

National Transportation Safety Board

Washington, D.C. 20594

Name: Jeffrey Knights

Department Atmos Energy / Mid-Tex Technical Services

Title: Vice President of Technical Services

Date of Interview: April 25, 2018

I have reviewed my transcript(s) from the above referenced accident and:



I have no comments to make.

My comments are submitted herewith.

My comments are marked on the attached copy.

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

Interview of: JEFFREY KNIGHTS

Marriot Court Yard Hotel Plano, Texas

Wednesday, April 25, 2018

APPEARANCES:

ROGER EVANS, Investigator in Charge National Transportation Safety Board

JIM COLLINS, Regional Manager Railroad Commission of Texas

JOHN McDILL, Vice President of Pipeline Safety Atmos Energy

CHRIS McLAREN, Distribution Integrity Management Program Coordinator

Pipeline and Hazardous Materials Safety Administration (PHMSA)

THOMAS TOBIN, Attorney Wilson Elser (On behalf of Mr. Knights)

ITEM		<u> </u>	N D E X	<u>P</u>	AGE
Interview	of Jef	frey Knights:			
	By Ms.	Evans			6
	By Mr.	McLaren			34
	By Mr.	Collins			42
	By Mr.	McDill			45
	By Mr.	Evans			49
	By Mr.	McDill			54
	By Mr.	Evans			56
	By Mr.	McLaren			57

1	<u>INTERVIEW</u>
2	(2:26 p.m.)
3	MR. EVANS: On the record with Mr. Jeffrey Knights.
4	Good afternoon. Today is April 25th. It is now 2:26 p.m.
5	My name is Roger Evans. I'm with the National Transportation
6	Safety Board. I'm a senior pipeline investigator with the
7	pipeline accident investigation group out of Washington, D.C. For
8	this accident I'm the investigator in charge.
9	We are at the Marriot Courtyard Hotel in Plano, Texas. This
10	interview is being conducted as part of the investigation into the
11	fatality home explosion that occurred on February 23rd, 2018 in a
12	West Dallas suburb situated north of Love Field.
13	The NTSB Case Number for this accident is PLD18FR002. The
14	purpose of the investigation is to increase safety, not to assign
15	fault, blame or liability.
16	This interview is being recorded and may be transcribed at a
17	later date. A copy of the transcript will be provided to the
18	interviewee for review prior to being entered into the public
19	docket.
20	Mr. Jeffrey Knights, please provide the spelling of your
21	name, the company you work for and your job title?
22	MR. KNIGHTS: Jeffrey Knights, K-N-I-G-H-T-S. I'm the vice
23	president of technical services for Atmos Energy Corporation.
24	MR. EVANS: Okay. You are permitted to have one person
25	present during the interview. This is a person of your choice

a supervisor, friend, family member or nobody at all. Please 1 state for the record who you have selected. 2 MR. KNIGHTS: Tom, Thomas Tobin. 3 MR. EVANS: Okay. And, Mr. Tobin, can you please provide the 4 5 spelling of your name and your affiliation? 6 MR. TOBIN: My name is Tom Tobin, T-O-B-I-N. I'm an attorney 7 with the Wilson Elser law firm in New York. 8 MR. EVANS: Okay. Now I'd like to go around the room and 9 have each person state their name, spelling, title, and the agency 10 or organization they represent. MR. COLLINS: Jim Collins, J-I-M, C-O-L-L-I-N-S, regional 11 12 manager for the Railroad Commission of Texas, Dallas-Fort Worth. 13 John M-C-D-I-L-L, vice president of pipeline MR. McDILL: 14 safety for Atmos Energy, Dallas, Texas. 15 MR. McLAREN: Chris McLaren, C-H-R-I-S, M-C-L-A-R-E-N, PHMSA 16 DIMP coordinator, Houston, Texas. 17 MR. EVANS: Okay. Thank you. Well, thank you there, Jeff, for agreeing to speak with us 18 19 today. Before we begin --20 MR. MCLAREN: Can I just do a clarification? On my title 21 it's Vice President of Technical Services, Atmos Energy 22 Corporation, Mid-Tex Division. So I just wanted to get that Mid-23 Tex in there. 24 MR. EVANS: Okay. **KNIGHTS** 25 MR. McLAREN: Sorry about that.

1	MR. EVANS: Oh, no problem.
2	INTERVIEW OF JEFFREY KNIGHTS
3	BY MR. EVANS:
4	Q. Yeah. Before we begin, can you give us your education and
5	all that, education
6	A. Yes. I've got a bachelor's of science degree from the
7	University of Maine in surveying engineering and I've got a
8	master's of business administration from Southern Methodist
9	University.
10	Q. Okay. And how long have you been at the firm?
11	A. Been with Atmos Energy since they acquired the assets in
12	2004.
13	Q. Okay. And can you go through your career, positions you've
14	held since 2004 in the Atmos company?
15	acquisition A. Yes. When I came from the Lone Star Gas Assets , I was a
16	project manager, senior project manager. And shortly after 2004,
17	I became a director of engineering. I was in that for about 3
18	years, moved over to vice president of operations, was in that
19	position for 4 years, and been in my current role as vice
20	president of technical services for the last 6 years.
21	Q. Okay. And I have a small org chart that was provided to me.
22	And you said last 6 years?
23	A. Yes.
24	Q. Okay.
25	A. And I'm also a professional engineer for the state of Texas.

Q. Okay, good. So I'd like to kind of learn a little bit about your -- the group you manage. And I see you have seven direct reports?

4 A. Yes. Yes, that's correct.

5 Q. Yeah. And we've talked to Marlo and Tammy.

6 A. Yes.

Q. So we know what they do. So perhaps you can go down the -you know, give us a brief description of your -- of what you do in your position and then go down through -- we know what Tammy and Marlo does, so give us an idea of what the rest of you do starting with, you know, Travis, and just kind of a thumbnail sketch of what your position entails?

Okay, yes. Overall, my technical services organization is 13 Α. 14 really an operation support organization, so we support the folks 15 in the field, the operational side of our business. We support them with the engineering, compliance, environmental, the right-16 17 of-way, construction management, safety; really everything there is outside of the meter reading service and some of our in-house 18 19 construction side. So we're -- we support both our Mid-Tex 20 Division, which is primarily our distribution side of the Pipeline 21 business, and we also support our pipeline -- Atmos pipeline Texas 22 Division.

So, like I said -- you heard from Marlo and Tammy. The other
 direct reports that I have -- I've got four other directors. One
 Marc
 is Mark Rothbauer, who's over my engineering group, so he does --

1 he oversees all of the design and project management of all of our M&O 2 capital work and some of our own M work. 3 Then I've got Troy Paige. Troy is over my measurement 4 engineering group, so he does all the monitoring of measurement equipment and he also has our safety department. And they 5 6 monitor, again, like I said, all the measurement pieces of -- the 7 ins and outs of our gas, gas flows. 8 Then I've got Brad Johnson. Brad Johnson is over my pipeline 9 integrity management, so his -- he does all of the ILI runs, 10 inline inspection runs. He does all -- he manages the entire 11 pipeline integrity management program for all the digs, all the 12 maintenance pigging, all of those activities for us. 13 And can I interrupt you just for a second? Ο. 14 Α. Sure. 15 Q. When you say the word pipeline, you're meaning transmission 16 or distribution or both? 17 It's all transmission facilities, so anything over 20 percent Α. 18 that's SMYS, or upstream of a city gate, town border station. So 19 anything that falls under that pipeline integrity. 20 So we've covered Brad. Ο. Okay. 21 Yeah. And I think my last one is Travis Cooper, who has --Α. 22 that chart is actually inaccurate now. A week ago he was just 23 promoted to our operations VP level, and now Buddy Powell is in 24 his role. It's P-O-W-E-L-L. 25 And Buddy Powell, used to be Travis Cooper, they manage our

1 right-of-way department, our environmental department, as well as 2 construction management. So they source all of our construction 3 activities, oversee the -- all the installation of third-party 4 construction work. So --

5 Q. So Travis has a different reporting arm? He's not reporting6 to you anymore?

7 A. Correct.

25

Q. Okay, yeah. Okay. Now how do you interface with Tammy and -- what is your -- I know -- we know what those two women do as far as their jobs are concerned. So how do you interface with those two positions?

I know they have -- you know, we know that Tammy is the person who acts on the analysis side and Marlo is more of the collections side of the data. Are you -- you know, do you approve their work or is it -- is there an approval cycle that you manage those people or kind of how is that relationship?

17 A. Yeah. It depends on the activity that they're doing, but I
18 have oversight responsibility. I work with them on a daily basis.
19 I'm in constant contact with them on different aspects.

For instance, with Tammy, we are constantly looking at our capital projects, our budgets, our risk. We're continuously looking at and working together on strategy, setting out strategy, setting direction and then reviewing execution of those -- of that strategy in that execution of the work. So --

On specific projects and specific questions, if there's

Free State Reporting, Inc. (410) 974-0947 9

approval required or something, like if they're having to approve 1 2 a project, depending on the authorization levels required, it may 3 come up to me for official approval. But it just depends on the individual project or individual oversight necessary. 4 So, as an example, Tammy, who was just in here, she was 5 Ο. 6 talking about projects, right? And how there's a lot of latitude, 7 if it was safety related, that the money can usually be had. Well, not usually -- she said that if it's safety related you can 8 9 get the money. 10 Yes. Α. 11 And that's a fact. That's what she told us. 0. 12 Now are you part of that approval cycle or does it -- it depends on a number, like if it's over X millions of dollars or --13 14 Yeah, it depends on the project. I agree with Tammy. Α. Ιf 15 it's safety related, we're going to fund the project. 16 But the way we're structured is our field folks have a certain authorization level. They can do certain projects without 17 18 just -- if they see something in the field that needs to be done, 19 if it's a leak repair, if it's a small pipe replacement project, they have the authorization, and we've provided funding throughout 20 21 the year for them to make those immediate decisions in the field 22 to take care of something they see in the field. 23 They -- and then if it's more of a planned project, then that 24 would come up through Tammy's group. And I work with her 25 throughout the year in every -- continuously through the month on

1 our allocation of funds within that budget, as well as sometimes 2 what projects are released. She does a lot of that herself and 3 able to fund projects; her team has that authorization to fund 4 certain projects. If it's more of a program type of a project, 5 we'll usually talk about it. Like the cast iron work that we do, 6 we'll talk about that to say, yes, we're going to make a decision 7 to do X number of miles of pipe in a year or something. Those larger decisions we'll talk through and, I guess, approve those, 8 9 for lack of a better word --

10 Q. Right.

11 A. -- from a concept perspective.

12 And then do you have to take -- your budget approval process, Ο. 13 does it have to go above you to this person, like Mr. John Paris? 14 Again, it depends on -- we are given a budget from -- at the Α. 15 beginning of a year to manage and that's our responsibility to 16 manage to a budget; however, if there's something unusual that 17 happens throughout the year or there's something that we can't fit 18 within the budget then, yes, we go above to John and John would go 19 to our corporate side to get additional funding for that. 20 Ο. Okay.

A. Which is actually what happened in the work that we've done
with the Northwest Dallas so --

Q. Right. So when the decision -- were you part of the decision by the way with regard to the movement of folks and stipends and were you part of that process or no?

1 A. Which part of the --

2	Q. I mean, when they curtailed the 2,800 homes and then the 300
3	homes within that 2,800 homes, there was two curtailments. They
4	paid, you know, a living allowance and all that for were you
5	part of the process to well, what was your role in all that?
6	A. Yeah, yeah. I was involved in the in gathering the data
7 8	to in that decision making of what to take down. How large of planned
9	And then I was not involved in the payment of the customers
10	in that aspect, it was more on the technical side of what some of
11	the information that led up to those decisions and how large of an
12	area to take that outage on.
13	Q. So we would like you to go through the whole you know, who
14	was in the room, names of people that were in the room, what were
15	the decisions based on to curtail could you kind of go through
16	that whole process?
17	A. When you say curtail you're talking taking the planned
18	outage?
19	Q. Yes.
20	A. Okay. Well, really it started that first that Friday
21	morning, the 23rd for at least my involvement in that effort. We
22	got word of from our field operations of the, of the explosion
23	and we started getting feedback on what happened and what the
24	what they were finding out there in the area from the leak survey.
25	We continued to monitor that through the day as they

1 continued to expand that area. While we were kind of monitoring 2 that we were kind of looking at the overall pipe that was in that 3 area, what was -- what material it was, looking at different 4 aspects of the facility itself.

As we continued to survey and continued to expand that survey 5 6 and getting those results in, I don't remember exactly who was in 7 I know I was in the room and John Paris was in the room the room. and we basically on -- that was still on Friday and the -- at some 8 9 point during Friday we -- when we started seeing the leaks and the 10 number of leaks that was going on and when we went through an area 11 and then went back over the same area, we would find new leaks, 12 different leaks, and so it was something we hadn't seen before.

And so out of, out of caution because we didn't know the -what caused the explosion, we were seeing these other leaks, so we went ahead and based upon the material types, and we looked at the pipe that was installed at the same time period or under the same what we call expenditure requisition, we chose to isolate that section, which was the 300, about a nine block area.

And we isolated that nine block area and evacuated those,
those customers. So that was through -- I guess, that was through don't
Friday. I remember exactly the timeline, Friday, Saturday morning
and then --

And, again, we continued the survey, expanding our survey beyond that area and continued to see the leakage in a very kind of concentrated area around that Marsh Lane divider.

And, again, there was, there was a lot of discussion with a lot of different folks and I don't remember who was in the room and who was there. It was, it was a lot of stuff going on during and we were working 24 hours a day trying to figure out what was going on, getting feedback from Jeff Martinez, who was in the field feeding us that -- some of that information.

And, again, we were seeing similar things that we saw in the 300. We were seeing that -- new leaks popping up. I say popping up. They were -- basically you'd survey one time. We'd say get a crew out there and take care of that leak and you go back over that area again and there was new leaks.

12 So it was something that was unexplained. I've never seen it 13 in my 25 years of working for the gas company and none of -- I 14 know John has said he has never seen it before -- Paris.

So there was some time over the Saturday -- I believe it was Saturday or Sunday we just said there's something here that we can't explain and so we decided to get a soil expert because it was very wet. It was -- there was something going on that we couldn't explain.

So we hired the -- got the expert in there. I believe he came in on -- it was either Sunday or Monday morning. And, again, we started working through this. During all this time we continued to do a leak survey. We continued to expand that leak survey to -- and we basically got to a point where we were seeing more expected levels of what we, what we would see in a normal

1 survey area and when we went back over it we weren't seeing new
2 leaks.

3 So we stopped expanding our survey, at that point, and 4 started coming back in and, again, feeding all this information to 5 Dr. Bryant, which was the soil expert that was hired.

And then on -- it was Tuesday evening. I had actually gone home on -- I got home about 4:00 and finally got to bed about 9:00 and John Paris called me back in on that Tuesday evening because Grade 1 we had found another great one -- [a leak that we -- out there onsite that was in.?]

So, at that point, he called me back into the office and it Akers was myself, Kevin Acres, David Park and John Paris, and the four of us spent basically all night reviewing things and going through the -- all the leak history looking at an isolation area -- what would be what we could isolate in a larger area, should we isolate.

And, again, at that point, sometime during that evening there was a, there was a recommendation made or at least we thought we needed to do that and then David Park and John Paris took that information. I'm trying to remember is it -- that might have all been Monday night because it was March 1st.

March 1st was a Wednesday, I believe, so that would have been the 28th is when we -- the evening of the 27th, 28th is when we had all this discussion and then the -- morning of the 28th is when we, we had Dr. Bryant in there and there were several folks

in the room, at that point, in a conference room over in Kevin Akers' Acres' office, and that's when we finalized the decision to go ahead and take the -- out of abundance of caution, out of just something we've never seen before, it was the safe thing to do, it was the right thing to do to isolate that system and take that outage of the 2,800.

7 Okay. So when you say that neither you nor John had -- in Ο. all your career had seen anything like this -- was it the number 8 9 of leaks in the area then and the fact that you, I mean, checked 10 the area once and it's not leaking and so you go back and it's 11 leaking, that type of thing is what you're talking about, right? 12 Yeah. It was a combination of the -- it was really the Α. performance of the system. So, I mean, the way that we judge the 13 14 performance of the system is when you do a leak survey you just --15 that number of leaks concentrated in that small block when you had 16 somewhat normal distribution of leakage outside of the block, 17 there was just a large number.

And then, as you said the going over it once and then that next day you go over it again and you find new leaks, and then you get those repaired and go over it again and there's new leaks.

21 So it was just, it was just something that, again, we've 22 never seen, never experienced.

23 Q. Okay. What is Jeff Martinez' position?

24 A. He just got a promotion to customer service director.

25 MR. TOBIN: Vice-president.

Free State Reporting, Inc. (410) 974-0947 16

- MR. KNIGHTS: Vice-president of customer service. Vice president of customer service.
 - MR. EVANS: Okay.

MR. KNIGHTS: He was the vice president of operations over
the Dallas area prior to this, this event.

6 BY MR. EVANS:

3

25

7 So when you started seeing all these leaks in this area and Ο. 8 an unusual amount of things happening and all that, did you go 9 back to your data at all, like your Opti system? Did you look at that or did you look at any of your GIS data or leak history data 10 11 on the screen or did you have any of the techies like Andrew, you 12 know, come in and say, hey, look at this and can you pull the data for this and let us see what kind of numbers we've had? 13 14 During those last three -- I mean, during those three Yeah. Α. 15 or four days that was, that was constant getting in additional 16 information from my team, from -- we looked at -- we were getting 17 leak data coming in.

We looked at historical leak data. We looked at the -- every 18 19 -- we were getting new leak data coming in from the field operations and getting them loaded onto our -- onto the GIS system 20 21 so we could see where they were, plotted them, and we were looking 22 at trends. [leak data] at 10:00, 3:00, and 8:00 23 Getting, we were getting in a 10, 3 and 8, so I mean, we were 24 getting them multiple times a day -- new maps, generated maps just

for those -- that particular timeframe. So we were, we were

1 looking at that particular data.

2	We were looking. I looked at what the, what the pipe types
3	were. We had to pull that data as far as all the material types,
4	the different size. We looked at back at the any Optimain
5	segments that were relative high risk. We looked at that.
6	So, yes, we looked at a lot of different data during that two
7	week or two day period.
8	Q. Okay. So when you say you looked at the date , I mean, I
9	guess, you talked to the data but the data didn't talk back? You
10	didn't have anything from that data that was saying that was
11	indicative of what you were seeing in real life?
12	A. Correct. Yeah. The only
13	Q. True statement?
14	A. Yes. That is a true statement, nothing, nothing.
15	Historically there was nothing in the data that pointed us to this
16	particular area was anything different or anything unusual that
17	was driving, driving these results, so it was more of the current
18	data that we were receiving in from our leak surveys that were
19	driving our immediate decisions and decisions that we were making.
20	In addition, we were at the same time, got the Dr. Bryant
21	information and I remember one day, one morning when he one of
22	the first meetings he had he pulled out a map of this particular
23	area and he showed some a zone on the map and it was exactly
24	where we were looking at and that was it was kind of an a-ha
25	moment type that while there maybe is something here that's

1 causing or contributing to this in this one area.

2	Q. Okay. So when you saw the information that Dr. Bryant had
3	and you looked at that looked at the area where the leaks were
4	occurring, I mean, was it a matter of showing I mean, if this
5	is let's just say that this is the area on the map, right,
6	where the leaks are occurring and this piece of cardboard happens
7	to be where the soil uniqueness was, right?
8	Is it a matter of this lays over the top of this with a large
9	area around it or is it smaller than this where the area of the
10	soil, unique soil?
11	A. Yeah. The unique soil was in, in the vicinity of it and
12	which is kind of in towards the middle of that area that we took
13	the outage on.
14	When we, when we made the decision to take the limits of our
15	outage we went ahead and used that his information and his data
16	and we took I'll use an engineering term a safety buffer or
17	safety area
18	Q. Right.
19	A that we basically went out a little bit further than that
20	to ensure that we took that additional safety buffer beyond what
21	was showing up on any of the maps and even our leak data
22	demonstrated, so we went a little bit beyond that, which is why we
23	went over to Lakemont Drive in (indiscernible).
24	Q. Okay. So this is a true statement, I hope, so I can
25	paraphrase it. So when you saw the area of the soil, it fit well

	u	
1	withi	n the 2,800 home region with room to spare, the mini soil
2	area?	
3	A.	It fit well. It's not a perfect match and it was a
4	combi	nation of both the soil and what we were experiencing with
5	our l	eakage information.
6	Q.	Okay.
7	Α.	So it wasn't just based upon the soil so
8	Q.	Okay. But the soil unique soil area did fit within that
9	2,800)?
10	Α.	In my high level understanding of soil I'm not a soil
11	exper	t and
12	Q.	Right.
13	Α.	I'm not that's not my
14	Q.	No.
15	Α.	that's why we had Dr. Bryant there that helped us.
16	Q.	I'm not going to take that as fact (indiscernible).
17	Α.	Yeah.
18	Q.	So the soil
19	Α.	The soil, it was in generally it was in that area and the
20	type	of soil that he was identifying is and, again, it wasn't
21	just	the soil that he that was my initial look. It was the
22	soil	that then he looked at other factors as part of his analysis
23	and h	is expertise on that.
24	Q.	Yeah. So one of the things that we all found I guess,
25	every	one that's seen Mr. Bryant's resume, which is part of that

	N 1
1	report, was that you had such a renowned expert that was who you
2	contacted.
3	And we were just curious, was he a known commodity before
4	you, before you even like when someone said, we need to get a
5	soils guy, did his name Bryant pop into your head because you'd
6	done work with him in the past?
7	A. I personally have not worked with him in the past. I know
8	our company has and that's so
9	Q. Okay. So he had done other company work?
10	A. So he had done, he had done work for us in the past.
11	Q. Okay. Thank you. Okay.
12	A. But I personally had not worked with him.
13	Q. Okay. And let's go ahead and characterize this issue just so
14	we get it well recorded. The fact that you saw this phenomenon
15	going on, this anomaly of sorts in this area never saw it before
16	in your 20 some years of experience have seen anything like this.
17	How about any of the were there any other members of Atmos
18	that were associated with this work, had they made comments with,
19	you know, well, I've seen this before. He asked me to we
20	experienced this and this or were they of the same variety, I
21	haven't seen this before either?
22	A. Yeah. Yeah. Everyone that I've talked to from the field
23	operations side that, I mean, a lot of them have been around a
24	long time and from all across, across our Texas area, our service
25	area, none of them all of them said, never seen this level of

1 leaks and I don't understand.

2	I know we did a quality survey, I know we have good
3	equipment. I don't understand how we're going back over these
4	leaks and it's and we're finding new leaks. It's just
5	unexplainable. Don't understand it and never seen it before so
6	Q. Okay.
7	A. That was a constant theme that we heard from multiple people,
8	yeah.
9	Q. So I don't think, I don't think anyone's mentioned this or
10	I've been dying to ask this question and you're the guy I know
11	that I can ask it to.
12	A. Uh-oh.
13	Q. So, you know, you say that you have this anomaly of sorts,
14	right? So what was leaking, was it fittings, was it threaded
15	fittings, was it service connections, was it service risers, was
16	it meters? What was leaking? Where were the leaks occurring?
17	A. From the data that I've reviewed the leaks were occurring on
18	both mains and services. They were leaking at the some of them
19	were leaking at the couplings.
20	The mains, both the mains have couplings as well as the
21	services have couplings and then they were also we also found
22	some at the taps and I don't know exactly where on the tap they
23	were but they were leaking at the taps.
24	Q. Right.
25	A. So those are the, those are the ones that I remember seeing,

1	again, with main services and really at the couplings.
2	Q. So we know that in the alleyway that we had two inch steel,
3	right, where the fatality occurred?
4	A. Yes, there's two inch steel going down that alley.
5	Q. Yeah. And we know that we had what appears to be third party
6	damage on the from a plumber who did some sort of work with
7	we think it was from a plumber. We'll never know that but I mean
8	
9	A. I'm not aware of that.
10	Q. Oh.
11	A. I haven't been involved in that side.
12	Q. Okay. Well, anyway, that is a fact. That's a fact.
13	A. Okay.
14	Q. We can show you pictures that shows the coating on the pipe
15	has been kind of knocked off.
16	A. I did see the report and I read the report.
17	Q. Okay.
18	A. So that's about as that's all the facts that I'm aware of.
19	Q. Okay, okay. But when you say the mains were leaking and the
20	other balance of the homes in that region in a curtailed area,
21	right, what were the main do you know what the material of the
22	mains were in that area?
23	A. It was all steel, the same, the coated steel.
24	Q. Coated steel?
25	A. Uh-huh.

	n
1	Q. Okay. So all those leaks were occurring from coated steel?
2	A. When I the majority of that area was coated steel. I
3	don't know. Every leak I can't confirm
4	Q. Okay.
5	A every leak was on coated steel but that
6	Q. But the fact the mains were coated steel
7	A that overall system generally is the same material, same
8	vintage
9	Q. Okay.
10	A of a coated steel nature.
11	Q. Okay. So since you had this issue, what type of work did you
12	do I mean did you start thinking to yourself that perhaps we
13	have this around the whole city of Dallas?
14	A. Yeah. That definitely has crossed our minds and we said,
15	yes, let's how big is this issue and how big of an area? Do we
16	need to shut the whole system of Dallas down? Do we need to shut
17	this I mean, that was part of our process that we went through
18	as we, as we determined the boundaries of our of the 2,800
19	outage area.
20	So, and again, we did our leak survey beyond that outage area
21	and started confirming that. But then, at the same time, we asked
22	Dr. Bryant as he gathered more and more data, okay, you're saying
23	that this is an isolated situation based upon these factors, is
24	there any other areas that we need to be concerned about that have
25	these similar factors.

1 And he came back with three additional locations that didn't have all the factors but it had some of the factors that he 2 3 recommended that we take a look at. And so we immediately sent 4 some survey crews to an area up around [REDACTED], 5 6 MR. TOBIN: Before you go on. 7 MR. KNIGHTS: Okay. 8 This testimony -- this is Tom Tobin. MR. TOBIN: The 9 testimony about where these other three areas are specifically 10 within Dallas is extremely sensitive and I'm wondering if we could 11 ask that this part of the testimony be closed, be subject to a 12 protective order or an agreement that it will not be disclosed 13 absent some public safety cause? 14 15 16 17 18 19 [REDACTED] 20 21 MR. EVANS: Off the record. 22 (Off the record.) 23 (On the record.) 24 MR. EVANS: Okay, back on the record with Jeffrey Knights. 25 (Instructions regarding redacting the location previously

1	mentioned.)
2	So we're going to go back to the interview.
3	BY MR. EVANS:
4	Q. Okay. So, Jeff, let's talk about there were three areas you
5	spoke about that where it is believed there are similar
6	characteristics to the area where the incident occurred?
7	A. Yes.
8	Q. Okay. And the relative distance first off they're not
9	contiguous, is that correct?
10	A. That's correct, they're not contiguous.
11	Q. Okay. And the other, and the other three areas do not join
12	one another?
13	A. No, they do not.
14	Q. They're three separate areas?
15	A. Three separate areas.
16	Q. Okay. And what you know about these three areas thus far is
17	that there are some common characteristics but not all the
18	characteristics of the area where the accident occurred?
19	A. That's correct, that's per Dr. Bryant's work that we had with
20	him. This was his recommendations of these three areas.
21	Q. Okay. Thank you. So this characteristic these
22	characteristics that were in the soil per Dr. Bryant, did you put
23	out any sort of a feeler to the other Atmos entities in your eight
24	state region to find out if anyone had ever experienced this?
25	A. No, I did not put any feelers out. We did have one of our

1	Louisiana folks another tech service vice president that was in
2	town helping us with this and he did not have any had not seen
3	anything like this in his region, his division so
4	MR. EVANS: Off the record.
5	(Off the record.)
6	(On the record.)
7	MR. EVANS: Okay, back on the record.
8	BY MR. EVANS:
9	Q. So once the you started doing all this I know you
10	actually replaced the mains, correct? That was the mains and
11	service lines or just the mains?
12	A. Mains and service lines in the 2,800 or back on the 2,800
13	Q. Yeah, right.
14	A outage area? Yes, we replaced all the mains and services.
15	Q. Okay. So when you took the lines out and did you do any sort
16	of leak testing to determine where there were I know you had a
17	schedule that was you probably weren't looking at analyzing
18	where leaks were occurring on all the mains, but did you do any
19	sort of testing of lines as they came out to see if there were any
20	common areas where there were failures?
21	A. No, we didn't. To my knowledge we did not do any testing.
22	We did retain anything in that outage area. We retained the
23	any pipe that we actually removed meters pipe, risers, we
24	retained all of that and brought it down to our Dallas service
25	center.

1	MR. EVANS: Off the record.
2	(Off the record.)
3	(On the record.)
4	MR. EVANS: Okay, back on the record.
5	BY MR. EVANS:
6	Q. So no testing was done of the piping that was removed to see
7	where it was leaking but you did have indications of knowing some
8	commonality where leaks were occurring? You said you kept the
9	taps and you gave these descriptions you got those from the
10	service guys, the service techs?
11	A. Well, any, any leaks that we repaired prior to taking the
12	line out of service then
13	Q. Okay. You knew where to schedule (indiscernible)
14	A we had those recorded on our leak reports and our leak
15	repair
16	Q. Okay.
17	A and the cause and location of those, of those leaks were
18	on those. But the rest of those the leaks were never uncovered
19	and the pipe was never disturbed.
20	Q. Okay.
21	A. Because we took the, we took the whole system down.
22	Q. So a fair statement is to say that the point of leaks that
23	you determined are the ones that were repaired because you made
24	the repair and you found a leak and you repaired it, that's why
25	you knew what was leaking?

1 A. Yes.

2 Q. Okay. You talked about expenditure. You used the word3 expenditure.

4 A. Uh-huh.

Q. Which peaked my interest. So are you saying that when you buy a lot of pipe, like a rail carload of pipe that you may get a heat number of consistencies across that heat? I mean, you might have problems with one heat number or something with where the lot of pipe came from, is that what you were talking about when you said expenditure?

11 A. No. What we, what we call an expenditure in -- back in the 12 Lone Star days when we installed pipe, it was basically we called 13 an expenditure requisition which means that all the charges for 14 the material, the labor, the construction, anything to put that 15 project in under that particular project.

16 Q. Umbrella, yeah.

A. That 3,000 feet of pipe was all done under that one expenditure requisition or -- and so that's what we're -- that's what I referred to as an expenditure requisition.

Q. Okay. So you weren't looking at commonality with the absolute era of the day that pipe was produced -- all that pipe was from this lot that had this -- you weren't looking at that kind of issue?

A. No, it was more looking at the common construction practice
for -- it would have been the same -- typically the same crew. It

1	would have been similar construction practices or similar material
2	types, that type of
3	Q. Okay.
4	A would have been common in that so
5	Q. Okay. By the way, do you track that? If you do your
6	records contain the I mean, have you had rejected pipe where
7	you had to go back and say, let's go locate? Is that part of your
8	database?
9	A. We track depending on the age of the pipe or the year, the
10	newer stuff today, yes, we track every piece, every lot, every
11	Q. Oh, attribute you have.
12	A. But prior to the code going into effect in 27 then that
13	it's, it may or may not be may or may not have records of that
14	so
15	Q. Okay. So the decision and I want to make sure I have this
16	correct, the decision to stop the pipe I mean, stop the flow of
17	gas in the 2,800 home neighborhood was between yourself and John
18	Paris?
19	A. No. The, that was there was a lot of information that we
20	gathered that led up to that and there was a lot of other folks
21	but
22	Q. Oh, so there's
23	A. The decision was I'd say it was more of a group decision
24	but it was that was done in that, you know, in and Kevin
25	Akers Acres was involved and I mean, there were several of us that

1 were in that room and after reviewing all the data and Dr. Bryant 2 was in the room and we -- that was when we said, yes, we're going 3 to shut this thing down, out of an abundance of caution.

4 And it's for the safety of this system, these residents; 5 we're going to shut it down.

6 Did you have any nay sayers? Ο.

7 I do not recall any nay sayers. It was, it was -- oh, we Α. had, we had had the data and it was the right thing to do and it 8 9 was -- we're a safety company. We, safety was our number one and everything 10 this was what we had to do and we're going to worry about anything 11 else after the fact.

12 Worry about the cost after the fact, worry about the impact 13 to customers. That was -- the thing to do was shut the system 14 down and we started that process and at the same time started the 15 rest of the process about how to take care of the customers, 16 working with the Dallas command centers and how to handle the 17 media.

18 But the decision, there was no, there was no nay sayers. Ι 19 mean, that I recall.

20 Ο. No grey area, let's do it kind of thing?

21 I mean, it was, this is, this is what we had to do and this Α. 22

is what we needed to do to keep the area safe so --

23 Okay. So --Ο.

24 And, I say, it wasn't an easy decision but it was -- it also Α. 25 -- it wasn't a hard decision at the same time, I mean.

1 Q. Okay.

A. Because it's taken 2,800 -- I mean, that large of an area out. Again, we've never -- in my career we've never done that and but --

5 Q. And just so you know, we did a search on the web and we can't 6 find anyone in the history of man that has curtailed like 2,800 7 homes.

8 A. Yeah.

9 Q. We don't know that it's ever been done. So this is a very 10 touchy subject, this next area and I want to know -- you know, 11 there's a lot of skeptics out there, you know, people that are 12 thinking, huh, soil, right.

And I know you were with the person who's the soil expert and he's telling you all these issues about soil and factors and all this, all this other, you know, critical information about what went on.

But we have the other, the other -- these other people in the 17 18 world that were at the public meeting that day and the NTSB, by 19 I'm not one of them, by the way, but I'm not -- I don't, the way. 20 I don't think I see things this way but -- there's this, there's 21 this topic out there, okay, if it's soil, you know, why didn't the 22 sewers, why didn't the water, why didn't, why didn't, why didn't, 23 right? Why do we not have foundations cracking? Why do we not 24 have sink holes occurring and all these other options? 25 So when you found out this information about the soil did you

1	
1	contact the water company and the sewer company to say, we've got
2	a problem and you guys might have one too?
3	A. We did not contact them directly; however, they were well
4	aware of the situation because we worked in conjunction with them
5	on this project, so they were out there locating their sewer
6	lines, they were out there locating their water lines.
7	They knew that we had this issue. We worked really close
8	with the city of Dallas as a whole and they all parts of the
9	utility company, their engineering departments, everybody was in
10	that command center and so they were aware of what was going on.
11	But we, we did not, did not ask them specifically if they
12	were had issues or not so and, again, I'm not a, I'm not a
13	water; I don't know what their material types are.
14	Q. Right.
15	A. I don't know how they run. And they may have had leaks and
16	they don't, they don't know it because they're not running natural
17	gas
18	Q. Right.
19	A so they can't detect it. But so
20	Q. Okay.
21	A I'm not. I can't speculate there.
22	Q. So just for the record, a true statement would be you have no
23	knowledge that yourself that there were any other utility leaks
24	in the region? None of your people reported seeing water leaks or
25	sewer main breaks or sinkholes from water or anything like that?

1	Did you hear of anything like that yourself?
2	A. The only thing that I heard a couple of days when I was at
3	the command center the water guys I think it was the water,
4	might have been the sewer the utility guys, they said, they
5	said, we're out here repairing leaks too.
6	But I don't even remember who it was. It was I wasn't
7	talking directly with them. That was they were talking to
8	someone else so I don't know what that, what that means.
9	MR. EVANS: Off the record.
10	(Off the record.)
11	(On the record.)
12	MR. EVANS: Back on the record. That's all I have for now.
13	MR. McLAREN: Well, thank you, Roger.
14	BY MR. McLAREN:
15	Q. I'm Chris McLaren. Good afternoon, Jeff.
16	A. Good afternoon.
17	Q. Fascinating discussion as counsel had discussed about this
18	theory. It's very interesting to understand the chronological
19	nature of the events as they unfolded and I think, you know, this
20	is all part of the investigation and gathering of information.
21	When you were doing these surveys to understand the issue and
22	then resurveying, were they conducted by the Picarro $\frac{11}{10L}$ and on
23	foot or was there a hierarchy? How did you manage this and then
24	also yeah, let's start with that question?
25	A. The beginning of the surveys was foot, foot patrol and then

1 at some point and I don't have that available right now, at some 2 point we brought in our innovatively detection equipment, which is 3 the official -- is what we call -- it's, there's two brands that 4 we use.

5 One is the Picarro unit and the other one is the ABB LGR 6 unit. That's the two vendors that produce this technology. And 7 so we used -- we have both of those types of units in our -- both 8 in our division as well as across the company.

9 So at some point during the process we started bringing those 10 units in so we could survey more area and with higher sensitivity 11 with those units.

12 Q. All right. Do you have responsibility for the performance of 13 the leak management at Atmos under you?

14 A. Marlo Sutton has the compliance which has the quality 15 assurance or quality of the leak surveys and the compliance of 16 when we perform the surveys and then she also has responsibility 17 for taking the data from the ILD units.

18 ILD stands for innovative leak detection. ILD units and 19 brings those back in to then feedback out to the operations to 20 investigate the indications so --

Q. Who, who is in charge of the foot patrol and the ILD units from a management standpoint --

23 A. The --

24 Q. -- does that feed up to you?

25 A. No. The physical employees --

1 Q. Yes, sir.

2	A that are doing those driving those vehicles and doing
3	that foot patrol feeds up through our operations side. So in this
4	at least at the beginning the surveyors would have gone up
5	through Tommy Looney who's the compliance supervisor is who those
6	immediate folks in Dallas would have reported to.
7	Q. Okay. So
8	A. But over time we had a lot more people out there.
9	Q. So if you're going to run a leak survey, is it and you all
10	are doing a lot beyond and above the call of duty. Call of the
11	minimum requirements from a federal and state perspective, to meet
12	your programs you've committed to as well as other initiatives, is
13	it, is it normal to first run the ILD and then to come through
14	with the foot patrol to quantify those spots?
15	A. Yes. The process for the ILD equipment is it's very
16	similar. I don't know if you're familiar with the aerial patrol
17	where you do an aerial leak survey but basically it's the same
18	type of a process where you, you run the area, you it
19	determines your indications and that basically allows your ground
20	patrol or ground folks to come in and investigate that indication.
21	And it will either determine that it's a there's a
22	gradable leak there or that it's some other source that there's
23	not a gradable leak at that location.
24	So not all indications turn into gradable leaks but, yes,
25	that's, the overall process for the ILD is you run it. Actually

you run it two nights and then you combine that data together and 1 2 you get indications in that and then send surveyors out to do 3 ground patrol of investigations of those indications. And for that ILD the products, either of them, when you're 4 Ο. running them at night, when it's calm hopefully and everything's -5 6 - and the conditions are right to beat their minimum threshold for 7 adequacy -- a lot of these gas mains or some percentage of them run through the street and some run through the alleys. 8

9 Would the ILD need to be run in the alley for -- just to 10 identify leaks on a main in an alley or would they only be driving 11 down the streets because the alleys are passible?

12 A. If, it depends the way the -- again, the way that the ILD is 13 designed is you have a field of view and that field of view is a 14 calculation and it's based upon wind direction and how your, how 15 your unit is driving, what direction your unit's driving and it 16 determines a field of view.

And as long as that alley is within that field of view, then you do not have to drive down that alley. And so if that alley is not in that field of view, again, that's part of the review process that Marlo's team does is they review that data and if that's outside of that field of view them we send -- either send the ILD back into that alley, if you can access that alley, but a lot of alleys can't be accessed.

24 So then you basically do foot patrol for those alleys so you 25 get 100 percent coverage and that's part of Marlo's team's review

> Free State Reporting, Inc. (410) 974-0947

37

1	process	is	to	ens	ure	that	all	mains	are	covered,	either	by	foot
2	patrol	or	by '	the	ILD	field	l of	view.					

3 Ο. Okav. And it sounds like here in the end I'm getting some 4 warm feeling about this self-assessment requirement within the leak management portion of the DIMP regulation that there is a --5 6 we've got the L, the E, the A, the K and the S coming from the 7 GPTC that's referenced in the preamble of the DIMP rule and that there is some self-assessment or QA/QC to the results to ensure 8 9 that your leak management program is effective, since you do not 10 repair all leaks when found.

A. Yes. In addition to that, we also have a QA process that -where we select -- randomly select certain leak surveys that are done the prior month and go back over those with a different leak technician and review that as well, so that's another QA piece of our, of our leak program.

16 Q. Okay. Thank you. And we were provided metrics basically --.
17 A. Yes.

Q. -- and they are the DIMP performance metrics from the DIMP rule that you all, that you all keep. And even I like the way it goes in including and excluding excavation damage because excavation damage certainly is the leading cause of serious and even one of your leading causes of all leaks --

23 A. Yes.

1

Q. -- even on surfaces. And so when we look at the report that was referenced that you have seen, that shows a sewer lateral on

> Free State Reporting, Inc. (410) 974-0947

38

1 top of a main with a circumferential crack and coated steel, you
2 know, there's certain ideas there that might be formed to go along
3 with the geological and hydrological soils modeling discussion.

And it certainly sounds like there was a lot of surveying and resurveying that led you to this incredibly large outage for safety based on that soils model and it sounds like there must be a very moving and telling story that we're hearing here of today.

8 So I haven't seen the data for the basis of this coming of 9 this leakage surveying and resurveying and finding additional 10 leakage as this flooding event or hydration expansion of soil 11 event continued.

12 As you, as you, as you continue to with Dr. Bryant to then 13 identify where, where are these factors continuing, did you, did 14 you use the same strategy of running the ILD out into these areas 15 of investigation and then did you find moving results? 16 We used both foot patrol and the ILD in these other Yes. Α. 17 areas that were identified and the two of the three areas we did 18 not see anything that was, that was out of the ordinary that we 19 wouldn't have expected to see.

In one of the areas we did see a little bit of increased activity but not to the alarming -- not to the same level that we saw up in the -- this Northwest Dallas area.

23 So we -- as part of our continuing surveillance or continuing 24 safety process we continued to -- we repaired those leaks that we 25 found and continued to accelerate the survey in those areas and

we're still surveying that area on an accelerated basis or more routine basis and doing some pipe replacements in that area as well so --

Q. So I think that by looking at this data you're integrating
data and there's metrics and trends developing in your, in your
brain about I'm going -- these are, these are the things that I'm
seeing that are directing my action.

Are there any other performance metrics like this that you utilize in your day-to-day operations to gauge the integrity of the pipeline system that might, that might provide discrete data that you would use some more granular metrics, other dashboards, trends about system integrity, that you use in the management of the operation of the system?

perspective 14 Well, I think the -- from a reporting prospector group, what Α. 15 we look at, I mean, the leaks is our primary one. We look at corrosion trends, corrosion reports. We look at the -- obviously 16 17 the damage, damages and where those damages are occurring and we -- and then there's communication from the field that if they 18 are seeing something or they're having -- they have some concerns 19 20 that they would, they would reach out to us.

Or we routinely go -- my team routinely goes out to the field operations and sits down with them to have discussions about their knowledge and their -- what they're seeing, what they're experiencing in the field about their system that they operate every single day.

> Free State Reporting, Inc. (410) 974-0947

40

So there's that constant -- I wouldn't say constant but routine periodic discussions with our field operations with my team as part of that. And then in addition to that, the three OPS VP's that operate that area that are out there a lot talking to their folks, they office right next to us and we're constantly in communication with -- between myself and the operations side of the business.

Q. Okay. Sort of -- are there, are there any predictive analytics that Atmos uses regarding system integrity? Do you see that these sort of real time -- you mentioned some real time things -- I'm looking at damages at real time based on area? People are responsible for this area so in real time they're gathering data and providing feedback.

14 It seems like that Atmos has committed a lot in the past and 15 is committed currently to gathering high quality data. Is there a 16 path forward to try to utilize that in a more predictive way 17 towards the system integrity?

18 A. We've had discussions about how to incorporate. Right now a 19 lot of our data is segmented in different systems and we're --20 we've purchased an ESRI system for our pipeline division and we've 21 just implemented that to -- on the pipeline side.

And we're having discussions right now in experimenting with how to -- how we can take a lot of this data and be able to put it into a GIS -- true GIS system to be able to overlay on top so you can see a lot of these different risks together and help us make

Free State Reporting, Inc. (410) 974-0947

41

some additional decisions, and with that would potentially be some
 predictive modeling on that activity.

3 I know we've been experimenting a little bit with predicting, 4 predicting leaks based upon pipe types and locations and that type of activities so --5 6 Ο. Thank you. Regarding you mentioned past experience working 7 with Dr. Bryant -- could you -- was that for several years ago during when we -- when Texas experienced a drought and there were 8 9 some coupling failures on steel pipelines from unrestrained 10 coupling failures? 11 I was not involved in those interactions with Dr. Bryant. Т Δ 12 just know our company had some experience with him but our 13 leadership team is the one that contacted Dr. Bryant and got him 14 into this project. 15 MR. McLAREN: Okay. One moment, please. Okay. Thank you 16 That's all. very much. Thanks Roger. 17 BY MR. COLLINS: 18 Jim Collins, Railroad Commission of Texas. Just a few Ο. Okav. 19 questions, Mr. Knights. Do you know the number of leaks that were 20 repaired before the replacement project began or can we get that? 21 We can get -- we could get that but I don't, I don't -- so Α. 22 you're wanting -- just to clarify exactly what you want -- you're 23 wanting prior to us taking the outage --24 Huh-huh, the big outage, the 2,800. Ο. 25 The larger outage, the larger outage from the time that we Α.

1	from	the Friday point
2	Q.	Yes, sir.
3	А.	to the point that we took the outage?
4	Q.	I think we probably need to go about Thursday.
5	Α.	Thursday.
6	Q.	The 22nd.
7	Α.	Okay.
8	Q.	So there were leaks repaired on the 22nd.
9	A.	Okay.
10	Q.	I don't know exactly how many. I don't remember how many.
11	A.	Okay.
12	Q.	But I know there were leaks in the area repaired.
13	Α.	Okay.
14	Q.	So starting on that date maybe going forward.
15	Α.	Okay.
16	Q.	Just in that
17	Α.	In that, the outage area
18	Q.	the outage area, the outage area so
19	Α.	the outage area from that, that Thursday the 22nd
20	Q.	Thursday.
21	Α.	through the date of the outage, March 1st?
22	Q.	Yes, sir. Yes, sir.
23		MR. TOBIN: Do you want leaks repaired or leaks identified?
24		MR. COLLINS: Leaks repaired.
25		MR. KNIGHTS: Leaks repaired, okay.

MR. COLLINS: Because, well, I can use that number versus the 1 2 leaks identified to compare how many were actually investigated. 3 I can use that data to compare, you know, what was left in the 4 ground that was uninvestigated so far is what I'm trying to get as picture of. 5 6 MR. KNIGHTS: Okay. 7 MR. COLLINS: Okay. BY MR. COLLINS: 8 LGR Picarro 9 Q. Referring to the Carl and the ABB LDR units, the ILD 10 innovative leak detection equipment, do you guys -- I mean, it's a 11 great -- it sounds like a great technology to me. It sounds like 12 it would be a great way to do a leak survey but has that been 13 officially approved by either someone at the Railroad Commission 14 or at PHMSA before you all started using it or during a develop 15 process? 16 During, during the -- as we were purchasing the units Α. Yeah. 17 and we did some testing and I know another gas company in Texas is also -- is using it and is -- we had discussions with the 18 I don't remember if was Carrie or with Stephanie but 19 commission. 20 one of those we -- Marlo and I went down and shared with their --21 the technology. 22 And the, the answer that we got when we asked, do we need to 23 -- what do we need to do to be able to use this for compliance 24 level surveys, the answer was that is an operator's -- that's just 25 a tool and we don't get into directing you as an operator what

- 1
 - tool to use.

2 It's up to the operator to use the appropriate tools to 3 perform that leak survey activity.

4 Q. Okay. Thank you.

5 A. Uh-huh.

Q. In reference to the three other areas and you -- I won't
mention any names but you had said that there were potentially
some replacements going on.

9 A. Yes.

10 Q. Do you know the size of the replacement as far as footages, 11 mileages of pipe?

12 A. It's, it's -- I don't know the exact number of projects or 13 the footages that we're, that we're working on right now.

14 MR. COLLINS: Okay. All right. That is all the questions I 15 have.

- 16 MR. EVANS: Okay.
- 17 BY MR. McDILL:

18 John McDill, Atmos Energy. Jeff, earlier today we've had Ο. 19 kind of a number of discussions to help maybe better clarify or 20 gain some understanding around data or information that may be 21 available to the operations groups that you help support, 22 particularly related to leaks repaired or, you know, on people's 23 ability to query that on their mobile data terminals in this Field software called Fluke SmartView. 24

25

Do you have any knowledge around what may be available to

1	some of the people, either accessible through compliance
2	Field management system CM+ or Fluke SmartView?
3	A. Yes, I do.
4	Q. Can you
5	A. Describe it?
6	Q. Sure. Yeah, describe what, what you know.
7	A. Yeah. Within our compliance system we call CM+, there is an
8	ability within that in the report section or through the leak edit
9	function that you can, you can identify. You can get a leak
10	history of all leaks on a map sheet and a map sheet is just a
11	basically a rectangular boundary that we use for identifying leak
12	surveys and helping us manage our work.
13	But you can actually put in that, that map sheet, that's a
14	unique number and it will give you the entire leak history of all

15 the leaks on that particular map sheet by -- it shows it by pipe 16 type. It has the grade on it, it has some other -- if it was on a 17 main or service and if it was repaired, unrepaired, all those 18 types of things.

In addition, that's more of a tabular format. In FieldSmart, which is the field viewer of our, of our asset, the pipes and materials that we have that's accessible to all of our employees that have an MDT, there's a function in there that you can render leaks. It's called rendering leaks and you can actually render them by grade, by timeframe and that type of stuff and that will visually show you where those are at -- approximate location, you

1 know, within the FieldSmart viewer.

And also in CM+ not only can you narrow it down by map sheet but you can actually go into an edit mode and you can actually put in just the address or just the street and it will just show you the leaks on that street or if there was ever a leak at that address.

So there's multiple ways or functions that a field technician8 would be able to view, view leaks in an area.

9 Okay. Thank you for clarification. If, maybe you can Ο. 10 describe for us if as you guys go about planning work projects, 11 laying out the strategy and utilizing data -- if a request came 12 from the field that they needed to fund a project that was previously unknown, can you describe that process to us? 13 14 The first thing is if it's, if it's a smaller type Α. Yeah. 15 project, 250 feet or less, they can go do it without actually 16 requesting it. They have the ability, as I mentioned earlier.

But if it's -- say it's a 2,000 foot project that would come into -- the operations would send it into our -- we have a mailbox setup for funding requests that's monitored everyday by two different people, so we turn those around -- that, that request would be reviewed by a planner to analyze the geographic area that's being requested.

They look at our Optimain scores, they look at any other leakage, they look at material type and they will recommend a -maybe expanding the scope of the project to include more of that

pipe and then they would recommend the size that would go back to our funding person who would then send it back out to the operations location.

And then they would work back with my team, who's out in the field, my project specialists that are out in the field, and they would actually generate a project to send it out for approval.

And in some cases and some emergency type projects that all happens within about a 12 hour period but our ops folks, if it's an emergency where they have to do something for safety related, they will pick up the phone and call and say, hey, I need a project number and they're going to go do the work and we'll take care of the paperwork afterwards.

13 Q. So that will describe something greater than the 250?14 A. Correct.

Q. So if they had a project that was 300 feet and it was deemed a safety risk, describe what you said again -- what you were talking about.

18 A. Yeah. If it's 300 feet and it's a safety risk then they 19 would complete the project and then they would follow that 20 process, send it in for a request and would generate the project 21 after the fact and but the project is done. We take care of the 22 safety issue immediately.

- 23 Q. So they do the work followed up by the paperwork --
- 24 A. Correct.
- 25 Q. -- while you're down?

- 1 MR. McDILL: Okay. Thank you.
- 2 MR. EVANS: Okay. ABB LGR, LGR stands for?
- 3 MR. KNIGHTS: Los --
- 4 MR. TOBIN: Los Gatos Research.
- 5 MR. EVANS: Okay.
- 6 MR. KNIGHTS: What he said.
- 7 MR. TOBIN: Los Gatos Research.
- 8 MR. KNIGHTS: What he said.
- 9 MR. EVANS: Oh, okay.
- 10 MR. KNIGHTS: I can never pronounce that so --
- 11 MR. TOBIN: I might not have pronounced it correctly.
- 12 MR. EVANS: Los Gatos, that's New Mexico.
- 13 MR. TOBIN: New Mexico, correct.
- 14 MR. McLAREN: That's not how they say it in Chicago.
- 15 MR. TOBIN: Yeah.
- 16 MR. KNIGHTS: That's not how they say it in Maine either.
- 17 MR. McLAREN: Yeah.
- 18 BY MR. EVANS:
- 19 Q. Okay. This is Roger Evans. With the 2,800 home area -- you
- 20 know, previous to your concentrated survey, did you have odor
- 21 complaints in that area?
- 22 A. I don't know. I'm not -- nope, that's not part of my, my 23 role.
- 24 Q. Well, so you may have had but you don't know?
- 25 A. Yeah.

1 Q. Okay, okay, very good.

A. If there was odor complaints I would go to our dispatch area
or if there was --

Q. What about leak reports -- were there -- did anyone call and say or would you get that if someone said, hey, I've got gas bubbling up on or in a puddle? You'd get that, right, you'd know about that?

8 A. Not necessarily I wouldn't know about it. I would -- it
9 would -- that would, again, if someone calls our customer support
10 or our emergency line that would be sent to our dispatch.

Our dispatch would dispatch a service technician that reports up through our operations side and the service technician would go out and investigate that and determine if, determine if there's a hazardous leak or if it just needs to be a gradable leak to schedule for later.

So and then I would not, I would not be involved in those day to day activities, excuse me.

18 So the fact that, you know, water hitting the soil with all Ο. 19 these factors, right, is an issue. So do you -- have you changed 20 the way you do business when it rains and you look over that area? 21 I mean, is it such that if it rained four inches in one day in the 22 2,800 home area that you could generate more problems? 23 We have -- we are -- we have looked at that to determine that Α. 24 that's something we want to incorporate into our future

25 accelerated leak surveys and we're considering what those factors

Free State Reporting, Inc. (410) 974-0947 50

might be for -- while we're deciding that in this particular area 1 2 that if we are accelerating that survey we're doing that on a 3 routine basis. It's almost continuously we're kind of working that area. 4 We've got folks out there kind of going over that area again and 5 6 then they'll start it again and keep, keep surveying until we have 7 -- we're not seeing any leaks that to occur so --Okay. So as of today with your surveys you've done, you've 8 Q. 9 gone and repaired leaks because they're still -- I mean, I quess, 10 not to say that you didn't grab all the leaks the first time. But 11 I mean you still have leaks coming up in that soil area? 12 Α. Not in that. 13 Not in the main area? Ο. 14 I don't know, I don't know. I have not looked recently what Α. 15 the results of those -- that area but there shouldn't be any leaks 16 in that outage area because now it's all, it's all plastic. 17 Q. Coupling? 18 Poly, poly pipe, so if there is leaks it's going to be most Α. 19 likely thread leaks or something like that but --20 MR. TOBIN: (Inaudible). 21 MR. KNIGHTS: It could be on the customer side. Yes, it 22 could. 23 MR. EVANS: Right. 24 MR. KNIGHTS: There still could be customer side leaks --25 MR. EVANS: Okay, okay.

	n
1	MR. KNIGHTS: that would show up.
2	BY MR. EVANS:
3	Q. So the other three areas that you spoke about, are you doing
4	daily type surveillance of that area with or are you I know you
5	were talking about you were doing some work over there. But I
6	mean, is that a result of the surveillance you were doing with
7	the surveying you're doing of the area?
8	A. Yeah. We're not doing daily or we're doing some periodic
9	surveys over there as well so
10	Q. Okay.
11	A we have accelerated that, that routine or the periodic
12	nature of that, so we're but we're not, we're not out there
13	constantly on that one
14	Q. Okay.
15	A because, again, we're not seeing the same the level of
16	leak history in that area.
17	Q. So and one thing I was curious about, if I let's say I
18	live in one of those areas and am I going to get your attention
19	fairly quickly if I call you for a leak complaint? Is there going
20	to be is that how the priority those three areas have like a
21	star next to these the routine?
22	A. No, all of our, all of our customers get
23	Q. The same?
24	A good emergency response. We have techs out there
25	Q. Regardless of where it is?

-- and 24/7 and the dispatch knows where they are. 1 Α. It's a 2 very automated and efficient system that we have on our dispatch 3 side to ensure that our -- any customer that has, has a concern, 4 it doesn't matter where they're located in our system they're going to get that emergency response by our trained technicians. 5 6 Okay. You know, the only things that I have to say that I Ο. 7 have seen in every accident I've ever investigated there's a silver lining, you know. If (indiscernible) people got or five 8 9 people got killed or -- you know, the worst one was in Connecticut a lot of -- I think there was 30 or 40 injuries and eight 10 11 fatalities in one I was an investigator at.

But one of the things I did -- I have seen in my career is that there's always some sort of silver lining that something gets changed, you reduce risk, you do business differently. And your guys are way up here at the top of this chain, the food chain right here, right.

You know, what do you see that you're going to be changing or have you, have you earmarked items that you're going to be changing since this accident happened?

A. I believe, I mean, definitely we're going to -- we're
learning. We've learned lessons and we're going to continue to
learn lessons as we, as we determine this.

The one key thing is that we're going to be continuing to work with John Bryant to look at our soils and our hydrology and some of the other factors that he's, that he's identified and

> Free State Reporting, Inc. (410) 974-0947

53

DIM 1 incorporate those into our overall dim model, our risk analysis 2 system.

And then I think the other thing that we've learned is the, is the ability to have a lot of data available at one time and kind of being able to overlay it.

6 So I feel that we will seriously consider moving forward with 7 some automation of some systems to allow us to more quickly 8 analyze data and more quickly take all of the data together to see 9 how the interactiveness between, between them.

10 So I think those are the two big things for me. And then 11 just continuously work on our damage prevention -- excavation 12 damage. We have an awesome program. Hopefully that was 13 demonstrated by my team but it's a really good program but there's 14 always room for improvement.

And we've still got some bad actors out there that just won't call -- just won't, won't tell you and doesn't -- and as long as they don't get caught, you never know that they hit you.

18 Q. All right.

19 A. So I think that's one of the things that we'll just continue20 to work on and focus on is our third party damage so --

21 MR. EVANS: Okay. That's all I have. Any more questions 22 here, young man?

23 MR. McLAREN: No, thank you.

24 MR. COLLINS: None for me. Thank you.

25 BY MR. McDILL:

Q. John McDill, Atmos Energy. Jeff, we didn't talk a lot about your background at the company, but can you tell a little bit about some of the activity you're done in the industry or either Texas Gas Association?

A. Yeah. I'm involved in the American Gas Association and I'm actually on the managing committee and I was also one of the participants in the inaugural best practices that we did -- that we were one of the top or first 10 companies that did best practices back five years, seven years.

I'm not sure how long ago it was now but it was -- we did the safety culture, the pipeline -- I think it was pipeline integrity and the training -- technical training side. So that was the initial three.

And then we have also done round two already. I wasn't directly involved in that but several members of my team were and we did damage prevention and OQ -- or not OQ, QA/*9QC on that so -

So I'm heavily involved in the industry and we will -- I've already been reached out by Christina Sames with AGA to share this experience, what we can share on lessons learned with the industry at the June, June conference.

22 So definitely we'll be sharing the lessons to improve the 23 industry to make sure that we're all -- in fact, I've also got 24 several calls from several companies already asking. Some of them 25 came in the day after, two days after -- what happened, why did

1	you take out the 2,800 outage and so do we need to be concerned
2	about any of this stuff?
3	And we gave them Dr. Bryant's name and they I know several
4	of them contacted him so
5	Q. So, Jeff, when you say that AGA best practice, are you
6	talking about the AGA peer review program?
7	A. Yes. Yeah. That's our peer review, yes.
8	Q. And so that's industry evaluating industry?
9	A. Correct.
10	MR. McDILL: Okay. I don't think I have any more questions.
11	BY MR. EVANS:
12	Q. Okay. I have one other thing just a couple things. Yeah,
13	we believe it or not, almost every accident that we investigate
14	the association crowd comes out and says, will you come over and
15	present to us with what happened.
16	If you do that, you need to send us your presentation if
17	you're going to be doing it.
18	A. Got it.
19	Q. And let us filter it
20	A. Yeah, yeah.
21	Q for what may be said to the public.
22	A. Yeah, yeah.
23	MR. TOBIN: So, for clarification, are you being asked to
24	present about the planned outage?
25	MR. KNIGHTS: Yes, the planned outage beyond not the

1 MR. EVANS: Yeah. We would need the ---- not the instant before so --2 MR. KNIGHTS: 3 MR. EVANS: But if it's about this case, we've got to make 4 sure that nothing goes out that's not --5 MR. KNIGHTS: Sure. 6 MR. EVANS: -- that we don't want to have go out. 7 MR. KNIGHTS: Yeah. 8 MR. TOBIN: Okay. 9 MR. KNIGHTS: Got it. 10 MR. EVANS: That's for sure. We do that all the time by the 11 way. 12 MR. KNIGHTS: Okay. 13 That happens all the time. And I -- oh, go MR. EVANS: 14 ahead. 15 MR. McLAREN: And just with regards to that -- Chris McLaren 16 -- is it during that presentation that you would be providing information on the real time events that occurred in making that 17 18 planned outage decision such as having the leak survey data and 19 then the rain event effect on the expansive hydrological soils and 20 then the resurveying showing new leaks and different leaks? Is 21 that the kind of information? MR. KNIGHTS: 22 No. 23 That seems to be a lot of the information that MR. McLAREN: 24 would form the basis of the theory. 25 MR. KNIGHTS: Yeah, no. We haven't developed the program yet

1

5

or the presentation yet.

2 MR. EVANS: Right.

3 MR. KNIGHTS: But the thought is more of the response of how
4 did you shutdown that -- take that outage and --

MR. EVANS: Right.

6 MR. KNIGHTS: -- and how did you mobilize 120 crews and do a 7 one year project in three weeks? How did you have the logistics 8 in place to be able to pull that off?

9 That would be where I would focus what my thoughts are but 10 I'm going to get with the rest of the team and see and we're going 11 to -- we've also just made sure that we're going to have kind of 12 one presentation that if multiple people might give it to 13 different locations but it's going to be one presentation so to 14 control that information, as you mentioned.

MR. EVANS: Yeah. There's a really good chance that our -16 my director will be at that.

17 MR. McLAREN: It's in D.C., I think.

18 MR. KNIGHTS: Yeah, it is.

MR. EVANS: Yeah. And I'm sure he'll be there. And if he comes up to me and says, did you filter that presentation before he gave it?

22 MR. KNIGHTS: (Inaudible).

23 MR. EVANS: He doesn't care what you say --

24 MR. KNIGHTS: Right.

25 MR. EVANS: -- he's going to ask me if I filtered that

presentation, period. 1 2 MR. KNIGHTS: Sure. 3 MR. KNIGHTS: Yeah. MR. EVANS: If we've looked at it. 4 5 MR. KNIGHTS: Yeah. 6 MR. EVANS: Because something like that would really be 7 embarrassing for us if --8 MR. KNIGHTS: Sure. 9 MR. EVANS: -- one word got out that our director did not 10 like to see. 11 MR. KNIGHTS: Yeah. 12 MR. EVANS: And that's one of the things about the way we do 13 our work so --14 MR. KNIGHTS: Okay. 15 MR. EVANS: Yeah, I would -- if you're going to do that 16 presentation, especially to AGA --17 MR. KNIGHTS: Yeah. 18 MR. EVANS: -- big time we want to look at that one so --19 MR. KNIGHTS: Got it. 20 MR. EVANS: Just before we wrap up here, is there anything 21 else you'd like to say about where you're going, what you're 22 doing, your experiences, anything at all? 23 I mean, I can't. I mean, this has been an MR. KNIGHTS: No. 24 experience -- unfortunate situation that led to it but the 25 experience and the -- I've never been prouder of a company in the

1 way that we've responded all the way from top leadership down to 2 our front line employee. And not only have we responded in the way we did, taking care 3 4 of our customers, but safety was always the top and it's really --5 it's a proud time when you can work for a company that doesn't 6 just put safety as our top priority as a blue chip on a piece of 7 paper, but actually lives it. 8 And, I mean, this last two weeks or two months has been a 9 testimony of really living the safety culture that we, that we 10 drive and strive for every day. 11 So, I mean, and I appreciate all of you and your involvement 12 in this as well so thank you. 13 MR. EVANS: Okay. Well, that will complete the interview. 14 Thank you so much. We're done with the interview. 15 MR. McLAREN: Thank you, Jeff. 16 MR. KNIGHTS: Thank you. (Whereupon, the interview was concluded.) 17 18 19 20 21 22 23 24 25

1

2

CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: NATURAL GAS-FUELED EXPLOSION OF RESIDENCE, DALLAS, TEXAS FEBRUARY 23, 2018 Interview of Jeffrey Knights

ACCIDENT NO.: PLD18FR002

PLACE: Plano, Texas

DATE: April 25, 2018

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.

> Cheryl Farner Donovan Transcriber