UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

Investigation of:	*
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HOUSE EXPLOSION IN FIRESTONE, COLORADO, APRIL 17, 2017	* Accident No.: DCA17FP005 *

Interview of: STEVEN HEIDEMAN

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

Monday,
May 15, 2017

APPEARANCES:

RAVI CHHATRE, Investigator in Charge
National Transportation Safety Board

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

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

MATTHEW LEPORE, Director
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DOUG PRUNK, Fire Investigator
Frederick-Firestone Fire Protection District

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

MATTHEW McKENZIE, Attorney
National Transportation Safety Board

KEVIN MCGREEVY, ESQ
Ridley, McGreevy & Winocur
(On behalf of Mr. Heideman)

I N D E X

I N T E R V I E W

(9:10 a.m.)

MR. CHHATRE: Good morning. Today is Monday, May 15, 2017. We are currently at Frederick-Firestone Fire Protection District's Business and Education Center, located at 8426 Kosmerl Place, Longmont, Colorado. We are meeting regarding the investigation of explosion of a house located at 6312 Twilight Avenue, Firestone, Colorado that occurred on April 17, 2017.

My name is Ravi Chhatre. I'm with, I am with the National Transportation Safety Board located in Washington, D.C., and I'm Investigator-in-Charge of this accident. The NTSB investigation number for this accident is DCA17FP005.

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

Also, I would like to information Mr. Steve Heideman that you are permitted to have one other person present with you during the interview. This is a person of your choice -- your supervisor, friend, family member or, if you choose, no one at all. Please state for the record your full name, spelling of your name, organization you work for and your title, business contact information such as mailing address, email, postal address, or whom you had chosen -- and whom you have chosen to be present with

you during your interview.

MR. HEIDEMAN: Steven Heideman, S-T-E-V-E-N, H-E-I-D-E-M-A-N. I work for Wellsite Services. I'm a contract pumper for Anadarko. My email is my full name, [redacted].com, and Kevin McGreevy, my lawyer is with me.

MR. CHHATRE: Now I would like to go around and each person introduce themselves. Please state your name, spelling of your name, your title and the organization that you represent, and your business contact information, starting from my left.

MR. AJIBOYE: My name is Gbenga Ajiboye, G-B-E-N-G-A. A-J-I-B-O-Y-E. I'm with USDOT, PHMSA at Lakewood Office. My, I mean, I'm an engineer, and my phone number is [redacted] My email address is [redacted].

MR. LEONARD: Mike Leonard, first name common spelling, last name L-E-O-N-A-R-D, with the Colorado Oil and Gas Conservation Commission, Quality Assurance Professional. Email is [redacted]us. Cell phone number, work cell phone number is ([redacted]

MR. PRUNK: Doug Prunk, Division Chief of Life Safety for Frederick-Firestone Fire Department. It's [redacted]. ([redacted]

MR. MCGREEVY: Kevin McGreevy, I'm Steve Heideman's attorney. My is spelled M-C-G-R-E-E-V-Y. I'm with Ridley, McGreevy & Winocur. Our telephone number is ([redacted] and email address is [redacted], [redacted].com.

MR. MCBRIDE: David McBride, I'm Vice President of Health, Safety and Environment for Anadarko Petroleum Corporation. It's [redacted]. My phone number is ([redacted]

MR. CHHATRE: Thank you for that. Mr. Heideman, thank you for coming again, talking to us. We'll continue from last time, and I don't exactly remember like what point we start. Because I, there may be some repetition, so bear with us.

INTERVIEW OF STEVEN HEIDEMAN

BY MR. CHHATRE:

Q. And my notes tell me we talked about the pressure and line, when the line is froze from outside. The SAP (ph) is going to walk me through when you see the frost -- I'm calling it frost. Is that correct?

A. Yeah. That's what I see as frost, yeah.

Q. So what does that tell you in that line?

A. Could be different things. The only way to get to it is to, or to figure it out is to troubleshoot it. But I couldn't get my truck to it to thaw it, to be able to do that or to get my tools to it.

Q. Sure. Tell me what different possibility there are to get this troubleshoot (ph).

A. Could be the regulators failing and over pressuring. It could be condensate in the line that caused the, started the ice inside or a plug. Could be, there could be a small leak.

Q. A small leak where?

A. Somewhere on the line or around the regulators.
Q. Okay. Could that be manifest at some other location? Or, might --
A. It would have, it would have been right here at the well head.
Q. Okay. Three.
A. But the only way to find out is to be able to get tools out to it.
Q. Okay. And what steps you will do?
A. What I did, I just shut it and isolated the line, so that it stopped flow. And then over, if even if I can't get a truck to it to thaw on it or put methanol in it, then at least overtime the hydrate will thaw itself. And then we would, I would, my first thing to check would be the regulators.
Q. Okay.
A. And make sure that (indiscernible).
Q. Now that would, did you see any pressuring freeze on the line?
A. No.
Q. Just to get rid of the problem of regulator.
A. The gauges were fine, but that doesn't, if there's a freeze before the gauge, then it's still holding that 50 pounds right there.
Q. Okay.
A. So the only way to tell is to pull the Mecos apart, the

regulators. Flip, check the blocks. Make sure all the seals inside are still good. And then thaw them out and then hook them back up and see if they're working.

Q. Okay. So in leak is obviously, the leak is only if there's a leak, but why would you negate the frost like that, besides the regulator feeling and over pressurizing it. But if the regulator fails and over pressures the line downstream, why would we get a freeze where you are seeing the frost?

A. Because you're changing from one size of line that it's going to into either a smaller or bigger line. That changes everything about the gas. The matter of the gas is completely different at that point. So, if all of a sudden its sending, it fails and send 100 pounds into a smaller line, then it's trying to over pressure that small area. So it's going to start creating a hydrate.

Q. And just for record, when you small line, you're talking about stainless steel --

A. Right.

Q. -- tubing, right?

A. Correct. The 3/8th stainless.

Q. Okay. Now if you see the frost, let's just say the same day you left. I mean, you being and some time that day the frost happens. You are not going to go to have well again for another 8 days. Is that correct?

A. No. At that, at that point I'm just trying to get access with my truck there so that I --

Q. No, no. What I meant was, you check the well. Everything is kosher.
A. Oh.
Q. You leave. And after you leave, that night, next day you get the frost. So there's going to remain until you visit the well next time, which I guess, if you, if I remember what you told us, like, you had to visit every well once a week.
A. Right.
Q. So in the worst case scenario, it can be 8 days.
A. But this one since I knew it was frosted or if it was even another well, it doesn't matter. I'm going to try to get back to it sooner.
Q. Okay. And that's you doing it, or that Green Hat training told you, or it's a standard operating practice?
A. Yeah, both. It's just, we don't want to leave it that way for too long. We'd rather get it back online and fixed. So that's just kind of what we do.
Q. So in the worst case what should happen if the, if you still have the frost? And again, I'm not saying you are dealing this way although the frost is still there. I'm saying if you read the well, you see the frost, you take care of it, whatever you are doing, hot blanket, disconnect.
A. Right.
Q. And then you make everything kosher. Everything is working fine.

A. Right.
Q. Then you leave. And if for some reason, the well gets frost again after you leave, then you are not going to visit that well again --
A. Probably for another week.
Q. -- in the worst case for several, 8 days, right.
A. Yeah. Yeah, probably about a week, yeah.
Q. A week. So now tell me what effect that frost will have on the operation of the well?
A. None.
Q. Okay.
A. It doesn't, this line doesn't actually effect the well running, or not running. It's, this line is strictly to send supply to the separator. So the only way I would notice that it's frozen over or not working correctly is if I lose supply at location.
Q. You mean, from that well? You would, nothing, no product is flowing through that well? I lost --
A. No, the well could still be flowing.
Q. Okay.
A. This line is completely separate from that. It doesn't, it doesn't matter if the well shut in or not. So the only way I would know something is wrong with this line is if I lose supply on my separators, my ECDs, my burners.
Q. On the other location?

A. On the location that the well goes to. But this isn't a production line.
Q. It's a return line?
A. This is just a supply line.
Q. Supply line or return, okay.
A. Yeah.
Q. Now when you see the frost on this line, then you go to the other location where it's supposed to be feeding or providing the supply?
A. I was there before I saw it. But --
Q. To the location where this line would be feeding?
A. Uh-huh. That --
Q. And look, look at -- what was that?
A. That's the Coors B613 location.
Q. B613, oh, okay. And is that in the same vicinity, where the separator, or --
A. To the west. That's where the separator is. That's what I'm saying.
Q. No, but, okay. Is this the location?
A. Yeah, that's the separator for that location.
Q. Okay. So have you, so you had been there. Did you see that 1-inch line coming out some place here?
A. I don't remember to be honest. These, some of these locations are like fingerprints, so there's like no two the same. But, and I haven't been able to go back, but --

Q. Not since the accident. I'm saying prior to the accident, you had been in this location to locate that 1-inch line that supposed to be feeding --
A. Not in --
Q. -- your separate line.
A. -- particular or not.
Q. I wouldn't -- okay, let me rephrase the question. Not that day. You're saying in the past --
A. Yeah.
Q. -- had you gone --
A. I have not gone there to look for the 1-inch, no.
Q. One inch line.
A. No.
Q. So you believe the line is running. How will you know this particular unit is getting the supply?
A. Because it's, it's still functioning. If it, once it quits functioning, then none of your wells will show any trend on CygNet.
Q. Okay. So now is that the only online that will supply the separator? As other, for other wells who supply to the separator also?
A. Other wells, too, the other two wells.
Q. You still will not know your separator is working. You still would not know whether --
A. Right.

Q. -- this line is supplying or not supplying?
A. Right.
Q. Is that correct statement?
A. Correct.
Q. So it's not a standard practice to -- I don't know. Let me, let me rephrase it. When you were really at Green Hat program, is that correct statement?
A. Mm-hmm.
Q. Now did you mentor, or whom you were earlier shadowing, did that person tell you that you should be checking this 1-inch line or supply line when you're ready to go to separator to make sure it's working?
A. If the separator is not working, then I was taught to look, to go find that 1-inch and make sure I have a supply.
Q. But again, going back to my previous question, because there are so different wells that feeding your separator --
A. Right.
Q. -- you really would not know your line is supplying or not?
A. Right.
Q. Right?
A. Yeah.
Q. So that is already a good indication for you?
A. Yeah.
Q. To tell you whether this one line is working or not?
A. Right.

Q. So in theory, I guess, you really would never know of your 1-inch line is working or not? There is --
A. There is --
Q. Is there any way to check on the, on this location where the separator is, to check your 1-inch line, 1-inch line's working? Do you know what I'm saying?
A. Yeah. There should -
Q. Or you do not know that --
A. I'm not sure.
Q. -- 1-inch checking? So your mentor did not tell you that, how to check?
A. I know how to look for them, yeah. I know how to check for them, but I didn't.
Q. No, I understand. That day you did not.
A. Yeah.
Q. You did not go back to this well.
A. Correct.
Q. Right?
A. Yeah. No.
Q. But do you know where to check and how to check that particular line?
A. Yeah.
Q. And how would do that in this location?
A. You can't see it in this picture, but --
Q. Okay. Describe to me. I mean, I'm just trying to

understand.
A. So on this side of the separator over here, there's a doghouse, and that's where your dumps, your oil and water dumps. There's a scrub pot, and your 1-inch would go into the scrub pot. Your scrub pot keeps the supply on everything that the separator and the ECB needs.
Q. Okay. Is it manifold that all wells supply --
A. Yeah, it's a little manifold that goes in --
Q. (indiscernible) there. And that's so you can check?
A. Right.
Q. Have you ever checked -- see, I think you joint in December, right?
A. Yeah.
Q. 2016?
A. Yes.
Q. From December 2016 until April 17, 2017, did you ever check at this location where your 1-inch line from -- I think what 14, is it Well 14 --
A. Yes.
Q. -- is working?
A. Not that I can remember, no.
Q. Did your mentor ever show you how to check it?
A. Not that I remember at this particular location.
Q. Okay. So mentor (indiscernible). Have you done that to any other well?

A. Yeah.
Q. Forget about this well. To make sure that these two ends are meeting, the line feeding from the well and line receiving to whatever -- whichever, now I'm not saying this location. Any other location?
A. Yeah.
Q. Have you checked those lines?
A. Yes.
Q. Then I guess --
A. But when, only like if I'm losing supply, that's when I go look for the 1-inch and make sure I'm getting supply. I don't, I don't just go to a location and go look for a 1-inch. It's, it's usually not a very big deal. It's easy to get the gas back on location, so as long as everything is running and I go through and do my checks, I don't find leaks or smell any leaks or anything like that, then typically we think everything is good. So I'm not going out of my way to look for every line, at every location, every time I'm there.
Q. No, not really then, I understand. But I guess, when there's a problem like a frost.
A. Right.
Q. Does your SOP requires you to go back and check where this line is feeding?
A. And that's what we would of when we were able to actually work on the 1-inch. But we would have started at the well head,

then we would have went to the separator and also check there.
Q. I think I'm not asking you the question correct. So let me repeat.
A. Okay.
Q. When you see at the well, when you see a problem, in this case like a frost, and so -- and I think, I like the answers you gave me. I mean it's really clear to me what different things can happen, right?
A. Yeah.
Q. So in your SOP, procedures, does it tell you that any time you see something like this, at minimum you should go to the location, the separator location that, that line is supposed to be feeding to make sure that, that line is actually, is it working or not working?
A. Yes. And we would have when we got to work on the 1-inch. But we didn't get to.
Q. But why you had to work on the 1-inch line just to make sure that -- I mean, you already have frost. You said, it still can be --
A. Because my priority is fixing it at the well head first.
Q. Understand.
A. And then I'll go to the battery and make sure that it's working correctly.
Q. Okay. But now that you cannot fix it, did you not, then, you still did not go to that location where it's feeding?

A. No.
Q. And does your SOP requires you to do that?
A. I'm not actually sure if it does or not.
Q. Okay. So your mentor -- is that the correct word, mentor?
A. Yeah, mentor is fine.
Q. Yeah.
A. Or trainer.
Q. Trainer, okay. Your trainer did not tell you to do that, in --
A. No.
Q. -- the hopes where you were --
A. No.
Q. Okay. Now in those 5, 6 months you are working, did you ever go in here to find out that 1-inch line is feeding, figure out the problems or no problems?
A. No.
Q. And you would not do that as a looking operation, every now and then to check that all the lines, 1-inch lines are feeding?
A. Not if everything is working. It, we just, Scott's (ph), right, we wouldn't go out of our way for it if everything is running correctly?
Q. So how many lines typically feed this separator, how many wells, this 1-inch line?
A. There's three wells. I'm not sure how many 1-inches go into it.

Q. So nobody told you how many are supposed to be feeding that particular separator?
A. No.
Q. So this can be happening to any other well because if -- and if I understand correctly, even if there are three wells feeding the separator.
A. Right.
Q. If two are not supplying, it's the separator still will work because one well is providing it. Am I correct?
A. It just depends. Some separators burn off the gas quicker than others. Some separators only need one well to supply them. Some of them three or four wells to supply them. They're all, they all vary.
Q. So it's possible, it's not possible that out of three, two can fail and the separator, the separator still may work?
A. Sure, it's possible.
Q. And in that case, I guess -- I mean not to you but any operator would not know if other two lines or other one line is not working?
A. Yeah, there's a possibility that, that's a (indiscernible).
Q. Anyway, your other lines are working. Your, I guess, like your requirement, like you shall visit every well once a week, at least.
A. Right.
Q. If not more. Similarly, your instructions do not tell you to

periodically check these supply lines?
A. Correct.
Q. Okay. So did you at least know which line was feeding at the separator from Well 14?
A. The 1-inch.
Q. I mean, you are -- this -- okay. When you were trained, when you were shadowing your trainer, does he identify this 1-inch lines that come from different wells?
A. I can't remember, on this specific location or any of the other ones.
Q. No, any location. Any location.
A. I mean I know we did. But it wasn't at every location.
Q. Okay. So in part of your training you really would not know this line, this line or this line is coming from Well 14, Well 18, whatever the numbers may be?
A. Oh, we, for me to, if -- okay, so if we got a manifold with three of them coming in --
Q. Right.
A. -- I'd have to stop two of them and leave one open to see which line is which. They're not labeled.
Q. They're not labeled?
A. No.
Q. Okay. And is it true for all, this kind of setup, all the wells and all separators that lines are not marked?
A. The majority of them.

Q. Okay. Have you seen any in, on your 90, 80 or 90 wells in your route, have you seen any, where the lines are actually marked, which well is feeding?
A. Yeah. Yeah, a few of them but it's probably just another pumper that did it.
Q. Yeah, okay. Okay. Yeah, let's look at this drawing here. Is that number 14 means it's coming from Well 14?
A. Yeah, 14, right there. This is a flow line though. It's not your 1-inch.
Q. Okay. So where the 1-inch line will be coming in here?
A. It'd be off -- you can't see it from there either.
MR. AJIBOYE: Can't see it from here.
Q. Yeah, you can't see it. Okay.
UNIDENTIFIED SPEAKER: You can't see it from this one?
A. Nope.
Q. Okay.
A. Need a picture of the doghouse.
UNIDENTIFIED SPEAKER: There is no doghouse on this one. Those are your dumps.
A. Oh yeah, okay. It, well, and so there's a scrubber pot that it should be coming in but it doesn't look like there is.
UNIDENTIFIED SPEAKER: The scrubber pot's on this side?
A. Right.
Q. Which I'm -- sorry, tell me where it should be coming in?
A. The scrubber pot right there.

Q. Uh-huh.
A. It should be coming in there, but it doesn't look like there is one.
Q. This one. This unit here?
A. I mean this is actually -- yeah, okay.
Q. Even here --
A. Like I said, trying to remember every one of these locations --
Q. No, that's why I'm given you this drawing.
A. So this is the scrubber pot it should be coming in right here.
Q. Okay.
A. But it --
Q. Go ahead and write down the scrubber pot and we will mark this here, Exhibit -- what is one here?
MR. AJIBOYE: Here, there should be one.
Q. I think they're different. It still may not work is what my concern is. Yeah, this is --
A. Well, it's kind of dark.
Q. Your pen.
UNIDENTIFIED SPEAKER: (indiscernible) blue.
Q. Hold on. Hold on. Give me your pen. Thanks.
MR. AJIBOYE: I have a good pen.
UNIDENTIFIED SPEAKER: (indiscernible).
Q. Okay. Here we go. Write that. That may not show, my

concern that it may not show on it. Let's see, there is that. It's -- let me get -- hey, I think --

UNIDENTIFIED SPEAKER: This pen. Yeah, it ain't working.

Q. I think I can, I can see it. Thank you. So here it should be coming in, right?

A. Right.

Q. So where are, where are other, what are these lines coming to this scrubber port?

A. There's none.

Q. So then this scrubber, this separator is only fed by one line?

A. It's --

Q. Is that -- I'm not do -- so where would be?

A. If there's none coming in here, then they're only being fed off the flow line.

Q. Okay. Previously, previous coming in here, where will it be connect? Top, bottom, side, or --

A. It comes into the side.

Q. Okay. So there is a line coming in here. What is this line here? Oh, that is not it, that's --

A. No, that's not a 1-inch. That's your, like a PRV. It's pop off.

Q. So this not, it's not a supply line?

A. No.

Q. Okay. You need to write down today date and your name and

all that good stuff. Sign it and this will be -- yeah, the date underline though.

UNIDENTIFIED SPEAKER: The 15th, I think?

Q. So have you been to this location with your mentor or trainer?

A. Yeah, right before I got the route in February.

Q. Okay. So he took you to this location in February?

A. Mm-hmm.

Q. And did he show you all these different lines and what to look for and all that stuff? Would he at least show you like, for example, the, because you are saying this is a scrubber here, did he show you the scrubber?

A. I can't even remember but we had, we had to, he was turning this on. So he was all over the place. It was hard to keep up, but to remember every little thing from then is, I can't remember it all.

Q. Okay. Do you remember your trainer showing you at any other location the scrubber and the pipes coming in?

A. Sure.

Q. So whenever you visit, I'm guess once a week, so probably several times you went to this location. Did you ever check that the lines coming into scrubber or anything is coming in or --

A. No. I don't think, I must not have, no.

Q. Like, I believe you are correct, because otherwise you would have noticed there's no line coming in.

A. Right.
Q. So there are three wells feeding this, then there'll be three lines coming in, correct?
A. If there's a 1-inch at the other two, and I can't remember if there is.
Q. Okay. So separately, which other wells feed this scrubber? Do you know that?
A. The Coors V6-13 and the Coors V6-13JI.
Q. V6-13, V6-13JI. JI is the one that's near the incident location?
A. That's the 14JI.
Q. 14JI, okay, not 13. Okay. So these three?
A. Yeah.
Q. Okay. So in your weekly visits, you're, you're not required to check all these connections, make sure all the connections are working and --
A. As long as it's running, then we're not, we're not looking for stuff like that all the time.
Q. I understand that, you may not, your program, your program -- like for example, even if the well is working, you still have to visit it, right?
A. Yeah.
Q. That's what they tell you to do, every, so do they tell you that every time you visit, you should be looking at different pipe, different connections or they don't tell you that?

A. No, it's more look for, make sure it's running, look for leaks, look for anything that needs to be worked on. And --
Q. So --
A. -- I never particularly did anything with this 1-inch until I saw the frost. I had no reason to. So when I'm at the location, I'm not also looking for supply on location if I already have supply. So I'm not going out of my way for that 1-inch, looking for the 1-inch that I, when I have supply on location. So I'm looking for other stuff.
Q. Sure. Understand. But at this location, where there, you are supposed to get the fuel to keep this thing running, is it, is it not important to make sure that the fuel is coming in to keep the scrubber going, or you had to wait until the scrubber fails? I mean, I'm just trying to find out operating procedure for the company.
A. Yeah, we, it would have just been when the separator runs out of gas.
Q. But this one only has one coming in, right? So if one is not coming in, then it may not work. So is not clear, I understand if you had more than one -- two, three are coming in, then like you said, it probably may not still fail because one, at least one is supplying. Right?
A. Right?
Q. But since only there's one is coming in here, is it not critical to check that at least discover is running or will not

fail?
A. Probably should have.
Q. Okay. But again, now do they, does the company gives you any standard checklist that every time you go to the different locations at least minimum, if not more, minimum, you should be checking in that they --
A. No, there's not a checklist.
Q. There is no checklist?
A. No.
Q. Okay. And during the Green Hat program, how long you were in that program? I know you told me you aced it, that part that you're in there.
A. Yeah, just till I, till I got my route in February. So from December to February.
Q. Three months about.
A. It was, and I just --
Q. And I remember you telling me that you had a different, I think you followed under a different well setup than, I mean well route I guess than this one?
A. Yeah.
Q. Right?
A. Yeah.
Q. That I remember. So in any of those locations, did your trainer told you to do anything of this thing at all? In this 3-month period --

A. Not once, not once did he pull a 1-inch apart and look to get if it's actually supplying.
Q. Not once?
A. No.
Q. Okay. So, if you were to check if this line is working or not, what will you do here? How would you know? What is a step by step procedure that you can take to make sure this supply line is supplying?
A. You could make sure it's all opened up at the well. Go, come up here.
Q. Do you have to disconnect anything here?
A. No, you don't. Well, you would disconnect eventually to hear pressure coming out of it. You'll come up to the manifold a lot --
Q. Do you see a manifold here, or if not? So okay.
A. No, no. There's not one there.
Q. Describe me the manifold of it?
A. It's just a little 1-inch line that comes out in 90s into the scrub pot.
Q. Okay.
A. And there's a ball value, there's a ball valve before it comes into the scrub pot so, I can shut that ball valve. Disconnect it right there going into the scrub pot. Then I can pinch it open, hear pressure coming out of it.
Q. And you know it's working?

A. And then I know it's working.
Q. Okay. And how much trouble that is? How much timewise?
A. Maybe 15, 20 minutes.
Q. Okay. And typically in your visit to each well, how much time you spend actually once you enter the well, or in that, you know, you call it what? What do you call that gated area? Is it like just well, or you call it fenced area, or what do you call it?
A. Like for where the separator is?
Q. Like -- no, no. Not separator. All the well, itself. I mean where the well's held, a compound.
A. Oh, the location, battery, whatever.
Q. Okay. Okay. So when you entered that location for your weekly visits how much time typically you spend at each well?
A. Probably 30 minutes to an hour.
Q. Okay.
A. If nothing's wrong.
Q. Okay.
A. And that's, I go to the location, the battery, make sure on CygNet and the RTU everything looks good. I'll walk around. Look for my leaks. Check my tanks. Then I'll go to the well heads, make sure there's nothing leaking out there. Everything looks like it's running properly. Some of these only run once a day, so when I'm there, like this well runs once a day. It's probably not going to run while I'm there.

Q. Sure.
A. Unless I manually make it run.
Q. Happens to be there when the well is running?
A. Correct. So I wouldn't like get to see the dumps or anything but --
Q. So in your protocol or procedure because that may be the case, can you just start the well for whatever time it's safe to check it, to make sure it's working for you?
A. Yeah, you could, yeah.
Q. How can you only, it is on the STEM program and it's not supposed to be --
A. Yeah, even if it's a STEM, it doesn't matter. They don't care. If you get your 284 barrels in the first 3 months of the year, they'll just shut it in the rest of the year.
Q. They'll just shut it. Yeah.
A. They don't really care when they get it.
Q. Right. But I mean for you, for your checkup, you can still turn it on.
A. Sure.
Q. And turn it off?
A. Yeah.
Q. That is beyond your shut in and shut off for the step.
A. Right.
Q. Okay. Okay. So around half meeting (ph), you have of what, 80 or 90 wells, you wells you said, in your, in your route?

A. Yeah, somewhere around there, yeah.
Q. And your work week is 4-day workweek, or 5 day or 7 day?
A. Monday through Friday.
Q. Monday through Friday, 8 hours a day?
A. Yeah.
Q. Okay. Well, looking at it like, even if you worked 30 minutes, not one hour, but minimal is 30 minutes, what you told me.
A. That's just what I spend on my --
Q. I just kind of thinking, what the time is.
A. Every pumper does it differently.
Q. Sure.
A. I don't --
Q. Yeah, and some might take even there be no problem might take one hour, right?
A. Right.
Q. In that case, 5 days a week, you are taking only 80, not 90, but whatever be, you know, 80. So 16 wells, you have do in each day, roughly. If you had 90, then the time even drops further.
A. Right.
Q. Right?
A. Sure.
Q. So you do 16 wells a day, 8 hour day, so it's 30 minutes minimum. And I'm only taking minimum at each location, not giving, because some wells might one hour. But even that, if it

takes 30 minutes, that's 8 hours just at each well, not counting travel time, not counting nothing in it.

A. Well, if I, you know, if I run into an issue on one, then some get pushed off to the next day.

Q. And then you're just compounding your problem. You're not really alleviating. On next well, next day then you have even more.

A. But if I go to a location and find a problem, I'm going to stay there till I can either get it fixed or pass it on to Anadarko to figure out what we've got to do.

Q. Yeah.

A. But that could be a few hours sometimes.

Q. Sure. I fully understand.

MR. PRUNK: For clarification, this is --

MR. CHHATRE: Identify. Identify.

MR. PRUNK: This is, yeah, this is Doug Prunk. So if there's three wells on that site --

MR. HEIDEMAN: Right.

MR. PRUNK: -- how, on average when you've done that route, how many, is that a half hour spot? Or is that an hour? Because you're saying, yeah, I understand the route, but you're saying the map doesn't kind of add up.

MR. HEIDEMAN: Right.

MR. PRUNK: But locations have multiple wells, right?

MR. HEIDEMAN: Yeah.

MR. PRUNK: There's not a lot of single well, or so does that help your timelines out a little bit? Or would you have spent up to 3 hours on that one site because there's three wells there?

MR. HEIDEMAN: No, if I don't find nothing wrong, then I would have moved on to the next one.

MR. PRUNK: So how long is that, that site, of those three Coors wells?

MR. HEIDEMAN: If I don't find nothing wrong, probably 30, 40 minutes.

MR. PRUNK: Okay. All right.

Q. Now when you say three wells, when I saw 14JI, and your separator, there is some good distance.

A. Yeah.

Q. So you would drive it. So assuming all three wells that are in the one fenced area?

A. Right.

Q. So you still have to physically go to different locations, right?

A. Right.

Q. And each location, you're at least 30 minutes, maybe an hour?

A. Right.

Q. Or two sometimes.

A. Yeah.

MR. PRUNK: No.

MR. MCGREEVY: Are you saying -- Kevin McGreevy. Steven, I,

in future (ph) are you saying, the location is, a location, the separator and the three wells?

MR. HEIDEMAN: Yeah. That --

MR. MCGREEVY: Or is the location --

MR. HEIDEMAN: That's location.

MR. MCGREEVY: Okay. That's the location. So when you're saying 30 minutes, you're saying for the separator and the three wells?

MR. HEIDEMAN: Right.

MR. MCGREEVY: And when you're saying that you have 80 to 90 wells, that, do you know how many different locations there are?

MR. HEIDEMAN: I've probably got 20, 20, 25 different locations.

MR. MCGREEVY: Okay. But you're spending, if there's no problem, it's 30 to 40 minutes at the three wells and the separator?

MR. HEIDEMAN: Right.

MR. MCGREEVY: Okay. All right. Sorry, I was confused between the two.

MR. CHHATRE: Well, now I let it go because if I'm asking question, let me ask, ask me to repeat it. I'm happy to do that.

MR. MCGREEVY: Oh, okay.

MR. CHHATRE: Okay? Because you're advising and you shouldn't be asking questions.

MR. MCGREEVY: Oh, okay. I'm sorry.

MR. CHHATRE: Okay?
MR. MCGREEVY: Okay.
MR. CHHATRE: I mean that's, yeah, it's protocol. I just let you go, but, and I didn't want to interrupt you. But just tell him to ask him to repeat the question, and I will.
MR. MCGREEVY: Okay.
MR. CHHATRE: In 10 different ways.
Q. So you're saying each location takes you 30 minutes?
A. Probably minimum, 30 minutes, yeah.
Q. Minimum, right? So now I take your 30 minutes minimum again, not counting the worst case scenario could be one or 2 hours.
A. Right.
Q. So that means you had to go to three different locations, which maybe quarter mile, half mile or right next to each other. Where your location is house several wells and the separator.
A. Right.
Q. Correct?
A. Right.
Q. So they are not all together like in this case, they are at least half a mile, I think away, and maybe driving distance-wise, probably a little longer.
A. For one well, but I can go to the, where the separator and the tank and everything is, I can walk 30, 40 feet to the other two wells.
Q. Not in this case?

A. Yes. The other two wells are right up by that location.
Q. No, no, no. I mean in this case, one way this --
A. Yeah, I know. And that one I would drive to.
Q. Okay.
A. The other two are right there.
Q. Is this pretty standard for all your 90 well route, or -- I mean I understand. I fully understand what you are telling me.
A. There's some that are hard to get to. You have to walk out in the middle of a crop.
Q. Okay. Even if you walk, let's just say, so you're only spending roughly 10 minutes at each location, each well? Now, not location, each well?
A. Right.
Q. Right?
A. Yeah.
Q. So it's --
A. As long as I don't see nothing wrong with it.
Q. But you still look for it, right?
A. Yes, I look --
Q. And before you know anything is wrong or not wrong?
A. Yes.
Q. So you have 10 minutes to inspect each well location? I mean not location. Each well?
A. Yes.
Q. Roughly, I mean I'm not --

A. Yeah, roughly.
Q. I'm not trying to --
A. I've never really timed myself at each well.
Q. No, I understand. And I understand that but somehow I'm still struggling with the math. And if you had 90 wells, then it makes it even worse. But I'm just taking the -- so that is just -- okay. I understand.
A. Some locations you got --
Q. So now just say --
A. -- four or five of them right here next to each other. So if you're driving to one spot, I could walk from, into each well, right there.
Q. Understand. That's what I'm taking. As you met each separator, all the wells sat next to each other, still each well is going to take, if it takes 30 minutes per location, and if you have five wells, then you are spending less than 10 minutes at each well.
A. Then some of them get put on the backburner if they're a lower producer.
Q. I'm not saying, so that is, that happens?
A. Yes.
Q. So don't you tell your, whoever you report to, and I forget that term, rower or who are --
A. Ron Kern (ph).
Q. So do you tell them that hey look, I could not finish my

90-well route, so these 10 wells still need to be checked out. Does that happen?
A. No, we would just try to get to them the next day or that week at least.
Q. Okay.
A. And if not, then we have a guy on the weekend, we could put it in the notes, like, hey, I really couldn't get to this. Can you swing by there and check it out?
Q. So there is, there is an option at that time to do that?
A. Right.
Q. Okay. Have you ever done that? Have you ever taken that option to take --
A. Yeah.
Q. Okay. Great. All right. Now since the accident, explosion, did you guys have any huddle for this particular, I don't know, is area the correct term, or location is that term? Or, which ever your 90-well unit is, and the other operators, have you ever discussed to see, hey, how can we improve, or what went wrong or what we call a diagnostic kind of thing with your --
A. Yeah. We're making a bunch of changes right now, that SOPs --
Q. No, no. I guess my question is not that.
A. -- MOCs.
Q. My question is did you guys officially got together and discuss the lessons learned or how we can improve things?

A. Yes.
Q. And that was on one warranty (ph) basis, or on your own or did the company had done that? I mean your company?
A. The Anadarko guys kind of all got together and we discussed it. But they wanted ideas of different ways that we can be better. Or to avoid something like this happening again, or whatever. But now we're just, we're just removing all the 1-inchers now.
Q. Okay. But when was that? Do you remember after the accident? Was it --
A. That they decided to remove them? Probably like a week-and-a-half ago.
Q. Okay. Now, when you say, Anadarko guys, what do you mean? Are these the --
A. Like the upper --
Q. -- inspectors like you guys? Or the --
A. It was above us.
Q. Above you, okay. And they got together with all the operator, these operators, is operator the correct term?
A. Yes, or pumper, whatever.
Q. What is that?
A. Operator, pumper.
Q. Pumper. I'm sorry --
A. Pumper.
Q. Oh, P-U-M-P-E-R?

A. Yeah.
Q. Okay. I'm sorry. So, did they, did the Anadarko supervisor got together with all the pumpers or operators?
A. Yeah. Our foreman pulled us into a room and told us what they wanted us to do, and discussed --
Q. And did he -- what's the name?
A. -- every -- his name is Ron Kern.
Q. K-E-R-N?
A. Yeah.
Q. Okay. And was that meeting documented? Was there a signup sheet?
A. No. It was just, every morning he comes in and talks to us, but we don't sign in for it. The only one we sign in for is our weekly like safety meeting.
Q. Okay. So, when you said, Anadarko got you guys together, it's not really getting them together for this reason? It was just your morning meeting? Am I correct?
A. But that's a specifically, we had to stay late so that he could talk to us about what they decided we were going to do.
Q. Okay. And did they ask your ideas at the time? I mean all the, all the inspectors' ideas?
A. Yeah. They asked if anybody had any ideas to make this unavoidable again.
Q. And did anybody weren't here to tell that, to tell them that, hey, this is what I'm thinking or it was just --

A. Well, we threw the idea to, why don't we have, why aren't these lines pressure tested every year just like the flow lines are annually. For us to go out to each well, too, and have a guy at the well and a guy at the separator, and let's verify that we're getting the gas to the separator. And we've done that with every single one of our verticals --

Q. Now?

A. -- since then.

Q. Since then. Okay. Pressure, two people checking each location, at each well?

A. Yeah, we've been going in pairs everywhere.

Q. Okay. Yeah, was that an official, some place, it's like informal deal, or was it officially noted some place that when you do that, you have to come in and say, okay, Well Number 1 is good.

A. Yeah. We got it all documented on papers. Yeah.

Q. Okay.

MR. CHHATRE: Hey, can we, can you find out that if they were meeting that's official meeting. Are there any records? Any signup sheet? Or if the person is sick that day, that person may not know. I'm just trying to find out, if there is safety meeting like this. Can we get what happened in that meeting? Who gave that? Any documentation? If there is not, you can tell me there is no documentation. That's fine. What --

MR. MCBRIDE: Yeah, I'll find out. I don't want it to get --

MR. CHHATRE: Because I think we've talked to --

MR. MCBRIDE: Ron Kern?

MR. CHHATRE: No, but he never mentioned anything.

MR. MCBRIDE: No, but I will get the timing straight because I'd like to tell you exactly.

MR. CHHATRE: Because irrespective, irrespective.

MR. MCBRIDE: I was part -- this is David McBride. I was part of the decision to remove those lines and that was done well before the NTSB ever arrived on scene. We decided that about April -- when was it -- that was the 2 days, 2 or 3 days before the pressure release came out, which would have been like April 21st or 22nd, I think when they decided to remove the 1-inch lines as part of the inspection protocols we did for the 3,000 wells that we were going to go examine.

MR. CHHATRE: No, I understand that. But I'm wondering why Mr. Kern didn't tell us anything. And we asked him.

MR. MCBRIDE: Yeah, I think he was probably just communicating what he was being told to do for the inspection process. But we have a documented, since the NTO came out from COGCC as well, we have a fully documented, auditable trail --

MR. CHHATRE: Okay.

MR. MCBRIDE: -- of what we're doing to comply with that NTO, and what we're doing to comply with the announcement that we made on the 3,000 well inspection program. We have something that's fully defensible and a paper trail created specifically for those two action items.

MR. CHHATRE: Right. I was just curious if there was any documentation, any meeting signup sheets?

MR. MCBRIDE: We'll check on it.

Q. So now besides the 1-inch being decommissioned or dismantled, whatever the term is, are you doing anything differently since the accident?

A. We will --

Q. I mean when I say, you, I'm talking about operators in general and then you in particular.

A. We will be. None of them are running, so they're, I think they're still coming up with the new SOP of how they want us to check locations.

Q. Okay.

A. That hasn't exactly been passed on to us yet, though.

Q. Okay.

A. We're, because we're still in the process of disconnecting and verifying all the 1-inchers.

Q. Okay. I understand. Okay. So I just have top level, 35, 45 minutes now here. But if you're adding anything that I did not add that you think my help me put all the pieces together, I mean, no import, is less important. So don't worry about whether it's important or not. If you have any remote ideas that'll help me, or help actually the industry how to improve things, that will be helpful. Does it part come to your mind anything I should have asked and did not ask?

A. No. I mean the only thing that I've thought of is how come these lines weren't pressure tested ever. The flow, like, the flow line and the oil and water dumps. All those are pressure tested annually.
Q. Right. So, did you mention that in that meeting? Was this pressure, this idea mentioned by you or somebody else?
A. Yeah, I mean we all just kind of talked about it. It wasn't my idea.
Q. Okay.
A. But it makes sense to me.
Q. Okay. But I mean, if anything comes to your mind because you have been very, very close to this well in particular. So if anything comes to your mind, this interview is not end of our communication link.
A. Right.
Q. So if anything comes to your mind contact us.
A. Okay.
Q. Or either that or pass on to PHMSA.
MR. LEPORE: Yeah, this is that --
MR. CHHATRE: Just for a second. Just be on the record so that you are right.
MR. LEPORE: It'd Matthew Lepore, COGCC.
MR. CHHATRE: Great. Thank you.
BY MR. AJIBOYE:
Q. Yeah, this Gbenga from PHMSA. So Saturday when we were

talking, you said something about April 11th. Can you elaborate on what happened on April 11th?
A. So I had, I had the well in manual mode so it wasn't running, because it was struggling against line pressure. And so, I went out there on the 11th and I was going to try to cycle that well, because it has built some pressure from being in manual mode for a few days. And that's when I found the frost on the 1-inch. So I didn't cycle the well. I left it in manual.
Q. So do you remember when you put the well manual mode?
A. I think it was the 7th.
Q. That's April 7th. And do you know how to read the daily production record? Is that something that you familiar?
A. Not in that format. On our computer it looks totally different.
Q. Okay, now, so my understanding now is on April 7th, you put the well on manual mode?
A. Don't quote me on that day.
Q. Okay.
A. I'm trying to remember it off the top of my head. I have, I have it in my notes that you guys probably all have.
Q. Okay. And why did you put it in manual mode on that day?
A. Because it was struggling. For a couple weeks leading up to the 11th, it was battling against line pressure.
Q. Against what?
A. Line pressure?

Q. Okay.
A. Like our sales gas line. I think at that location it's BCP, and their booster went down. So line pressure was 280, 300, maybe even a little higher. Well, if my tubing drops below that, it's not going to run against it. So it'll just load the well up. So I have to put it in manual mode or equalize it. In this case, I put it in manual mode.
Q. Okay.
A. And I went out to try to cycle it and see how it would do, and I never got to that because I found the frosted 1-inch.
Q. Okay. And when you find, when you found that frost 1-inch in the course of that, and what exactly did you do?
A. I left it in manual and I shut the 1-inch ball valve.
Q. Okay. Did you report to a higher authority about --
A. I went to my lead.
Q. What did he do? And what happened? Can you walk us through his response? What did happen?
A. He came out with me the 12th.
Q. Okay.
A. And we looked at it for a minute and then his goal from that point was to get truck access.
Q. Okay.
A. So that we could work on it.
Q. So was that something that would have been very important to do for you guys at that point?

A. Well, since it wasn't running anyways, we're -- and we're at the mercy of Land Management to get us a new lease road. It could have been 2 days. It could have been 3 weeks for all I know. I'm not really sure how long it would have took. But we can't, can't do no work on it if we can't get all of our tools out to it.
Q. Okay. During your Green Hat program, you said you went through so many locations, right? And if I can recollect this seemed to be one of the locations that was in your training route?
A. Yeah. Right before I got it. They barely turned this on in January.
Q. Okay. So can you -- okay, but before you got it, before you got your route, this was part of your Green Hat walk through location?
A. Mm-hmm.
Q. Which is meant to be for the training?
A. Right.
Q. So can you walk us through when you got to this location, what were you training on, that's clearly on this position? Whatever you can recollect.
A. We went there. He verified automation working. We checked all of our, or checked the tank and pit. Went into the separator area and got pressure up to this point after -- well, we went to the well heads and pressure tested each valve first, looking for leaks. Then we sent pressure up here to the flow line. And we got gas on location. Opened up the high-low rater and then we did

that with each well. And as we're doing that, we're going around, we're checking all the gauges. Looking for any types of leaks. Setting the regulators and the back pressure regulator. And then we, I'm pretty sure we stayed there and watched each one of them, or, well, he made them run one time while we were still there. And then that's when he optimized them to run once a day.

Q. Okay. And that went, the other two wells that is similar to, that is fit in this bona (ph), this separator, do they look exactly like this particular one?

A. Pretty similar.

Q. Well, there are differences?

A. And I can't remember off the top of my head. They're -- almost all the wells look pretty similar to exactly this.

Q. So are you, is now that your route, the location to have the 1-inch, the automation, would that be, like I want to know what your actual wells look in comparison to this particular one, and if there are any differences, what do you think are?

A. For sure, probably all of this is identical.

Q. Okay.

A. I can't, I can't be sure that there's a 1-inch line there.

Q. Okay, you under -- so now, one of, what came up now is that 1-inch line was about to be removed right? And my understanding of what you explain to us is gas in pressure has to go through this, into the 1-inch, right?

A. Right.

Q. Is there somewhere else that -- if you take out this whole unit, how will, can you explain to me how you think the automation is going to work?
A. The automation is still there all the time. But to get a live reading, you leave like this outer casing to the transducer open, and you would put pressure to this transducer, your tubing pressure.
Q. Okay. So which, you are, what you are saying now is you can run the automation without this unit? Is that typical?
A. A lot of them don't even have the 1-inch.
Q. And they have automation?
A. And they have automation.
Q. Okay.
A. This doesn't have anything to do with the automation whatsoever.
Q. Okay.
A. This is just supply.
Q. That's the one -- okay. We, okay. Okay, now, as part of your training, right, you said, if the, if this unit, this line going to the 1-inch has a problem, it could be a frost, and are you trained to fix this problem if you can access this well? Is that something that you were trained to fix?
A. Yeah, we were trained to fix that?
Q. What trained you to work on that?
A. That's, again, that's why I wanted to my lead there, so he

could help me troubleshoot it. And if it's something I don't know what to do, at least he's there to help.
Q. What is that, was that part of, was that something that's part of you Green Hat program? Has anyone ever walked you through that before, as how to troubleshoot this, or it's something you have --
A. I've done it before, but the first thing we checked was the regulators.
Q. Okay.
A. And that ended up being the issue. So, we didn't have to do anything else. Once we fixed the regulators and got the freeze out of it, we replaced the regulators and everything worked fine again.
MR. AJIBOYE: I think I will for now, I would pass on.
MR. CHHATRE: Okay.
MR. AJIBOYE: And I will catch you on the follow up questions.
MR. CHHATRE: Commission?
BY MR. LEONARD:
Q. Mike Leonard. Can you show us on this picture, you said the, everything was frosted up. Can you show us exactly, I mean --
MR. PRUNK: Again, we can mark it.
Q. Yeah, mark what all was frosted up?
A. Just drew the pen on it --
Q. That's fine.

A. -- of where the frost was.
Q. So this is, this is showing up from the outer casing and then across both, all three stainless steel supply lines?
A. Yeah, but on these top two --
Q. Uh-huh.
A. -- it stopped like right about here.
Q. So this is about halfway, yeah, half, 3/4, well --
A. Probably a quarter of the way.
Q. A quarter of the way back. Okay.
A. Yeah, it started right here, coming up into the Meco.
Q. Okay.
A. It came across. This whole 1-inch line was frosted and then --
Q. Oh, I see. So --
A. And the 3/8th coming over to the 1-inch. And then the 1-inch was frosted. This regulator was frosted. And these two started to frost.
Q. Okay. All right. Just leave that for now.
MR. CHHATRE: Can you sign it, please?
Q. Well, if, so you said, and maybe I'm mistaken, but you said you fixed the regulators there?
A. No.
MR. CHHATRE: I get where the frost is.
A. Okay.
MR. CHHATRE: It could it have been worse on the, I dropped

it.
A. All I did was shut the 1-inch ball valve --
Q. Okay.
A. -- to stop flow to it. And then, again, I couldn't get access to it with my truck, so I got ahold of my lead, and then from there we're just trying to get access. So --
Q. So who was your lead?
A. Scott Oley.
Q. Scott Oley. Did, and then, you said you went back the next day?
A. We went back and we weren't there but maybe a minute, and from then he was just trying to get access.
Q. Was it, was it still frosted the second day?
A. It was a lot less. The --
MR. CHHATRE: Write down frost with the plane, with the pen.
A. It was maybe frosted from this regulator to maybe a foot down below it.
Q. So wait a second. The --
A. So there was just a little --
Q. -- of the one, the one that's drawn --
A. -- a little bit of frost on the 1-inch still. The rest of it has thawed out.
Q. Okay. Okay. Right, because I had some stuff over here. So and I know it's going to be hard to remember. I know you're not familiar with this type of production records. So what do you

usually see from, on your end for production records?
A. We, I don't really use the records that often. But the one way I use it to tell me if something is going wrong, is when I'm going through CygNet every morning on, I got through every well, every morning on CygNet.
Q. Okay.
A. So it shows me yesterday's production. If I know this well runs every single day and then I don't have production anymore, and it's something that my trend is giving me a hint of what's wrong, then I'm, I've got to go out there and see if I can figure it out.
Q. Can you, can you explain trend to us?
A. Each well has its own page on CygNet, and then there's an actual trend bar where you can see your line pressure -- well, your static is what they're calling it -- tubing, casing, then it also will give you a reading for flow line pressure, tamp separator, tamps, all that stuff, but the trend, so you'll see it like start leveling out, and then right when it runs, you'll see what your casing and tubing do against the line pressure and how they build back up.
Q. So is that like a, like a graph?
A. Yeah.
Q. Okay. If the well's running normally, I don't know, can you get a piece of paper and maybe draw what it should look like? I mean, on the graph, so let's --

MR. CHHATRE: You can do that on the back.
Q. Yeah.
MR. CHHATRE: On the back that you're doing.
Q. Just a normal well, what it would be if it was running normally, a normal cycle.
A. Okay.
MR. CHHATRE: Do you need a pencil, a pen?
MR. HEIDEMAN: Yeah, I think a pencil would be better.
MR. CHHATRE: Yeah, because you can erase. And on the back just your initials are fine. You don't need to go through a whole bunch of other information there.
A. It's not going to be the prettiest, I don't think.
Q. That's close enough. So that -- you can stay there. I can see it from where I'm at. As long as everybody else can see it.
A. So, you got your pressures. Now, they, these could be further apart. Your static is usually, we'll just call that 150 pounds or whatever.
Q. That's your line pressure, right?
A. Your line pressure.
Q. Okay.
A. Say this is 350, that's 500.
Q. Okay.
A. They're going to drop altogether once it, once that well opens up. And then once, like once that plunger comes up is when it shuts and starts building pressure again.

Q. Okay.
A. That would be just like a good run right there.
Q. So does this also record arrival times of your plunger?
A. Yes.
Q. Okay.
A. On CygNet it does.
Q. On CygNet. The CygNet system, not necessarily on your trend but --
A. Right.
Q. -- that's another portion of --
A. It's on that whole same page right there.
Q. Okay. So, when, let's say the well's struggling, how does that change?
A. It depends what happens. Like if it's a latch valve, your tubing's just going to fall off and not build up. If --
Q. So I guess where I'm going, are you going to have the same kind of spike or is it going to be more of a flatter graph?
A. No, it's going to look completely different. If something else is going on, it will not look like that.
Q. Okay. And that's, that's kind of what you're looking for.
A. It stands out, yeah.
Q. Yeah, okay.
A. And for different reasons. There's all kinds of different reasons.
Q. So going back to the, and I know you don't, you're not

familiar with those production records, that thing I showed you. Turn it that the way. So you said on the 4th, or the 7th, you put it in manual? And I'm not going to hold you to it, because I know you don't have anything, but it, to, so I guess where I'm going, it looks like about the 1st that well started struggling. Is that what you're --

A. Yeah, I was --

Q. -- seeing?

A. I was going back and forth for like a couple weeks.

Q. Okay.

A. And I put it into manual. I'd try to cycle it. I put it back in manual, right after I cycled it because it's still just struggling against line pressure. I couldn't bring a plunger up. So then it's, it just started loading up on me each time I tried it.

Q. Okay. So like around the 11th or 12th, what, you were out there the 10th through the 11th.

A. The 11th I went out to cycle it because it had been building pressure over the weekend for like, 3, 4 or 5 days. I can't remember exactly.

Q. Well, and so it's got the casing pressures there. It appears to be building.

A. Oh, I see up here.

Q. Yeah, sorry.

MR. AJIBOYE: And that's the one that's --

Q. Yeah, that's production and the casing pressures. But it appears to be building pressure, correct?
A. Yeah, it does.
Q. Okay. And then you shut it in on the 11th.
A. I had left it shut in. It was already in manual.
Q. You had left it shut in. So how did it produce on the 12th?
A. That's -- it must have been a ghost reading. It was in manual.
Q. But if you have a ghost reading, your casing pressure's dropped. Casing pressures are on like that side there. So wouldn't that --
A. Casing's still 662. They'll, they'll sway a little bit. But if, when you run the well, that's going to drop to like 200 pounds.
Q. So like -- okay. So on the 11th, I'm at 673.
A. Right.
Q. And by the 13th, I'm at 650.
A. Yeah, I mean --
Q. Wouldn't that be indicative of it's making a trip?
A. That's too, it's too small of a gap there. It would have dropped a lot more.
Q. Okay.
A. They do sway a little bit. They'll go up and down a little bit. Like on the, on the 7th, that's 645. It's building from there.

Q. Okay. So you talked about the Green Hat program. Is there two, is that one -- I mean, how do I, how do I explain this. Is there two sections of that Green Hat program? So is there like a classroom section?
A. Yeah, you do a classroom. That's only if you get it done in a few days.
Q. A few days.
A. And you do a test on it.
Q. Okay.
A. Well, you do a test on each section of it.
Q. So that was the test that you aced?
A. Yeah, I did all eight, yeah, I passed all that. And then you have to do a foreman quiz that they'll run you through.
Q. Okay.
A. And that's, that's how you complete the Green Hat is after the foreman quiz.
Q. So when did you --
A. A lot of it you've got to do out in the field, too.
Q. Do you remember when you completed your quiz, the foreman quiz?
A. It's been a couple months.
Q. Just a couple months after you started?
A. It was, it was probably in February. Don't quote me on that, though.
Q. Yeah, that's fine. It's hard to remember stuff like that.

And who was your mentor?
A. Curtis Harvey (ph).
Q. And how long was he your mentor?
A. For the month-and-a-half, 2 months that I rode around with him or shadowed him, I should say.
Q. Okay. You mentioned earlier that if the separator's working -- so what, should that -- you mentioned that you, the 1-inch only gets opened if the separator's not working right.
A. Right.
Q. So, was the separator working okay?
A. Yeah.
Q. So may, can you explain maybe why that 1-inch was open?
A. Well, the 1-inch stays open if you're using it for supply. It stays open out at the well head.
Q. Okay. I'm a little confused now. So you said that the, you only open the 1-inch if the separator has a problem.
A. No. I would, I would only actually open the line to verify pressure if I'm not getting supply. But the 1-inch -- let me see if we've got a picture of it here. I might do this one.
Q. That one.
A. This ball valve right here.
Q. Mm-hmm.
A. That's, you would use to send supply to the separator, it was open until I shut it on the 11th.
Q. Okay. And you shut it on the 11th?

A. Right.
Q. And you guys didn't try and cycle? When you went out with Scott Oley, you guys didn't try and cycle any of the valves that day?
A. No.
Q. Okay.
MR. LEONARD: Okay. That's all I have right now.
MR. CHHATRE: Okay. Fire?
BY MR. PRUNK:
Q. This is Doug Prunk. Had you had to utilize your field coordinator on any other wells in your route, in your, in that couple months that you'd been on the route?
A. Yeah, randomly. If I --
Q. Was it Scott usually, or was it that -- because there's two coordinators, correct?
A. Yeah, Scott and Saul (ph). But Scott -- like so we're split up north to south in our area. Scott's like the south one.
Q. Okay.
A. So he'd be my first call, but I can call any of the other operators, too. And we could breakaway to help each other.
Q. Okay.
A. And I have done that, too.
Q. Okay. Have you worked with Scott before on other wells?
A. Yes.
Q. Okay. So I know we had, we have access issues on the land

built up around to the way of the well road. Did he -- in -- I mean for him to make a, for you both to meet out there, was it -- I don't know how I'll put this -- if it was unfrozen at the time, when you guys attempted to troubleshoot the well, you think that day, or was it truly none of our tools are anything we could carry and we had to be parked that close?

A. Well, it was still frosted over a little bit, so we, if we were going to do that, we either got to heat on it with our trucks, or put methanol down the line.

Q. Okay.

A. And that's all, I don't, we don't actually carry methanol pumps, but he does.

Q. Okay.

A. So that's another reason why he was called for that.

Q. So if it was, just on this day, everything being the same, if it wasn't froze or there was no signs of frost anymore, would you have worked on that well, you think that day, or was it still just the overshadowing land-management issue kept us from doing that?

A. I'm not really sure if we would have or not. He tried to get in from everywhere he could and once he could, he just decided, let's get Land involved and leave it the way it is. So, and we moved on, we moved on with the day.

Q. Okay. So you had no other interaction with the wells at, any of those three Coors wells? You were done that day, at, on that location?

A. Right.
Q. Okay. Quick question on the 11th and 12th pressure reading that we're kind of all trying to wrap our head around a little bit, is there any -- and this is just for my knowledge -- is there any possibility that once this came unthawed that it would have, that something, that rotator valve would have received pressure finally? Like if there was a plug in one of those lines on the 11th, you shut it down, it had a chance to thaw, that the 12th it would have created ascent to that rotary valve? Is that a possibility, or no?
A. Sure, it's possible. But it was in manual mode, so it shouldn't of ran anyways. You have to take it out of manual mode and through the RTO or CygNet. So you have, you have to go out of your way to do that. The only one that would have done that is me or possibly Scott. But I'm pretty sure he didn't.
Q. Okay. Are you able to manually flow? Can you activate that rotary valve without the computer, or is everything through CygNet and that computer?
A. You can, but there -- let's see if I got a -- you can kind of see it. There's this little setup here that your stainless, well, it runs to the latch valve and then it comes back to this. Right here, there's two knobs. If you reverse those knobs, you'll open it up.
Q. Okay.
A. But you have, I mean you'd literally have to go to do it.

Q. Right. Have you ever had to do that on this well during the times like when it was pushing against line pressure or anything like that, that reactivated those?
A. I used my automation to do it.
Q. Instead?
A. Mm-hmm.
Q. Have you had to, with the line pressure of anything like that, have you had a, I guess the word I've heard in this industry is tweak a little. That Meco valve, did you ever have to do any adjustment to that since you've had the route, like to take it up pressure or down pressure or any act, improvement?
A. Not to, not to any of the wells on this location, I didn't.
Q. Okay. These aren't the, kind of all been acting normally except for this?
A. Yeah. I didn't, I never had an issue one with them until they started battling line pressure.
Q. Around the first part of April?
A. Right.
Q. And they hadn't before, prior to that?
A. They ran fine, yeah. And they're once a day.
Q. Okay.
MR. PRUNK: That's all I have. Thanks.
MR. CHHATRE: Okay.
UNIDENTIFIED SPEAKER: I'm just trying to understand the, you turned the ball valve off on the, what day, the 11th?

MR. HEIDEMAN: Yeah.
UNIDENTIFIED SPEAKER: When the line froze?
MR. HEIDEMAN: Right.
UNIDENTIFIED SPEAKER: And you left it off since then, right?
MR. HEIDEMAN: Right.
UNIDENTIFIED SPEAKER: Okay. Thanks. That's all I have.
MR. CHHATRE: And so I have -- this is Ravi, NTSB. A couple of quick follow up questions.
BY MR. CHHATRE:
Q. And I like simple ones first. Is there such a thing for your return line or flow line -- not flow line -- the return line, what other term you used?
A. The supply line?
Q. The supply line to have maximum operating pressure or that line can go to unlimited pressure?
A. No, there is a max. I --
Q. Do you know?
A. Off the -- no, I don't know off the top of my head.
Q. Okay.
A. It's probably 150, 200 pounds. I'm not really sure.
Q. Okay. Can you through Dave get that information back to me? What the maximum pressure would be.
A. Yeah, I can make a call and find out.
Q. Yeah, I mean, not right now. I'm not saying it's urgent to do it right immediately, but if, you know, in the next week or so

if you can just --
A. Oh yeah.
Q. -- pass the information through Dave to me.
A. Okay.
Q. But the maximum pressure on that 1-inch flow line would be.
A. Okay.
Q. Or supply line would be. Now is there a minimum pressure for that line that, it will not go below or it should not go below?
A. We try to keep it at 50 pounds all the time for the motor valve and for enough pressure on location.
Q. So is it to fair to say, it's a minimum of --
A. Probably --
Q. -- for the supply line is 50 psi?
A. Forty-five, 50 pounds.
Q. Forty to 50?
A. Yeah.
Q. How about if I say 40 to 50?
A. Okay.
Q. Is that reasonable?
A. Yeah.
Q. That you have minimum for that line?
A. Yeah, you wouldn't open your motor valve with probably less than 40, so.
Q. So then 40's the minimum? I just warranty that it's just 40 psi. And the maximum can be -- and I'll get the number, but

roughly 150 psi?
A. Probably so --
Q. So that will be whatever the number you give me?
A. Yeah.
Q Okay. But generally, I thought you said, you maintain it at least at 50 to --
A. We keep it at 50, yeah.
Q. Fifty, yeah. So 50 with not more pressure. Now is there any way for us to find out -- for us, for you -- to find out what was the pressure on that 1-inch supply line on the day of the accident? Is there some way of, visa vie of the CygNet, whatever just to --
A. Yeah, your 1-inch doesn't have a transducer so --
Q. Okay.
A. -- there's no automation for that 1-inch.
Q. So there's really no way, unless you happen to be there, there's no way to know what the pressure on that day will be?
A. Right.
Q. Okay. That's fair. And I think you mentioned earlier something about your, the line pressure, you had to maintain it otherwise there'll be no flow. Can you elaborate a little more for me?
A. So line pressure is, we sell all of our gas. And that pressure, we have to be able to flow against, or over for us to be able to produce. So, because we also, that line pressure also

regulates the pressure that's on location. So, if this top bottle is at 300 pounds because of line pressure --

Q. Which is that here?

A. -- this would be your top bottle up here --

Q. Okay. Uh-huh.

A. -- is at 300 pounds because of line pressure, my well may not be able to run against that 300, if, say it's, it could even be 300 itself, but all it is doing is butting heads.

Q. It's that, steady here. Okay. So it has to be at least 301 psi for it work in it?

A. To do some kind of flow.

Q. Yeah.

A. Yeah.

Q. And is the line pressure -- where is this line pressure? Where is that like supply line? This is supply line?

A. No.

Q. You cannot see it here?

A. There's a gauge there that would tell you, but this right here looks like that's your line pressure. That's going to your sales meter right there. This line right here.

Q. This one?

A. That drops down and then it'll go into your sales meter, is in that little house.

Q. Okay. That is one. Right here? Do you mind just writing down the supply, what is the supply line.

A. Yeah.
Q. So supply line is where you are selling it to the customer?
A. Right.
Q. And even the minimal pressure, the maximum pressure for that supply line, or there is no such thing?
A. I've seen that get up to 400, 400 or 500 pounds in some areas of the state.
Q. Supply, for the supply line, okay.
A. Well the sales line.
Q. Okay.
A. That's not your supply.
Q. No, yes, I'm sorry. I used that wrong again. So that is the line pressure then. If it goes to 400, then your line pressure is 400?
A. The well's not going to run.
Q. Well, the well is not -- okay, well, there's no supply to that.
A. Right.
Q. There is no manual way of kind of increasing the well pressure and then push it back, or can I do that, something like that?
A. There not, well, there's check valves that would stop that.
Q. Okay. So do you know if it builds line pressure for --
A. When the all the boosters and everything are running good, it's probably between 180 and 220 on a DCP line. On the Kerr-

McGee line it probably sits about 140, 150.
Q. Okay. DCP line is where our well is?
A. That one's DCP, yeah.
Q. Okay. So DCPs operating so they're not supplied, our line pressure would be 100 and --
A. Like probably 180 to 220.
Q. Okay. And that's your, where you say line pressure, right?
A. Mm-hmm.
Q. Typical operation.
A. Yeah.
Q. So your well has to have more than 220 if the line pressure is 250 --
A. Right.
Q. -- for any sale from that well to occur?
A. Probably at least 10 pounds more for it to actually be (indiscernible).
Q. That's what I was going to ask you. So what is your rule of thumb on, I mean for that?
A. Yeah, you, 10, 20, and it depends on the well. Every well is different, so.
Q. Sure. Okay. Area also probably matters?
A. Yeah.
Q. Area of the well probably also matters. Okay. And on the, your return line or supply line 1-inch, is -- I think we already talked about that and you told me 40 to 50 psi is the minimum.

The maximum can, and then we'll get back.

A. Right.

Q. Okay. So I'll look to it, okay.

MR. CHHATRE: And that's all I have.

MR. MCBRIDE: Hi. I mean that, just go back to the question you asked him about providing information and then I'll help him with that.

MR. CHHATRE: That would be the, what he told me was 40 psi will be like a minimum pressure on your return, or supply, I mean this is interchangeable line.

MR. MCBRIDE: Right.

MR. CHHATRE: But the maximum, he said, typically it cannot be more than 150, but he's not sure about the number. So he's going to get back and so you can send it to me.

MR. MCBRIDE: And I'd like to permission to be able to do a little research on that in term, because I think it's a combination of an engineering answer and an operational answer.

MR. CHHATRE: Beautiful. I mean it doesn't matter. I mean I can give you the number. I don't --

MR. MCBRIDE: There's an MAOP answer to that question. And there's also a practical operational question and I'm not sure --

MR. CHHATRE: You both, let me give you both numbers.

MR. MCBRIDE: Yeah, so I'd like to be able to that.

MR. CHHATRE: Oh yeah, absolutely.

MR. MCBRIDE: Yeah, because I think there's, part of it's an

engineering answer.

MR. CHHATRE: Hold on, that is fine.

MR. MCBRIDE: Is a gauge, it's going to be a regulator setting max that's allowable. It's probably going to exceed the line capability. So I just need to verify that with engineering.

MR. CHHATRE: That is right. Yeah, so I will, just give me the number.

MR. MCBRIDE: Yeah.

MR. CHHATRE: That's, I'm looking for that number. I'm, you know, how you get it --

MR. MCBRIDE: Okay, sure. No problem. I just wanted to make sure it's correct.

MR. CHHATRE: You know, just tell me that hey, this is a combined answer from the operator and the engineer or whatever.

MR. MCBRIDE: Thank you. Okay, this is David McBride now.

MR. CHHATRE: And again, I have other, two accidents to go to immediately after I go home.

MR. MCBRIDE: Understand.

MR. CHHATRE: So on this one there is no dire emergency.

MR. MCBRIDE: Okay.

MR. CHHATRE: You can take to your -- I can only make sure that I'm not using this term, give me (indiscernible) then turn it on, then includes the same process.

MR. MCBRIDE: We'll get both, so yes, sir.

BY MR. AJIBOYE:

Q. Yeah, so this is, okay, this is Gbenga. A follow up question. You said on the 11th, you said you shut, your turned off the 1-inch ball valve.
A. Mm-hmm.
Q. And did you, prior to that what was the, what was the condition and why do you think the condition would have been the way it was prior to 11th?
A. It was open. It had supply to it all the time. The 1-inch ball valve, I had never touched until I saw it frosted over.
Q. So that you can't tell how long that was open, can you?
A. Since before I got it.
Q. And on the 18th, and on the 17th, which is the day of explosion, were you called on the location? That night of the explosion?
A. I had found out the next morning when I came into work.
Q. So was there somebody that went there on the 17th, to this?
A. Somebody was there for Anadarko. They're like an on-call, IOC guy maybe. I'm not sure who it was.
Q. So were you there on the 18th?
A. I have not been able to go to this well since, so.
Q. So I don't know, my -- was somebody from Anadarko, did anybody come here on the day of the accident, because my understanding from the whole testimony was, somebody came here. Did something, left, then came back again and did something. Is that --

MR. PRUNK: The nighttime pumper or the on-call pumper.
A. I know he went and shut the whole location in.
Q. You don't know his name?
MR. PRUNK: Drew. Yeah.
UNIDENTIFIED SPEAKER: Yeah, Drew whatever. Yeah.
UNIDENTIFIED SPEAKER: Drew Johnson.
MR. PRUNK: And he's on the list.
MR. AJIBOYE: He's on the list?
MR. PRUNK: Right, but we're still working on him.
MR. AJIBOYE: Okay. Okay. Okay. So that was not you?
MR. HEIDEMAN: No.
MR. AJIBOYE: Okay. Okay. Then, that would handle my follow up question.
BY MR. LEONARD:
Q. Yes, this is Mike Leonard. So let's go back to the latch valve just real quick. So you had 50 pounds through the Meco, and then it goes to the Fisher valve, correct?
A. To the CR67-regulator, yeah?
Q. CR, okay. Okay.
A. Yeah, I guess they all are Fishers.
Q. Nomenclature, yeah. What, so what is that, what is that regulator step it down to, do you know?
A. The CR67?
Q. Yeah?
A. I'd, from the way I understand it, these, both regulators

correlate to keep that 50 pounds.
Q. So it takes 50 pounds to open that latch valve?
A. Forty to 50, yeah. We just set it at 50.
Q. Can you open it with less pressure?
A. Not much less. If it, no, I've seen it have like 35 pounds on it and it's not opening the latch valve, or if it does, it's super, super slow.
Q. It's just real slow, so if it's got less pressure, it just open real slow?
A. Right.
Q. Okay.
MR. LEONARD: That's all I have for right now.
MR. CHHATRE: Okay.
BY MR. PRUNK:
Q. Real quick, Doug Prunk. So, your route's basically divvied up in five, right? Five days a week you try to make all the wells once a week.
A. Right.
Q. How is it tracked in the system that they know that you're not just sitting under a shade tree during the day? What keeps track of how you did a route? I mean that in a loving way, too. So --
A. I guess they just trust that we're doing it. They don't really monitor that.
Q. Okay. Do you do notes on --

A. We do.
Q. -- even when you make a stop and it's, everything's good, do you put in all okay, and keep moving on, or --
A. No, but we will be implementing that.
Q. Okay, now. Was it a procedure prior to that?
A. No.
Q. It wasn't a requirement?
A. It was, we just, if we found an issue, we put notes.
Q. Okay. So did we make notes on the 11th, around -
A. Yeah.
Q. -- there about the frost?
A. Yeah.
Q. And then on the 12th when we went, did, was there notes on the 12th?
A. No, I don't believe there was. I can't, I can't remember, but I don't think there was on the 12th. Unless I said something about Scott trying to find access on that day, which I might have done that.
Q. Okay. Do you know if Land Management was followed up on this?
A. I don't.
Q. Would that have been in your purview to make that call, or is that Scott's job to do that?
A. Yeah, Scott knows how to do it. That's one of the reasons he's there, or he goes to the foreman.

Q. Okay. Do you know, I know you're a contract employee. Do you know if your truck is GPS tracked, that you know of?
A. No, I'm not too sure. We have something that just records if we're speeding or something like that. But I don't know that it actually has actual GPS on it.
Q. Okay.
MR. PRUNK: All right. That's all I got.
MR. CHHATRE: Okay. Dave?
MR. PUCCETTI: No, nothing. Thank you.
BY MR. CHHATRE:
Q. Just one last, because I want to make sure I hear you correctly. That prior to the accident, that you don't have to make any interior CygNet or anywhere else that you visited at a certain well or you did not? Am I, did I, did I hear that correct?
A. If I, so, when I go through my CygNet every morning, I'm looking for issues. So those are my priorities of the day. So when I go to fix those issues, I put those in CygNet. If, and then once I'm done dealing with that part of the day, and then I'm just making my stops, routine stops, checking locations, unless I find something, I typically wouldn't put nothing in CygNet.
Q. So on a day of, when you may be doing 10 wells that day, just you're doing your weekly check, and if everything is running smoothly, which I'm sure happens probably more often than not, there is really no entry that nobody would even know that you went

to that particular well? And when I say you, I don't mean you as a person, right.

A. Yeah.

Q. I mean you as the operator.

A. Yeah, probably, nobody would know.

Q. No one would know.

MR. CHHATRE: Okay. All right, that's all I have. Anybody has a follow up questions? If not, we appreciate you coming again, spending almost the same amount of time, if not more and helping us out. Anything comes to your mind, contact us.

MR. HEIDEMAN: Good.

MR. CHHATRE: And with that, off the record.

(Whereupon, the interview was concluded.)

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 Steven Heideman
ACCIDENT NO.:	DCA17FP005
PLACE:	Longmont, Colorado
DATE:	May 15, 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.

Romona Phillips
Transcriber