --

25 MR. CHHATRE: Identify.

1 MR. LEPORE: Sorry. Matt Lepore, COGCC, and I just want to  
2 suggest that Joe describe for you a couple of different terms that  
3 we use. I think it'll help. So corrective action, warning  
4 letters and notices of alleged violations, which all three arise  
5 from an observed noncompliance, an observed failure to be 100% in  
6 compliance with the rule. But the agency tends to take each of  
7 those steps in sequence.

8 MR. CHHATRE: Understand that.

9 MR. LEPORE: So an observed violation might result in, that's  
10 not appropriate; you need to fix it --

11 MR. CHHATRE: Correct it. Yeah.

12 MR. LEPORE: -- within the next 30, 20, 10, 5 days.

13 MR. CHHATRE: Sure. Yeah.

14 MR. LEPORE: I think if he steps through that a little more  
15 --

16 MR. CHHATRE: Yeah, that's what I was just -- yeah.

17 MR. LEPORE: -- specifically -- yeah.

18 MR. CHHATRE: Walk me through. I mean, because the way you  
19 described it, to be honest with you, I didn't get anything, I  
20 mean, as to what really triggers it. I have no step-by-step  
21 model.

22 MR. MacLAREN: You need to listen harder.

23 MR. CHHATRE: No, I'm listening. Here, the same rules apply.  
24 Like I told you, ask me questions 10 times if you don't  
25 understand.

1 MR. MacLAREN: Right.

2 MR. CHHATRE: I'm going to ask you the same question 10 times  
3 if I don't understand the response. It's not just one-way flow.  
4 But go ahead. I'm sorry.

5 MR. MacLAREN: Okay. I go out and conduct a field  
6 inspection. And I notice that some valves associated with a well  
7 and flowline have not been maintained properly. I indicate that  
8 on a field inspection report. This may be part of a release that  
9 was reported. I indicate that on part of the field inspection  
10 report. I indicate the observations made and then the corrective  
11 actions required to remedy those action, to remedy the problem and  
12 the rule violation. And I outline a date that those actions must  
13 be completed.

14 I go out to reinspect. The actions required have not been  
15 met by the date outlined. The operator -- we write a warning  
16 letter to the operator documenting noncompliance. We go out and  
17 reinspect again. The operator has not fixed the situation and is  
18 still out of compliance. Then we would move to writing a notice  
19 of alleged violation, which would be referred to our enforcement  
20 group.

21 BY MR. CHHATRE:

22 Q. So going back to the very first step, that you find a  
23 deficiency and you tell them to correct it, right? That's a first  
24 step. Now then are you automatically required by your regulation  
25 to go back after that period and make sure that they have or they



1 have not done that work?

2 A. Yes.

3 Q. Okay. And then next step follow the same way, that if they  
4 haven't corrected and you give them notice or whatever your  
5 terminology is, then you again go back. So all your steps are --  
6 require you to go back and visit the same operator to ensure  
7 compliance, it's complied.

8 A. And we conduct follow-up inspections.

9 Q. Okay. So I guess, then, in your tenure, have you ever  
10 initiated any of these procedures for any operator?

11 A. Yes.

12 Q. Okay. To enforcement actions that results in fine or  
13 whatever. You have.

14 A. Um-hum.

15 Q. And has any of that thing has happened with Anadarko? Not  
16 necessarily this particular well, but anywhere where there are  
17 (indiscernible) thousands of wells they may own or operate.

18 A. Me personally, through my inspections?

19 Q. Your agency. Do you know any actions taken?

20 A. Well, I would say yes.

21 Q. Okay. Can we, can we get a copy of that action, enforcement  
22 actions? You have, you have a record of that or you don't?

23 MR. LEPORE: This is Matt Lepore from COGCC. Yes, we have  
24 records of every single enforcement action ever taken -- well, not  
25 ever, historically -- against any operator. I guess I want to

1 have a conversation about the relevance of every single  
2 enforcement action ever taken against Anadarko, or any other  
3 operator for that matter.

4 MR. CHHATRE: Well, what we are -- I'm just trying to find  
5 out --

6 MR. LEPORE: They are publicly available documents.

7 MR. CHHATRE: They are publicly available. Okay.

8 MR. LEPORE: Yes.

9 MR. CHHATRE: Great. Okay. I'm just, I'm just looking at,  
10 like, last 5 years, maybe. I mean, I don't want to get thousands  
11 of documentation from you, but --

12 MR. LEPORE: (Indiscernible).

13 MR. AJIBOYE: (Indiscernible).

14 MR. CHHATRE: I just want to find out, in the last 5 years,  
15 how many are taken against this particular operator.

16 MR. LEPORE: And I think you understand now from Joe's  
17 response -- Matt Lepore, COGCC -- there's a spectrum of both  
18 severity of violations and severity of consequences which dictate  
19 whether we take all three of those -- corrective action, warning  
20 letter, enforcement -- or whether we just say, sorry, this was bad  
21 (indiscernible).

22 MR. CHHATRE: No, he didn't say that. He only said, he said  
23 he goes through three steps.

24 MR. LEPORE: Okay, so --

25 MR. CHHATRE: I mean, that's not what he said, and he's the

1 gatekeeper, right?

2 MR. LEPORE: I wouldn't characterize it that way either.

3 MR. CHHATRE: Okay. So I mean, he's your eyes and he --

4 MR. LEPORE: He's a gatekeeper on a very narrow slice, a very  
5 specific --

6 MR. CHHATRE: Okay, that's what I'm saying here, I guess.  
7 You guys are seeing, when he goes for the inspection, you are  
8 seeing through his eyes what is happening in the field; is it not?

9 MR. LEPORE: I think you're seeing through his eyes through  
10 your questions.

11 MR. CHHATRE: No, I'm saying you as an, as an agency. If he  
12 goes and inspects something, you are seeing that inspection  
13 through his eyes; are you not?

14 MR. LEPORE: Yes, but I mean -- I don't feel it's my job to  
15 ask follow-up questions, so --

16 MR. CHHATRE: No, no. I'm not saying that. I'm saying it's  
17 your job.

18 MR. LEPORE: But I think there are follow-up questions that  
19 would clarify what I'm letting you know.

20 MR. CHHATRE: Sure. Maybe you can ask the follow-up  
21 questions after I'm done.

22 MR. LEPORE: There's just, there's just the scope of --

23 MR. CHHATRE: Yeah, sure.

24 MR. LEPORE: -- that is actually formalized --

25 MR. CHHATRE: No, I'm trying, I'm trying to understand

1 procedures. So anything that clarifies that is fine.

2 MR. LEPORE: Yes. Yeah.

3 MR. CHHATRE: But okay.

4 So we took care of enforcement actions. Now I think there's  
5 a reference made about the best practices that the operator is  
6 supposed to follow. You mentioned some best practices that  
7 operators are required to follow. Are those mentioned in your  
8 regulations by reference? Because I guess the question was, what  
9 is significant, and actually that was the question I was going to  
10 ask you. What is significant? Because it's all relative. So did  
11 you refer to some industry practices?

12 MR. MacLAREN: Um-hum.

13 MR. CHHATRE: Now is that practice referenced in your  
14 regulations so the operator knows what is significant? Or that is  
15 not referenced in your regulation? Because if it is not  
16 referenced in your regulation, how would and why would anybody go  
17 and look at that document? I asked a simple question. Is it yes  
18 or no? Like, is it referenced --

19 MR. MacLAREN: Right.

20 MR. CHHATRE: -- in your regulation or not?

21 MR. LEONARD: This is Mike Leonard. I just want to clarify  
22 your question. So are you asking if the term industry best  
23 management practices is stipulated in the regulations?

24 MR. CHHATRE: Yes, my question is very simple that, I guess  
25 -- earlier question came up. That was something about what is

1 significant, what is not significant, or what is -- I guess you  
2 had that question, correct? And that was your question. And the  
3 answer you want was, is it industry practice that the operator is  
4 supposed to follow that identifies significant, or whatever that  
5 question may be. And my simple question is, granted, if industry  
6 practice is what they are supposed to follow, is that practice  
7 referenced in your regulation, that significant events should be  
8 reported? I'm just giving an example. So a footnote saying,  
9 follow this industry practice, if that is --

10 MR. MacLAREN: No.

11 MR. CHHATRE: That is not. Okay.

12 MR. MacLAREN: No.

13 MR. CHHATRE: Now the other discussion earlier was, I guess,  
14 there are two agencies that control the natural gas flowlines.  
15 Did I get that correct? Health and --

16 MR. MacLAREN: CDPHE.

17 MR. CHHATRE: Yeah --

18 MR. LEPORE: Colorado Department of Public Health and  
19 Environment.

20 MR. CHHATRE: All right.

21 MR. MacLAREN: I've got a question for you.

22 MR. CHHATRE: Sure.

23 MR. MacLAREN: Would you like to save some of your questions  
24 for the later interviews? These are all great questions for our  
25 engineering manager.

1 MR. CHHATRE: Believe me, if I (indiscernible) today, I'm  
2 going to ask those of everybody. I'm trying to find out, you  
3 know, the regulations and how much of those regulations people  
4 follow and are -- you know, if there is any region that needs to  
5 be (indiscernible). I mean, I'm not trying to put anybody through  
6 any torture here. I'm just trying to understand. If I am an  
7 operator, if I understand what the -- regulation has to be  
8 specific for me to comply to you, right? If I am not sure what a  
9 significant is, how me as an operator -- significant to you may be  
10 different completely than if somebody else goes to inspect. So  
11 I'm just trying to review the subjective part of it. You follow  
12 what I'm saying?

13 MR. MacLAREN: Yeah.

14 MR. CHHATRE: Good. But if you need to take a break, we can.

15 MR. MacLAREN: No. Keep going. So I'm seeing you're at the  
16 end of your page.

17 MR. CHHATRE: Oh, no, no. I have three pages.

18 MR. LEPORE: This is Matt Lepore, COGCC. My recollection of  
19 Joe's response about industry best practices was that he was  
20 responding to what is reasonable. So David McBride asked  
21 questions about what is reasonable, because the rule says take  
22 reasonable precautions.

23 MR. CHHATRE: Yeah, but I don't remember the specific  
24 question. What I'm saying is, if it isn't referenced to industry  
25 practice, is it referenced in regulation? That's all I'm really

1 asking.

2 MR. LEPORE: Right. And I just want to clarify that the  
3 reasonableness and -- best practices was about reasonableness, not  
4 about what is significant.

5 MR. CHHATRE: Okay. Again, what I'm -- I may have posed the  
6 question a little bit differently, but my -- really, the crux  
7 here, if you refer something to any industry practice for any  
8 reason in your regulation and that is through interpretation, is  
9 it referenced in the regulation?

10 MR. LEPORE: I understand.

11 BY MR. CHHATRE:

12 Q. I mean, you can use any -- and that was -- I guess the answer  
13 was no or yes?

14 A. Referenced? No.

15 Q. Okay. And I guess -- I'm still trying to understand.  
16 Because I think the description already made earlier also that the  
17 gas releases are controlled or regulated by Health, that CDPH --

18 A. E. Gas emissions.

19 Q. Yes. Gas emissions are. So gas release or leak, for  
20 example, will be considered a gas release, I believe. Who will  
21 control that? I mean, who --

22 A. CDPHE.

23 Q. So with your regulations, gas release by a gas flowline, you  
24 are not responsible for it. CDPHE would be. And again, I'm not  
25 trying to -- I'm just trying to understand who the guardian will

1 be for that. Who is responsible? And then are we supposed to  
2 report a leak to you guys or to CDPH [sic.]?

3 A. They would report to both.

4 Q. But if you are not -- if I understand you correctly, and I  
5 don't know how report works. But you said CDPH [sic.] is  
6 controlling the gas lines, flowlines.

7 A. No, I did not say.

8 Q. They are not. Okay. So whose regulations I'm supposed to  
9 follow? Both or yours only or --

10 A. Both.

11 Q. Both. Okay. And have you guys compared your regulations  
12 with them?

13 A. Yes.

14 Q. Are those regulations same, similar, different or -- I mean,  
15 educate me on that, because I --

16 MR. LEONARD: May I, may I clarify? This is Mike Leonard.

17 MR. CHHATRE: Sure. Please.

18 MR. LEONARD: Okay. Mike Leonard. The leak itself, the  
19 actual mechanical leak, the hole in the line, is regulated by  
20 COGCC, okay? So the emission of the gas into the atmosphere is  
21 regulated by CDPHE, because that's an air quality issue. They  
22 would not have -- I mean, I don't know what their rules say. I  
23 don't know if they could say, well, you got to fix that leak. But  
24 we have the authority over the leak, over the --

25 MR. CHHATRE: So the integrity part has to be followed per



1 your regulation; am I correct?

2 MR. LEONARD: Correct.

3 MR. MacLAREN: Yes.

4 MR. CHHATRE: Okay.

5 By MR. CHHATRE:

6 Q. And earlier, I guess, you know, clarification question was  
7 that flow and pipeline are interchangeable words?

8 A. Correct. In our 1100 series rules.

9 Q. Okay. And I thought when I asked earlier question on the  
10 flowline and markings, and you said the markings are required for  
11 pipelines but not for the flowlines. So now, again, I'm going to  
12 ask the same question again --

13 A. We clarified that.

14 Q. Okay. Please.

15 A. Yes. So the markings are required at public right-of-way  
16 crossings and designated setback areas.

17 Q. Only for the public crossings, not to the entire length of  
18 the pipeline.

19 A. Correct.

20 Q. Okay. So if a line is running through the farm, is that line  
21 required to be marked or not?

22 A. No.

23 Q. Okay. So in this case, when I was at the scene 3 weeks later  
24 -- so my question is, you guys were here earlier. Did you see any  
25 markings between the two wells or the, I guess, the well and the

1 receipt point of the, I don't know, separator or whatever terms  
2 you guys use. Did you guys see any markings?

3 MR. LEPORE: Can I ask a clarifying question?

4 MR. CHHATRE: Yeah, sure.

5 MR. LEPORE: For the active flowlines that are being used  
6 today?

7 MR. CHHATRE: Yes. Yes, no. Only for active. Yeah.

8 MR. MacLAREN: Yeah, the active flowline was marked.

9 MR. CHHATRE: By the operator, like --

10 MR. MacLAREN: Yeah, at a road, at the road crossing.

11 MR. CHHATRE: Okay. It was marked.

12 MR. MacLAREN: Yeah.

13 MR. CHHATRE: That's all I have. Thank you so much. I'll  
14 pass it (indiscernible).

15 UNIDENTIFIED SPEAKER: (Indiscernible).

16 UNIDENTIFIED SPEAKER: Well, we'll let him do clarifying  
17 questions.

18 MR. LEONARD: Okay. Yeah, this is Mike Leonard. I have a  
19 few clarifying questions.

20 BY MR. LEONARD:

21 Q. So Joe, to the best of your knowledge, the 1100 series rules,  
22 the flowline/pipeline rules, have they changed overtime?

23 A. Yes.

24 Q. So there's been modifications to that rule.

25 A. Correct.

1 Q. After you -- if you do an inspection and find an issue and  
2 issue a corrective action, can you recommend that for enforcement  
3 right away, or do you have to do another inspection?

4 A. I can recommend that for enforcement right away.

5 Q. Okay. But you can only recommend for enforcement. You  
6 yourself as an inspector cannot bring enforcement.

7 A. Correct.

8 Q. Correct. Okay. And is -- does COGCC have an enforcement  
9 policy matrix and penalty matrix?

10 A. Correct. Yes, we do.

11 Q. And that's publicly available on the website.

12 A. Yes, it is.

13 Q. Okay. So there are certain issues that, if found, they are  
14 automatically -- so there are mandatory -- or the other side of  
15 it, discretionary rule violations. There are mandatory rule  
16 violations that an NOAV has to be issued.

17 A. That is correct.

18 Q. Okay.

19 MR. LEONARD: I think that's all I have now.

20 MR. CHHATRE: Okay.

21 MR. PRUNK: Doug Prunk with the fire department.

22 BY MR. PRUNK:

23 Q. Joe, you said that previous to this position you were a  
24 normal operator? Normal inspector. You were a normal inspector.

25 A. I was a southwest field inspector.

1 Q. So in that timeframe, it's probably safe to say that you've  
2 seen hundreds or thousands of wells.

3 A. Thousands of wells.

4 Q. Yeah, absolutely. How common is this setup of this type  
5 well? Like, the aboveground configuration of -- just, you know,  
6 I'm talking just in the confinement, like this. Yeah.

7 MR. LEPORE: Like what is shown in the picture that was  
8 previously marked as an exhibit?

9 MR. PRUNK: Yeah.

10 MR. MacLAREN: This is uncommon. The reason I -- the way  
11 that the --

12 BY MR. PRUNK:

13 Q. What are you saying, this? What you're pointing at is --

14 A. Well, what I'm pointing at is -- the 1-inch line back to the  
15 wellhead can be fairly common. The way that the 1-inch line is  
16 tied into the wellhead and is used for production operations is  
17 not as common. You want me to clarify?

18 Q. No, no, I think I understand. Yeah.

19 A. The reason that it is -- this is an uncommon situation is  
20 that the gas flow in the 1-inch line is multidirectional. It can  
21 go to the separator to supply fuel gas to the burner to heat the  
22 separator vessel, or the line can go the other direction to supply  
23 fuel gas to operate the motor valve and the plunger lift system on  
24 the wellhead. So it's multidirectional. We do not commonly see  
25 that.

1 Q. Okay. In your history, your experience on a normal -- well,  
2 let me ask the first question first. How often -- what type of  
3 rotation -- or what's the goal to try to have an onsite visit of  
4 wellheads by your organization? Is there a -- each well is looked  
5 at hopefully every 4 years, or is there any type of --

6 A. Ultimately, our goal -- well, we -- a couple of things go  
7 into play. We have wells that are deemed priority inspections  
8 based on a risk model that has been created by the agency.  
9 Ultimately, our goal will be to inspect wells annually.

10 Q. Is the risk model -- you're saying all 55,000 wells annually  
11 are hopefully (indiscernible) and are looked at.

12 A. That's, you know -- we're working in that direction. I'm not  
13 saying --

14 Q. So the risk model is based on close to buildings or something  
15 like that?

16 A. Sensitive areas, yeah. Those factors come into play.

17 Q. Yeah, EPA-type stuff.

18 A. Yeah, a number of variables including, yes, proximity to  
19 populated structures, sensitive areas like wetlands.

20 Q. Okay. So I think earlier you --

21 A. Reach of well.

22 Q. -- said that this -- the last record that we have for this  
23 well to be inspected was '14, is what we're showing. Would it be  
24 fair to say or would you -- how do I say this? Is this something  
25 that would have probably been noticed by all inspectors, this

1 oddity that you spoke of, or is it just based on your, you know,  
2 extensive knowledge of wells?

3 A. It's based on my specific knowledge of flowlines and wells.

4 Q. So it would be -- there's a possibility that, if I were to  
5 sample any of the other inspectors, they may or may not catch  
6 that.

7 A. Correct.

8 MR. PRUNK: Okay. All right. Thank you.

9 MR. LEONARD: I have a couple questions now. Sorry.

10 BY MR. LEONARD:

11 Q. So when you say this is not a common configuration for  
12 wellheads, are you speaking statewide or for this specific DJ  
13 basin?

14 A. I'm speaking statewide.

15 Q. Statewide. But it -- potentially, it could be a common  
16 configuration in the Denver Julesburg Basin?

17 A. That's correct.

18 Q. Okay. And would there be -- I'm sorry. This is Mike  
19 Leonard, if I didn't do that. I always forget, as well as  
20 everybody else. Chief Prunk asked, you know, if another inspector  
21 would notice these lines. Could there be a reasonable or regular  
22 use for these lines that they would be in place?

23 A. Yes.

24 Q. Okay. So it's not something that would stand out to a normal  
25 inspector because there could be some configuration somewhere else

1 that these lines would, at some point in time, be needed.

2 A. Correct.

3 Q. Okay. Speaking as far as inspection frequency, is there not  
4 a flag in the system that, if a well hasn't been inspected in 3  
5 years, it's flagged --

6 A. Yes.

7 Q. -- as to be inspected? Okay. And that's the current agency  
8 standard, is if it hasn't been looked at in 3 years, there's a  
9 flag --

10 A. That's correct.

11 Q. -- that flags it for inspection, and that -- and it may also  
12 raise it on the priority list or -- yeah.

13 A. Yeah, that's correct.

14 MR. PRUNK: And one more clarification. Doug Prunk. This  
15 well, by history, we know that it was shut in from December of '15  
16 through January of '17. Would that -- does the, does your  
17 organization know about those type of shut-ins?

18 MR. MacLAREN: Yes.

19 MR. PRUNK: That would suspend your inspection as well at all  
20 --

21 MR. MacLAREN: No.

22 MR. PRUNK: -- or it would be -- if it was shut in, it would  
23 still get looked at if it was on the route or that schedule?

24 MR. MacLAREN: Yes.

25 MR. PRUNK: Okay, so that had nothing to do with from '14 to

1 '17 or --

2 MR. MacLAREN: No.

3 MR. PRUNK: Okay. Is there any -- was there -- is this on a  
4 schedule for '17 that we know of? Is there already a -- was it  
5 already -- prior to this event. Obviously it's been inspected  
6 plenty now. Prior to this event, would it have been looked at in  
7 '17?

8 MR. LEONARD: This is Mike Leonard and I can answer that.  
9 Yes. Because of its -- so on the website in presentations, there  
10 is a prioritization of well inspections. Presentation that  
11 actually shows the formula shows how it's calculated, how the  
12 scores are calculated. And this well would have been flagged.  
13 And it gets flagged the day -- so 3 years from, 3 years and a day  
14 after the last inspection, it would be flagged for inspection.

15 MR. LEPORE: Do you know what month the last inspection was?

16 MR. LEONARD: I'd have to look. I can look, but --

17 MR. CHHATRE: What is the question?

18 MR. LEPORE: I asked him if he knew what month in 2014 the  
19 well was last inspected. My recollection is August, but --

20 MR. LEONARD: I believe it was August or September. I mean,  
21 I could look that up. And that will come -- that will be part of  
22 the well file that COGCC will provide you.

23 MR. CHHATRE: Send us. Yeah. Any other follow-up questions?

24 MR. McBRIDE: No, sir.

25 MR. CHHATRE: Okay.



1 MR. McBRIDE: Thank you, Joe.

2 MR. CHHATRE: Just for the record, I just want to ask one  
3 question here. When you say it's not common, that doesn't make it  
4 unsafe, does it? I mean, it may be uncommon, but that doesn't  
5 mean it's unsafe practice.

6 MR. MacLAREN: That's correct.

7 MR. CHHATRE: Just want to make sure that we don't get a  
8 wrong impression on the, on the record, so -- okay. That's all I  
9 have. If not, appreciate you spending a long time with us and  
10 answering all the questions. I don't know if (indiscernible), but  
11 you really helped. You helped significantly.

12 MR. MacLAREN: Thank you.

13 MR. CHHATRE: Thank you so much.

14 MR. MacLAREN: You bet.

15 MR. CHHATRE: Off the record.

16 (Whereupon, the interview was concluded.)  
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CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF:           HOUSE EXPLOSION IN FIRESTONE,  
                                  COLORADO, APRIL 17, 2017  
                                  Interview of Joe MacLaren

ACCIDENT NUMBER:           DCA17FP005

PLACE:                        Longmont, Colorado

DATE:                         May 12, 2017

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.

A rectangular area containing a redacted signature, represented by a solid black bar.

---

Eileen Gonzalez  
Transcriber