

National Transportation Safety Board

Washington, D.C. 20594

Mr. Peter Gintautas

Director of Health, Safety and Environment

Environmental Protection Specialist

Colorado Oil and Gas Conservation Commission

Dear Mr. Gintautas,

Reference: Interview Regarding the (April 17, 2017 accident in Firestone, Colorado, -- NTSB accident number: DCA-17-FP-005).

Attached is a redacted transcript of your interview that was conducted on May 26, 2017. The redacted transcript of the interview is provided directly to you, the interviewee, for review and identifying any typographical errors." Please look over this interview for accuracy and make any necessary editorial changes.

You may either reference the relevant page and line number along with the suggested change or redline a copy of the document. Please initial any changes when marking up or redlining the original document.

When replying be sure and checkmark one of the three statements below, even if you have no changes. Please submit replies to me via email no later than July 3, 2018. ICCEIVED 13 June 7019

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.

Please note that this transcript must be treated as confidential at this time. This transcript is for your use only, and not for release outside of the investigation. If you have any questions, please contact me by phone or email.

Thank you for your assistance and cooperation,

Chuck Koval, Pipeline Incident Investigation Analyst

National Transportation Safety Board

Office of Railroad, Pipeline, and Hazardous Materials Investigations 490 L'Enfant Plaza East SW Washington, DC 20594 Cell: Email: Email: Fax: **APPEARANCES:**

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DOUG PRUNK, Fire Investigator Frederick-Firestone Fire Protection District

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DAVID McBRIDE, Vice President of Health, Safety & Environment

Anadarko Petroleum Corporation

MATTHEW MCKENZIE, Attorney National Transportation Safety Board

not present on 12-May 2017

1 for advice on that. And Mike had said he'd rather somebody else 2 provide that advice and that happened to be me.

I live about a mile away from the site so it wasn't very long 3 before I was over there. And the 20th we collected -- there were 4 a lot of people there on the 20th. I could not name all of those 5 people are even tell you who they all were. But there was a large 6 delegation both from insurance companies, fire investigators, the 7 fire department, people from our staff, police, and we collected a 8 soil gas sample from the end of -- there was a trench that was 9 already in existence from I think from the day before that had 10 followed the pipeline up to near the oil. And there was maybe a 11 foot or foot and a half of dirt that had not been excavated right 12 near the foundation. 13

I -- we used a soil -- what's called a slide hammer. It's 14 about 3 feet. You can make a 3-foot deep hole with it. It's 15 quarter to half -- I guess maybe a half an inch wide. You can 16 then stick a tube in and get some gas sampled. I measured, you 17 know, gas there. There were hydrocarbons, combustible 18 Four hydrocarbons in it, using my for gas meter and then hand collected 19 it using a little hand pump into a -- a bag specifically designed 20 for gas samples and labeled it, put it back in my vehicle. So I 21 had custody of it. And over the course of the day we did that at 22 three -- three total places. One in the window well of the 23 neighbor's house, at 3610 as I -- I'm not sure what the neighbor's 24 house number is. But the -- just to the west there was a 25

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Then the third time I was anywhere around the site was May 10th. So, Tuesday this week. And our staff had been arranging to Soil have soul gas survey done using that kind of probe and quite a bit had been done already, even starting the week before. But there were some other spots they wanted to get over near Oak Meadow Drive, Boulevard, whatever the proper name is for that street 7 where we're getting very high gas readings in the soil at 2 or 3 8 feet of 100 percent by volume methane. 9

And I believe that's -- it's a different map, but I believe 10 Juart art has on the back of this. Make that's -- there's a map Ste 11 sure I'm looking at the map right. That's over about here in this 12 area along the -- the road coming in. So --13

Do you know the --14 0.

It's Oak Meadow Drive or Oak Meadow --15 A.

MR. LEPORE: Boulevard. 16

MR. GINTAUTAS: Oh Boulevard. Okay. 17

BY MR. CHHATRE: 18

Which one? 0. 19

Oak Meadow Boulevard. 20 Α.

Okay. 21 Q.

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So this -- the pipeline -- I don't know exactly, or I've not 22 Α. been involved in trying to dig that up. I know there was a trench 23 dug there at some point in the earlier days because I saw the 24 depression still. But we -- along two or three places, I think 25

readings three at least, along there we got ratings at 2 or 3 feet of 100 1 percent by methane and in that earlier part of the survey when I 2 wasn't there. And we wanted to reproduce that and also de further 3 define it out to this side. So some more points were added to our 4 soil survey out across on the west side of Oak Boulevard there. 5 And there were also some monitoring holes being drilled with 6 another one of our staff was there. And he was supervising that 7 with the contractor using a little -- a geo probe which is a small 8 drilling rate on a track mounted rig. There was also contractors 9 for Anadarko who were doing something very similar with another 10 geo probe rig. And I -- I have talked to them. I know who they 11 are. We've worked -- they've worked for us too before. 12

I mostly was there to coordinate with the -- the contractor 13 that was doing the soil gas survey for us. And as the last thing 14 we went back to the third house in that row which is four, I 15 think. But whatever the first numbers are, to check the backyard 16 to see if there were any levels of methane in the -- in there 17 which we got background levels. Because the -- the homeowner had 18 asked us to. And we did that as a -- I believe those were 19 communicated to her that same afternoon by my supervisor or my 20 manager in Denver because I had called them and sent them an email 21 with information as well. 22

That's, you know, other than internal discussions, that's been my part of the investigation. I'm not -- you know, I'm not -I was not there when the pipes were exposed originally and those

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1	to just kind of either rule in or rule that out as being anywhere
2	similar to I can tell generalities about the sales gas that
3	comes in. But and you can look it up. And I think you'd go to
4	Black Hills Energy and they probably have a an MSDS that says
5	their gas they sell in the lines is 97 percent methane. This gas
6	that we're seeing is not 97 percent methane. It's a lot less.
7	You know, and the ratio to the other hydrocarbons. But I I
8	it would still be better to have a real even if we did it today
9	it's still I mean, you know, in the future it would still be a
10	reasonable thing to do.
11	BY MR. CHHATRE:
12	Q. Now you the shale and I'm going to use the term shale
13	gas for simplicity.
14	A. Sure.
15	Q. Is shale gas composition any different than the normal
16	vertical well composition for example, or would it be pulled out
17	in this area?
18	A. Not really because a lot of the verticals are in the same
19	formations. A lot of the there are some different, some deeper
20	wells in the verticals that the J-Sand is a deeper, older rock.
21	It's been heated up more. It has a different isotopic
22	composition. It's still the generally wet gas that the gasses in
23	the Denver Basin are not dry gases. They're not just methane.
24	The (indiscernible) methane gases in southeastern Colorado and
25	southwestern Colorado are 99.9 percent methane. You don't see any

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1	Q. For now if you have
2	A. I the the I took the water samples out of the sump
3	and the LTE contractor who was there I think at Anadarko's request
4	collected the gas sample for the fire department and had it
5	analyzed, I think Anadarko had it analyzed.
6	Q. And do you remember what day that was?
7	A. That's the 27th.
8	Q. Yeah.
9	A. April 27th.
10	MR. LEPORE: Sorry may I?
11	MR. PRUNK: Sure.
12	BY MR. LEPORE: French
13 14	Q1 Have you seen the results of the samples taken from the front- argins It's Matt Lepore.
15	A. There were French drain samples taken on the 19th when I
16	wasn't there. I was that's from the house that burned. I have
17	seen that. That was given to us I think by Anadarko or the fire -
18	- I don't I think Anadarko paid for it to be done. I don't
19	actually know who provided it to us. It was shown to me very
20	shortly after we got it, probably the 21st or something like that.
21	They were on extreme rush with the lab. All of us had taken him
22	to the same lab essentially and they were overwhelmed but they did
23	a very good job.
24	I've seen that one. It's, you know, different than I took
25	a sample from the French drain from the house next door which had

on the 10th had a geo probe which is a small push drill rig that 1 can go down through soft things. And we put in some 1-inch holes 2 down here, maybe here, and a string along here. And I don't know 3 the exact distance but we put in several along the back of these 4 houses here. They were for -- to allow us to monitor better. 5 They're 10 feet deep. The 5 foot of perforated casing and then 6 the top part is a solid casing and there's some be night seal at 7 the -- the 5 feet so that it will -- won't be getting oxygen down 8 into the hole. They have a cap on them. We're trying to build a 9 little sampling port so we can get data on a routine basis. 10

And I think John -- my supervisor's plan was maybe to get 11 that done daily for a little while. We also put in a couple 12 2-inch holes over here that were designed to be vent holes so that 13 gases come up in the higher part. I think this geoscientist which 14 was who was doing a similar study for Anadarko was doing something 15 similar. I don't know that they'd finished that when I left on 16 the tenth. And I haven't conversed with anybody about that since 17 18 then.

19 They reported to me when we were there that the greatest 20 concentration of methane, or of combustible gases, let's put it 21 that way, was at about 20 feet in the -- that hole that they put 22 in there. Which I'm not really sure what depth the pipeline was 23 ever at. That's part of my -- I'm surprised by it being at depth 24 because the gas should try to -- it's buoyant. It should be 25 coming up through the soil.

1	BY MR. CHHATRE:
2	Q. This is this is Ravi. So near the Oak Meadows, we are
3	still getting gas readings at the depth of 80 feet you said?
4	A. 20.
5	Q. 20 feet.
6	A. 20.
7	Q. And what are the readings?
8	A. I do not know what they had. They just told me the highest
9	reading they got in the hole was at 20 feet. I just I don't
10	have a number for you.
11	Q. Okay.
12	A. I just don't know. And they had wandered about 26 feet and
13	that probably compared to coming up, that's probably a barrier
14	to most of the gas migration if there is really a water table
15	there with water in the in the shallow aquafer. That would be
16	something we are I know we've considered and I don't where it
17	stands. And we've talked about putting in potentially putting
18	in some monitoring wells to see what is in the water, if it's
19	methane or if there's, you know, methane is could be traveling
20	in a plume.
21	We've had one instance in Colorado that we know of where
22	methane was high enough in the water and coming out of the water
723	that there was a fire in the house in (indiscernible) Colorado
24	about 12, 15 years ago.
25	Q. This is natural gas slipping out, no no leaks from

1	A. Yeah.
2	Q CBM type of gas? (Indiscernible).
3	A. Yeah, yeah. We know what isotopic we have a lot of data
4	from that both from coal cores done by the USGS, 25 some length
5	of time ago. It has a much different isotopic signature. And it
6	also is basically 100 percent methane. No
7	Q. So the variability that you think you're seeing in the gas
8	then would logically lead you to conclude that it's either from a
9	single source being degraded by heat or some other interference
10	that you haven't yet figured out or you've got potentially a
11	second source that you haven't accounted for.
12	A. Yes. Those are two working hypotheses, right.
13	Q. Okay. So I just want to make sure I captured what you're
14	A. Right those are you know, if in monitoring over some
15	length of time, we don't' see reductions in the soil gas
16	concentrations, that leads to the other the the second part
17	of that that maybe there is another well, another pipe, a natural
18	seep. We've not seen natural seeps of gas from that deep in in
219	well you know, in this part of the (indiscernible). I don't
20	there are places in the world where gas comes up from depths like
21	that to the surface and causes problems.
22	I I don't it doesn't it doesn't necessarily not
23	happen here but we don't we've never been able to find any.
24	We've done so I'm actually looking about it because we we've

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actually considered that as a possibility for some of the water

1	A. Yeah.
2	MR. LEPORE: Same day.
3	MR. GINTAUTAS: I had to look it up. I really didn't I
4	was down there. I remembered it was the middle of April and I had
5	to look in our records because I didn't really believe it. Yeah.
6	MR. LEONARD: (Indiscernible).
7	MR. GINTAUTAS: Yeah.
8	MR. LEONARD: One year to the date in the same town, but it
9	was totally unrelated.
10	MR. GINTAUTAS: Yeah.
11	BY MR. MCBRIDE:
12	Q. Utility gas, you haven't yet seen the analysis?
13	A. I have not. I have not any not any from sampling. I == I
714	I think that John Axer, (ph.) who's my supervisor, went out and
15	found their MSDS sheet for what the product that they provide.
16	And it had a range. And I think was maybe 95 to 97 percent
17	methane, and, you know, they may not have even said what the other
18	parts were. That's not the ratio we're seeing in these. That's a
19	pretty dry gas. And and that's what I'd expect to get to
20	get the 1,000, 1,010, 1,020 BTU per cubic foot. You can't have
21	that much propane in that in that methane in there. Their BTU
22	content is quite a bit higher.
23	Q. Well while you were on site have you did you hear anybody
24	reference or talk about the utility backed gas, basically utility
25	companies responding straight from the pipeline (indiscernible)

25 degrees it's about -- I've used it in labs here. It's -- it's 1 a liquid, but it boils away very rapidly in -- in the room. It's 2 not very useful here in Colorado. It is still liquid at this kind 3 of temperature at sea level because there's more pressure. So I 4 don't -- I think pentane would still come up. It just might take 5 longer. 6 But you don't believe it can go down, right? 7 0. I -- I don't --8 Α. Because it's kind of --9 0. -- think it's that -- it's still a gas probably here because 10 Α. the pressure. I think the gases are going to be buoyant compared 11 12 to water. Q. But should that be any kind of liquid in the line? What will 13 happen? An actual liquid, like crude? 14 A. It probably would go down with rain, you know, water 15 percolating through the soils there and go into the water table 16 and that's one of the reasons to think about having a -- a 17 18 monitoring well. And how -- how frequent is it for liquid to come associated 19 Ö. with those gas in the produced well? Is that common? 20 It is in -- but it -- I think this may have been after, if I 21 A. understood it, this gas was after the separator maybe. I'm not 22 sure of that. 23 MR. LEONARD: I'm sorry? 24 MR. GINTAUTAS: It's the gas that was in that line after the 25

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1 Q. Okay. I don't -- I don't know enough about that particular well and 2 A. whether, you know, I didn't -- I've looked at the production or if 3 I don't remember if it made liquids, much liquids or not. In 4 terms of hydrocarbon liquids I don't think it did. But there 5 still is a heavier component in the gas phase. 6 7 Q. Okay. And -- and that could go in another direction. 8 A . MR. AJIBOYE: That's it. I'm done. 9 10 MR. CHHATRE: Okay. MR. LEONARD: I have a question. 11 MR. CHHATRE: Go ahead. 12 BY MR. LEONARD: 13 Mike Leonard. Peter, on this -- on this drawing of -- of the 14 0. subdivision you notice there's a -- there's a line that says, 15 existing gas line to be -- what does it say? Relocated? 16 Yes. 17 Α. Okay. Do you know if that line is still there? 18 0. stuart I do not. I looked at this. Stewart had this outside this 19 Α. morning. And we looked at it. And I don't. That -- that's why I 20 have Duke (ph.) in my head and not -- DCP in my head and not --21 My second question would be --22 0. I don't know. 23 A. -- where the existing current flow line or the -- the old 24 0. flow lines, where they cross, is that -- if that line wasn't 25

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1	relocated, is that potentially near where
2	A. Yes, yes, it is.
3	Q. Okay. And would the gas composition be the same in that
4	line?
5	A. It it could still be. If it's on their way to the gas
6	plant, not on their way to after the gas plant
7	Q. On the way back.
8	A. If it's
9	Q. If it's being gathered, not
10	A. Yes, yes.
11	Q. It could be the
12	A. Yes.
13	Q. The composition could be the same.
1.4	A. Yes, it could.
15	Q. So we could throw this back at
16	A. And then yeah. That's
17	Q. Maybe he could go
18	A. Right, yes. That that one there is a marker right here
19	today and it says it's Black Hills Energy. Right at this corner.
20	I I saw it the other day and I I watched the utility I
21	I didn't know whose it was and I watched the utility locates guy
22	go up to it. And I I we went over afterwards and it said it
23	was Black Hills Energy. Right at this corner of Firestone
24	Boulevard. Llogost
725	Q. Have you been to the the tank battery? The ecolers tank

1	of a you know, if it comes to be something else, if it's the
-7 2	line going to a gas plant where they do the debys and separate
3	ethane, propane off to sell separately the composition would look
4	very similar to what we see now. If it's after the gas plant and
5	it's on its way back to somebody to sell buy it then it would
6	probably be the methane mix that we're talking about with the
7	1,000 or 1,050 BTU content. That's not what we're seeing.
8	So I I don't I mean I just don't so far there's
9	nothing indicating a higher level you know, a methane a high
10	methane concentration that's only with the gas of 1,000 or 1,050
11	BTUS. The the calculations that I saw from the gas samples
12	from the soil were like the if it was pure hydrocarbons it
13	would have been 1,300 BTUs. That's probably very much like the
14	production gas
15	Q. Okay.
16	A that we have samples for.
17	Q. And what is your second hypothesis? You say that that's one
18	hypothesis.
19	A. Well that's those are two really. They're two
20	Q. Which one?
21	A. It's been shut off or it hasn't been shut off.
22	Q. Okay. All right.
23	A. You know.
24	Q. Now, going back now you said the readings are not decreasing.
25	So all the readings we have taken so far, all of them are not