UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

* * * * * * * * * * * * * * * * * * *

Investigation of:

*

ENBRIDGE - LINE 6B RUPTURE IN

* Docket No.: DCA-10-MP-007

MARSHALL, MICHIGAN

*

* * * * * * * * * * * * * * * * * *

Interview of: ROBERT DONALD

Crowne Plaza Hotel Edmonton, Alberta Canada

Tuesday, January 31, 2012

The above-captioned matter convened, pursuant to notice.

BEFORE: MATTHEW NICHOLSON Investigator-in-Charge

APPEARANCES:

MATTHEW NICHOLSON, Investigator-in-Charge Office of Railroad, Pipeline, and Hazardous Materials Investigations National Transportation Safety Board

BARRY STRAUCH, Ph.D. Supervisory Investigator National Transportation Safety Board

KALU KELLY EMEABA, Group Chair SCADA Operations National Transportation Safety Board

KAREN BUTLER, Supervisor Accident Investigations PHMSA

JAY JOHNSON, Supervisor Audits and Inspections Enbridge Pipelines

I N D E X

ITEM				PAGE
Interview	of Robert Donald:			
	Ву	Mr.	Nicholson	6
	Ву	Dr.	Strauch	8
	Ву	Ms.	Butler	17
	Ву	Mr.	Emeaba	21
	Ву	Mr.	Johnson	27
	Ву	Mr.	Nicholson	28
	Ву	Dr.	Strauch	33
	Ву	Mr.	Nicholson	36
	Ву	Mr.	Emeaba	37
	Ву	Mr.	Nicholson	38

- 2 MR. NICHOLSON: We are on the record. This is NTSB
- 3 pipeline case number DCA-10-MP-007, Enbridge Energy July 2010
- 4 crude oil release in Marshall, Michigan. These are the Human
- 5 Factors Group interviews being conducted at the Crowne Plaza Hotel
- 6 in Edmonton, Alberta, Canada. Today is Tuesday, January 31st,
- 7 2012.
- 8 This interview is being recorded for transcription at a
- 9 later date. Copies of the transcripts will be provided to the
- 10 parties and the witness for review once completed.
- 11 And for the record, Bob, please state your full name,
- 12 with spelling, employer name, and job title.
- 13 MR. DONALD: My name is Robert Owen Donald and I work
- 14 for Enbridge Pipelines as a shift supervisor now. At the time of
- 15 the incident I was a shift lead.
- MR. NICHOLSON: Okay. Could you spell your name? Could
- 17 you spell it for us?
- 18 MR. DONALD: D-o-n-a-l-d is the last name.
- 19 MR. NICHOLSON: Okay.
- MR. DONALD: Robert Owen are the first two names.
- 21 MR. NICHOLSON: Thank you. And then for the record
- 22 please provide a contact phone number and e-mail address.
- MR. NICHOLSON: E-mail?
- MR. DONALD: And

- 1 MR. NICHOLSON: Okay. Bob, you're allowed to have one
- 2 other person of your choice present during this interview. This
- 3 other person may be an attorney, friend, family member, co-worker
- 4 or no one at all. If you would, please indicate whom you've
- 5 chosen to be present with you during this interview?
- 6 MR. DONALD: I've chosen not to bring anybody -- with
- 7 Jay Johnson.
- 8 MR. NICHOLSON: Okay. We will now go around the room
- 9 and have each person introduce themselves for the record. Please
- 10 include your name with spelling, employer's name, contact phone
- 11 number and e-mail address. I will start and we'll go to my left
- 12 after that.
- My name is Matthew Nicholson, M-a-t-t-h-e-w, N-i-c-h-o-
- 14 l-s-o-n. I am the NTSB IIC. My phone number is My
- 15 e-mail is
- 16 MR. EMEABA: My name is Kalu Kelly Emeaba, K-a-l-u
- 17 K-e-l-l-y, E-m-e-a-b-a. I'm the SCADA Operations Group Chair.
- 18 I'm from the NTSB. My phone number is and my e-mail
- 19 address is
- MR. JOHNSON: Jay Johnson, Enbridge, Supervisor of U.S.
- 21 Compliance,
- 22 MS. BUTLER: Karen Butler. I'm with PHMSA Central
- 23 Region out of Kansas City. I'm the Supervisor of Accident
- 24 Investigations. It's K-a-r-e-n, B-u-t-l-e-r. My e-mail is
- and my phone number is

- 1 MR. STRAUCH: And I'm Barry Strauch with NTSB. B-a-r-r-
- 2 y, S-t-r-a-u-c-h. My phone is My e-mail is
- 3
- 4 MR. NICHOLSON: Okay.
- 5 INTERVIEW OF ROBERT DONALD
- BY MR. NICHOLSON:
- 7 Q. Bob, just to begin with -- I know it's been over a year
- 8 since we talked to you, if you could just update us as to your
- 9 position at Enbridge? Are you still in shift lead capacity or --
- 10 A. No. We were moved into a supervisory capacity as part
- 11 of the new control center management. So the shift lead position
- 12 transitioned to supervisor and we picked 10 new operations
- 13 personnel to back us up on the technical side. So their official
- 14 is technical lead.
- 15 Q. Okay.
- 16 A. Two on every shift: one pipeline and one terminal. And
- 17 these will provide the technical support that was advised by the
- 18 -- I think by the -- some of the --
- 19 Q. Can you speak up a little bit? I'm sorry.
- 20 A. Yeah, the new positions, the shift lead positions were
- 21 factored in as part of the recommendations for the new control
- 22 center management.
- 23 Q. So the title shift lead is no longer --
- 24 A. No.
- 25 Q. Oh.

- 1 A. Shift lead is no longer there.
- 2 Q. Okay.
- 3 A. It's still in the e-mail address, but we're under
- 4 supervisory now, so --
- 5 Q. So your title is control center supervisor?
- 6 A. Terminal supervisor.
- 7 Q. Terminal?
- 8 A. Yep.
- 9 Q. Okay. So now they define you?
- 10 A. Yes.
- 11 Q. Pipeline/terminal?
- 12 A. Pipeline and terminal, correct.
- Q. Whereas before I think it was sort of an understanding
- 14 between --
- 15 A. It was everything.
- 16 Q. It was everything?
- 17 A. Yeah.
- 18 Q. But you -- the two shift leads would typically work it
- 19 out between themselves?
- 20 A. It wouldn't be defined as pipeline or terminal.
- 21 Q. Right.
- 22 A. They basically covered a number of consoles in the room.
- 23 Q. Okay.
- A. But we were open to just about any console.
- Q. Okay. So are the duties the same now for supervisor or

- 1 has that changed?
- 2 A. Supervisory roles and technical lead roles are being
- 3 fleshed out right now.
- 4 Q. Okay.
- 5 A. So probably within another month we'll have that all
- 6 settled out as to what the new roles are. So a lot of the
- 7 technical oversight that was previously provided by shift lead has
- 8 now all gone to technical lead.
- 9 Q. Okay.
- 10 A. Yeah, so we're basically more HR related. We're still
- 11 part of the liaising between departments, shipper services, you
- 12 know, just general oversight on the whole room.
- Q. And there's still two supervisors per shift; is that
- 14 right?
- 15 A. Two supervisors per shift, yeah.
- 16 Q. Okay. One terminal, one pipeline?
- 17 A. One terminal, one pipeline, correct.
- 18 Q. Okay. I appreciate that. Thanks.
- MR. NICHOLSON: At this point I guess I'll pass it over
- 20 to Barry.
- BY MR. STRAUCH:
- 22 Q. Okay. Bob, at the time of the accident you were a shift
- 23 lead?
- 24 A. Correct.
- Q. Were you on duty any of the days immediately preceding

- 1 the accident?
- 2 A. Yeah.
- 3 Q. Was it July 25th? Any of those days, July 24th, '5th,
- 4 '6th?
- 5 A. I believe it was a Sunday, so I think I was on shift for
- 6 2 days prior to.
- 7 Q. Okay.
- 8 A. Yeah, the Friday and the Saturday.
- 9 Q. Okay. According to -- I believe it was Ghazal Derhami's
- 10 testimony. She said that you were involved with her in terms of
- 11 using a draft procedure that allowed one to determine calculations
- 12 -- and I'm maybe phrasing this incorrectly -- to calculate how
- 13 much quantity would be put into a pipeline in a column separation.
- 14 Are you familiar with that?
- 15 A. I think we were drafting up an interim procedure for
- 16 column separation. But what we had used in the past primarily, if
- 17 there was a suspect column sep, that we would look at the previous
- 18 shutdown and how much had drained out of the line to give us an
- 19 idea of how much time it would take us to put the column back
- 20 together.
- Q. Okay. And what happened if, in calculating how much
- 22 would be required to put the column together, it -- in your
- 23 calculations it would take more than 10 minutes? What would you
- 24 do in that situation?
- 25 A. In those situations we were supposed to get approval

- 1 from our superiors to go beyond the 10 minutes.
- Q. And did this, in fact, happen at any time when you did
- 3 seek -- where the calculations showed it would take more than 10
- 4 minutes and you did seek approval?
- 5 A. I'm trying to think. With her, I'm not sure if we got
- 6 the column back together before the 10 minutes or not.
- 7 Q. Okay.
- 8 A. I'm pretty sure we did.
- 9 Q. Okay. How was it understood that people were to get
- 10 approval of the supervisors if the calculations showed it would
- 11 take more than 10 minutes using this particular draft procedure
- 12 that I'm referring to?
- 13 A. If it had gone past 10 minutes, yeah, we were supposed
- 14 to get a hold of the supervisor to get approval to go beyond the
- 15 10.
- Q. And how was that known if it was not stated explicitly
- in the draft procedure?
- 18 A. I'm not sure how you would -- if the calculation was to
- 19 go beyond 10 minutes?
- 20 Q. Um-hum.
- 21 A. We were to call the supervisor, yeah, and ask for
- 22 permission to go beyond.
- Q. Okay. To your knowledge, was it stated on the draft
- 24 procedure itself?
- 25 A. We had the 10-minute rule basically, so --

- 1 Q. And what --
- 2 A. So, if it was to go beyond 10 -- we basically cut it off
- 3 at 10 minutes and then if the calculation goes beyond 10, we would
- 4 try to get supervisory approval to beyond 10.
- 5 There are -- with the calculations we have now with the
- 6 elevation profiles and crude properties and such for the specific
- 7 pipelines, if they do go beyond 10, we still restrict the operator
- 8 to cut it at 10. If he doesn't have the column back, we shut down
- 9 and reassess.
- 10 Q. Was this restriction in place at the time of the
- 11 accident?
- 12 A. I don't know. I don't think so.
- 13 Q. So at the time of the accident it was okay to go beyond
- 14 10 minutes?
- 15 A. No, 10-minute was the cutoff. If we couldn't get it
- 16 back together at 10, then, yeah, we'd have to shut down.
- Q. Okay. Ghazal Derhami, she was one of the people that
- 18 you supervised?
- 19 A. From time to time, yeah.
- Q. Okay. How would you characterize her performance?
- 21 A. At best she was a little erratic being a new operator.
- 22 And that was expected, so --
- 23 Q. Okay.
- A. And she would have issues at times with her operations,
- 25 so we would probably have supplied some support when she asked for

- 1 it, so --
- 2 Q. Okay. And what would you attribute her erratic
- 3 performance to?
- 4 A. Just her personality type.
- 5 Q. Okay. What was it about her personality that led to
- 6 this?
- 7 A. She seemed like a very insecure person.
- 8 Q. I see. Okay.
- 9 A. So, just going off of conversations that we had with
- 10 other supervisors or shift leads, for taking direction sometimes
- 11 she'd get a little standoffish.
- 12 Q. Standoffish?
- 13 A. Didn't like being told what to do or being told that,
- 14 yeah, she had -- or her logic was may be flawed in some of her
- 15 approaches.
- 16 Q. Now, Tim Chubb was her shift mate. How would you
- 17 characterize his performance?
- 18 A. Tim had been with us, I think, a couple of years. He
- 19 seemed all right. I really didn't have a lot to do with Tim. I
- 20 didn't work with him very much, so --
- 21 O. Um-hum.
- 22 A. So it would be really hard -- like I said, we do
- 23 assessments on operators that we actually operate with the most.
- 24 So if operators come across shifts on mutuals then, yeah, like I
- 25 said, it's really hard to determine or to get a real good grasp of

- 1 his operational capabilities.
- 2 Q. Okay.
- 3 A. The fact that he was sitting in a chair would tell me
- 4 that he was competent enough to operate the pipelines, but --
- 5 Q. Okay.
- 6 A. That's as far as I can, you know, take it.
- 7 O. You had more familiarity with Ghazal than Tim?
- 8 A. Not really. Ghazal, again, was -- she wasn't on my
- 9 shift. From time to time I worked with her.
- 10 Q. Now, suppose -- well, in your experience as a supervisor
- 11 or shift lead, how often had operators come to you and asked to be
- 12 transferred away or to get a different shift mate?
- 13 A. To get a different shift mate?
- 14 Q. Yeah. If they weren't getting along with a shift mate
- 15 and wanted a different one, how often did that occur?
- A. Well, I wouldn't say ever. No one has ever come up to
- 17 me and asked to be transferred off their shift because they didn't
- 18 get along with an operator.
- 19 Q. If somebody had come to you and asked you, what would
- 20 your response have been?
- 21 A. I would try to resolve the issue. There are issues
- 22 where operators argue, and so I've intervened in the past and
- 23 tried to get to the source of the matter. Nothing was -- we're
- 24 here to operate the pipelines and the terminals; we're not here
- 25 for, you know, social interactions and, you know -- so we try to

- 1 keep it on a professional level as best we can.
- Q. And what's your expectation in terms of how shift mates,
- 3 how they would work sharing the space? What do you see in terms
- 4 of --
- 5 A. Well, we try to promote team concept in the room. So if
- 6 operators have different various questions on their operation,
- 7 depending on the experience level, the lesser experienced might
- 8 ask the more experienced an opinion on what they're seeing. And
- 9 so, like we do try to promote teamwork in the room, so -- with all
- 10 the terminals and pipelines that they interact with.
- 11 Q. Okay. Now, are how supervisors or shift leads expected
- 12 to promote teamwork in the control room?
- 13 A. How are we -- well, okay. So, well, basically, like I
- 14 said, the pipeline groups were kind of spread out and they were
- 15 called pods, I guess, you know. So they would basically -- the
- 16 console arrangement was -- not in all cases, but in some cases
- 17 were back to back so they were close, in close proximity to each
- 18 other. And depending on the training level, if they were cross-
- 19 trained, they would be able to watch the other console while the
- 20 other operator went for a bathroom break or in the kitchen to get
- 21 something to eat.
- 22 Q. Okay. So they were expected to cover when the other
- 23 person was away from the console for any reason?
- 24 A. Correct. Yep.
- 25 Q. What about when one operator became overloaded for

- 1 whatever reason, what would happen then?
- 2 A. My experience was when I've seen operators working in
- 3 the group that I worked in get overload, I would jump in and grab
- 4 their workload, their paperwork basically. Like I said, I had
- 5 seen operators involved in pipeline upsets. And depending on the
- 6 size of the line, yeah, it would take, you know, 20 minutes to a
- 7 half hour to put it all back together again, whether it was
- 8 starting up or shutting it down. So I used to volunteer, just
- 9 grab the guy's paperwork and just do it for him.
- 10 Q. And when you did this you were a supervisor or a
- 11 controller?
- 12 A. No, I was an operator at the time.
- 13 Q. You were an operator?
- 14 A. Um-hum.
- Okay. So you could tell just by sitting next to the
- 16 person?
- 17 A. Yeah.
- 18 Q. What about as a supervisor? How could you tell if
- 19 somebody was getting overloaded?
- 20 A. The operator would have to come and tell us. Given the
- 21 scope and the size, you know, nearly impossible to go and ask if
- 22 -- like I said, we know some consoles from time to time they did
- 23 get overloaded. Whether or not their pod mate's help out -- if in
- 24 the case where they don't have a pod mate, if the operator is
- 25 stressed out because of the workload, we'll look for alternative,

- 1 try and get somebody to come in and help them.
- Q. Which consoles were more prone to this than others?
- 3 A. There was one console that had asked for help. The
- 4 workload wasn't so much that it was overwhelming every day, but
- 5 because of scheduling concerns, probably every other day they
- 6 would run into multiple deliveries and injections over a period --
- 7 over a short period of time.
- 8 Q. And what line did this console operate?
- 9 A. That would probably be -- at the time, one operator had
- 10 come to me with regard to stress levels on the workload and so, I
- 11 brought that forward with my immediate supervisors and it led into
- 12 a console workload assessment. And so, we've seen measurement
- 13 tools developed over the last year and a half or so, the number of
- 14 operations that actually take place on every console including the
- 15 on-calls.
- 16 Q. This tool, if it was a year and a half, it was developed
- 17 after the accident?
- 18 A. Correct.
- 19 Q. Okay. So how would you -- which line was that that was
- 20 subject to the most --
- 21 A. It wasn't a line. It was a terminal.
- 22 Q. Okay. Which terminal was that?
- 23 A. Clearbrook, Minnesota.
- 24 Q. I'm sorry?
- 25 A. Clearbrook.

- 1 Q. Oh, okay.
- 2 A. Clearbrook/Regina.
- 3 Q. Okay.
- 4 A. The operator had told me that his stress levels were
- 5 high with regard to workload. And when I sat and talked to him,
- 6 we walked through the operation and I told him, I said, if you're
- 7 calling for this workload assessment to be made, then we have to
- 8 get the other operators on that console in line with it as well.
- 9 O. Um-hum.
- 10 A. And that was to identify whether it was just his issue
- 11 or it was prevalent throughout the operation.
- 12 Q. Okay. And what did you find?
- 13 A. Over the period of months, I think we got the other
- 14 operators on line, as far as I know, to say that, yeah, that there
- 15 were days when that console load would constitute a lot of stress
- 16 for them, so --
- 17 MR. STRAUCH: That's all the questions I have at this
- 18 time.
- MR. DONALD: Oh, sure.
- MR. STRAUCH: Thank you.
- MR. NICHOLSON: Karen?
- BY MS. BUTLER:
- 23 Q. I guess I've just got a couple clarifications.
- 24 A. Sure.
- 25 Q. I wanted to make sure -- I think that the Ghazal

- 1 procedure relationship that we were talking about had to do with
- 2 there was a pig in the line? And I think within the 10-minute
- 3 rule it was possible that that pig was going to get stuck or would
- 4 stop approximately within a valve if it didn't come together. And
- 5 there was conversation about the fact they wanted to get the pig
- 6 past the valve before they would attempt to shut down if they
- 7 hadn't met the column sep come together time, the 10-minute rule.
- 8 A. Um-hum.
- 9 Q. Do you recall any of those specifics in the discussion
- 10 or not?
- 11 A. Nothing with regard to a pig, no.
- 12 Q. Okay. All right. Do you recall it in regard to
- 13 anything else?
- 14 A. I recall a column separation and working out a time to
- 15 figure that out with the amount of drain up.
- 16 Q. Okay.
- 17 A. And the column did come together in the exact time that
- 18 I had figured out just based on the drain up, so.
- 19 Q. Okay. And you kind of alluded to elevation calculations
- 20 being part of that procedure?
- 21 A. No. Not at the time.
- Q. So that's part of a new procedure?
- 23 A. That is.
- Q. Okay. I got that. Thank you for clarifying that.
- 25 A. Yep.

- 1 Q. Have you read the internal Enbridge investigation for
- 2 Marshall?
- 3 A. No.
- 4 Q. Okay. And in the past when we've interviewed you and
- 5 you've had time to reflect, is there anything that surfaced in
- 6 your mind about, oh, I should have said this or why didn't they
- 7 ask about that; they really need to know about that or they
- 8 clearly need to pursue this element and it hasn't been discussed?
- 9 Is there anything like that you'd like to clarify for the record
- 10 or interject to us?
- 11 A. With regard to the incident itself?
- 12 Q. Yes. Or it could be before or after, the set-up to the
- 13 incident or how something worked through the process?
- 14 A. Not really. My perception was we were in a growth --
- 15 the company was in a growth mode with bringing in new pipelines,
- 16 new terminals, especially in northern Alberta. And my only
- 17 concern -- and I voiced that with my supervisors -- was that were
- 18 we on track with hiring and getting enough bodies in to meet that
- 19 new demand.
- 20 Q. All right. So if I were to paraphrase that, I think you
- 21 said you were concerned about the fact that the control room was
- 22 growing?
- A. Um-hum.
- Q. And you wanted to make sure that you had enough
- 25 controllers in the training pool? Is that -- would that be fair?

- 1 Or in the experience pool or how would --
- 2 A. Yeah. In the past, it seemed to me, as we brought in
- 3 new consoles, not to the extent of the growth that we're
- 4 experiencing now, is that we would be more probably reactive.
- 5 Q. Okay.
- A. And we'd be hiring, but it would -- I don't know if the
- 7 timing would be right on the money or not.
- 8 Q. Okay.
- 9 A. That's just a personal opinion.
- 10 Q. Okay. So at the time of Marshall, when it occurred --
- 11 would you -- do you think you had enough resources to cover
- 12 situations in the room or not?
- 13 A. Yeah, I would say we did.
- Q. Okay. Would you clarify, as experienced resources or --
- 15 A. The experience level is diminishing now. So, a number
- 16 of experienced operators had vacated to other positions, some
- 17 still within the control center as coordinators and such.
- 18 Q. Okay.
- 19 A. You know, so our experience level within the room was
- 20 diminishing with new employees coming in and -- so, yeah, our
- 21 experience level is pretty low right now.
- 22 Q. Okay.
- 23 A. Not many of the old folks though.
- MS. BUTLER: Okay. That's all.
- MR. NICHOLSON: Kelly?

- 1 BY MR. EMEABA:
- 2 Q. Kelly Emeaba.
- 3 A. Hey, Kelly.
- 4 Q. My question is also on the procedure, unapproved
- 5 procedure.
- 6 A. Um-hum.
- 7 Q. And I have a couple of them. The first one is, if I may
- 8 ask you why did you pull and apply the unapproved procedure for
- 9 column separation in May of 2010, which they have mentioned? Why
- 10 did you pull it and apply it?
- 11 A. I applied it?
- 12 Q. Yeah, why was it used?
- 13 A. There was no other way to assess column separation other
- 14 than by the amount of drain up. It had been used before, as far
- 15 as I was concerned.
- Q. Okay. And the issue is that when you know it was
- 17 unapproved?
- 18 A. The column separation procedure, per se, was based on
- 19 putting the column back together within 10 minutes.
- 20 Q. Correct. I know.
- 21 A. Yeah.
- 22 Q. If you know -- when you know the procedure contained an
- 23 unapproved segment in it, because if you look at the entire
- 24 procedure, you have the approved segment on it, then the
- 25 unapproved procedure, which is the calculation, and an area,

- 1 because that's where the unapproved issue came in.
- 2 A. Um-hum.
- 3 Q. So when you knew it contained the unapproved segment and
- 4 that was also the area that was used, why did you apply it to be
- 5 used when you know that procedure has not been approved?
- A. Well, there's no procedure per se for column separation.
- 7 The only procedure we had was if the column didn't come together
- 8 we were to shut down and reassess.
- 9 O. Correct.
- 10 A. So my understanding with Ghazal was the column did come
- 11 together, close to -- probably close to the 10-minute mark. So,
- 12 there was no issue as far as I was concerned. And I told her, I
- 13 said, on the calculation that, you know, it would probably take
- 14 this long to put it together, so --
- 15 Q. Okay. Now, what we are trying to find out is that you
- 16 are speaking as though that procedure that you used was already in
- 17 place, accepted by the management and approved by whoever approves
- 18 it.
- 19 A. Um-hum.
- Q. But it was not approved?
- 21 A. No, sir.
- 22 Q. Yes, that's my question: Why was it used? If that had
- 23 not been put in place, you had a previous one that you only have
- 24 to follow. Why did you (indiscernible) to go to that unapproved
- 25 one? Was there a reason why you had to do it?

- 1 A. Just logic.
- Q. Just logic. Okay. And if I can ask a second question?
- 3 A. Um-hum.
- 4 Q. How many times has the procedure been applied during
- 5 your shift management before the 26th of July?
- 6 A. I couldn't tell you.
- 7 O. So you can't --
- 8 A. Myself, I've seen column separation come together. In
- 9 most of the instances it has come together before the 10-minute.
- 10 In the case of it going past the 10-minute, we've shut down and
- 11 re-assess it.
- 12 Q. Okay. So the answer I'm getting from you is that you
- don't know why you pulled that procedure (indiscernible) to Ghazal
- 14 to use, other than the fact you wanted the column separation to be
- 15 filled. So even when it was unapproved and you knew it, it was
- 16 your own decision to use it?
- 17 A. Yes, that is correct.
- Q. Without the management approval or whoever that approves
- 19 it?
- 20 A. Again, it was within the 10-minute, so the column came
- 21 together within the 10-minute.
- 22 Q. Okay. And --
- 23 A. So the calculation I used just verified -- my
- 24 understanding is that the column had drained so much oil at the
- 25 delivery location downstream, so we would use that, that number

- 1 divided by the rate to guesstimate a time for the column to come
- 2 together. Again, if it went beyond the 10-minute we'd have to
- 3 shut down and reassess.
- 4 Q. Okay. And the other question is that, did you inform
- 5 the operator that the procedure was unapproved to be used?
- 6 A. No, I don't think I --
- 7 Q. You did not tell her?
- 8 A. No.
- 9 Q. Did you --
- 10 A. I explained -- I think I explained to her that, that we
- 11 were -- I was using the number of the column -- I mean, sorry, the
- 12 drain on the shut down, the previous shut down, in my calculation
- 13 just to verify how close we'd get to actually putting the column
- 14 back together.
- Okay. And the last question, did you ever discuss the
- 16 used unapproved procedure with your supervisor?
- 17 A. Did I ever discuss the unapproved?
- 18 Q. The unapproved procedure that you used to your
- 19 supervisor?
- 20 A. I'm not sure if I talked to a supervisor about it. I
- 21 know other operators that I've worked that we would use that
- 22 calculation as a guideline.
- Q. As a guideline?
- 24 A. Yeah.
- 25 Q. Even when it is unapproved?

- 1 A. Yeah, I quess.
- 2 Q. Okay.
- 3 A. It wasn't -- there was no per se approved procedure to
- 4 use drain off in the column sep procedure. But the logic for
- 5 myself is if the drain up on that column or on the line had been a
- 6 certain amount, that there was a reasonable expectation -- and
- 7 we've seen this in the past that the column would come together in
- 8 a number of minutes based on drain out.
- 9 Q. Now, we don't have any argument on what you are saying
- 10 in terms of the time that it comes together, the column separation
- 11 comes back together.
- 12 A. Um-hum.
- 13 Q. But the question is the fact that this procedure was
- 14 unapproved by the management and in some way in your system --
- 15 A. It wasn't part of the procedure.
- 16 Q. It wasn't part of the procedure?
- 17 A. No. That's right.
- 18 Q. Okay. So I know the question has gone before you. So
- 19 why did you have to go and get it when you know it was not part of
- 20 the procedure? Why did you get it and why did you use it?
- 21 A. I explained to Ghazal that this calculation could be
- 22 used as part of a column sep calculation. That was all. It
- 23 wasn't to say we were superseding or overseeing or writing a new
- 24 procedure; we were just giving her an explanation as to how a
- 25 column does come apart and the reasons why it comes apart.

- 1 Q. And it was applied?
- 2 A. Well, the application is within the 10-minute, so the
- 3 procedure states 10 minutes, correct? Yes. So we don't go beyond
- 4 the 10 minutes.
- 5 Q. The calculation aspect of it, which was new.
- 6 A. This was mine.
- 7 Q. That was -- it's yours?
- 8 A. Yeah.
- 9 Q. So you generate that, the calculation segment in that
- 10 procedure; is that what you're saying?
- 11 A. I'm saying I did the calculation apart from the
- 12 procedure.
- 13 O. No.
- 14 A. The procedure states 10 minutes.
- 15 Q. Correct.
- 16 A. The column.
- 17 Q. But on this unapproved procedure there is a segment
- 18 which state do this calculation, do that calculation on it. Who
- 19 inserted that portion there? Was it by you or by your management,
- 20 but had not been put in place?
- 21 A. I'm not, I'm not following. The procedure states 10
- 22 minutes to put the column together. If not, you shut down and
- 23 reassess. Okay, so -- and then usually we would call a support,
- 24 so --
- MR. NICHOLSON: Yeah, I'm going to follow up maybe -- do

- 1 you have anything else?
- MR. EMEABA: No, thanks.
- 3 MR. NICHOLSON: I think I'm getting the gist of this.
- 4 Maybe we can -- maybe I could rephrase it a little bit.
- 5 MR. JOHNSON: Yeah, I --
- 6 MR. NICHOLSON: Jay, do you want to clarify?
- 7 BY MR. JOHNSON:
- 8 Q. Excuse me. This is Jay. So I don't want to put words
- 9 in your mouth, but the draft procedure, which had a component of
- 10 that which talked about how to figure out how long it would take
- 11 for line pack --
- 12 A. Um-hum.
- 13 Q. -- that's the calculation you would do? That line pack
- 14 one?
- 15 A. Yes.
- 16 Q. But you did not -- the new -- the draft procedure said
- 17 if it took 20 minutes you could pump for 20 minutes. So you used
- 18 the calculation, but said we still have to follow the existing
- 19 procedure and shut down within 10 minutes?
- 20 A. Correct.
- 21 Q. So you were showing Ghazal -- or were you showing Ghazal
- 22 the calculation part of the procedure and how you came up with the
- 23 numbers, but following the existing one saying, but you shut down
- 24 in 10 minutes?
- 25 A. Yeah.

- 1 MR. JOHNSON: Actually, I don't know if that's where
- 2 you --
- 3 MR. NICHOLSON: Yeah, that's how I understood it too. I
- 4 think -- I want to go back a little farther too because I'm
- 5 getting -- I thought I was hearing inconsistent answers.
- BY MR. NICHOLSON:
- 7 Q. Karen asked you about a very specific time that Ghazal
- 8 pointed out when she used this procedure and I thought I heard you
- 9 say, no, you don't remember that instance.
- 10 A. Just with the -- with a pig in the line. I don't
- 11 remember anything with regard to the pig.
- 12 Q. But she said with the May 2010 incident. And then he
- 13 asked if you used the procedure in May of 2010 and you said, yes,
- 14 with Ghazal, so --
- 15 A. Well, I thought we were referring to the same event that
- 16 she was putting her column together.
- 17 O. It is the same.
- 18 A. Yeah.
- 19 Q. That's why I'm confused.
- 20 A. Yeah, no I --
- 21 O. I heard two different answers.
- 22 A. Well --
- Q. I heard no, I've never -- I didn't do it.
- A. With Karen, I don't remember anything about a pig being
- 25 in the line.

- 1 Q. Okay. So we are clear that -- or you've confirmed that
- 2 you did pull this draft procedure in May of 2010 and provided it
- 3 to Ghazal?
- 4 A. I used the -- I told her the -- using the calculation we
- 5 could guesstimate the time it would take the column to come back
- 6 together, so --
- 7 Q. And that was with this draft procedure?
- 8 A. Yeah, I believe it probably was in draft. I don't
- 9 remember really.
- 10 Q. You don't remember if it was in draft or if it was the
- 11 draft procedure?
- 12 A. Yeah, I don't remember if it was a draft procedure.
- 13 Q. Well, I'm looking at the draft procedure.
- 14 A. Okay.
- Q. And it does say, item 3, when starting up into known
- 16 column separation, calculate a restoration time to restore the
- 17 column separation.
- 18 A. Right.
- 19 Q. The volume drained divided by flow rate equals time.
- 20 A. Right. Correct.
- 21 Q. That's what you're describing?
- 22 A. Right.
- Q. Okay. But then you're -- what you're saying is, that
- 24 would not necessarily allow you to exceed your 10-minute rule?
- 25 A. Correct.

- 1 Q. Okay.
- 2 A. Yeah, the 10-minute rule -- the past 10-minute requires
- 3 higher approval.
- 4 Q. Even if your calculation said 20 minutes?
- 5 A. Well, if I had called that calculation in to say we were
- 6 going to go beyond the 10-minute based on the calculation, I would
- 7 have to have approval from my supervisor.
- 8 Q. So this allows you calculate it, but you still need
- 9 approval to execute it beyond 10 minutes?
- 10 A. Correct.
- 11 Q. I don't, I don't see that in here. Where does it say
- 12 you have to call somebody?
- MR. JOHNSON: That's why it's draft.
- MR. NICHOLSON: Well, how could that be his -- okay. So
- 15 let's go back up to the original.
- DR. STRAUCH: Maybe we can go off the record and look.
- MR. NICHOLSON: Okay. So you're saying it's draft
- 18 because it doesn't say --
- MR. JOHNSON: No one approved.
- MR. NICHOLSON: Okay.
- MR. JOHNSON: And we can do this off the record if you
- 22 want.
- MR. NICHOLSON: No. I don't want to.
- MR. JOHNSON: Okay. No, it --
- MR. NICHOLSON: I want to understand.

- 1 MR. JOHNSON: They didn't approve -- this would have
- 2 allowed an operator to do that calculation and go past the 10
- 3 minutes.
- 4 MR. NICHOLSON: Okay.
- 5 MR. JOHNSON: Which management did not approve,
- 6 therefore this procedure was not approved.
- 7 MR. NICHOLSON: Okay.
- 8 MR. JOHNSON: The calculations, that fact -- that's a
- 9 good component of that.
- 10 MR. NICHOLSON: Sure. Yeah, I understand you can do
- 11 that.
- MR. JOHNSON: But the minute it goes past 10 minutes,
- 13 then the operator --
- 14 BY MR. NICHOLSON:
- 15 Q. And your recollection is in May, it never went beyond 10
- 16 minutes?
- 17 A. My recollection is, yeah, it didn't go beyond.
- 18 Q. Okay. Because the statement we got was it went 15
- 19 minutes, so it sounds like that's different.
- 20 A. Well, I'm not sure.
- 21 Q. Okay.
- 22 A. I don't remember 15 minutes.
- 23 Q. You remember the instance, but you're not sure about the
- 24 time?
- 25 A. I vaguely remember the -- her putting the column

- 1 together and I told her this is how, this is how we would look at
- 2 the calculation for time.
- 3 Q. Okay.
- 4 A. And it worked out exactly to the time that I had --
- 5 Q. So you never had an experience where you applied that
- 6 calculation rule and exceeded a 10-minute mark without calling
- 7 first?
- 8 A. Not to my recollection, no.
- 9 Q. So the 10-minute rule was strictly enforced?
- 10 A. It was.
- 11 Q. Okay. Then why wouldn't it have been enforced on the
- 12 26th? It almost sounds like -- you know, the 10-minute doesn't
- 13 get in the way of your trying to get a line started ever as a
- 14 shift lead?
- 15 A. It shouldn't. Like I said, we've had situations --
- 16 Q. Isn't that --
- 17 A. -- the 10-minute is up and then we have to shut down and
- 18 have other people look at it, possibly in engineering.
- 19 Q. Okay. Okay. Thank you for that. I think that helps
- 20 clarify it.
- MR. JOHNSON: Does that explain it better for you,
- 22 Kelly?
- MR. EMEABA: Yes. I mean, he has stated the fact that,
- 24 yeah, he did it at his own volition. Yes, I agree with that. It
- 25 was unapproved. He decided to use it and it was in system. It

- 1 was not explained to the operator it was not approved, and they
- 2 continued to use it.
- 3 MR. JOHNSON: They used a component, the math component
- 4 of the procedure only.
- 5 MR. EMEABA: Correct. Correct.
- 6 MR. NICHOLSON: Okay. I think we're clear. Thank you.
- 7 MR. EMEABA: Thank you.
- 8 MR. JOHNSON: All right.
- 9 DR. STRAUCH: Yes, thank you.
- 10 MR. EMEABA: That's all.
- MR. NICHOLSON: Barry, you want to --
- MR. STRAUCH: Yeah, I want to just --
- 13 MR. NICHOLSON: -- (indiscernible) would you like to
- 14 continue?
- DR. STRAUCH: Oh, I'm sorry.
- 16 BY MR. STRAUCH:
- 17 Q. If I may follow up on this dead horse. In your
- 18 experience at Enbridge did you see the 10-minute rule violated or
- 19 take second place to any other procedure?
- 20 A. I'd have to say no, I haven't.
- 21 Q. Okay.
- 22 A. There are times like I said when it -- the procedure
- 23 states when you receive pressure at the upstream station ahead of
- 24 the column sep, there is no definition as to the amount of
- 25 pressure. So what I usually use when pressure comes into the

- 1 upstream station, that would be pressure enough to start a unit at
- 2 that location and start to fill the column from that, so but
- 3 there's no designated amount of pressure.
- 4 Q. You know, at the time of incident were you aware that
- 5 this draft procedure was being referred to?
- 6 A. On the night of, no.
- 7 Q. Okay. Were you aware that other people had referred to
- 8 this procedure at any time since you first worked with it with
- 9 Ghazal?
- 10 A. I think off the record, operators and shift leads might
- 11 have looked at the drain up and figured out an amount of time
- 12 based on what we just talked about, the calculation.
- 13 Q. Okay.
- 14 A. But it wasn't official as far as procedure was
- 15 concerned.
- 16 Q. So, just if I may --
- 17 A. Um-hum.
- 18 Q. -- if I may say -- and please correct me if I'm not
- 19 saying this correctly. Your understanding of the procedure was
- 20 that it provided a calculation tool --
- 21 A. Correct.
- 22 Q. -- for the operator or shift lead to determine how long
- 23 it would take --
- 24 A. Correct.
- 25 Q. -- to put a column back together?

- 1 A. Um-hum.
- 2 Q. In your experience at Enbridge could you explain why
- 3 another shift lead misunderstood this procedure and misunderstood
- 4 that this procedure would take precedence over the 10-minute rule
- 5 if the calculation showed that it would take more than 10 minutes?
- A. I'm not aware of what went on the night, the night of
- 7 the actual pumping into the -- near the breach.
- 8 Q. But all shift leads had the same level of
- 9 responsibility?
- 10 A. Correct.
- 11 Q. And presumably had the same background and same
- 12 experience. Why is it that you understood the actual meaning of
- 13 this procedure and other shift leads did not?
- 14 A. I cannot speak for the other shift leads, other than I
- 15 knew they discussed it amongst themselves and with the MBS analyst
- 16 that was on at the time. And so, they had made their choice or
- 17 their decision based on that conversation that took place between
- 18 the operators, the shift leads and the MBS analyst.
- 19 Q. Okay. Thank you.
- 20 A. That's all I'm aware of really.
- MR. NICHOLSON: Karen has got some I'm sure, right?
- MS. BUTLER: Bob --
- MR. DONALD: Um-hum.
- MS. BUTLER: -- when you made that last comment, do you
- 25 believe the MBS analyst's input could have impacted that decision?

- 1 MR. DONALD: Personally, I didn't.
- MS. BUTLER: Okay. Thank you.
- 3 MR. DONALD: You're welcome.
- 4 MS. BUTLER: That's it.
- 5 MR. NICHOLSON: Jay, we haven't --
- 6 MR. JOHNSON: No, I got my input when we had some
- 7 confusion there. So, thank you, I'm --
- 8 BY MR. NICHOLSON:
- 9 Q. I would just be curious then, Bob, when do you perform
- 10 this drain up -- if I've already started the line?
- 11 A. Yep.
- 12 Q. Would I perform this drain-up calculation in this -- or
- 13 during the start-up? Or am I to do these drain-up calcs before
- 14 the line is started?
- 15 A. If the operator is aware there is a potential for column
- 16 sep on a start-up, hopefully they would come to us and tell us
- 17 that there's column sep and we could look at the event prior to
- 18 start-up to determine how much was drained off and use that in the
- 19 calculation to put the column together. That was the only tool we
- 20 had at the time, basically, the draft procedure.
- Q. So I can't wait till I get to 10 minutes, oops, it's
- 22 still column sep and then start my calculations while the line is
- 23 still going?
- A. We'd ask the operators to probably shut down and we'd
- 25 reassess it at that time, so.

- 1 Q. And how would you know you're starting up into column
- 2 sep? If I'm an operator, how do I know that?
- 3 A. Well, you might get an alarm from the MBS analyst prior
- 4 to, telling you about there was column sep. But if the column
- 5 showed low pressures. So, what we would call low pressure would
- 6 be below base suction. So if 35 pounds was what we use, 10 pounds
- 7 above. So 25, anything under 25 pounds --
- 8 Q. Okay.
- 9 A. -- could constitute a column separation.
- 10 Q. Okay. So that's readily available to operators? He can
- 11 look at his pressures?
- 12 A. Yeah, correct. Yeah.
- MR. NICHOLSON: All right. Anything else from you,
- 14 Kelly?
- BY MR. EMEABA:
- 16 Q. I wanted to ask the question that he just answered it,
- 17 because your initial statement was, you know, there was no
- 18 specific amount of pressure for you to know it's column
- 19 separation. But by answering Matt --
- 20 A. Yeah.
- 21 Q. -- you just mentioned, yes, threshold.
- 22 A. Oh, okay.
- Q. So I'm okay about that.
- 24 A. Okay.
- 25 Q. Thank you.

- 1 A. You're welcome.
- 2 BY MR. NICHOLSON:
- 3 Q. Okay. Bob, I guess before we close I understand that
- 4 Enbridge was performing some other internal interviews with
- 5 regards to practices in the control room recently. Were you a
- 6 part of that?
- 7 A. No. Practices?
- 8 Q. Just the ongoings, the environment. Any internal
- 9 interviews of you for control center type discussions?
- 10 A. No.
- 11 Q. Okay. But you were part of the previous internal
- 12 investigation back in 2010?
- 13 A. Related to the -- Marshall, yes, I was.
- MR. NICHOLSON: All right. Anything else guys? Okay.
- 15 With that we'll end the interview of Bob Donald. I appreciate you
- 16 coming in, Bob.
- MR. DONALD: Well, thank you.
- 18 (Whereupon, the interview was concluded.)

20

21

2.2

23

24

CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: ENBRIDGE - LINE 6B RUPTURE IN

MARSHALL, MICHIGAN

Interview of Robert Donald

DOCKET NUMBER: DCA-10-MP-007

PLACE: Edmonton, Alberta, Canada

DATE: January 31, 2012

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.

Anne VanDereedt

Transcriber