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2 IN THE COURT OF COMMON PLEAS OF ALLEGHENY COUNTY,

3 PENNSYLVANIA

4 COMMONWEALTH OF PENNSYLVANIA CRIMINAL DIVISION

5 versus CC2012-11273

6 DANIEL JOHNSON, Nonjury Trial

7 Defendant. REPORTED BY:

8 Jane B. Hirsch, RPR
Official Court Reporter

9

TRIAL DATES:

10

January 23 & 24, 2014

11

TRIAL JUDGE:

12

Hon. Thomas E. Flaherty

13

COUNSEL OF RECORD:

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FOR THE COMMONWEALTH:

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2 I N D E X O F W I T N E S S E S

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2 **Thursday Morning**

3 **January 23, 2014**

4 - - - -

5 THE COURT: Okay. We have the matter of the
6 Commonwealth versus Daniel Johnson, Case Number
7 11273 of 2012.
8 Mr. Michael Sherman for Mr. Johnson and
9 Ms. Amanda Aldridge representing the Commonwealth.
10 Mr. Sherman, you had a pre-trial question?
11 MR. SHERMAN: I do, Your Honor. Thank you.
12 THE COURT: If you wish to address it?
13 MR. SHERMAN: Well, I believe the
14 Commonwealth would have to call witnesses in order
15 to carry its burden.
16 THE COURT: Okay. We have a suppression.
17 Ms. Aldridge.
18 MS. ALDRIDGE: Yes, Your Honor.
19 THE COURT: Call your first witness.
20 Are there any preliminary issues before we
21 proceed?
22 MS. ALDRIDGE: The pre-trial motion would
23 be -- my understanding of the pre-trial motion is
24 that the suppression is coming for the basis of
25 the stop, consent, and the probable cause to

1 arrest.

2 THE COURT: Okay. Do you wish to call your

3 first witness?

4 MS. ALDRIDGE: I'm calling Officer Hartzell.

5 - - - -

6 **RUSSELL HARTZELL**

7 **having been first duly sworn,**

8 **was examined and testified as follows:**

9 - - - -

10 THE COURT: All right. Ms. Aldridge.

11 - - - -

12 **DIRECT EXAMINATION**

13 BY MS. ALDRIDGE:

14 Q Officer, could you please state your name and

15 spell it for the Court, please?

16 A Officer Russ Hartzell, H-a-r-t-z-e-l-l.

17 Q Are you currently employed, sir?

18 A I am.

19 Q Where are you employed?

20 A Ohio Township Police Department.

21 Q In what capacity?

22 A Police officer.

23 Q How long have you been employed there?

24 A Since 2003.

25 Q Do you have any other law enforcement experience,

1 sir?
2 A I do.
3 Q Where is that?
4 A I worked in McKees Rocks, West View Borough, State
5 Capitol Police, Oakdale Borough Police.
6 Q So you would say maybe what, 10 years, 15 years of
7 law enforcement, 20 years?
8 A Twelve to 13 years.
9 Q Were you working as a police officer on June 14,
10 2012?
11 A I was.
12 Q Were you working in a marked vehicle on that day?
13 A I was.
14 Q What happened that day, sir?
15 A I was traveling on I-79 south bound when I began
16 to follow a white Chevy Avalanche.
17 Q Why were you following the Chevy Avalanche?
18 A I was just on general patrol. The white Avalanche
19 was in the middle lane there. That portion of 79
20 is three lanes, and this vehicle was in the middle
21 lane.
22 Q So you weren't following it, you just happened to
23 be behind it?
24 A I just happened to be on patrol, correct.
25 Q What did you see that day?

1 A I observed the white Avalanche veer to the left-
2 hand lane without using a turn signal. I
3 proceeded past the vehicle. At this time the lane
4 tapers to two lanes southbound. The white
5 Avalanche merged from the left-hand lane to the
6 right-hand lane behind me, began to follow me.
7 Q So you observed a vehicle infraction of the car
8 changing lanes without using its turn signal
9 appropriately?
10 A Correct.
11 Q And they moved into a passing lane and did not
12 pass you?
13 A Correct.
14 Q And then they changed lanes again --
15 MR. SHERMAN: Your Honor, I just object to
16 she is leading the officer. He testified what was
17 going on.
18 THE COURT: Objection sustained.
19 MS. ALDRIDGE: Sorry, Your Honor.
20 THE COURT: No problem.
21 BY MS. ALDRIDGE:
22 Q So the defendant is behind you now?
23 A Correct.
24 Q What happened then?
25 A I observed the vehicle veer onto the berm of the

1 road. I could view this out the passenger side
2 mirror of my vehicle. I could see headlights
3 veering onto the berm. The vehicle then corrected
4 and then veered onto the berm again. At which
5 time I pulled onto the berm to let this vehicle
6 pass as I was going to conduct a traffic stop on
7 that vehicle for those infractions.
8 Q When you conducted the traffic stop, where was
9 that?
10 A Prior to me pulling back out onto 79 to conduct
11 the traffic stop, I observed the vehicle drive
12 onto the berm once again. As I was entering the
13 interstate, lights and sirens activated. The
14 vehicle continued on 79 southbound prior to
15 stopping on the Neville Island Bridge, prior to
16 the exit.
17 Q So the stop itself was on the bridge?
18 A Correct.
19 Q Who was driving this vehicle, sir?
20 A His name was Daniel Johnson, and he is seated next
21 to Michael Sherman in the courtroom.
22 THE COURT: Let the record reflect Officer
23 Russell Hartzell has identified Mr. Johnson.
24 BY MS. ALDRIDGE:
25 Q So you pulled the vehicle over on the bridge.

1 What happened next?
2 A I approached the driver's side of the vehicle.
3 Asked the driver for his license, registration,
4 proof of insurance.
5 Q Was the defendant able to provide you with that
6 information?
7 A He did after he fumbled through his driver's
8 license, and he attempted to hand the documents to
9 me through the window. However, he kept putting
10 them into his left hand.
11 Q So it wasn't a --
12 A They weren't actually coming out the window. He
13 was just (indicating) --
14 Q Okay. What did you actually observe about the
15 defendant?
16 A I detected a strong odor of alcoholic beverage
17 even though Mr. Johnson was chewing gum. And he
18 had glassy bloodshot eyes.
19 Q What did you do at that point?
20 A I asked him if he had been drinking, at which time
21 he stated that he wasn't. I asked him again, due
22 to the odor of the alcoholic beverage coming from
23 his breath, and he stated that he had three beers
24 about an hour ago.
25 Q Based on your observations and the defendant's

1 statement, what happened?
2 A I requested Officer Brian Craig of the Ohio
3 Township Police Department to assist me for SFSTs.
4 Q Is that normal to request another officer?
5 A It is, for officer safety.
6 Q Did you conduct the field sobriety tests?
7 A I did conduct a series of standardized field
8 sobriety tests.
9 Q Which tests did you do?
10 A I conducted the horizontal gaze nystagmus, the
11 walk and turn, and the one leg stand, along with
12 the finger-to-nose.
13 Q With those tests, how did the defendant do?
14 A I deemed that he was incapable of safe driving.
15 Q Why?
16 A The HGN --
17 MR. SHERMAN: I would object to any testimony
18 regarding the HGN, Your Honor.
19 THE COURT: Sustained.
20 THE WITNESS: The walk and turn, I asked
21 Mr. Johnson to stand with his right foot in front
22 of his left in a heel-to-toe fashion with his arms
23 at his side while I demonstrated the test.
24 Johnson placed his left foot in front of his right
25 and stood with his feet side by side, at which

1 time I asked him again to place his right foot in
2 front of his left. He did left in front of his
3 right. Johnson began the test, touched heel-to-
4 toe until his eighth and ninth step when his feet
5 were side by side. Johnson was asked to turn to
6 the left with a series of small steps, at which
7 time he turned right in a spinning motion.
8 Johnson began walking in the opposite direction
9 and he stumbled on the second step.
10 BY MS. ALDRIDGE:
11 Q So he didn't turn correctly?
12 A He didn't touch heel-to-toe, he didn't turn
13 correctly, he lost his balance.
14 Q And he started the test?
15 A Improperly.
16 Q What other tests did you do?
17 A The one leg stand. I asked Mr. Johnson to raise
18 his left leg six inches off the ground and count
19 out loud 1,001 and so on until I asked him to
20 stop. He began the test and raised his left leg
21 and counted 1,001 to 1,010 before he put his foot
22 down and then counted 1,011 to 1,017 before he put
23 his foot down again.
24 Q Did he follow the directions of the test?
25 A No, because I asked him to keep his leg raised

1 until I asked him to stop. He put his foot down
2 on two occasions prior to me asking that.
3 Q What other tests did you do?
4 A I asked him to do the finger-to-nose. That test
5 is where you stand with your feet together, head
6 tilted back, arms extended out, index fingers
7 only, and his eyes closed. He was asked to touch
8 the tip of his nose with his index fingers that I
9 announced and to take them back on his own.
10 Johnson touched his upper lip with his right index
11 finger once and his upper lip left with his left
12 index finger both times I asked. Mr. Johnson also
13 swayed during that test.
14 Q Based on your observations and the defendant's
15 performance on the test, what --
16 A I deemed Mr. Johnson, based on my training and
17 experience was incapable of safe driving and he
18 was placed under arrest for DUI.
19 Q What did you do next?
20 A Mr. Johnson was advised of the DL-26 Chemical Test
21 Warnings, which he consented to a blood draw.
22 Mr. Johnson was transported to Sewickley Valley
23 Hospital where four tubes of blood were drawn at
24 2200 hours.
25 Q So the defendant did not refuse the test?

1 A No, at no point.
2 Q When you got to the hospital, what happened at the
3 hospital?
4 A Maria Hixenbaugh, who is a phlebotomist for
5 Sewickley Valley at the time, withdrew four tubes
6 of blood from his right arm. The tubes of blood
7 were turned directly over to me and taken to the
8 Ohio Township Police Department and then taken to
9 the Allegheny County Crime Lab where they were
10 processed and analyzed for a lab reading.
11 Q Were you in the room when the blood was drawn?
12 A I was.
13 Q Did the defendant refuse at that time?
14 A No.
15 Q Is there a receipt that you are given at the
16 hospital for the blood?
17 A You enter the room and the defendant is seated
18 immediately to the left. My seat is right ahead
19 on the door. The phlebotomist comes in. I'm in
20 the room. Due to the defendant being in police
21 custody, we have to be with them at all times, per
22 policy.
23 Q I asked about a receipt.
24 MS. ALDRIDGE: May I approach the witness,
25 Your Honor?

1 THE COURT: Yes.
2 BY MS. ALDRIDGE:
3 Q Would this refresh your memory? Is this something
4 that you remember seeing him sign?
5 A Yes.
6 Q This is a receipt for?
7 A I took custody of four tubes of blood.
8 MS. ALDRIDGE: Your Honor, we would like to
9 enter this as Commonwealth Exhibit 1 as the
10 receipt for the blood evidence to the police.
11 THE COURT: Any objection, Mr. Sherman?
12 MR. SHERMAN: No, Your Honor.
13 THE COURT: Okay. So admitted.
14 BY MS. ALDRIDGE:
15 Q Are you the officer who took the blood to the
16 Crime Lab?
17 A I was not.
18 Q Did you receive a receipt from the Crime Lab?
19 A I did.
20 Q Is this the receipt that you would have received,
21 or a facsimile of the receipt you would have
22 received?
23 MR. SHERMAN: I object to the extent that he
24 wasn't the officer who took the blood so he didn't
25 get the receipt when the blood was taken.

1 MS. ALDRIDGE: But he received the receipt as
2 part of the property. The officer can't do
3 everything, so they have a standardized --
4 THE COURT: All right. If you want to ask
5 him questions, lay a foundation.
6 MS. ALDRIDGE: I'm sorry?
7 THE COURT: If you want to ask Officer
8 Hartzell questions to lay the foundation, maybe
9 I'll allow it. Receiving the receipt. He didn't
10 receive it directly.
11 BY MS. ALDRIDGE:
12 Q How did you receive the receipt, sir?
13 A It was in my mailbox on my desk.
14 Q So an officer from the police department
15 transports blood to the Crime Lab and receives
16 receipts?
17 A Correct.
18 Q And then they disburse them at the station?
19 A Correct.
20 MR. SHERMAN: We don't know who the officer
21 was.
22 THE COURT: Well, you can cross-examine on
23 that.
24 Go ahead.
25 MS. ALDRIDGE: Your Honor, I would like to

1 enter this as Commonwealth's Exhibit 2 as a
2 receipt for the blood from the Crime Lab.
3 THE COURT: Do you object, Mr. Sherman?
4 MR. SHERMAN: Yes, Your Honor.
5 THE COURT: All right. I'm going to overrule
6 the objection. So admitted.
7 BY MS. ALDRIDGE:
8 Q After the blood draw is completed, what did you do
9 then, sir?
10 A Mr. Johnson was taken back to the Ohio Township
11 police station where he was processed and released
12 from the station.
13 Q Did you receive any reports or findings from the
14 Crime Lab?
15 A I did. His blood alcohol content, according to
16 the reading, was a .125 percent.
17 Q How did you receive that, sir? How did you
18 receive that information?
19 A I believe via U.S. Mail. Again, it was in my
20 mailbox on my desk.
21 Q It comes in the form of a report?
22 A Yes.
23 Q Would this be the report or a copy of the report?
24 A Yeah, from the Allegheny County Medical Examiner's
25 Office.

1 Q How do you know that this is related to your case?
2 A His name is on it along with the lab case number
3 of 12-LAB-05762, which coincides with the receipt
4 that was just entered into evidence.
5 MS. ALDRIDGE: Your Honor, I would like to
6 enter this as Commonwealth Exhibit Number 3, the
7 Allegheny County Crime Lab Report indicating the
8 blood analysis results.
9 THE COURT: Mr. Sherman, any objection?
10 MR. SHERMAN: Just the same objection, but I
11 believe there are people from the lab to testify
12 to that.
13 THE COURT: All right. I'll admit it.
14 MS. ALDRIDGE: For the purposes of the
15 suppression motion -- pardon me.
16 BY MS. ALDRIDGE:
17 Q After you received the information from the Crime
18 Lab and the results from the Crime Lab, what did
19 you do?
20 A I believe I filed a Criminal Complaint and
21 Affidavit of Probable Cause for defendant for
22 driving under the influence.
23 Q Were there other charges?
24 A I believe careless driving. I would have to look
25 at the Criminal Complaint.

1 Q So you don't remember what the other charge was?
2 A I would have to review the Criminal Complaint to
3 refresh my memory.
4 MS. ALDRIDGE: Your Honor, may I approach?
5 THE COURT: Yes.
6 BY MS. ALDRIDGE:
7 Q Is this a copy of the Criminal Complaint?
8 A It is.
9 Q What are the charges indicated on there?
10 A 3802(a)(1), 3802(b) for both driving under the
11 influence, and he was charged with 3309 driving on
12 roadways laned for traffic and careless driving.
13 MS. ALDRIDGE: Thank you. For purposes of
14 the motion, Your Honor, I rest. I have no other
15 questions.
16 THE COURT: Okay. Cross, Mr. Sherman.
17 MR. SHERMAN: Before I ask questions, I
18 showed counsel a very short video, and I have it
19 on my computer, and I would like to show Your
20 Honor so you get an idea of what part of the road
21 we are talking about.
22 THE COURT: Okay. I'll come down.
23 MR. SHERMAN: I can bring it up.
24 THE COURT: Has Ms. Aldridge seen it?
25 MS. ALDRIDGE: I've seen it.

MR. SHERMAN: Yes, I've showed both the officer and counsel.

THE COURT: I'll come down.

(Mr. Sherman is playing the video for the Court.)

THE COURT: What are we seeing here?

MR. SHERMAN: This is where Mt. Nebo Road is in the officer's Ohio Township area, and we are approaching Interstate 79 exit south. So if you look at where the white van is, he is turning onto the interstate just like Mr. Johnson and Officer Hartzell.

And you can get the idea for mileage in the left-hand corner.

This is where Mr. Johnson would have merged onto the highway (indicating).

Right here at 1.6 miles is where the road turns from three lanes into two lanes (indicating).

We are approaching the bridge where the traffic stop was conducted.

MS. ALDRIDGE: So the actual infractions occurred prior to?

THE WITNESS: Prior to that.

MR. SHERMAN: The traffic stop took place

1 approximately right here, just at 2.9 miles before
2 the Neville Island exit (indicating).
3 THE COURT: Okay.
4 **(The tape stopped being played.)**
5 MR. SHERMAN: I just wanted the Court to have
6 an idea of what we are talking about. So I'm
7 going to enter the DVD as Defendant's Exhibit A
8 or 1, of this video.
9 THE COURT: And you are going to question the
10 officer about this?
11 MR. SHERMAN: Yes.
12 THE COURT: Any objection?
13 MS. ALDRIDGE: No.
14 THE COURT: Okay. So admitted.
15 MR. SHERMAN: Thank you.
16 - - - -
17 **CROSS-EXAMINATION**
18 BY MR. SHERMAN:
19 Q Officer, you would agree you are very familiar
20 with that roadway?
21 A I am.
22 Q You patrol there regularly?
23 A I do.
24 Q You would also agree there are multiple bends in
25 the roadway?

1 A There are.
2 Q And there are bends to the right?
3 A Correct.
4 Q And bends to the left?
5 A Correct.
6 Q There are elevation changes?
7 A Correct.
8 Q You first saw Mr. Johnson when you were on Mt.
9 Nebo Road at the I-79 exit?
10 A The 79 entrance.
11 Q Entrance.
12 A Correct.
13 Q And Mr. Johnson made a left onto the ramp taking
14 you onto I-79?
15 A Correct.
16 Q He made that left normally?
17 A Correct.
18 Q Made it safely?
19 A Correct.
20 Q No traffic violations?
21 A I didn't observe any at that time.
22 Q We saw that just from right before the turn to the
23 end of the ramp we are talking about a half a
24 mile?
25 A Okay.

1 Q You would agree with that?
2 A I would.
3 Q When Mr. Johnson made the left, he had the
4 presence of mind to use his turn signal?
5 A I don't recall.
6 Q If he didn't use his turn signal, that's something
7 you certainly would have noted?
8 A I would have.
9 Q Mr. Johnson traveled down the ramp without any
10 traffic violations?
11 A Correct.
12 Q And he merged into Interstate 79?
13 A Correct.
14 Q Merged in normally?
15 A Correct.
16 Q Merged in safely?
17 A Correct.
18 Q Now when he merged onto Interstate 79, did he use
19 his turn signal?
20 A I don't have anything noted. I don't recall.
21 Q Again, if he didn't, that's something you
22 certainly would have noted?
23 A Correct.
24 Q When he merges onto I-79 and it turns into three
25 lanes, right?

1 A Correct.
2 Q And Dan Johnson was in the middle lane?
3 A He was.
4 Q You were traveling behind him?
5 A I'm not sure if I was behind him or if I was in
6 the right-hand lane.
7 Q But you were behind him in distance?
8 A I was behind him in distance, correct.
9 Q You said that Dan crossed over into the lane to
10 the left of him?
11 A Correct.
12 Q After he crossed into the lane, you drove past
13 him?
14 A Correct.
15 Q He corrected back into his lane?
16 A Correct.
17 Q You continued driving?
18 A That is correct.
19 Q At that point you didn't think he was a threat to
20 public safety, did you?
21 A Not at that point.
22 Q When you passed Mr. Johnson, the road is still
23 three lanes at that point?
24 A When I passed him it was at the Glenfield/Emsworth
25 exit, which is in Aleppo Township. That tapers

1 down to two lanes.
2 Q So at that point, as we saw on the video, and I
3 believe I noted with your approval, that's
4 1.6 miles that he traveled, at least that you saw
5 him travel?
6 A Correct.
7 Q And in that 1.6 miles, there was this one movement
8 into the left lane that you saw Mr. Johnson do,
9 correct?
10 A Where he didn't use his turn signal, yes.
11 Q You had someone else in the car with you?
12 A I did.
13 Q An intern?
14 A Correct.
15 Q You were doing a ride along, so to speak?
16 A Correct.
17 Q That's where the intern basically gets to see you
18 in action?
19 A Gets a grasp of police work.
20 Q He gets to see you doing your job?
21 A Correct.
22 Q When you are driving down the road, at that point
23 you are now ahead of Mr. Johnson?
24 A That's correct.
25 Q And you claim that you saw him cross over the berm

1 through your right passenger side mirror?
2 A That's correct.
3 Q So you are looking past the intern, right?
4 A Correct.
5 Q And you are looking into the mirror?
6 A Correct.
7 Q At night?
8 A That's correct.
9 Q And you just happened to look at the time where
10 you said Mr. Johnson was traveling on the berm?
11 A Correct.
12 Q This is a two-lane highway at this point, right?
13 A That's correct.
14 Q The traffic stop that you conducted was
15 approximately -- or how far past the Sewickley/
16 Emsworth exit did you claim to have seen
17 Mr. Johnson travel on the berm?
18 A I don't recall. I don't have it noted.
19 Q The stop was on the Neville Island Bridge?
20 A That's correct.
21 Q And as we also agreed, was about 2. -- a little
22 over 2.9 miles after the first time you saw
23 Mr. Johnson?
24 A That's correct.
25 Q You put on your lights and siren?

1 A I did.
2 Q Mr. Johnson responded immediately?
3 A I believe he traveled for some distance before
4 merging onto the right-hand berm of the roadway.
5 Q You testified about this case at a preliminary
6 hearing, right?
7 A I did.
8 Q You were asked if Mr. Johnson pulled over
9 immediately. Do you recall that?
10 A This hearing was back in 2012. That was some
11 time.
12 Q I just want to ask you, when Mr. Johnson was going
13 over the bridge, you are on the two lane road and
14 the bridge breaks into three lanes?
15 A As an on ramp from Glenfield and Route 65.
16 Q So you wouldn't expect a motorist to stop in the
17 middle lane if you pulled them over, right?
18 A Correct.
19 Q You would expect them to pull over on the berm on
20 the bridge?
21 A In a safe location, yes.
22 Q I want to direct your attention to the preliminary
23 hearing transcript, Page 15, Lines 1 through 4.
24 Could you take a look at that?
25 A Okay.

1 Q Does that refresh your memory as to whether
2 Mr. Johnson pulled over immediately?
3 A It does. Being that the case was back in 2012.
4 Q So when you put on your lights and sirens, he did
5 pull over immediately?
6 A He did.
7 Q And he signaled to go over to the side?
8 A He did.
9 Q He pulled over properly?
10 A He did.
11 Q When he stopped his car, he wasn't parked
12 partially in traffic, partially on the side, on
13 the berm?
14 A No, he was on the berm, off the road.
15 Q He didn't hit the wall or anything?
16 A He didn't.
17 Q You then go up to the car?
18 A Correct.
19 Q And Mr. Johnson put his window down?
20 A Yes.
21 Q You asked for his license, registration, and
22 insurance?
23 A Correct.
24 Q And he gave you his license?
25 A He did.

1 Q He held it -- you say he didn't hand it through
2 the window. He held it up?
3 A Correct.
4 Q He held his license up and he also held up the
5 change of address card?
6 A Correct.
7 Q So he had the presence of mind not only to go
8 through his wallet and get you his license, he
9 also gave you his change of address card?
10 A Correct.
11 Q And he gave you his registration?
12 A After he had to dig through his center console.
13 Q Which certainly isn't out of the ordinary for a
14 motorist.
15 A Okay.
16 Q I mean, motorists -- you make hundreds of traffic
17 stops, right?
18 A Correct.
19 Q And motorists have their insurance cards in their
20 center console?
21 A Glove box. Some people keep them in their wallet.
22 Q Some people have it on the visor. They are
23 everywhere?
24 A Correct.
25 Q So there is nothing out of the ordinary in the way

1 Dan Johnson produced his registration?
2 A Just that he had to dig through his center
3 console.
4 Q And he also produced his insurance?
5 A Correct.
6 Q And there is nothing out of the ordinary in the
7 way he had to produce his insurance?
8 A I had to ask him again for his registration and
9 insurance after I asked him at the initial
10 contact.
11 Q Did you take into consideration that this motorist
12 might have been nervous?
13 A He could have been.
14 Q When you spoke with him, his speech was fine?
15 A Correct.
16 Q You asked Dan at some point to get out of the car?
17 A That's correct.
18 Q And he turned the car off?
19 A I'm not sure if he turned the car off or not.
20 Q You think he might have left it running?
21 A He may have.
22 Q Is that the proper police protocol, to allow the
23 car to keep running during the stop?
24 A Some people choose to leave their vehicles run,
25 some choose to turn them off. We don't have a

1 policy and procedure on that.
2 Q He got out of the car normally?
3 A Yes.
4 Q Didn't hold onto the car for balance?
5 A No.
6 Q Didn't stagger when he got out of the car?
7 A No.
8 Q Didn't stumble?
9 A No.
10 Q He got out of the car normally?
11 A Correct.
12 Q And then you had to walk to the back of his car?
13 A Correct.
14 Q And at that point your overhead lights were on,
15 right?
16 A I believe I just had my take-down lights on and
17 Officer Craig's red and blue lights were flashing
18 behind my police car.
19 Q When he walked to the back of the car, he walked
20 normally?
21 A Correct.
22 Q Didn't stagger?
23 A Correct.
24 Q Didn't stumble?
25 A Correct.

1 Q When it came time to give him the one leg stand,
2 Mr. Johnson listened to the instructions?
3 A Correct.
4 Q He didn't stagger or sway when you were giving him
5 the instructions?
6 A No.
7 Q He started when you told him to start?
8 A He did.
9 Q How long did you tell him to hold his leg up for?
10 A We time it for 30 seconds. I didn't tell him how
11 long it was going to be up for. I advised him to
12 count 1,001 until I asked him to stop without
13 putting his foot down.
14 Q So during this, there are certain clues you look
15 for when doing the one leg stand. One of them is
16 swaying while balancing, right?
17 A Correct.
18 Q He didn't sway while he was balancing?
19 A He did not.
20 Q One of the clues you look for is someone who hops
21 during the test?
22 A Correct.
23 Q He didn't hop during the test?
24 A Correct.
25 Q One of the things you look for is if a person uses

1 his arms for balance?
2 A Correct.
3 Q He didn't use his arms for balance?
4 A No, but he put his foot down on two occasions
5 prior to me asking him to do that.
6 Q And you stopped the test after the second time?
7 A I did.
8 Q The walk and turn, when he started, you told him
9 to put his right foot in front of his left?
10 A Correct.
11 Q And he put his left in front of his right?
12 A Correct.
13 Q Did you explain that if you are in that position,
14 the test isn't going to work properly?
15 A I did.
16 Q But you let him do the test anyway?
17 A Part of the instructions are also following my
18 instructions.
19 Q So set in that position there is no way he could
20 have done the proper turn anyway?
21 A Well, he was advised also to place his right foot
22 in front of his left a second time and he failed
23 to do so.
24 Q But given the position he was in, he couldn't have
25 done the right turn under any circumstances?

1 A If he would have walked too many steps he could
2 have.
3 Q Well, then --
4 A But that would have been a clue then.
5 Q Right. Then he wouldn't have taken nine steps?
6 A Correct.
7 Q And he took nine steps?
8 A He did.
9 Q As a trained officer, you made hundreds of DUI
10 arrests?
11 A That's correct.
12 Q And in fact, you are responsible for at least
13 25 percent of the arrests for your police
14 department?
15 A That's correct.
16 Q That's twenty-five percent of DUI arrests for your
17 police department?
18 A Correct.
19 Q And your police department has over 30 police
20 officers?
21 A Correct.
22 Q Now there are certain signs of impairment that
23 officers look for when they pull over a motorist.
24 You would agree with that?
25 A Correct.

1 Q One of those is slurred speech?
2 A Correct.
3 Q Mumbled speech?
4 A That's correct.
5 Q You look at whether someone is confused?
6 A That's correct.
7 Q How they walk?
8 A Correct.
9 Q If they are staggering?
10 A That's correct.
11 Q If they are swaying?
12 A Correct.
13 Q You look at how they are dressed?
14 A That's correct.
15 Q You look at their appearance?
16 A That's correct.
17 Q You look at their face?
18 A Correct.
19 Q How they answer questions?
20 A That's correct.
21 Q Whether they understand your questions?
22 A That's correct.
23 Q Whether when they are pulling over if they hit
24 anything?
25 A That's correct.

1 Q You look at how they stop their car?
2 A Correct.
3 Q You look at how they produce their license,
4 registration and insurance?
5 A That's correct.
6 Q You look at how they get out of their car?
7 A That's correct.
8 Q And you look at if they use the car for balance?
9 A That's correct.
10 Q And you are looking at also when you tell them to
11 walk to an area and perform, coordination testing,
12 you look and observe how they get to that area?
13 A That's correct.
14 Q Let's look at this case. Those are the signs of
15 impairment.
16 There was no slurred or mumbled speech?
17 A That's correct.
18 Q There was no confusion in understanding your
19 commands?
20 A Except whenever I had to ask him for his
21 registration and insurance a second time and he
22 fumbled through his wallet for his driver's
23 license and change of address card.
24 Q Things that you agree could be a result of being
25 nervous?

A It could be.
Q And he didn't stagger or stumble or sway?
A On the finger-to-nose he did sway.
Q Other than that, no -- and during the finger-to-nose you are putting your head back?
A That's correct.
Q And you don't know if he had any inner ear or any problems that when someone puts their head back that would cause them to sway?
A He didn't tell me of any medical conditions.
Q Did you ask him?
A I don't recall.
Q As far as the finger-to-nose test, there is what we call a validated field sobriety test, right?
A Correct.
Q The finger-to-nose test is not a validated test.
A But it is a balance test.
Q But it's not a validated test?
A Not through NITSOP.
Q But through you?
A And other DUI trainings I've attended.
Q There was nothing out of the ordinary about Mr. Johnson's appearance?
A No.
Q Wasn't disheveled in any way?

1 A Not to my recollection.
2 Q He was dressed appropriately?
3 A Correct.
4 Q When you were asking him questions, he understood
5 your questions?
6 A He did.
7 Q And you understood his answers?
8 A I did.
9 Q When he pulled over, he didn't hit anything?
10 A No.
11 Q And as we discussed earlier, he pulled over
12 appropriately?
13 A Onto the berm of the road.
14 Q When he got out of the car, he didn't use it for
15 balance?
16 A Correct.
17 Q He didn't -- when he was walking back to the area
18 for the sobriety testing, he didn't stagger or
19 stumble?
20 MS. ALDRIDGE: Objection, Your Honor.
21 MR. SHERMAN: Well, I would object to her
22 objection.
23 THE COURT: Your objection?
24 MS. ALDRIDGE: These questions were already
25 asked and answered.

1 MR. SHERMAN: I would also object to the
2 officer telling her to object. But that's fine.
3 THE COURT: Do you want to move on, Mr.
4 Sherman.
5 BY MR. SHERMAN:
6 Q You were not the officer that took the blood to
7 the Allegheny County Crime Lab?
8 A I was not.
9 Q When you gave Mr. Johnson his Implied Consent
10 Warnings, he understood them?
11 A He did.
12 Q You read them word for word?
13 A He was advised of the DL-26.
14 Q Did you read them?
15 A I did not.
16 Q So you told him essentially that if he doesn't
17 take the test, there is a penalty for that?
18 A I did.
19 Q And the penalty is loss of a license?
20 A Loss of license, fines, jail time, possible jail
21 time.
22 Q You never attempted to get a warrant for the
23 blood?
24 A I don't get a warrant for blood.
25 MR. SHERMAN: I have no further questions,

1 Your Honor.
2 THE COURT: Okay. Any redirect,
3 Ms. Aldridge?
4 MS. ALDRIDGE: Yes, Your Honor.
5 - - - -
6 **REDIRECT EXAMINATION**
7 BY MS. ALDRIDGE:
8 Q Officer Hartzell, in your experience, does someone
9 have to show all the signs of impairment to be
10 impaired?
11 A They don't.
12 Q So if they just exhibited a few, they could be
13 impaired?
14 A They could.
15 Q In your experience, you have had experience with
16 impaired persons or persons under the influence in
17 other arenas other than just DUIs?
18 A I have impaired subjects on public drunkenness, we
19 get calls for fights in bars. People are
20 obviously consuming alcoholic beverages in a bar
21 establishment. Domestic cases stem from alcohol.
22 The subjects there are typically impaired or under
23 the influence of alcohol or a controlled
24 substance.
25 Q So it would be safe to say you have a good handle

1 on signs of impairment?
2 A Through training and experiences, that's correct.
3 Q In your experience, sir, do all drivers who are
4 under the influence or impaired have accidents?
5 A No.
6 Q Do they all commit the same vehicle infractions?
7 A They do not.
8 Q You advised the defendant of the chemical test
9 warnings?
10 A Correct.
11 Q And when you do that, you are advising them of
12 what?
13 A If they failed to give a blood sample, there will
14 be loss of license, fines, possible jail time.
15 Q That's an actual penalty, or punishment for
16 refusal, is that correct?
17 A Correct. And it's in the DL-26 Form.
18 MS. ALDRIDGE: I have no other questions,
19 Your Honor.
20 THE COURT: Okay, any recross, Mr. Sherman?
21 - - - -
22 **RECROSS-EXAMINATION**
23 BY MR. SHERMAN:
24 Q With regard to the signs of impairment, you also
25 mentioned that Mr. Johnson had bloodshot, glassy

1 eyes?
2 A That's correct.
3 Q Did you ask him why?
4 A I did not.
5 Q You didn't ask him what time he got up that
6 morning?
7 A I didn't.
8 Q You didn't ask him what kind of work he did?
9 A No.
10 MR. SHERMAN: I have no further questions.
11 THE COURT: All right. You are excused,
12 officer.
13 THE WITNESS: Thank you.
14 THE COURT: Next witness.
15 MS. ALDRIDGE: I believe for the purposes of
16 the motion to suppress, that we would rest, Your
17 Honor.
18 THE COURT: Okay. Mr. Sherman.
19 MR. SHERMAN: Thank you, Your Honor.
20 I made a little chart and I'm going to give a
21 copy to the Court of the applicable cases. But if
22 you look at the cases in this area, and you are
23 looking for cause to pull a motorist over, there
24 is a whole line of cases where the traffic
25 infractions were greater than this case and the

1 courts had found that there was no cause to pull
2 the motorist over.
3 You got Mr. Johnson, taking the officer's
4 testimony as true, he goes into the left lane and
5 it's not a significant -- he drove right by him.
6 So obviously there was nothing there that
7 heightened his sensitivity to cause him to pull
8 him over. He kept driving. He got in front of
9 him. And now he is driving down the road and he
10 got an intern in the car, he is talking, it's dark
11 out, and he claims to have seen Mr. Johnson go on
12 the berm through his right passenger mirror. Now
13 if --
14 THE COURT: Are you presenting any witnesses?
15 MR. SHERMAN: No. I'm just making argument.
16 THE COURT: All right. Very good.
17 MR. SHERMAN: So he sees him go in his right
18 passenger mirror. First of all, who in the world
19 is looking in their right passenger mirror when
20 they are traveling in the right lane next to the
21 berm? There is no traffic on the berm. There is
22 no one going down. But Officer Hartzell claims to
23 have looked in his right passenger side mirror and
24 that's when he saw this infraction. He claims
25 that he then pulled over and he wanted Mr. Johnson

1 to go by so he could get behind him and he saw him
2 touch the berm again.
3 So you have got -- the first I would say is
4 not a traffic infraction, he drove by. So in
5 2.9 miles, Mr. Johnson signals and goes on the
6 ramp, which is a half mile long. He drives fine.
7 He then gets on the road, he drives another two
8 and-a-half miles almost to where he is stopped,
9 and he touched the berm twice.
10 According to cases, if you look at the
11 Gleason case, the motorist crossed the fog line
12 two to three times in a quarter of a mile, and the
13 Court said there is no cause, no probable cause to
14 stop.
15 In Garcia, the motorist straddled the line
16 two times in the two block distance, and the Court
17 said no probable cause.
18 In Commonwealth versus Carlson, crossed the
19 center line two times and weaving over one mile,
20 and the Court said no probable cause.
21 In Battaglia, weaving within the lane and a
22 wide turn over several miles. No cause.
23 And in three district cases reported in the
24 district and county reports, same thing, crossed
25 the double line two times, touched the white fog

1 line several times over a six block distance. No
2 basis to pull the motorist over. And that's in
3 Almodovar.
4 And Commonwealth versus Turney, touched the
5 fog line two times, traveled on the berm once
6 during three-quarters of a mile.
7 Commonwealth versus Andrea Rogers, crossed
8 the berm line once, a half mile. The bottom line
9 is there was no cause to pull Mr. Johnson over to
10 stop him.
11 And so, I respectfully suggest, Your Honor,
12 that the stop was improper. I would like to give
13 the Court a copy of this chart and I have the
14 cases as well. I have a copy for counsel.
15 THE COURT: Were they suppression hearings,
16 Mr. Sherman?
17 MR. SHERMAN: Yes.
18 THE COURT: All of them were suppression
19 hearings?
20 MR. SHERMAN: Yes.
21 Without a basis to stop the car, the Courts
22 have been very clear that this was a momentary
23 minor violation, Your Honor. It could have been
24 for any reason. And the traffic infraction, the
25 Courts have found greater instances of violations

1 where they didn't pull a person over.
2 The Courts have found there have been far
3 greater instances than this case, Your Honor, that
4 there has been no cause to pull the motorist over.
5 And here, the officer never followed him --
6 he sees this thing he says in his right side
7 mirror, he is sitting there with the intern at
8 night. But these courts have found, and we are
9 talking about Supreme and Superior Courts, have
10 found there was no basis to conduct the traffic
11 stops. I would also suggest that once the stop
12 was conducted, that there wasn't an adequate basis
13 for probable cause to arrest. Because everything
14 Mr. Johnson did showed sobriety.
15 On the one leg stand, he did everything
16 properly except for he held his leg up for 17
17 seconds, he put his foot down once, and then at 17
18 he put his foot down. He didn't hop, he didn't
19 sway, didn't use his arms for balance. The clues
20 that the officers look for. None of that was
21 there.
22 He didn't do anything improper about getting
23 out of the car. He got his license, registration
24 and insurance. The officer wants to make a big
25 deal he had to go through his center console. I

1 mean, my stuff is with about 50 other things on my
2 visor. I have to do the same thing. I think most
3 motorists aren't that organized as maybe the
4 officers would like.
5 So he did everything that showed sobriety,
6 and didn't do -- on the walk and turn, you are
7 asking someone on the Neville Island Bridge, with
8 cars going by at night with one police car with
9 its lights on, to do these maneuvers properly, and
10 there simply wasn't the level of cause that we
11 need for an arrest.
12 Lastly, I believe that Missouri versus
13 McNeeley requires that an officer get a warrant
14 before they obtain blood. And here the officer
15 said if you don't take the test, you are going to
16 get a penalty, you are going to possibly go to
17 jail, you are going to get a fine. And he never
18 went and got a warrant for the blood.
19 Based on those three arguments, Your Honor, I
20 would ask the Court grant the suppression motion.
21 THE COURT: Ms. Aldridge.
22 MS. ALDRIDGE: Your Honor, there are hundreds
23 of Vehicle Code Violations where a law enforcement
24 may stop any vehicle on the roadway and request
25 documents, registration, financial responsibility

1 or driver's licenses.
2 The crimes code, and this is just one
3 fraction of the vehicle code violations that are
4 out there. You can stop a car for the taillight
5 being out, for the bumper being too high, the
6 tires being too wide, or the little chain link
7 that goes around your license plate. The
8 placement of your sticker on your license plate is
9 a vehicle infraction. So to say that there was no
10 probable cause for Officer Hartzell to pull the
11 defendant over, I think is just erroneous at best.
12 He observed the defendant change lanes
13 without a turn signal. That's a vehicle code
14 infraction. Not turning your turn signal on
15 within 200 feet of wherever it is you are trying
16 to turn is a vehicle code infraction. Just
17 because you he didn't pull him over for that,
18 doesn't mean that he didn't violate the vehicle
19 code.
20 The defense has quoted and cited all of these
21 cases and he is talking about six blocks, a tenth
22 of a mile, three-quarters of a mile, a half a mile
23 where some of these infractions occur. Officer
24 Hartzell is a veteran police officer, he has
25 conducted, as Mr. Sherman said, 25 percent of the

1 DUI arrests for his area. So he is well familiar
2 with the roadway.
3 The officer maintained contact with the
4 defendant over a period of two and-a-half miles.
5 So he observed these infractions over a period of
6 two and-a-half miles. It wasn't a quick, oh, I
7 saw that, I'm pulling him over. He observed him
8 leave the roadway, on a two lane roadway at 9:00
9 at night, and you are in the curb lane or the edge
10 of the road, and a vehicle veers off to the right,
11 you see that in your rear-view mirror, and you see
12 that in your passenger side mirror.
13 Again, Officer Hartzell is a trained officer.
14 He is trained in observing things. So he is
15 looking. He is already past the defendant, he has
16 already seen how the defendant is driving, and now
17 he sees him leave the roadway. So he has probable
18 cause to make the stop. When he makes the stop,
19 based on the driving that the defendant had
20 exhibited, leaving the roadway, changing lanes
21 without signaling, he doesn't have to write a
22 citation for all of these infractions. He can
23 issue a warning for one of them, none of them, or
24 all of them. He can cite for one of them or all
25 of them. That would be the officer's discretion.

1 He has that ability to do that.
2 As he requests the documentation, driver's
3 license, registration, and insurance, as a trained
4 officer he is looking to see how you present. Is
5 there anything else going on? Is the defendant
6 having a medical emergency? He doesn't know why
7 he left the roadway. So during this stage of the
8 encounter where they are requesting that
9 information, if other signs present themselves
10 that are indicative of some other behavior or
11 crime or impairment, then the officer has a duty
12 and a responsibility to investigate further.
13 So the defendant exhibited bloodshot, glassy
14 eyes. He smelled of alcohol. Which would lead
15 any reasonable officer to conduct a further
16 investigation. And at which point the officer
17 did. He conducted the field sobriety tests. And
18 during the field sobrieties tests he noted
19 continued signs of impairment. Yes, they were on
20 the bridge. That's where the defendant stopped.
21 The defendant felt that was a safe enough place to
22 stop. That's where he stopped. There was traffic
23 on the roadway. It was only 9:15, so yes, there
24 was traffic on the roadway. There was an officer
25 for back-up to provide safety. The additional

1 vehicle provides a buffer space to allow the
2 defendant to be off of the roadway between the two
3 cars when they conduct the field sobriety tests.
4 There is the additional back-up officer who is on
5 the scene providing traffic directions to keep
6 anybody from being too close to them. So he was
7 in a safe position to do that.
8 I believe just the fact that Officer Hartzell
9 was driving a marked patrol unit, the defendant
10 changed lanes without using his turn signal.
11 Changed lanes again to get behind the marked unit.
12 I don't know, I still get the pucker factor when I
13 see a police car on the road. Just that
14 disregard. Officer Hartzell testified not all
15 impaired people respond the same way. Not all
16 impaired people exhibit the same signs. The
17 reason that there are so many signs of impairment
18 is because everybody responds to alcohol
19 differently. And the signs emitted are all going
20 to be different.
21 I don't believe that McNeeley is on point or
22 related in this case because the defendant
23 consented to the blood draw. There was no force
24 draw. There was no exigent circumstances. They
25 were stopped, he was advised of the DL-26 of the

1 warnings of a refusal, and he consented to the
2 blood draw.
3 The defendant made statements regarding that
4 he was drinking. So you have bloodshot, glassy
5 eyes; you have someone who has the odor of alcohol
6 coming from his person and/or his breath; he is
7 chewing gum, maybe to mask that odor; he admits he
8 is drinking; the field sobriety tests are
9 conducted. There are several points at which the
10 defendant did not do well and was deemed unsafe or
11 impaired and unsafe to operate the motor vehicle
12 by Officer Hartzell, who has again training and
13 experience, and has made multiple DUI arrests
14 regarding that.
15 When Mr. Johnson, when the defendant got to
16 the hospital, he had again an opportunity to
17 refuse if he so chose before the phlebotomist
18 actually drew the blood, and he did not.
19 In reference to some of the cases, in Garcia,
20 we have a lane change, the signal again, that he
21 did commit the vehicle code violation, so I'm
22 not -- unless they changed the crimes code, these
23 are reasons for a reasonable officer to stop the
24 car. When he said that -- it's not a suspicion
25 that the driver violates a vehicle code. They

1 either do or they don't. They go through a red
2 light, they make a right turn on red where it's
3 marked no turn on red, they change lanes without
4 using a turn signal, driving off the roadway. All
5 of these are factual basis for a traffic stop.
6 That's not a guessing game.
7 Indicated in the motion that it was a
8 momentary lapse that they left the roadway. Okay.
9 It was momentary texting and driving before you
10 crashed into a tree. It was a momentary lane
11 change without a turn signal and somebody didn't
12 see you and you hit somebody or somebody hit you.
13 It was a momentary off the berm of the road.
14 You observed the video where those three
15 vehicles were parked along the side of the road.
16 A momentary leaving the roadway to cross the berm
17 would have killed that man, or injured that man in
18 those three cars --
19 THE COURT: What time did this happen?
20 MS. ALDRIDGE: 9:15 in the evening. So it's
21 not that late. People are still on the road.
22 It's a heavily traveled road. So I don't
23 believe -- I believe that he had probable cause to
24 stop the vehicle, because based on the vehicle
25 code violations, based on the length of time that

1 he was in contact or observing the defendant, that
2 he had probable cause to make the stop. Once he
3 made the stop, he observed indicators of
4 impossible impairment. The smell of alcohol, the
5 bloodshot, glassy eyes.
6 THE COURT: Well, we are just talking about
7 the stop.
8 MS. ALDRIDGE: Well, he is saying that there
9 was no probable cause to arrest. So he had
10 probable cause to arrest, and it was fortified by
11 the field sobriety tests and the areas where the
12 defendant performed poorly, and then taking him
13 for the blood draw.
14 He is saying that we didn't have, the officer
15 didn't have the right to draw blood. That we
16 needed a warrant. We don't need a warrant, Your
17 Honor, because the defendant consented. And he
18 had two opportunities to decline and he consented.
19 And the blood was therefore drawn. You got the
20 readings. He was a .125, which is one and-a-half
21 times the legal limit. Considerably over the .08.
22 And again, alcohol affects everyone in different
23 ways, so just because he didn't exhibit the signs
24 of impairment that Mr. Sherman thought he should
25 have exhibited, doesn't mean that he was not

1 impaired.
2 THE COURT: Okay.
3 Do you want to say something?
4 MR. SHERMAN: Just two points, Your Honor.
5 As far as the consent, it wasn't a voluntary
6 consent. It was, if you don't take this, you
7 could go to jail, you could lose your license, you
8 could get fined. That's not consent. That's not
9 voluntary consent. So I would suggest a warrant
10 was needed.
11 No less than the Pennsylvania Supreme Court
12 has ruled that not every traffic infraction is
13 worthy of getting pulled over. Yes, there is a
14 big vehicle code, but momentary and minor
15 deviations are permitted. And the Courts have
16 ruled, the Supreme Court, the Superior Court, the
17 various Courts of Common Pleas, have all ruled
18 momentary minor deviation.
19 The first one, the officer drove by. I
20 agree, he is an experienced DUI officer. If he
21 thought there was even something worthy of
22 following him for, if he even said, you know,
23 that's heightened my sensitivity, I better stay
24 behind and let's see what this guy is going to do
25 the rest of the way. He didn't do that.

1 THE COURT: Well, he cut him a break there.
2 MR. SHERMAN: Well, that's not a break. He
3 can't have it both ways. If he thinks somebody is
4 impaired to the point where -- I mean, I can't
5 believe the guy who has 25 percent of the arrests
6 for a 30 man department would say, I'm just going
7 to keep driving down the road because this guy may
8 be drunk, but I'm going give him a break.
9 THE COURT: Of course, also -- the courts
10 have said that the officer should follow for a
11 period of time as long as there is no immediate
12 danger, correct?
13 MR. SHERMAN: As testified, there was no
14 threat to anyone for the -- so you have got at
15 best, two times touching the berm, and that is the
16 textbook definition of a momentary and minor
17 deviation. Everything else was done properly.
18 The cases have said that. There is no cases
19 presented to the opposite that say that that's not
20 the law.
21 So I respectfully suggest, Your Honor, that
22 this falls within the case law that's been handed
23 down, and this was a momentary minor violation. I
24 mean, you have a guy whose job is on the line
25 essentially, and to say that anything more than

1 that would be cause, it just isn't here in this
2 particular case.
3 THE COURT: All right. Okay. I have to view
4 this motion in the light most favorable to the
5 Commonwealth, so I'm going to deny the motion to
6 suppress.
7 Do you wish to proceed?
8 MS. ALDRIDGE: Yes, Your Honor.
9 THE COURT: Ms. Aldridge.
10 Do you want to take a small break for a few
11 minutes?
12 MS. ALDRIDGE: If I could, Your Honor, that
13 would be great.
14 THE COURT: All right. The Court will take a
15 five minute break.
16 - - - -
17 **(A recess was taken in the proceedings.)**
18 - - - -
19 THE COURT: Are you ready to proceed?
20 MS. ALDRIDGE: Yes, Your Honor, just a
21 question.
22 The defense has an expert. Procedurally, do
23 you want me to do my witnesses first in response
24 to their expert's report?
25 THE COURT: Why don't you proceed.

1 MS. ALDRIDGE: I would call Maria Hixenbaugh
2 to the stand.
3 - - - -
4 **MARIA HIXENBAUGH**
5 **having been first duly sworn,**
6 **was examined and testified as follows:**
7 - - - -
8 **DIRECT EXAMINATION**
9 BY MS. ALDRIDGE:
10 Q Ms. Hixenbaugh, could you give us your name and
11 spell it for the Court, please?
12 A Maria Hixenbaugh, M-a-r-i-a, H-i-x-e-n-b-a-u-g-h.
13 Q What is your occupation?
14 A I'm a phlebotomist.
15 Q Were you working at Heritage Valley Sewickley
16 Hospital in June of 2012?
17 A Yes, I was.
18 Q In what capacity were you working there?
19 A I was full time.
20 Q Doing what?
21 A I drew blood work for the hospital.
22 Q So you were working as a phlebotomist then?
23 A Yes.
24 Q What were some of your duties?
25 A I would do blood draws for any patients that were

1 admitted into the hospital; I would process
2 specimens in; I would draw outpatients; and then
3 if the E.R. called me for any type of legal DUIs,
4 I was to come down and draw those.
5 Q So you have drawn blood for alcohol testing or DUI
6 testing?
7 A Yes, ma'am.
8 Q How many times approximately have you done that?
9 A In the past four years, I could say it would
10 probably be in the hundreds.
11 Q On June 14 of 2012, were you working on that
12 night?
13 A Yes, ma'am.
14 Q Did you have an occasion to draw blood for the
15 defendant?
16 A Yes, ma'am.
17 Q What type of process did you use?
18 A We have a specific process and procedure set by
19 the hospital that we get where when we
20 go downstairs -- we get called by the E.R., we go
21 downstairs. We are placed in a small room. And
22 it's just me, the defendant, the police officer,
23 and an E.R. witness. And from there I would ask
24 them their name, their birthday. At this point,
25 they had already consented because I wouldn't have

1 been called otherwise to come down.
2 Q You said there is a specific process or a
3 procedure?
4 A Yes. We are to clean the arm with Iodine. If
5 they are allergic to Iodine, we are to use soap
6 and water. We are to draw two green top and two
7 gray top tubes.
8 Q So you wouldn't use an alcohol wipe to prepare the
9 arm?
10 A No, ma'am.
11 Q Is there a significance in the colored tops of the
12 tubes?
13 A Yes. The color tops of the tubes indicate what
14 type of additive is placed in the tubes.
15 Q Where do you get the tubes from?
16 A We have a stock room upstairs in the lab where we
17 keep all of the tubes for the entire hospital
18 involving any type of blood draw.
19 Q Are these tubes checked for expiration dates?
20 A Yes, ma'am.
21 Q What happens if they are expired?
22 A If they are expired, we are to give them to our
23 manager and they take the tubes from there.
24 Q These tubes, they are used for the entire
25 hospital?

1 A Yes, ma'am.
2 Q So you were responsible for the blood draw from
3 the defendant, Mr. Johnson?
4 A Yes, ma'am.
5 Q Do you recall how much blood was drawn?
6 A It would be -- I drew four tubes. And they would
7 be anywhere from halfway to three-fourths of the
8 way full.
9 Q Is there a -- you said there were additives in the
10 tubes?
11 A Yes.
12 Q What do you do with the tubes after you draw the
13 blood?
14 A Well, with the additives for the green tops and
15 the gray tops, we will invert it eight to ten
16 times to make sure that the additive is properly
17 mixed with the blood.
18 Q In the gray tubes, what's the primary function of
19 the additive?
20 A It's to keep the blood from clotting.
21 Q How do you mark or label the tubes?
22 A The E.R. prints off labels for me and they are
23 already in the room when I come down, and I will
24 always verify the full name and the birth date
25 prior to drawing the blood.

1 Q And when do you label the tube?
2 A Right after I'm done.
3 Q What information is contained on that label?
4 A Normally on the labels there is their first name,
5 their last name, their birth date, their medical
6 record number for when they were registered in,
7 and the date.
8 Q What do you do with the tubes after that?
9 A After I draw the blood, I label them, I initial
10 the tubes to say that I was the one who drew them.
11 I place them in a biohazard bag and I hand them to
12 the police officer.
13 Q Is there a receipt for the release of this
14 evidence?
15 A Yes, ma'am.
16 MS. ALDRIDGE: Your Honor, we would refer
17 back to Exhibit Number 1, which is the release.
18 THE COURT: Okay.
19 BY MS. ALDRIDGE:
20 Q What happens after that?
21 A After all the paperwork is signed and handed to
22 the police officer, I'm finished and I leave.
23 Q If the defendant were to refuse, what would
24 happen?
25 A There is a whole separate set of paperwork that

1 needs to be signed.
2 Q Would you still draw the blood?
3 A No.
4 Q What would constitute a refusal?
5 A Them actually telling me no, curling up their arms
6 to where I can't --
7 MR. SHERMAN: Your Honor, we don't have a
8 refusal here, so these questions are irrelevant.
9 THE COURT: Ms. Aldridge.
10 MS. ALDRIDGE: I was just going to show that
11 we didn't need a warrant, Your Honor. Okay.
12 I don't have any other questions.
13 THE COURT: Okay. Mr. Sherman, cross.
14 - - - -
15 **CROSS-EXAMINATION**
16 BY MR. SHERMAN:
17 Q You essentially draw blood everyday in your work?
18 A Yes, sir.
19 Q Sometimes it's DUI related cases, but probably the
20 overwhelming majority are medical cases?
21 A Yes.
22 Q In doing that, do you have any specific memory of
23 Dan Johnson?
24 A Of him specifically, no. I draw hundreds.
25 Q Right. It's something you are doing everyday?

1 A Yes.
2 Q In addition, as far as the tubes, do you have the
3 expiration date of the tube that was used?
4 A Do I know it off the top of my head?
5 Q Yes, do you have any documentation of that?
6 A No.
7 Q With regard to the two volumes, is that just a
8 visual thing, you try to get it half to three-
9 quarters of the way full?
10 A Yes.
11 MR. SHERMAN: I have no further questions.
12 THE COURT: Ms. Aldridge.
13 MS. ALDRIDGE: Your Honor.
14 THE COURT: Go ahead.
15 MS. ALDRIDGE: I just guess a point of
16 information, I have a copy of the Pennsylvania
17 Bulletin, which indicates that the hospital is a
18 certified laboratory approved to determine blood
19 alcohol content under the Clinical Laboratory Act,
20 which is the Department of Health. So that says
21 that they have special approval for analytical
22 services; and blood tests for blood alcohol
23 content to perform alcohol analyses of blood
24 and/or serum and plasma. And this approval is
25 based on demonstrated proficiency in periodic

1 tests conducted by the Department's Bureau of
2 Laboratories.
3 So the hospital is a certified laboratory.
4 So therefore, I believe that they are keeping
5 within their standards of the tubes and the
6 expiration dates. All of that information would
7 be within the hospital records and in compliance
8 with the Department of Health. That would not be
9 for Ms. Hixenbaugh to have, retain or to know.
10 MR. SHERMAN: Your Honor, that's ridiculous.
11 Just because they are a lab that's licensed to
12 draw blood for motor vehicle cases, doesn't mean
13 that all the requirements are met. It just means
14 that they are permitted to make the blood draws
15 under the statute.
16 THE COURT: All right. Anything else?
17 MR. SHERMAN: I just have one more question.
18 THE COURT: Go ahead.
19 BY MR. SHERMAN:
20 Q With regard to you mentioned the way you cleaned
21 Mr. Johnson's arm. How did you do that?
22 A We are given a kit to begin with for all DUI
23 draws, which has everything in it when we go down.
24 And it's an Iodine prep where you squeeze the
25 little glass tube and the Iodine will leak into a,

1 almost like a little tiny gauze pad, and then you
2 clean their arm in a circular motion to make sure
3 you clear it of all bacteria prior to sticking
4 them.
5 Q What kind of kit is it?
6 A We put them together to begin with because we do
7 do DUIs. So when we do, we have someone who puts
8 the kits together prior to us going down.
9 Q So it's not a purchased kit. It's something where
10 you get all the things you need together?
11 A Yes, sir.
12 Q Just to make it faster?
13 A Yes, sir.
14 MR. SHERMAN: I don't have any further
15 questions.
16 THE COURT: Anything else, Ms. Aldridge?
17 MS. ALDRIDGE: No, Your Honor.
18 THE COURT: You are excused, Ms. Hixenbaugh.
19 THE WITNESS: Thank you.
20 MS. ALDRIDGE: At this time, Your Honor, I
21 believe she is out in the hallway. We are looking
22 for Susan Stanich, the scientist.
23 - - - -
24
25

1 - - - -

2 **SUSAN STANICH**

3 **having been first duly sworn,**

4 **was examined and testified as follows:**

5 - - - -

6 **DIRECT EXAMINATION**

7 BY MS. ALDRIDGE:

8 Q Good morning. Could you state your name and spell

9 it for the Court, please?

10 A Susan Stanich, S-t-a-n-i-c-h.

11 Q Are you currently employed, ma'am?

12 A I am.

13 Q How are you employed?

14 A I'm employed by the Allegheny County Medical

15 Examiner's Office in the Forensic Laboratory.

16 Q What do you do there?

17 A I'm a forensic toxicologist and also work crime

18 scene detail.

19 Q How long have you been employed there?

20 A Fifteen years.

21 Q Do you have specific education and training to

22 qualify you as a toxicologist?

23 A I have a Bachelor's Degree and also I have 15

24 years experience working in the Toxicology

25 Department.

1 MS. ALDRIDGE: Your Honor, we have a power
2 point presentation to kind of aid the Court in
3 understanding the process at the Crime Lab.
4 THE COURT: Okay.
5 THE WITNESS: If you go to Play Slide Show at
6 the top, and then Play from the beginning. Now you
7 just have to hit Page Down.
8 BY MS. ALDRIDGE:
9 Q In your training and experience, you conducted
10 alcohol and chemical tests?
11 A Yes.
12 Q You did that in blood or serum?
13 A Yes.
14 Q So you have done it in both?
15 A Yes.
16 Q Had you previously testified in court as a
17 toxicologist?
18 A I have.
19 Q Let's go over the process. Were you working in
20 2012, in June of 2012?
21 A I was.
22 Q You were employed with the Crime Lab?
23 A Yes.
24 Q The Medical Laboratory. We will start with the
25 beginning slide here. I have it on paper.

1 So ethanol and volatile quantitation, and
2 that's what you do?
3 A This is one of the processes we perform in the
4 Toxicology Department.
5 Q If you would go to the first slide, please.
6 Could you tell us about how you receive
7 evidence?
8 A All evidence comes through the Evidence
9 Department. No matter if it's toxicology
10 evidence, drug chemistry evidence, everything
11 comes through the Evidence Department. The police
12 agencies bring it in and it gets logged into our
13 electronic monitoring custody program. That's
14 called The Beast. And it's run. When the
15 evidence comes in, it gets logged in, it gets
16 signed in, and it gets an individual number. The
17 first part of the number starts with the year, and
18 then it has LAB and then the next numeric order of
19 whatever is up on the list.
20 Q This would refer to Exhibit Number 2. That would
21 be the receipt that the county gives?
22 A Yes.
23 Q What happens?
24 A A receipt gets generated, and then we keep a copy
25 of the receipt in the case file, and a copy of the

1 receipt goes with whatever police officer or
2 police station submitted the blood. And then a
3 folder gets created with the receipt in it. And
4 then the evidence and the folder then get taken to
5 the individual department, as to what is getting
6 worked.
7 Q This lab number follows the sample?
8 A Yes, it gets bar coded. The actual evidence gets
9 bar coded, gets an item number, and then the
10 folder also gets bar coded.
11 Q What happens to the sample for storing, would it
12 still be available today?
13 A Yes, the sample is available today. We keep all
14 evidence samples for a year. And most likely if
15 there is storage, longer.
16 Q The next slide, please.
17 This is evidence receiving in storage. Could
18 you elaborate or explain what happens here?
19 A Sure. Once the evidence is signed in down in the
20 Evidence Department, it is then brought up to the
21 Toxicology Department. When it's brought up here,
22 it is placed into the custody of the Tox Receiving
23 Area, which is the top and bottom pictures on the
24 left-hand side.
25 From there, a toxicologist, or an evidence

1 specialist signs the blood in. We determine the
2 color of the tubes, which are green, gray, purple,
3 red, whatever it is, and then we also take an
4 approximate level of the fluid that's in the
5 tubes. We then sub itemize them so each tube gets
6 an individual label and item number.
7 So if we received four tubes of blood, two
8 green, two gray, they would get labeled as the lab
9 number, the name of the case, and then the item
10 number. And it would say that it's a green top or
11 a gray top tube of blood.
12 Q Are all the tubes the same size?
13 A No.
14 Q So is there a rhyme or reason for the size?
15 A No. It's whatever the hospital provides.
16 Q So you don't provide the tubing?
17 A No.
18 Q There is a cold room?
19 A Yes. The picture that's on the right is a picture
20 of the walk-in cold room which is where all of the
21 samples are stored.
22 Q How are they stored there?
23 A They are stored refrigerated, in a rack.
24 Q In a rack?
25 A Yes.

1 Q Is that done by date or by lab number?
2 A It's done by lab number.
3 Q The next slide, please.
4 This is?
5 A This is pictures of our instrument room which is a
6 separate room from where the evidence sign-in area
7 is. This is the alcohol work station. This is
8 where the alcohol is actually put onto the
9 instrument.
10 Q Next slide.
11 Preparation for analysis.
12 A When we are doing an alcohol run or a batch run,
13 the actual samples are taken out of the
14 refrigerator and put at room temperature. Also,
15 the calibrators and controls are also taken out of
16 the refrigerator and put at room temperature.
17 Once everything has reached room temperature, a
18 calibration curve is prepared, along with a set of
19 quality controls, or QCs, and a set of volatiles
20 are also prepared. That is run first thing in the
21 morning. The calibration occurs, the QCs and
22 volatiles are run first thing in the morning. And
23 they have to reach a certain criteria in order to
24 be accepted.
25 Q Can you explain what the calibrator is?

1 A The calibrator is -- what we do to make up a
2 calibration curve is it is a certified reference
3 standard that is purchased, and then it is run and
4 the instrument is then calibrated against the
5 results.
6 Q What is a control?
7 A A control is a quality control check that is a
8 known standard that is run against the calibration
9 curve and it has to be within plus or minus
10 five percent in order to be acceptable.
11 Q How frequently are those controls run?
12 A We run calibrators and controls every time we run
13 a batch, and then we run a set of controls
14 throughout the run, throughout the day.
15 Q How are the samples prepared?
16 A They are prepared the exact same way that the
17 calibrators and controls are. Once it's warmed up
18 to room temperature, we vortex the tube so that we
19 get a whole blood sample. We take 200 microliters
20 of the sample, 1800 microliters of an internal
21 standard. It then gets put into a vial. The vial
22 gets a rubber stopper and a metal clamp and
23 sealed. The vial itself is labeled with the
24 laboratory number that corresponds with the blood
25 sample.

1 Q What is a headspace gas?
2 A That is the way -- if you put the power point a
3 couple more slides, advance the power point.
4 Q I'm sorry. So this is the label (indicating)?
5 A That's a picture of the vial and how we label it.
6 Q Next one, please.
7 A That's how we go about preparing the calibrators
8 and controls. So the headspace is the way that we
9 actually run the alcohols. The vial itself, the
10 tube -- the vial itself has the blood sample, the
11 internal standard in the bottom of it. It is then
12 taken and put into the actual instrument, and it
13 is heated to 80 degrees. And then the alcohol
14 becomes a gas. That's sampled at the top of the
15 vial. So the syringe goes in, pierces the septa,
16 it takes the headspace which is the gas, and then
17 injects it into the instrument. That's exactly
18 how the alcohol is run.
19 Q This says?
20 A This is the picture of the vortex. That's how we
21 mix the blood tubes to get a whole blood sample.
22 The middle picture is our diluter which is the
23 internal standard and how it takes the sample out
24 of the tube, and that's the final product on the
25 right-hand side.

1 Q So as you continue with the calibration, or you
2 continue with the process, what happens next?
3 A We have a computer program that runs the
4 instrument and it's called a sequence. You put
5 the lab numbers onto the sequence. It almost
6 looks like a spreadsheet, Excel spreadsheet, and
7 the lab numbers are then put in, and a sequence is
8 created, which it then tells the instrument what
9 temperatures it needs to run, how long it needs to
10 run, the gases that need to go into it. And then
11 a second scientists comes and verifies that
12 everything is in the right order. So we look at
13 the vial that's on the instrument and compare it
14 against the sequence that's on the computer.
15 Q Next one.
16 A That's a picture of the carousel with the vials on
17 it.
18 Q So the vials go --
19 A Into that auto sampler, and then they get lifted
20 up into the instrument to get heated and sampled.
21 Q So while they are in there, that's when the --
22 A The piercing of the septa, yes.
23 Q How do you assess the information that the
24 instrument gives you?
25 A The computer program then calibrates, using the

1 calibrators and controls, calibrates the alcohol
2 curve, and it has to meet, the R squared has to be
3 better than a 99.2. The controls have to be
4 within plus or minus five percent of the value
5 that they are supposed to be. The negative must
6 be completely negative.
7 Q Next slide, please.
8 This one is a little tough to see. Could you
9 explain what this is?
10 A This is the actual calibration curve of the day
11 Mr. Johnson's sample was run. And the top part of
12 it lists just the method, the process, the date
13 and time the curve was calibrated. The circled
14 part is what the R squared was reading that day,
15 and then listed are all the calibrator levels and
16 then the percent difference of what they were. So
17 it's just showing that everything was acceptable.
18 Q On that day?
19 A On that day.
20 Q Next slide, please.
21 A This is our ethanol QC log sheet. This is where
22 we log the quality controls that we run, when we
23 run the calibrator curve. And also there is
24 additional QCs that are run throughout the day,
25 and those are also logged onto the sheet. And it

1 just shows the levels that are acceptable.
2 Q Was everything acceptable on this day?
3 A Yes.
4 Q So the calibration was right, the QCs came out
5 okay?
6 A Correct.
7 Q Were there any other QCs or negatives run on this
8 day?
9 A We ran two other runs this day and there was
10 negatives and QCs run at the end of those runs.
11 Q Could you explain this slide for us, please?
12 A This is a negative chromatogram from that day. It
13 just shows the internal standard and the fact that
14 there is no ethanol peak.
15 Q Would you explain what this is, please?
16 A This is a chromatogram of the 80 percent
17 calibrator that we ran that day. It shows the
18 ethanol peak and it shows also the internal
19 standard peak.
20 Q Next slide, please.
21 A And this is an example of the 79 calibrator of the
22 volatiles that were run this day. We run a set of
23 volatiles with methanol, isopropanol and acetone,
24 along with the internal standard when we run our
25 calibration and QCs for the morning.

1 Q You said methanol?
2 A Yes. Isopropanol.
3 Q And what else?
4 A And acetone.
5 Q But not ethanol?
6 A No, ethanol is not in this mix.
7 Q Is there a reason?
8 A It's typically not in this mix because we have
9 other standards that have it.
10 Q Next slide, please.
11 Could you explain this slide, please?
12 A This is the chromatogram and the actual run of
13 Mr. Johnson's blood. His lab number was 5762. We
14 use the 1A tube, that's why it's labeled 1A. And
15 it lists the result file showing that I'm the one
16 that ran it, and then the result of what it was.
17 Q What was the result?
18 A It was a 125 milligram percent or a 0.125 percent.
19 Q Can you explain this line, please?
20 A This is the chromatogram. We have a second
21 scientist that runs and confirms our DUIs for the
22 day. So once I have run all of the DUIs, another
23 scientist comes and runs those same set of DUIs.
24 We both have to confirm each other within
25 five percent. And when we report the final

1 result, we take the lower of the two numbers.
2 So this is Mr. Kinkaid's chromatogram from
3 that day of Mr. Johnson's blood. And it lists the
4 same thing, it has the same name, the fact that it
5 was Dan that ran it, and then the final result.
6 Q What was the final result?
7 A The .127 or 127 milligram percent.
8 Q Next slide, please.
9 Proficiencies. Can you tell us about
10 proficiencies? What is that?
11 A The laboratory itself, the Toxicology Department,
12 runs 45 alcohol proficiencies a year. They are
13 provided to us by several different -- one of them
14 being the state of Pennsylvania provides
15 proficiencies. Which the state of Pennsylvania
16 knows what the results of those blood alcohols
17 are. We receive both blood and serum. And they
18 get run throughout the year at different times of
19 the year.
20 Q Are these treated any differently than any other
21 sample?
22 A No, they get signed in in evidence and treated
23 like a normal case.
24 Q Are you required to take proficiencies?
25 A Yes.

1 Q Is everyone required to perform proficiencies?
2 A Everyone's that's qualified to run blood alcohols
3 have to do proficiencies.
4 Q Could you explain this slide, please?
5 A This is a proficiency that Dan Kinkaid did I
6 believe in the same month as the DUI in question.
7 And these are his results and the mean results.
8 So it just shows that he passed everything and
9 that his results were very close to what was
10 expected.
11 Q Now the grading, it says acceptable. Is that like
12 a pass/fail thing?
13 A Yes.
14 Q So it's either acceptable or not?
15 A Correct.
16 Q The date on that is for June?
17 A Yes.
18 Q Do you know when the proficiencies are coming?
19 A The companies do notify us as to when they sent
20 them out so we know to look for them in the mail.
21 Q The next slide.
22 A This is a copy of a recent proficiency of mine, I
23 guess for 2012, with the results, and the reported
24 results and the acceptable ranges.
25 Q Had you ever received unsatisfactory results in a

1 proficiency exam?
2 A No, never.
3 Q To your knowledge, is the laboratory certified?
4 A Yes.
5 Q Who certificates the laboratory?
6 A We are certified by the state of Pennsylvania, we
7 are certified by CLIA, which is a federal
8 certification, and we are also certified by
9 ASCLD/LAB.
10 Q You testified that you actually performed the test
11 on Mr. Johnson's blood?
12 A Yes.
13 Q Was there any evidence of contamination that might
14 have resulted in an insufficient reading?
15 A No.
16 Q Does the laboratory test samples or specimens in
17 duplicate?
18 A Yes.
19 Q What does that mean?
20 A It means that I will run the blood alcohol first,
21 and then another scientist will come in and run
22 the exact same samples.
23 Q When you say same samples, you mean from the same
24 blood tube?
25 A Yes.

1 Q But they create their own vials?
2 A Correct.
3 Q Do you perform the proficiencies in whole blood or
4 serum or both?
5 A Yes, it all depends on what they send us, but they
6 do send us both whole blood and serum.
7 Q Approximately how many blood alcohol testings do
8 you do? I don't know how to phrase that. How
9 many tests or samples have you done?
10 A I have done thousands. I believe we receive about
11 3,000 DUI cases a year.
12 Q Are DUI cases the only time you run alcohol?
13 A No, we run alcohol on post-mortem cases also.
14 Q To your knowledge, have you ever had a blood
15 alcohol result outside of the acceptable range?
16 A On a proficiency?
17 Q Yes.
18 A Never.
19 MS. ALDRIDGE: I don't have any other
20 questions, Your Honor.
21 THE COURT: Cross, Mr. Sherman.
22 - - - -
23 **CROSS-EXAMINATION**
24 BY MR. SHERMAN:
25 Q This test was done on a headspace gas chromatogram

1 of flame ionization detector?
2 A Correct.
3 Q As part of your college education, do you run a
4 headspace gas chromatogram of flame ionization
5 detection?
6 A In college?
7 Q Yes.
8 A No.
9 Q Did you take any college courses on gas
10 chromatography?
11 A No.
12 Q Do you have a degree in microbiology?
13 A Correct.
14 Q You don't have a degree in analytical chemistry?
15 A No.
16 Q Did you take any analytical chemistry classes in
17 college?
18 A I took chemistry classes in college, yes.
19 Q One?
20 A I don't remember exactly which ones I had. No, I
21 had several chemistry classes.
22 Q What were they in?
23 MS. ALDRIDGE: Objection, Your Honor.
24 THE COURT: Yes.
25 MS. ALDRIDGE: Relevance.

1 THE COURT: Mr. Sherman.
2 MR. SHERMAN: We didn't even go through the
3 qualifications and whatnot, and ask the person
4 regarding her expertise, so I'm entitled to cross-
5 examine.
6 MS. ALDRIDGE: I'm not tendering the witness
7 as an expert. She was the toxicologist, she ran
8 the equipment and the test.
9 MR. SHERMAN: Well, I'm entitled to see the
10 background of the person doing the test.
11 THE COURT: Okay. I'll allow it, but I do
12 think you are stretching a little bit.
13 MS. ALDRIDGE: Fifteen years of actual
14 experience.
15 THE COURT: Why don't you try to wrap it up
16 as far as college, because I'm afraid we might go
17 back to high school.
18 MR. SHERMAN: We won't go back that far.
19 BY MR. SHERMAN:
20 Q How many chemistry classes did you take in
21 college?
22 A I don't remember off the top of my head.
23 Q So you have no background in the study of
24 analytical chemistry?
25 A I have taken chemistry classes.

1 Q Have you taken analytical chemistry classes?
2 A I don't remember.
3 MS. ALDRIDGE: Asked and answered, Your
4 Honor.
5 THE COURT: Asked and answered.
6 BY MR. SHERMAN:
7 Q Have you taken any courses put on by the American
8 Chemistry Society?
9 A No.
10 Q The majority of -- you said you are a forensic
11 toxicologist?
12 A Yes.
13 Q You have no college training in forensic
14 toxicology.
15 A Correct.
16 Q The fact that you are a forensic toxicologist is
17 by virtue of you doing that everyday?
18 A Correct.
19 Q You don't have any certification in forensic
20 toxicology?
21 A No.
22 Q I looked at your resume and I didn't see any
23 forensic toxicology courses other than legal
24 overviews and whatnot.
25 A Correct.

1 Q So you are a forensic toxicology because you do it
2 everyday.
3 A Okay.
4 Q Is that right?
5 A Sure.
6 Q As far as memberships and societies went, you are
7 a member of a Society of Forensic Toxicologists?
8 A Yes.
9 Q You go to their seminars and programs?
10 A Yes.
11 Q They put out guidelines regarding how labs should
12 operate?
13 A Correct.
14 Q And these guidelines are essentially the minimum
15 standards for how a lab should operate?
16 A I don't know that.
17 Q You don't know one way or another?
18 A No.
19 Q Have you authored any publications in your field?
20 A No.
21 Q Have you given any lectures on headspace gas
22 chromatography?
23 A No.
24 MS. ALDRIDGE: Again, objection, Your Honor.
25 THE COURT: Overruled. Go ahead.

1 BY MR. SHERMAN:
2 Q I want to talk to you about who employs you. You
3 work for Allegheny County?
4 A Correct.
5 Q In the Medical Examiner's Office?
6 A Yes.
7 Q In the Forensic Toxicology Section?
8 A Yes.
9 Q We can agree that you consider yourself a
10 scientist?
11 A Okay.
12 Q Do you?
13 A Yes.
14 Q It's certainly important for a scientist to be
15 independent.
16 A Sure.
17 Q Not to take sides.
18 A Right.
19 Q To show no bias towards either side.
20 A Right.
21 Q The lab you work in does testing for court cases.
22 A Yes.
23 Q For example, someone can't come in off the street
24 and ask to have their cholesterol checked?
25 A We don't do that testing anyway.

1 Q You do work just for county court cases?
2 A Yes.
3 Q Part of your job involves working closely with the
4 District Attorney's Office.
5 A Yes.
6 Q You have taken classes in how to testify on behalf
7 of the prosecution.
8 A No.
9 Q That must have been your colleague who took those
10 courses.
11 The overwhelming majority of your training
12 have been put on by law enforcement entities?
13 A Yes.
14 Q You obviously tested thousands of samples and
15 don't remember this particular sample?
16 A No.
17 Q I somewhat understand, but I just want you to walk
18 me through the one part where you have the -- you
19 have already put the sample at room temperature?
20 A Okay.
21 Q You now have a vial labeled, for example, you put
22 the lab number on the vial?
23 A Yes.
24 Q And you then have the vial open belonging to the
25 subject?

1 A Yes.
2 Q You have to get the blood from the vial that's the
3 subject's into this vial, the one you want to
4 test. How do you to that?
5 A It's with the use of the Hamilton diluter.
6 Q You take the diluter, you put it in the vial?
7 A Yes.
8 Q The sample vial?
9 A And it takes out 200 microliters of the sample
10 from the test tube and places it into the labeled
11 glass vial.
12 Q And that's how you do every sample?
13 A Every sample.
14 Q And do you clean the diluter in between?
15 A Yes, it gets wiped with bleach.
16 Q What kind of bleach?
17 A Ten percent bleach solution.
18 Q Is there a brand?
19 A Whatever the lab provides. I believe we have
20 Clorox.
21 Q And Clorox has ethanol in it.
22 A No.
23 Q Are you sure of that?
24 A I am not sure of that, no.
25 Q So Clorox that you use could have ethanol in it?

1 A If it did have ethanol, it would should up on the
2 negative.
3 Q We will talk about that. But you don't know if
4 the Clorox you used has ethanol?
5 A No.
6 Q Now we can agree that your goal is to get a
7 reliable, accurate and truthful result?
8 A Yes.
9 Q And there is no trust me in science, you want
10 proof?
11 A Say that again.
12 Q There is no trust me, like, hey, the result is
13 what it is, you need to validate that?
14 A Right.
15 Q And the result can't be complete, accurate and
16 truthful unless you verify it?
17 A Right.
18 Q And the process of verification is very, very
19 important?
20 A Yes.
21 Q I want to ask you some questions about you
22 described you had some slides up there on the gas
23 chromatograph, and you would agree that gas
24 chromatography is what we call separation science?
25 A Right.

1 Q You take some volatile compounds. It could be
2 different forms of alcohol, or any volatile
3 compound, and put it in that machine and it
4 separates it out?
5 A Yes.
6 Q What it does is it can tell you what the substance
7 is, right?
8 A Yes.
9 Q And it could tell you how much of the substance is
10 there?
11 A Yes.
12 Q And in our particular case, it can tell us if
13 ethanol was present?
14 A Yes.
15 Q And how much of it?
16 A Yes.
17 Q I want to talk to you about how the machine comes
18 up with this number. Basically the gas
19 chromatograph, as you said, it's attached to a
20 computer?
21 A Yes.
22 Q And there is an injector where you inject the
23 sample into the machine?
24 A Instrument.
25 Q And it's pushed along through a column by gas?

1 A Yes.
2 Q It actually goes through a fire, it gets burned
3 off?
4 A Yes.
5 Q And you measure the time that it takes to get
6 through, and that's how you match that up, or you
7 calibrate it?
8 A A retention time, yes.
9 Q And the retention time, it's got to be separate in
10 order to be accurate, right?
11 A Separate from what?
12 Q You can't have two compounds coming out at the
13 same time?
14 A Correct.
15 Q If you do, it's not accurate?
16 A Correct.
17 Q When it comes out, it produces those little graphs
18 that you showed, chromatograms?
19 A Yes.
20 Q And it has peaks?
21 A Yes.
22 Q So, for example, if you have a vial with two
23 substances in it, and you send it through the gas
24 chromatograph, your computer should produce two
25 peaks?

1 A Yes.
2 Q If there is more than two peaks, there is a
3 problem?
4 A Not necessarily. Only if the peaks would
5 interfere with the peaks that you are looking for.
6 Q If you have two things in a vial, and you have
7 more than two peaks, that means there is something
8 else coming out of that gas chromatograph, right?
9 A Yes.
10 Q You don't know what it is?
11 A No.
12 Q So as long as the peaks don't, they call coelute,
13 right, come together?
14 A Yes.
15 Q So according to the Crime Lab, as long as -- there
16 could be multiple peaks, but as long as they don't
17 come out together, it's not a concern?
18 A Correct.
19 Q I want to talk to you about the maintenance of the
20 machine.
21 A It's an instrument.
22 Q In order for the gas chromatograph to operate
23 properly, you have to maintain it?
24 A Yes.
25 Q It's sort of like a car. You need to inspect it?

1 A Right.
2 Q Whether it needs it or not, you have to do certain
3 things?
4 A Yes.
5 Q Right? You have to change different parts?
6 A Yes.
7 Q It's critical that you do that?
8 A Yes.
9 Q Now it's so important that the lab keeps a
10 maintenance log?
11 A Yes.
12 Q And the maintenance log will tell you the
13 maintenance that was given to a machine?
14 A Right.
15 Q The log also shows any problems?
16 A Right.
17 Q When there is a septum on the gas chromatograph
18 where, that's where the needle goes through to
19 introduce it into the machine?
20 A Yes.
21 Q That septum is only good for about 200 uses?
22 A I don't know that.
23 Q According to your maintenance logs, and I've seen
24 it, I guess, we have been given about two years I
25 think, there was no change in the septum. Do you

1 have anything to the contrary?
2 A No.
3 Q Allegheny County has a Lab Submission Manual for
4 evidence?
5 A Yes.
6 Q This is essentially the county's policy on how it
7 wants evidence treated?
8 A Yes.
9 Q In fact, it's so important that in the Forward,
10 which was written by Robert Houston, he is the
11 Laboratory Director?
12 A Yes.
13 Q He is your ultimate boss?
14 A Yes.
15 Q He wrote, "The scientific analysis of test items
16 is significant only if they are documented,
17 gathered, packaged and preserved and submitted to
18 the laboratory according to established criteria.
19 If the established criteria for the test item
20 handling are not followed, then its probative
21 value may be compromised and the significance of
22 the test item may be lost".
23 That's what the manual says.
24 A Okay.
25 Q You agree with that, right?

1 A Yes.
2 Q And if those items are not followed, it's not
3 documented, gathered properly, packaged,
4 preserved, submitted to the lab in a proper
5 manner, then the validity is compromised?
6 A Yes.
7 Q You were asked, or your lab in Chapter 9, is the
8 chapter dealing with what you do, guidelines for
9 submission of toxicology samples. Do you agree
10 with that?
11 A Yes.
12 Q And in there it says for alcohol determination
13 regarding specimen collection, you require two
14 10 milliliter gray top tubes of blood?
15 A Yes.
16 MS. ALDRIDGE: Your Honor, I have no frame of
17 reference from what Mr. Sherman is speaking to or
18 from. Does he have a copy for me?
19 MR. SHERMAN: I can show you.
20 BY MR. SHERMAN:
21 Q So the lab requires ten milliliter gray top tubes
22 for blood alcohol analysis?
23 A Yes.
24 Q I want to break this down a little more. On this
25 particular case we have been talking about tubes

1 and vials and things like that. The blood was
2 captured in what's called a vial container?
3 A Yes.
4 Q We have all at some point in our lives have had
5 blood tests. That's the tube that the blood runs
6 into?
7 A Yes.
8 Q There is an air tight seal on there for the
9 purpose of collecting that blood?
10 A Yes.
11 Q If that seal in any way is compromised, then the
12 sample is compromised?
13 A Yes.
14 Q You have no knowledge of the expiration date of
15 the tube?
16 A No.
17 Q You agree it's certainly important for the
18 manufacturer's specifications to be followed?
19 A Yes.
20 Q And the manufacturer's storage specifications have
21 to be followed as well?
22 A Yes.
23 Q And you have no knowledge of how that's done?
24 A No.
25 Q You also know that the lab has requirements of how

1 it wants the samples stored before it comes to the
2 lab?
3 A Yes.
4 Q And you have no knowledge of how that was done in
5 this case?
6 A No.
7 Q Now do you have any -- you showed us some photos
8 and things and whatnot. Do you have any
9 photographic evidence of what this particular
10 sample looked like?
11 A When it was received?
12 Q Yes.
13 A No.
14 Q Do you have any photographic evidence of what it
15 looks like when it was being worked on?
16 A No.
17 Q Photos would certainly allow us to see the
18 integrity of the seal on the tube as well?
19 A Yes.
20 Q A ten milliliter tube is designed to take
21 ten milliliters. If something that can get two or
22 three milliliters, that can indicate there is a
23 problem with the tube?
24 A No.
25 Q The short filling of the tube would indicate,

1 would not set off any red flags or any bells or
2 whistles in your head?
3 A No.
4 Q The Allegheny County Lab requires at least a
5 certain amount of the tube to be filled in order
6 to be a valid analysis, isn't that right?
7 A We would need enough for what we would use for the
8 testing.
9 Q But you require at least two milliliters?
10 A Yes.
11 Q Anything short, you won't accept?
12 A No, we accept.
13 Q So you will accept anything, but you require two
14 milliliters?
15 A Right. We will accept it, but if we don't have
16 enough to do the testing, we can't do the testing.
17 Q We also talked about the tubes, and they include
18 what's called an anticoagulant?
19 A Right.
20 Q That prevents the blood from clotting?
21 A Correct.
22 Q Because if the blood clots, that's going to
23 interfere with your ability to test it?
24 A Correct.
25 Q And it can compromise the validity of the result?

1 A Yes.
2 Q That's why you have that powder in the tube?
3 A Yes.
4 Q On this particular is something called micro
5 clots, right?
6 A I don't know.
7 Q You never heard of that?
8 A No.
9 Q There is also a problem that any lab is keenly
10 aware of and that's called fermentation. Do you
11 agree with that?
12 A I mean I've heard of it, yes.
13 Q There is also powder in the tube to prevent
14 fermentation?
15 A There is a preservative in the tube, yes.
16 Q Basically fermentation can cause the production of
17 alcohol in a sample, right?
18 A Yes.
19 Q The gas chromatograph can't tell the difference
20 between alcohol that was consumed, say, in a bar,
21 and alcohol that was produced by fermentation?
22 A Correct.
23 Q The purpose of that preservative is to prevent
24 bacteria from growing in the sample?
25 A Yes.

1 Q To perform a reliable, accurate and truthful
2 result, you have to have an anticoagulant and
3 preservative in that tube?
4 A Yes.
5 Q It has to be a sufficient amount?
6 A Yes.
7 Q If that's not there, then that compromises the
8 validity of the result?
9 A Yes.
10 Q You have no knowledge of how much of any
11 anticoagulant preservative were in the tube?
12 A No.
13 Q You didn't do any testing on that?
14 A No.
15 Q There is testing for that?
16 A I don't know.
17 Q You certainly heard of candida albicans?
18 A No.
19 Q You never heard of that?
20 A No.
21 Q I want to show you a document that I marked as
22 Defendant's Exhibit 2. It's from the instrument
23 maintenance log. Is that from the gas
24 chromatograph that was used to examine Dan
25 Johnson's sample?

1 A Yes.
2 Q On the bottom line, it says there is a notation on
3 June 18, 2012, that says, "Instrument is out of
4 service until the new GC is installed"?
5 A What date is that?
6 Q June 18, 2012.
7 A This is for a BAC-2 column. This is for the other
8 instrument that we weren't running.
9 Q I just asked you if this was for the one that you
10 run the sample on.
11 A This is for headspace A. We were at the time --
12 the time this was, we were trying to run a dual
13 column type of instrumentation, but this is for
14 the BAC-2 column, not the BAC-1 column.
15 Q Even though the device was set up to be a dual
16 column, the Allegheny County Crime Lab runs it as
17 a single column?
18 A At the time that that was run, it was run as a
19 single column, yes.
20 MR. SHERMAN: Your Honor, I'm going to --
21 just for clarity for the record, I'm not going to
22 introduce what I marked as Defendant's Exhibit 2.
23 BY MR. SHERMAN:
24 Q You talked about earlier that you have to run a
25 set of samples that are all alcohols to make sure

1 the machine is distinguishing between them, the
2 standard mix?
3 A Yes.
4 Q You have methanol, isopropanol, acetone and
5 propanol?
6 A Yes.
7 Q But there is no ethanol?
8 A No.
9 Q Is there any scientific literature anywhere that
10 says that's the proper way to run a standard mix,
11 to not include the actual volatile that you are
12 looking for?
13 A I don't know.
14 Q This is a five page document, and it's just the
15 standard mix chromatograms that you provided. I
16 would just let you take a look at them for a
17 minute. Looking at just the first page, 1, there
18 are four alcohols that you are looking for, right?
19 A There are three plus the internal standard.
20 Q I'm sorry, three volatile, or four volatile
21 compounds?
22 A Yes.
23 Q Yet there are three additional peaks on here
24 (indicating)?
25 A Yes.

1 Q And you don't know what those peaks are?
2 A No.
3 Q So they could be ethanol?
4 A No. Ethanol comes out at a certain time.
5 Q But the thing is you don't know what they are?
6 A I don't know what those are, no.
7 Q There is also little dashes underneath the peaks.
8 Did you put those there?
9 A That's the instrumentation to figure out the area
10 count.
11 Q Does the computer do that, or does a human do
12 that?
13 A The computer does that.
14 Q I asked earlier, when you get the samples ready
15 that's when you put on this aliquot, you put it on
16 an aliquot form?
17 A Yes.
18 Q Just quickly, when you aliquot the sample, it's
19 basically what you talked about, you take the
20 samples you have been given, you open them up, you
21 put the diluter in, you take it out, you put it in
22 headspace vials, and put in the gas chromatograph?
23 A Yes.
24 Q You have to seal the vial?
25 A Yes.

1 Q You have to label it?
2 A Yes.
3 Q How long does is it take to do one?
4 A To do one?
5 Q Yes.
6 A Seconds.
7 Q Just seconds?
8 A Yes.
9 Q That's with the labeling --
10 A We label the vials first. They are all labeled.
11 Q So you pre-label everything?
12 A Yes.
13 Q Then you bring out each person's sample one at a
14 time?
15 A Yes.
16 Q If you take out -- you take sample one, you would
17 open it, and then you take that and put that into
18 the headspace vial?
19 A Yes.
20 Q Close it up and put it in the device?
21 A No, I would close it up and leave it there until I
22 had put all of them onto the instrument.
23 Q Are they in the order in which you put it onto the
24 gas chromatograph?
25 A Yes.

1 Q So you put them all into a holder, so to speak,
2 and then you transfer them over?
3 A Yes.
4 Q So it only takes seconds to do that?
5 A To take the blood sample from the tube and put it
6 into the vial and then seal it, takes seconds.
7 Q So when you say aliquot start time, 8:10 a.m., end
8 time 8:20, what did you do with those ten minutes?
9 A That was from the time that I started, like, if
10 that was 8:00 in the morning, it most likely was
11 the calibrator, so it was the time I started doing
12 the calibrators, and I finished with the last one.
13 Q The last calibrator?
14 A Yes.
15 Q Then the second one where it says 8:30 to 8:35,
16 what would that be?
17 A Was it my initials there next to it, or are those
18 Dan's? That would be Dan. That was when he --
19 this actual particular run, the ones I was just
20 talking about, that's how long it took me to run
21 the ME cases for the day, and then Dan had to come
22 in and he also had some ME cases that he had to
23 run. So that's how long it took him to do those
24 ME cases.
25 Q So that has nothing to do with the blood alcohol

1 runs that you did?
2 A Yeah, these are the ME cases for the blood alcohol
3 that we did. And these would be the ones that we
4 would do the DUIs.
5 Q So you ran 69 samples for DUIs?
6 A I don't know how many I ran that day.
7 Q Would it refresh your memory if you saw that
8 sequence?
9 A Yes.
10 Yes, we ran 67 samples, and we also had a
11 control, and a negative in there.
12 Q All 67 of those were DUI cases?
13 A Yes, these are DUI cases -- no, there are some ME
14 cases in there.
15 Q When you say ME, what are you looking for?
16 A Ethanol, same thing.
17 Q So it's all ethanol determinations?
18 A Correct.
19 MR. SHERMAN: I would like to move for
20 admission of Defendant's Exhibit 3.
21 THE COURT: Any objection?
22 MS. ALDRIDGE: No objection, Your Honor.
23 THE COURT: So admitted.
24 BY MR. SHERMAN:
25 Q One of the most important, or actually, the most

1 critical processes that you do is calibrate the
2 device?
3 A Yes.
4 Q In calibrating the device, if it's not calibrated
5 properly, all of the samples that are in that run
6 are compromised?
7 A Correct.
8 Q Now you talked earlier about expiration dates and
9 whatnot. I just want to talk to you about that
10 for a minute. In order to make sure the device is
11 calibrated properly, you go out and purchase
12 solutions that are already pre made?
13 A Yes.
14 Q They are certified, so you know what's in them?
15 A Yes.
16 Q The practice of the Allegheny County Crime Lab is
17 to open the standard and use it as long as it's
18 within its expiration period, correct?
19 A Yes.
20 Q Once you open it, you may use it for what, six
21 months, a year?
22 A On alcohols it doesn't last long. We usually run
23 out and then we open up another one.
24 Q How long normally?
25 A For alcohol calibrators, maybe a week.

1 Q I want to direct your attention to two documents
2 and I'm marking them as Defendant's Exhibit 4 and
3 Defendant's Exhibit 5. These are the certificates
4 that come with your solution, is that right?
5 A Yes.
6 Q I'm just going to read from the Defendant's
7 Exhibit 4, but the text is the same on 5. It
8 says, "Expiration date has been established
9 through real time stability studies and applies to
10 the ampules stored unopened at the recommended
11 storage conditions".
12 A Yes.
13 Q And then in the next section it says, "The
14 standard should be used immediately after opening
15 to avoid concentration changes due to
16 evaporation".
17 A Yes.
18 Q So essentially, according to the manufacturer,
19 these have to be used right away?
20 A Yes.
21 Q You can't sit them and store them for a week?
22 A They get capped and stored.
23 Q But according to this, it says once its opened,
24 the expiration is immediate?
25 A Yes.

1 Q And that's not how Allegheny County does it
2 though?
3 A No.
4 MR. SHERMAN: Your Honor, I would move for
5 the admission of Defendant's Exhibits 4 and 5.
6 THE COURT: Any objection, Ms. Aldridge?
7 MS. ALDRIDGE: No, Your Honor.
8 THE COURT: They are admitted.
9 BY MR. SHERMAN:
10 Q I want to talk to you about you mentioned earlier
11 duplicate testing.
12 A Yes.
13 Q What the Allegheny County Crime Lab does, what you
14 did in this case was you put 67 unknown samples in
15 the gas chromatograph?
16 A Yes.
17 Q You were responsible for part of the 67 and Dan
18 Kinkaid was responsible for part of the 67?
19 A Yes.
20 Q So you opened Dan Johnson's sample, put it in a
21 vial, and put it in the headspace device?
22 A Yes.
23 Q Your colleague, Dan, took something from that same
24 exact sample and put it in another vial and put it
25 into the headspace device?

1 A Yes.
2 Q You then pushed the button and started the run?
3 A Yes.
4 Q And the results went through the computer?
5 A Yes.
6 Q So you took from the same sample, put it in the
7 same run, and two people looked at the results?
8 A Yes.
9 Q That's not duplicate testing as the Society of
10 Forensic Toxicologist would require duplicate
11 testing, is it?
12 A I don't know.
13 Q Duplicate testing is running, at least at a
14 minimum, two different runs.
15 A Okay.
16 Q Would you agree with that or don't you know?
17 A I don't know.
18 Q I want to show you, you had talked about it
19 earlier on the power point, Dan Johnson's
20 chromatogram. That is the chromatogram that you
21 used to produce the result for this case?
22 A Yes.
23 Q You are looking for two volatile compounds,
24 ethanol and propanol?
25 A Yes.

1 Q There are two additional peaks in that form?
2 A Right.
3 Q You don't know what those peaks are?
4 A No.
5 MR. SHERMAN: Your Honor, I'm going to mark
6 that chromatogram as Defendant's Exhibit 6 and
7 move for the admission.
8 THE COURT: Any objection?
9 MS. ALDRIDGE: No, Your Honor.
10 THE COURT: It's admitted.
11 BY MR. SHERMAN:
12 Q When you do your testing, you run what's called a
13 blank at the end of the test?
14 A A negative, yes.
15 Q The negative means it just has nothing in it?
16 A It has internal standards in it.
17 Q There is no types of alcohol?
18 A No.
19 Q You don't run blank in between each sample?
20 A No.
21 Q Even on the negative chromatograph there are
22 additional peaks?
23 A I don't know. Was there?
24 Q The one you showed on the board.
25 You were also asked about the proficiency

1 testing. On proficiency testing, for example, say
2 the state sends you .10 ethanol sample, and you
3 are supposed to try to get as close to or actually
4 get a one -- to get to a one or as close as
5 possible?
6 A I have to get what I get. I don't know what they
7 are.
8 Q I guess I didn't word that question correctly.
9 The state is not looking for a lab to hit the
10 result, they are looking for the lab to be within
11 plus or minus a mean?
12 A Yes. The state has requirements for what the
13 results have to be.
14 Q And a mean is the average?
15 A Right.
16 Q So if all the labs are testing high, as long as
17 you are within plus or minus of the mean, you are
18 okay?
19 A Yes.
20 Q You don't have to hit the actual result?
21 A No.
22 Q I'm going to mark as Defendant's Exhibit 7 the
23 negative that was run.
24 A Yes.
25 Q What you are looking for is just the end propanol?

1 A Yes, and to make sure there are no peaks that come
2 out at the other volatiles.
3 Q There are two additional peaks though?
4 A Correct.
5 Q And you don't know what they are?
6 A No.
7 MR. SHERMAN: Your Honor, I would move for
8 the admission of Defendant's Exhibit 7.
9 THE COURT: Any objection?
10 MS. ALDRIDGE: No, Your Honor.
11 THE COURT: So admitted.
12 BY MR. SHERMAN:
13 Q With regard to the procedures that you used
14 concerning the lab procedures, when were they
15 last -- do you know when they were last prepared?
16 A The actual writing of the procedure?
17 Q Yeah.
18 A We just recently did it within the past couple of
19 months, but I don't know when the alcohol one was
20 written, no.
21 Q So obviously that one doesn't apply to this case,
22 is that right? If it was the last couple of
23 months?
24 A I don't know when -- I know we recently have done
25 the alcohol, but I don't know when it was.

1 MR. SHERMAN: I don't have any further
2 questions, Your Honor.
3 THE COURT: Okay. Any redirect?
4 MS. ALDRIDGE: Just a few, Your Honor.
5 - - - -
6 **REDIRECT EXAMINATION**
7 BY MS. ALDRIDGE:
8 Q In reference to the equipment, the instrument,
9 they talked about maintenance?
10 A Yes.
11 Q Does the replacement of parts depend on what you
12 are using the equipment for?
13 A Yes.
14 Q The O rings, where are they located?
15 A They are located within the actual, where the vial
16 and the syringe would be.
17 Q What happens if an O ring isn't working?
18 A You would know it by the way the chromatogram
19 looks.
20 Q What would you do at that point?
21 A We would take it out of service and replace it.
22 We would call for service and replace the O rings.
23 Q If the injector -- how would you know that wasn't
24 working?
25 A That would be the same thing, the chromatograms

1 would not look the way they are supposed to.
2 Q These are internal parts?
3 A Yes.
4 Q To the equipment?
5 A Yes.
6 Q So it's nothing you would take apart to fix?
7 A We would call for service.
8 Q The defense in Exhibit 7, and I believe maybe also
9 in 6, they said that there are small peaks that
10 you don't know what they are?
11 A Correct.
12 Q But you do know what they are not?
13 A Correct.
14 Q And they don't represent ethanol?
15 A Correct.
16 Q So they have no bearing on the ethanol findings?
17 A Right.
18 Q With the proficiency tests, are they sent with an
19 amount? Do they say there is one percent, we need
20 you to find them?
21 A No.
22 Q So it's a sample, you are testing it, and then you
23 submit the results?
24 A Correct.
25 Q And they supply you with how your results compare

1 to what was actually in there?
2 A Yes.
3 Q And that's afterwards?
4 A Yes.
5 Q With regards to fermentation, you explained it's a
6 possibility?
7 A Yes.
8 Q How long do you think that might take?
9 A I don't know.
10 Q Would it be more than two days?
11 MR. SHERMAN: Your Honor, she testified she
12 doesn't know.
13 THE WITNESS: I don't know.
14 BY MS. ALDRIDGE:
15 Q When you tested the sample, were there clots?
16 A No.
17 Q So the anticoagulant worked?
18 A Yes.
19 Q Was the sample tested within ten days of the blood
20 draw?
21 A I don't know. I don't know when the blood draw
22 was.
23 Q The blood draw, I believe, was done on the 14th of
24 June.
25 A The sample was run on the 20th.

1 Q So it was within the ten days?
2 A Yes.
3 Q You didn't observe anything -- you have seen blood
4 where there is issues with it in the tube with the
5 sample, is that correct?
6 A Yes.
7 Q Did Mr. Johnson's blood appear to have any issues
8 in the tube?
9 A Not that I remember.
10 Q So when you put it in the vortex and it shook it
11 up, everything was normal?
12 A I don't remember. If there was something wrong
13 with it, we wouldn't have tested it.
14 Q But we tested it.
15 MS. ALDRIDGE: I don't have any other
16 questions, Your Honor.
17 MR. SHERMAN: I have no further questions,
18 Your Honor.
19 THE COURT: Okay. Why don't we take a break
20 until about quarter to 2:00.
21 MS. ALDRIDGE: Okay. Thank you.
22 THE WITNESS: Am I free to go?
23 THE COURT: Yes.
24 - - - -
25 **(Court recessed for lunch.)**

1 - - - -

2 **Thursday Afternoon**

3 **January 23, 2014**

4 - - - -

5 MS. ALDRIDGE: Your Honor, I would ask at
6 this time that all the evidence that we have
7 presented today be entered in as proper exhibits.
8 I believe that was one, two and three. And that
9 you would take judicial notice of the Pennsylvania
10 Bulletin as we discussed. Both the Allegheny
11 County Lab and the hospital lab are licensed by
12 the Department of Health to perform blood tests
13 related to alcohol. They are currently approved
14 by the Department under 28 PA Code 5.5 relating to
15 approval to provide special analytical service and
16 blood test for blood alcohol content, to perform
17 alcohol analysis of blood and/or serum and plasma,
18 and this approval is based on demonstrated
19 proficiency and periodic tests conducted by the
20 Department of Bureaus and Laboratories.
21 THE COURT: Mr. Sherman.
22 MR. SHERMAN: I have no objection, Your
23 Honor.
24 THE COURT: All right. So admitted.
25 MS. ALDRIDGE: At this point the prosecution

1 would rest and reserve the right for rebuttal.
2 THE COURT: Are you resting now?
3 MS. ALDRIDGE: Yes, and reserving the right
4 for rebuttal.
5 THE COURT: Mr. Sherman.
6 MR. SHERMAN: Your Honor, at this time I
7 would make a motion for judgment of acquittal
8 based on the evidence presented by the prosecutor.
9 I'm not going to go through it again. I already
10 made my argument with regard to the DUI aspect.
11 With regard to the first count, the
12 Commonwealth hasn't carried its burden of proving
13 beyond a reasonable doubt that that charge was
14 met, so I would ask that the Court enter a
15 judgment at this time of judgment of acquittal.
16 THE COURT: Ms. Aldridge, anything?
17 MS. ALDRIDGE: Your Honor, we would ask the
18 Court that when taken in the light most favorable
19 to the Commonwealth, we believe we presented
20 enough facts and evidence to proceed at this
21 point.
22 THE COURT: All right. I'm going to deny the
23 motion for judgment of acquittal.
24 Do you wish to proceed, Mr. Sherman, with
25 your first witness?

1 MR. INDOVINA: Your Honor, the defense calls
2 Kathy Drambel to the stand.
3 - - - -
4 **KATHY DRAMBEL**
5 **having been first duly sworn,**
6 **was examined and testified as follows:**
7 - - - -
8 **DIRECT EXAMINATION**
9 BY MR. INDOVINA:
10 Q Good afternoon. Would you please state your name
11 and spell your last name for the record, please?
12 A Kathy Drambel, D-r-a-m-b-e-l.
13 Q What do you do, Ms. Drambel?
14 A I am a housewife and mother of three children.
15 Q How many children did you say you have?
16 A Three.
17 Q Do you do anything else in the community as far as
18 volunteer work?
19 A I do. I do a lot of volunteer work with the
20 schools. I'm also --
21 MS. ALDRIDGE: Objection, Your Honor.
22 THE COURT: Yes.
23 MS. ALDRIDGE: The relevance of this witness?
24 THE COURT: Mr. Indovina.
25 MR. INDOVINA: I'm just introducing the

1 witness, Your Honor. I can move on. The witness
2 knows Mr. Dan Johnson. She spoke to him on the
3 night.
4 THE COURT: All right. I'll allow it. Go
5 ahead. You may proceed.
6 BY MR. INDOVINA:
7 Q Go ahead.
8 A I volunteer for the schools, for St. Vincent
9 DePaul and the Food Bank.
10 Q Did you have contact with Mr. Dan Johnson on
11 June 14, 2012?
12 A Yes, I did.
13 Q What was that contact?
14 A My husband and I went to Andora Restaurant that
15 evening for a business dinner with my husband's
16 clients, and we walked into the restaurant, and by
17 surprise Dan was already sitting there. And I was
18 very surprised. He lives in Franklin. And I went
19 and hugged him and talked to him for a while. He
20 was about five feet from our table.
21 Q Let me back up. He was there when you got to the
22 restaurant?
23 A Correct. He was already seated.
24 Q How did you greet?
25 A I hugged him and we chatted for a while.

1 Q What time is this at approximately?
2 A Well, we went for dinner. I don't know exactly,
3 7:00ish.
4 Q So you were very close to him when you talked to
5 him?
6 A Correct.
7 Q Did you smell an odor of alcohol on him?
8 A No.
9 Q What was his appearance like at that time?
10 A As it is today. Normal. The Dan Johnson I know.
11 Q Was there any indication that he was intoxicated?
12 A No.
13 Q How do you know Dan Johnson?
14 A One of my best girlfriends, Chris, is his
15 girlfriend, and we have been friends for over 20
16 years.
17 Q How long have you known Dan?
18 A Six years.
19 Q Have you ever consumed alcohol?
20 A Yes.
21 Q Have you ever been around other people who were
22 drinking?
23 A Yes.
24 Q Have you seen drunk people before?
25 A Yes.

1 Q What's it like when somebody is drunk?
2 A I mean, there is probably varied amounts of that,
3 but if you are really drunk, slurring your words,
4 falling over.
5 Q So you were at a business dinner?
6 A Correct.
7 Q You saw Dan?
8 A Correct.
9 Q Was he leaving or coming in?
10 A When I came in he was already seated. And he
11 probably left the restaurant 30 minutes, 45
12 minutes after we were seated.
13 Q Did he see when he left?
14 A Yes.
15 Q Did he say hi or goodbye to you again?
16 A Yes.
17 Q Did you hug again?
18 A We did.
19 Q So you were close enough to smell him?
20 A Correct.
21 Q Was there any odor about him?
22 A No.
23 Q What did he look like at the time he was leaving?
24 A Same as he does today.
25 Q As he is leaving, is there any indication that he

1 is intoxicated?
2 A No.
3 Q Would you have let him leave if he was
4 intoxicated?
5 A No.
6 Q What would you have done?
7 A We probably would have taken him home with us when
8 we left.
9 MR. INDOVINA: No further questions right
10 now, Your Honor.
11 THE COURT: Thank you.
12 Ms. Aldridge, cross.
13 - - - -
14 **CROSS-EXAMINATION**
15 BY MS. ALDRIDGE:
16 Q Ms. Drambel, you said the defendant was at the
17 restaurant already?
18 A Correct.
19 Q Was he at the bar?
20 A No. We were on the patio seated at tables for
21 dining.
22 Q You mentioned that you don't know what time it was
23 that you were there. You are presuming 7:00ish?
24 A My husband and I were going there for dinner with
25 clients, so anywhere between 6:00, 7:00, 8:00.

1 Q Do you know where Mr. Johnson went after he left
2 the restaurant?
3 A I do not.
4 Q Do you know what he was doing when he left the
5 restaurant?
6 A No.
7 Q Do you know if Mr. Johnson had anything to drink
8 while he was at the restaurant?
9 A I noticed he was drinking a glass of wine when we
10 were there.
11 Q At what point would you consider someone to be
12 intoxicated?
13 A I guess you could say someone that wouldn't be
14 able to drive a car.
15 Q Well, you mentioned slurring their speech.
16 A Right.
17 Q But if they weren't slurring their speech -- so
18 you are saying if they weren't slurring their
19 speech they aren't drunk or they are not impaired?
20 A I mean, I would not know it otherwise, no.
21 Q So you would be looking for specific things to say
22 that they weren't --
23 MR. INDOVINA: Objection, Your Honor. She is
24 putting words in her mouth. She never said she
25 was looking for specific things. She said if he

1 was slurring, he could possibly be drunk. That's
2 not what she said.
3 THE COURT: I'll allow it.
4 BY MS. ALDRIDGE:
5 Q Slurring would be a specific thing?
6 A Correct.
7 Q You mentioned that you hugged the defendant when
8 you first arrived?
9 A Correct.
10 Q Just a friendly pat kind of hug?
11 A Correct.
12 Q And when you left?
13 A Correct.
14 Q Did you stand when he left?
15 A Yes, we did, both my husband and I stood up as he
16 left.
17 Q Was he alone?
18 A No, he was not alone.
19 Q Do you know who he was with?
20 A No, I don't.
21 Q Do you know why he was there?
22 MR. INDOVINA: Objection, relevance.
23 THE COURT: Overruled. Go ahead.
24 BY MS. ALDRIDGE:
25 Q Do you know why he was there?

1 A No, I do not.
2 Q Do you have any knowledge as to how long he was
3 there before you arrived?
4 A That, I don't know either.
5 Q Was he eating? Did you see him eating?
6 A Yes.
7 Q You said you saw him drinking?
8 A There was a glass of wine in front of him, yes.
9 MS. ALDRIDGE: I don't have anymore
10 questions, Your Honor.
11 THE COURT: All right. Anything else of the
12 witness?
13 MR. INDOVINA: No, Your Honor.
14 THE COURT: Okay. You are excused. Thank
15 you.
16 MR. INDOVINA: The defense calls Christine
17 Liotta.
18 MS. ALDRIDGE: Offer of proof.
19 MR. INDOVINA: Ms. Liotta spoke to Mr.
20 Johnson several times leading up to the incident,
21 and then she picked him up from the police
22 station, Your Honor. So she has direct
23 observation as to what he looked and sounded like
24 before and after the incident.
25 THE COURT: I'll allow it. Go ahead.

1 - - - -

2 **CHRISTINE LAMPRINAKOS LIOTTA**

3 **having been first duly sworn,**

4 **was examined and testified as follows:**

5 - - - -

6 **DIRECT EXAMINATION**

7 BY MR. INDOVINA:

8 Q Good afternoon. Would you please state your name

9 and spell your last name for the record, please?

10 A Christine Lamprinakos Liotta, L-i-o-t-t-a,

11 L-a-m-p-r-i-n-a-k-o-s.

12 Q What do you do for a living?

13 A I'm a second grade teacher.

14 Q How long have you been a second grade teacher?

15 A This would be year three.

16 Q Are you involved in any way in the community at

17 all?

18 A Yes, I do occasional --

19 MS. ALDRIDGE: Objection, Your Honor,

20 relevance.

21 THE COURT: What's that relevance?

22 MR. INDOVINA: Just introducing the witness,

23 Your Honor.

24 THE COURT: I'll allow it.

25 THE WITNESS: I do occasional fundraisers for

1 terminally ill children in our area.
2 BY MR. INDOVINA:
3 Q Do you have any children of your own?
4 A Yes, I have five children of my own.
5 Q Do you know Mr. Dan Johnson?
6 A Yes, I do.
7 Q How do you know him?
8 A He is my significant other.
9 Q How long has he been your significant other?
10 A Eight years.
11 Q Have you ever consumed alcohol before?
12 A Yes.
13 Q Have you been around other people who have
14 consumed alcohol?
15 A Yes.
16 Q Do you know when somebody is drunk or not? Do you
17 think you can tell?
18 A I think so.
19 Q How could you tell?
20 A Their demeanor usually changes. Their words might
21 be slurred. They might be a little bit louder.
22 Their eyes may be glassy.
23 Q Did you speak with Dan Johnson on June 14, 2012?
24 A I did.
25 Q When did you talk to him?

1 A I spoke to him at around, I believe, 4:00.
2 Q What did you say when you talked to him?
3 A He had called to check in with me because I was
4 not in Franklin, I was in Mount Lebanon taking
5 care of my mom who was terminally ill at the time,
6 and he was just calling to check in and see how
7 she was doing that day, what time I thought she
8 might be going to bed that night.
9 Q What did he sound like when you talked to him?
10 A He sounded like he always does.
11 Q Was there any indication that he had been
12 drinking?
13 A No.
14 Q When was the next time you talked to him?
15 A I believe I talked to him again around 6:00.
16 Q Why did you talk to him at 6:00?
17 A He was checking in again. Again, my mom was quite
18 ill and he wanted to see how things were
19 progressing. And if she would be going to bed at
20 a certain time, so that he could then come and
21 visit me because we hadn't seen each other for a
22 few days.
23 Q When you talked to him at that time how did he
24 sound?
25 A He sounded the same as he did at 4:00.

1 Q Was that the last time you talked to him or did
2 you talk to him again?
3 A I spoke to him again that evening.
4 Q What time did you speak to him that evening?
5 A I believe it was around 10:00.
6 Q What did he say when you talked to him?
7 A He asked me to come pick him up.
8 Q Where was he?
9 A He was at the police barracks.
10 Q What did he sound like on the phone?
11 A The same as he did at 6:00.
12 Q Was there any indication that he had been
13 drinking?
14 A No.
15 Q Did he sound slow?
16 A No.
17 Q Was his speech slurred at all?
18 A No.
19 Q Did you go pick him up?
20 A Yes.
21 Q So you drove to the police barracks?
22 A Yes.
23 Q He came out to the car? Did he ever get in the
24 car with you?
25 A I went in and then, yes, he got in the car with me

1 afterwards, yes.
2 Q So did you guys walk back to the car together?
3 A Yes.
4 Q What was he walking like?
5 A Like he always walks.
6 Q What about his clothing, was there anything
7 significant about the way he was dressed?
8 A No.
9 Q Was he disheveled?
10 A No.
11 Q How did he look?
12 A His shirt was tucked in, he had a belt on. I
13 don't really remember what he had on, but I know
14 it was jeans and a nice shirt.
15 Q Did you sit in the car with him?
16 A Yes.
17 Q Did you guys talk?
18 A Yes.
19 Q Was his speech slurred?
20 A No.
21 Q Was his response slow when your conversation was
22 going on?
23 A No.
24 Q What did his eyes look like? Did you see his
25 eyes?

1 A He looked like he looks when he is with me
2 normally. I didn't notice anything different.
3 Q Was there anything you could think of that would
4 make you think that he had been drinking or was
5 intoxicated?
6 A No.
7 MR. INDOVINA: That's all I have, Your Honor.
8 THE COURT: Ms. Aldridge, cross.
9 - - - -
10 **CROSS-EXAMINATION**
11 BY MS. ALDRIDGE:
12 Q Ms. Liotta, you testified that the defendant is
13 your significant other?
14 A Yes.
15 Q You have been together how long?
16 A Eight years.
17 Q You testified that you have five children?
18 A Yes, from my ex-husband.
19 Q So none of them are his?
20 A They are not his, they are mine.
21 Q In your eight years with Mr. Johnson, does he
22 drink?
23 A Yes.
24 Q Have you seen Mr. Johnson impaired or under the
25 influence of alcohol?

1 A Yes.
2 Q What symptoms does he exhibit?
3 A Probably gets -- I don't know how to explain it --
4 a little more gregarious.
5 Q Does his speech get slurred?
6 A I'm trying to think if I've ever -- I guess I've
7 seen his speech slurred.
8 Q But not all the time?
9 A No.
10 Q But he gets gregarious, talkative?
11 A He has, yes. Not always, but he has.
12 Q So you would say that maybe there is different
13 levels of being impaired? Like one isn't the same
14 as the other?
15 A Absolutely not.
16 Q You said that you had spoken with the defendant.
17 You spoke on the phone?
18 A Correct.
19 Q He was calling you from his cell phone?
20 A Yes.
21 Q And you spoke with him at 4:00?
22 A Yes.
23 Q And you said again at 6:00?
24 A Yes.
25 Q What was the defendant doing between 4:00 and

1 6:00? Do you know?
2 A He had told me he was heading my way because I
3 hadn't seen him in a few days, and as I said, my
4 mom was quite ill, so he was taking a ride down to
5 visit with me after I put my mom to bed.
6 Q How long does that drive take?
7 A From Franklin?
8 Q Yes.
9 A About an hour and 40 minutes from start to finish
10 to my mom's house.
11 Q Do you know where Mr. Johnson was between 6:00 and
12 10:00?
13 A Did I know? No.
14 Q Do you know if he was drinking between 6:00 and
15 10:00?
16 A No.
17 Q When you spoke to him at 4:00 and 6:00, the
18 conversation was pretty much the same?
19 A Yeah. It was, how is your mom doing. I'm heading
20 your way. I think he did say, I believe, he said
21 I might stop and get something to eat. He was
22 trying to kill time until I put my mom and dad to
23 bed because they were quite a handful. And he
24 just wanted to give me that time before he came to
25 visit.

1 Q When he called you at 10:00, he said what?
2 A Could you please come pick me up, or would you
3 please come pick me up.
4 Q Did he tell you why?
5 A Yes.
6 Q What did he say?
7 A He said he had been stopped by a policeman for a
8 DUI.
9 Q When you arrived at the police station, how long
10 did it take you to get to the police station?
11 A I'm going to say I believe about from Mt. Lebanon
12 to there is about 20 minutes or so.
13 Q Was the defendant, Mr. Johnson, upset when you got
14 there?
15 A Sure he was.
16 Q Did you testify that he didn't have slurred speech
17 and that his clothes looked -- they weren't in
18 disarray or anything? That he looked normal?
19 A Correct.
20 Q Did he tell you where he had been?
21 A Right then, no. He just said can we go.
22 Q While you were in the car?
23 A Yes. He had told me he had been to Andora's and
24 ran into Kathy.
25 Q Did he tell you how much he had to drink?

1 A I'm not sure that we got into detail at that point
2 about what he had drank.
3 Q So he called you to pick him up because he got
4 arrested for driving under the influence, he told
5 you he was at a restaurant, and you didn't talk
6 about whether or not he drank?
7 A Of course we talked about whether he had drank,
8 yes. Yes, we talked about it, but I didn't say
9 exactly how many drinks did you have. No, I did
10 not ask that question. Because he did not appear
11 to be intoxicated.
12 Q You were in the courtroom earlier?
13 A Yes.
14 MS. ALDRIDGE: I don't have any other
15 questions.
16 THE COURT: Anything else, Mr. Indovina?
17 MR. INDOVINA: One question, Your Honor.
18 - - - -
19 **REDIRECT EXAMINATION**
20 BY MR. INDOVINA:
21 Q You said you have seen Dan drunk. Have you ever
22 seen him drive drunk?
23 A No.
24 MR. INDOVINA: No other questions.
25 THE COURT: Anything else?

1 MS. ALDRIDGE: Your Honor, may I approach?
2 THE COURT: Do you have any other questions
3 for her?
4 MS. ALDRIDGE: I may. I have a question.
5 THE COURT: You wish to approach?
6 MS. ALDRIDGE: Yes.
7 THE COURT: Come on up.
8 - - - -
9 **(The following sidebar discussion was held on**
10 **the record.)**
11 MS. ALDRIDGE: Does this open the door for
12 his prior DUI? She said she has not known him to
13 drive drunk and he has a prior DUI.
14 MR. SHERMAN: You don't even know when it
15 was.
16 MS. ALDRIDGE: It was in the last ten years.
17 They have been dating for eight.
18 MR. SHERMAN: If she says she never witnessed
19 him -- your question was did you ever witness.
20 MS. ALDRIDGE: That was your question.
21 MR. SHERMAN: If you ever witnessed it, how
22 does that have to do with a prior conviction?
23 It's not a conviction, it's an ARD.
24 MS. ALDRIDGE: You asked have you ever known
25 him to drive drunk.

1 MR. SHERMAN: No, he said did you ever see
2 him drive drunk.
3 MS. ALDRIDGE: His DUI was in 2010. So that
4 was within the last four years. They have been
5 together for eight years.
6 **(The previous question and answer was read**
7 **back for the Court.)**
8 MR. SHERMAN: She said she has never seen him
9 drive drunk.
10 THE COURT: Well, I'm not going to permit
11 the -- you say there was a prior conviction?
12 MS. ALDRIDGE: He has a prior conviction in
13 2010.
14 MR. SHERMAN: Now she is telling the Court.
15 THE COURT: Well, I'm not going to -- I'll
16 allow you to ask questions around that issue, but
17 not whether he was ever arrested or convicted.
18 MR. SHERMAN: She said she never seen him
19 drive drunk.
20 THE COURT: Well, I don't know. You are
21 certainly entitled to recross, but bottom line is
22 that will be off limits. Yes.
23 MS. ALDRIDGE: Okay, thank you.
24 **- - - -**
25 **(Discussion at sidebar was concluded.)**

1 - - - -

2 **RECROSS-EXAMINATION**

3 BY MS. ALDRIDGE:

4 Q Ms. Liotta, were you dating Mr. Johnson, the

5 defendant, in 2010?

6 MR. INDOVINA: Objection, Your Honor. It's

7 beyond the scope of redirect. The witness said

8 she did not know, did not see Mr. Johnson drive

9 drunk. Whatever the Commonwealth is getting

10 at now is beyond the scope of redirect. There was

11 one question on redirect.

12 THE COURT: Ms. Aldridge, response.

13 MS. ALDRIDGE: I believe that it would be

14 within the scope of, did you ever, because he said

15 ever, which includes everything, and I'm not

16 asking -- I'm asking in her relationship with him,

17 which she has already testified to, has been eight

18 years.

19 THE COURT: I'll allow it. Go ahead.

20 BY MS. ALDRIDGE:

21 Q Were you dating Mr. Johnson or your significant

22 other in 2010?

23 A Yes.

24 Q Did you have an occasion to pick Mr. Johnson up at

25 the police station?

1 A When.
2 Q In 2010.
3 MR. SHERMAN: Your Honor, this is outrageous.
4 You have already ruled on this. There was one
5 question asked. Have you ever seen Dan Johnson
6 drive drunk. And she said no. And that's it. So
7 now they are trying -- first of all, one person is
8 feeding the other one the questions. We are
9 sitting here waiting for questions.
10 THE COURT: I'll sustain the objection.
11 MS. ALDRIDGE: I have nothing further.
12 THE COURT: All right. Anything else,
13 Mr. Indovina?
14 MR. INDOVINA: No, Your Honor.
15 THE COURT: Okay, you are excused. Thank
16 you.
17 MR. SHERMAN: Your Honor, our next witness is
18 Janine Arvizu.
19 - - - -
20 **JANINE ARVIZU**
21 **having been first duly sworn,**
22 **was examined and testified as follows:**
23 - - - -
24 **DIRECT EXAMINATION**
25 BY MR. SHERMAN:

1 Q Would you give the Court your full name and spell
2 your last name for us?
3 A Sure. My name is Janine Arvizu, A-r-v-i-z-u,
4 J-a-n-i-n-e.
5 Q Do you have a resume?
6 A I do.
7 Q I would like to show you what I'll mark as
8 Defendant's Exhibit 8. Counsel has been provided
9 a copy of that. Is this your resume?
10 A Yes, it is.
11 MR. SHERMAN: Thank you. Your Honor, I would
12 like to move for admission and have the Court look
13 at Ms. Arvizu's resume.
14 THE COURT: Any objection?
15 MS. ALDRIDGE: No, Your Honor. This is
16 Number 8?
17 THE COURT: Yes.
18 BY MR. SHERMAN:
19 Q What does a laboratory auditor do?
20 A A laboratory auditor, the role that I serve in
21 working for my clients is that I work for clients
22 who use laboratory results to make very important
23 decisions. And they need to understand whether or
24 not the testing laboratory used the scientifically
25 valid method and whether it was reliably performed

1 so they can use those results to make their
2 important decisions.
3 Over the course of my career the majority of
4 my work in auditing laboratory work has been doing
5 those kinds of data quality assessments for
6 federal agencies.
7 Q What is your educational background?
8 A I have a Bachelor's of Science degree in
9 Biochemistry from Cal Poly in San Luis Obispo,
10 California, and ABD in Chemistry from the
11 University of New Mexico. That's not a degree.
12 It's All But Dissertation. It means I completed
13 all the course work and comprehensive and
14 cumulative exams and proposal preparation but did
15 not defend my dissertation. I went to work.
16 Q What does it take to be a quality auditor? Do you
17 just have to pay a fee?
18 A No. Certifications as a quality auditor are
19 granted by the American Society for Quality, which
20 is the professional organization of quality
21 practitioners. And in order to achieve their
22 certification, you have to have a certain number
23 of years of practical experience, post your
24 academic degree, and you have to sit for an
25 examination. It's like a four or six hour

1 examination. And it has a very appreciable
2 failure rate. It covers the entire body of
3 knowledge for the auditing process from sampling
4 statistics through how you conduct audits.
5 Q What is your employment background?
6 A I started my career working for the Department of
7 Energy at one of the national laboratories where I
8 established and managed a full service analytical
9 laboratory. It grew over the course of my tenure
10 from three to about 45 people, and it did a full
11 sweep of analytical testing, including gas
12 chromatography, as is the subject of this
13 particular hearing. We have several gas
14 chromatographs in our laboratory.
15 My role there was everything from writing the
16 specifications, to purchase the instrumentation,
17 to interviewing and hiring the staff, validating
18 the instruments, and reviewing and approving the
19 data produced by the laboratory.
20 Q Have you published in the field?
21 A I have. I actually authored the quality standard
22 that the U.S. Navy used as the basis for approving
23 the government and the commercial labs that did
24 analytical work for the Navy. That was during my
25 tenure as the program manager for the Navy's

1 quality program, evaluating all the labs
2 throughout the country that do analytical work for
3 the Navy.
4 Q Have you provided training in this field?
5 A A lot of training in this field. Throughout my
6 career I provide continuing education courses for
7 bench chemists, for field sampling technicians,
8 for the engineers that use laboratory results in
9 their work, as well as continuing education
10 seminars for lawyers. I've taught judges, judging
11 science course at Duke University. I love
12 teaching the subject of quality assurance in
13 laboratories.
14 Q Have you provided testimony as a laboratory
15 quality assurance expert in court before?
16 A I have on more than a hundred occasions, all kinds
17 of courts, state, local, federal, administrative,
18 military, international, all over the world.
19 Q So you have been accepted as an expert essentially
20 all over the world?
21 A Yes.
22 Q In what fields of endeavor have you been accepted
23 as an expert?
24 A The topic is generally testing laboratory quality,
25 data quality assessment of laboratories work

1 product. Although the scope has ranged from
2 sampling through testing and reporting in areas
3 from toxicology, DNA, gunshot residue, quite a
4 variety of forensic tests.
5 MR. SHERMAN: Your Honor, I ask that the
6 Court accept Ms. Arvizu as an expert in lab
7 quality assurance and lab testing protocols and
8 procedures.
9 THE COURT: Ms. Aldridge, any questions?
10 MS. ALDRIDGE: Yes.
11 - - - -
12 **CROSS-EXAMINATION**
13 BY MS. ALDRIDGE:
14 Q I was trying to write as fast as you were talking.
15 When you said that some of the topics that
16 you testified as an expert, is it testing lab
17 qualities and data quality --
18 A Assessment.
19 Q What does that mean exactly?
20 A It's the process that I described earlier, wherein
21 I go in after the fact and review the
22 contemporaneous records produced by a laboratory,
23 and during the sample collection process to
24 determine whether that entire measurement system
25 was in control and operating properly at the time

1 the measurement was generated.
2 Q Have you had occasion to work in a forensic
3 laboratory?
4 A No, I have never worked in a laboratory whose
5 primary purpose was forensic testing. The
6 laboratory that I managed for the Department of
7 Energy generates results that may have very well
8 ended up in court, but that was not their primary
9 purpose.
10 I was called, for example, to the Rocky Flats
11 Plant --
12 Q That was a no? That you have never worked in a
13 forensic laboratory?
14 MR. SHERMAN: Can she be allowed to finish
15 her answer?
16 THE COURT: Wait. Wait.
17 MS. ALDRIDGE: The question was, have you
18 ever worked in a forensic laboratory and you
19 responded no.
20 THE COURT: Well, she answered that. And did
21 you have a follow-up question?
22 MS. ALDRIDGE: I was trying to ask a follow-
23 up question.
24 THE COURT: What's the follow-up question?
25 BY MS. ALDRIDGE:

1 Q The follow-up question is have you ever done any
2 blood alcohol testing?
3 A I have not tested blood alcohol personally.
4 Q You had mentioned that you did GC analysis and
5 what did you test for?
6 A The GC testing that was done in the lab at that
7 time that I managed for the Department of Energy,
8 it included volatile organics, it included
9 alcohols, not ethanol specifically, but other
10 compounds that are chemically characterized as
11 alcohols, as well as other volatile organics.
12 Q Did it involve quantitation?
13 A Yes, qualitative identification as well as
14 quantitation.
15 Q Can you explain how that process works?
16 A How GC works?
17 Q How the qualitative and the quantitation works?
18 MR. SHERMAN: Your Honor, at this point we
19 are just asking the Court to accept Ms. Arvizu as
20 an expert. She has been accepted all across the
21 world. It's not cross-examination yet.
22 MS. ALDRIDGE: I believe that Your Honor
23 can --
24 THE COURT: It's relevant to this case.
25 That's the issue, isn't it? She could be an

1 expert in a lot of other cases, but I think that
2 Ms. Aldridge is entitled to a voir dire. Are you
3 asking me just deem her an expert without allowing
4 the prosecution the opportunity to ask her some
5 questions?
6 MR. SHERMAN: Well, the questions aren't
7 being related right now to her expertise. She is
8 asking her if she knows about certain things.
9 THE COURT: I'll overrule. Go ahead.
10 BY MS. ALDRIDGE:
11 Q In relationship to the GC testing, you said that
12 there was a qualitative and quantitative analysis?
13 A Yes.
14 Q How is that conducted?
15 A Do you want an explanation of how gas
16 chromatography works? Or do you need an
17 explanation of what qualitative and quantitative
18 analysis are?
19 Q How you conducted qualitative and quantitative
20 analysis.
21 A How I personally conducted it when I was running
22 samples at the bench?
23 Q Yes.
24 A I think I'm in a better position to explain how
25 it's done in practice now, but --

1 Q Why is that?
2 A Because the technology has changed somewhat since
3 those times. There is more computer control now
4 than there used to be. I didn't do a lot of bench
5 work. I very quickly transitioned from the bench
6 to a management supervisory quality assurance
7 role.
8 But I would be happy to explain gas
9 chromatography for you. In fact, we have some
10 materials and I brought pens so I can describe it.
11 It's very relevant to my conclusions in this case.
12 I've taught gas chromatography and I'd be happy to
13 explain the details to you.
14 Q So when you say you didn't do a lot of bench work,
15 does that mean that you didn't actually do a lot
16 of hands-on testing?
17 A That's correct. In a production laboratory, it's
18 essentially science on a production line. And the
19 day-to-day manipulation of processing of samples
20 is something most testing laboratories is done by
21 technicians. So I very quickly transitioned out
22 of the testing role into an oversight role.
23 Q Have you ever performed testing with a dual column
24 method?
25 A Yes.

1 Q What were you testing there?
2 A The samples or the analyzed interests?
3 Q The samples.
4 A They may have ranged from water samples, to soil
5 samples, waste samples, product samples, quite a
6 variety.
7 Q But not blood?
8 A Not blood, no. They included samples that may
9 have had biological activity, but not blood.
10 Q Have you ever testified for the prosecution?
11 A I have not. I have been consulted, I guess, by a
12 district attorney who was concerned about the
13 problems with his blood alcohol lab, and asked for
14 some advice. So he could handle what he needed to
15 look for to understand the problems in that
16 laboratory, but I didn't provide testimony.
17 Q Are you being compensated or paid for your
18 testimony here today?
19 A I expect to be. I'm paid for my time, not my
20 testimony per se. I'm paid a flat rate regardless
21 of whether or not I'm reviewing data or traveling
22 or testifying.
23 Q You mentioned that -- have you taken forensics
24 classes?
25 A Not in academia I have not. I have attended a

1 number of forensic conferences, if that's what you
2 mean by classes. They are one hour lecture type
3 things.
4 Q Course work, school work?
5 A Not in school, no.
6 Q For your dissertation -- or you don't have a
7 doctorate. But the classes that you are taking
8 there and the course work that you did, when was
9 that?
10 A Many years ago. In the 1970s, late '70s.
11 Q With the course work being that long ago, is it
12 fair to say that you can't argue a dissertation at
13 this point?
14 A That's correct. I would have to write one more
15 chapter.
16 MS. ALDRIDGE: I don't have anymore
17 questions, Your Honor.
18 THE COURT: Okay. Anything else?
19 - - - -
20 **REDIRECT EXAMINATION**
21 BY MR. SHERMAN:
22 Q When we hear all these terms like forensic lab,
23 are they supposed to operate -- I mean, is a lab a
24 lab?
25 A A testing lab is a testing lab. Labs that test

1 samples, unknown samples, to identify what's in
2 them and how much of something is in them are
3 referred to as testing laboratories. There is,
4 for example, an international standard, an ISO
5 standard for calibration and testing laboratories
6 that is universally acknowledged to be applicable
7 to all kinds of testing labs, specifically
8 including forensic labs. Forensic science is a
9 field of science introduced in a legal
10 environment. It's not a separate discipline of
11 science per se.
12 Q Have you been admitted to testify in courts all
13 around the world regarding testing for ethanol?
14 A I have testified -- I have not counted how many
15 times, but I would say dozens of times in blood
16 ethanol cases all over the country, from
17 California to Florida.
18 Q So essentially, if you never worked in a forensic
19 lab, or you have never run samples, are you still
20 qualified with regard to testifying as a
21 laboratory auditor, because that's essentially
22 what you have done for your career?
23 A Yes. The principles of laboratory quality
24 assurance are universally applicable. They are
25 not -- they don't change. The process through

1 which you determine the performance
2 characteristics of a method, or through which you
3 evaluate the performance of a method doesn't
4 change from lab to lab. In fact, some of the
5 foundational texts in the subject written by a
6 fellow from the National Institute of Standards
7 and Technology, analytical quality assurance, you
8 can look through the whole book and it does not
9 refer to any specific type of testing. It's the
10 principles of quality assurance and their
11 application in the testing environment.
12 Quality assurance in a laboratory are those
13 practices that you put in place to insure that
14 that laboratory is capable of consistently and
15 reliably producing data of acceptable quality.
16 Whether you are in my auditing class, whether I'm
17 auditing a food lab, or a pharmaceutical lab, or
18 an environmental lab, or a forensic lab, those
19 principles are the same.
20 Q You have audited labs for the United States
21 Department of Energy, and the United States
22 Department of Navy?
23 A Yes.
24 MR. SHERMAN: Your Honor, I have no further
25 questions with regards to Mrs. Arvizu's expertise.

1 MS. ALDRIDGE: Your Honor, I would argue that
2 Ms. Arvizu's area of expertise is not applicable
3 in this case. She has never worked in a forensic
4 laboratory. She does not have forensics
5 experience. She has never done any blood alcohol
6 testing. So just being familiar with the process
7 is very different from actually performing and
8 doing the process. And I don't believe that her
9 expertise is warranted.
10 THE COURT: All right. I'll deem her as an
11 expert and you will have the opportunity to cross
12 on the relevancy.
13 MR. SHERMAN: Thank you, Your Honor.
14 - - - -
15 **DIRECT EXAMINATION**
16 BY MR. SHERMAN:
17 Q Ms. Arvizu, what were you asked to do in this
18 case?
19 A I was asked to conduct a data quality assessment
20 of the results reported in this case by the
21 Allegheny Laboratory.
22 Q How do you as an independent party evaluate the
23 quality of results that were reported by a
24 laboratory?
25 A By reviewing the contemporaneous records that

1 documented the practices and the results obtained
2 at the time of the testing. Essentially try to
3 reconstruct the analytical process based on the
4 written record to understand what equipment was
5 used, what the performance characteristics of that
6 equipment was, how the sample was handled, what
7 method they used to test it, all the elements of
8 the process.
9 There are three primary areas that must be
10 assessed for a data quality assessment. The first
11 is sample integrity. That is, you must be
12 confident that the results reported from a sample
13 accurately and completely represent the sample
14 that was originally collected in the field.
15 Because it turns out it's a very difficult
16 technical challenge to keep that sample from
17 changing. To insure that the sample that's
18 ultimately analyzed by the instrument actually
19 represents the sample that in this case was
20 collected from the subject's arm days before. And
21 so sample integrity must be insured.
22 The second is method validity. The second
23 area is method validity. And that is as a
24 scientist, it's our professional obligation to
25 insure that the methods that we use to test

1 samples have been scientifically validated and
2 found to be appropriate for their intended use
3 before they are used to test an unknown sample.
4 That is a requirement of the international
5 standards for testing laboratories. It is a
6 requirement of the ASCLD/LAB standard that was the
7 basis for this particular laboratory's
8 accreditation, and it's a matter of scientific
9 necessity. That we simply can't just assume that
10 labs will work properly on unknown samples. We
11 have to test it empirically and demonstrate the
12 acceptability of that method. So that's the
13 second item.
14 The last item is method reliability. And
15 that is even if the sample had integrity, and even
16 if the method was valid, was the actual work in
17 this particular case effectively carried out. Was
18 everything in control and working properly at the
19 time it was tested.
20 So I look at all three of those areas to
21 assess the quality of a final result.
22 Q It's sort of like a three leg stool, where one of
23 the legs is missing, then you don't have a
24 reliable result?
25 A That's correct.

1 Q Certainly not one that a court of law could rely
2 on?
3 A That's correct.
4 Q I want to take these one at a time. What does
5 sample integrity have to do with a reliable
6 result?
7 A In many laboratories the analysts tend to adopt
8 blinders and consider I only test what I received
9 so my results are accurate for what's in that
10 container. The problem is the decision is not
11 based on what's in the container. What's
12 important for a decision making purpose is what
13 the concentration of the subject's blood was at
14 the time it was collected. That means that the
15 lab scientist needs to remove the blinders and
16 look at the entire measurement process and
17 evaluate that entire process to insure that the
18 sample they test in the lab actually represents
19 the subject's blood at the time it was collected.
20 That's a broader prospective. I've got to be
21 absolutely unambiguously positive that the sample
22 that was collected didn't change, it didn't get
23 mixed up with another sample, its identity was
24 demonstrated, and its chemical and physical
25 integrity was matured throughout that process.

1 Q Did you review records with regard to this
2 particular case of a blood sample involving Dan
3 Johnson?
4 A I did. The laboratory provided a litigation
5 packet, something around a hundred pages or so.
6 Q What were the issues with the integrity of
7 Mr. Johnson's sample?
8 A Those materials did not include records that
9 demonstrated the integrity of the samples
10 specifically relating to the collection. The one
11 very serious indication of a problem, however, is
12 that in the laboratory's final report, it
13 documents the fact that the sample, as received,
14 the sample as tested by the laboratory, was
15 received with three milliliters of blood in a
16 10 milliliter gray top tube. These tubes are
17 manufactured by Becton Dickinson, a very respected
18 supplier of medical supplies, and they are
19 manufactured under standards for a ten milliliter
20 tube with sufficient vacuum. It's an evacuated
21 tube, so that it will hold ten, plus or minus 0.7
22 milliliters of blood. That is, if there is
23 anything less than 9.7 milliliters of blood in a
24 tube, that's considered under filled.
25 The manufacturer in their published materials

1 that they provide to their purchasers states that
2 use of an under filled tube can lead to poor
3 product performance and inaccurate results.
4 The reason for that in the case of a blood
5 alcohol sample is because these evacuated tubes
6 have a glass seal, essentially, that rubber
7 stopper creates a glass seal at the top that holds
8 the vacuum inside. If those tubes are stored as
9 the manufacturer requires, which is an empty tube
10 simply with the additives, but no blood in it yet,
11 and if it's stored between 39 and 77 degrees, that
12 tube seal should remain intact. If it's stored
13 outside that temperature range, the integrity of
14 that seal can be lost and air can be introduced or
15 sucked into the vacuum and contaminate that tube.
16 The possible effects of that are very serious
17 in the case of a blood alcohol test. Because
18 first, you can't collect a full draw. You can no
19 longer collect 9.7 milliliters of blood because
20 there no sufficient vacuum. So the presence of
21 only three milliliters of blood in a tube is a
22 warning sign that that tube integrity may have
23 been compromised.
24 The second problem is that the introduction
25 of air to that tube introduces microbes from the

1 air. It introduces the potential for that sample
2 to be contaminated with the microbes that can
3 cause fermentation of the sample, which alters by
4 increasing the ethanol concentration of the
5 sample. That would be a silent error. That would
6 not be evident to an analyst if they simply popped
7 the tube and ran the blood sample.
8 The fact that there was only
9 three milliliters of blood is something that's
10 specifically addressed by the manufacturer. You
11 should not use the tube in that manner. And in
12 the case of blood alcohol, it's a warning that
13 tube integrity may have been compromised.
14 Q Now is this just some theoretical stuff that you
15 are putting here because you were called as a
16 witness or is this a real problem?
17 A This is a real problem. The national standards
18 for phlebotomy, NCCLS is the old abbreviation.
19 CLSI is the new one. That document goes through a
20 description of the issues associated with blood
21 tubes for blood alcohol testing, and it very
22 specifically addresses the need to insure that you
23 have sufficient preservative, and refrigerated
24 temperature, and minimum time between collection
25 and analysis to reduce the potential or

1 fermentation to occur in those tubes.
2 Q Is it common in forensic testing to not record the
3 expiration date of a tube?
4 A It's more common that it should be in forensics.
5 In every other testing discipline, the matter of
6 practice is when there is an expiration date and a
7 lot number, you record that to demonstrate that
8 that was acceptable for the unit at the time of
9 use, rather than relying on a tube or a secondary
10 container that may be thrown away.
11 The actual lot number that's used needs to be
12 recorded. It's part of what's called an audit
13 trail in the laboratory. We can't ever rely on an
14 individual's memory for something that they did a
15 year and-a-half ago on a Tuesday morning. We need
16 to rely on the written records. And so
17 documentation and maintenance of an audit trail
18 for the work that a laboratory does is an
19 essential element of quality standards.
20 Q When you started answering, you said it's more
21 prevalent than it should be, you were saying that
22 not in a sense that it's acceptable, you meant
23 that it's unacceptable?
24 A It's very unacceptable, yes.
25 Q Is there a problem with using an expired tube?

1 A Yes. Again, the manufacturer specifically warns
2 you that they will not certify, cannot certify
3 their tubes as appropriate for use if they are
4 used beyond their expiration date. It's put there
5 to protect the user.
6 Q Now I know you discussed the method validity.
7 What does it mean to be -- or for a method to be
8 scientifically valid?
9 A Method validation is a process that scientists go
10 through where you go into the laboratory and you
11 develop a plan to evaluate the performance of your
12 testing method. It's actually empirical testing
13 and it's conducted in accordance with the very
14 carefully designed plan. There is actually a
15 scientific working group for toxicology that has
16 issued guidelines for method validation that
17 prescribes very specifically the elements
18 necessary for validation of a forensic toxicology
19 method. And it's essentially where you go in and
20 test the method using known solutions to determine
21 how well it works. Its accuracy, its precision,
22 its selectivity, all of those characteristics that
23 matter for the intended use of the data. Because
24 a method that's perfectly suitable and appropriate
25 in one application, may be completely unsuitable

1 in another. So it's very important that you
2 determine method validity for its intended use.
3 Q So when you say method validity, any time you do a
4 new procedure, any time you do a new machine is
5 put into evidence service, any time you are doing
6 something new or different, you have to validate
7 or show that that method works?
8 A That's correct.
9 Q Did you get a method validation study from the
10 Allegheny County Crime Lab, Medical Examiner's
11 Crime Lab.
12 A I got a couple of pages of something that was --
13 it was an email transmitting something that said
14 method validation. There was a one page unsigned,
15 undated summary of the results, and then there
16 were two pages of manually completed summary data
17 from some accuracy and precision testing.
18 The reason I'm so specific is because that
19 doesn't even come close to the level of
20 documentation necessary for a scientifically
21 reliable validation study.
22 Q Notwithstanding the absence of the documentation
23 that's necessary, did they perform a proper method
24 validation study?
25 A The validation, the study that I reviewed was

1 described as a study to compare one GC column to a
2 new GC column, specifically, these were an RTX,
3 two different RTX columns, which are capillary
4 columns produced by a manufacturer --
5 Q I don't mean to interrupt you, but when you talk
6 about columns, we talked a little earlier about
7 when the sample is put through the machine, it's
8 traveling through this column?
9 A Yes.
10 Q And you were saying Allegheny County was testing
11 capillary columns?
12 A Yes. Their validation study was to compare one
13 capillary column to a different capillary column.
14 Q Was a capillary column used in this case?
15 A A capillary column was not used in this case.
16 This case used a packed column. That's a
17 completely different method, totally different.
18 Q So in crude laymen's terms, would this be
19 equivalent to Allegheny County saying we want to
20 study the performance of Cadillacs, but they use a
21 Volkswagen to conduct the study?
22 A They used a Volkswagen engine, because it was just
23 like the inner workings of the instrument that
24 they changed.
25 Q Basically, they are comparing apples to oranges?

1 A The validation study we were provided do not
2 validate the method that was performed on
3 Mr. Johnson's sample at all. Even remotely.
4 Q Is there any forensic, or any scientific book,
5 article, paper, anything that could defend the way
6 Allegheny County conducted its validation study?
7 A It may have been appropriate for its intended use
8 to compare those two columns. It was not
9 appropriate for the testing performed in this
10 case.
11 Q What is ISO 17025?
12 A ISO 17025 is an international standard,
13 international quality standard for calibration and
14 testing laboratories. It establishes those
15 general requirements for calibration and testing
16 laboratories that represent the consensus of the
17 international scientific community for the
18 practices that are necessary to insure reliable
19 results.
20 Q We heard earlier that Ms. Stanich is a member of
21 the Society for Forensic Toxicologists. Do they
22 put out any guidelines?
23 A Society of Forensic Toxicology in concert with the
24 American Academy of Forensic Scientists issued a
25 set of guidelines published in 2006 that represent

1 the consensus of the forensic toxicology community
2 as to the minimum standards necessary to do
3 forensic toxicology work.
4 ISO 17025 is a very high level standard.
5 It's not very prescriptive. It does not get into
6 the nitty-gritty detail for any given discipline.
7 That is what the SOFT standards do. The SOFT
8 Guidelines address.
9 Q When you say SOFT, Society Of Forensic Toxicology?
10 A Yes, the SOFT Guidelines essentially implement
11 higher order of quality principles, specifically,
12 in the language for forensic toxicologists.
13 Q You heard this ASCLD, ASCLID Lab.
14 A There is no I in there. ASCLD/LAB. It stands for
15 American Society of Crime Laboratory Directors,
16 Laboratory Accreditation Board. That is one of
17 three independent agencies that accredit forensic
18 laboratories in this country.
19 Q Do all three of these standards that you just
20 mentioned, do methods have to be valid according
21 to these three standards?
22 A Method validation is specifically addressed in the
23 ISO standard. It is specifically addressed in the
24 ASCLD/LAB standard. And I don't remember if it's
25 addressed in the SOFT Guidelines, but it is in the

1 other one that I mentioned, SWGTOX, which is
2 Scientific Working Group for Toxicology.
3 Q Is Allegheny County required to follow these
4 standards?
5 A I don't know that it's ever a law that anybody has
6 to follow good science, but it does represent the
7 consensus of the scientific community that these
8 things are necessary if you are going to call
9 something reliable science.
10 Q Was the method used to report the blood alcohol
11 content in this case scientifically valid?
12 A It was not.
13 Q Why not?
14 A The method that we saw portrayed earlier in the
15 power point presentation, and that was performed
16 on Mr. Johnson's sample, was what's called single
17 column gas chromatography. I think I need either
18 the display or the board so that I can explain
19 that.
20 Earlier today you saw a brief introduction to
21 gas chromatography. I'm going to be a little more
22 specific as to what goes on inside the instrument.
23 Basically a gas chromatograph is a big metal
24 oven. If you went into the laboratory and you
25 looked on the bench you would see a big metal box.

1 That box has the auto sampler that we heard about
2 that samples the headspace to inject it into the
3 instrument, so this is where samples come in
4 (indicating). And there is a detector, a flame
5 detector, flame ionization detector where samples
6 come out (indicating). And in theory, what
7 happens in chromatography, ideally, what you want
8 to have happen, is that a mixture gets separated.
9 Just like the kind of junior high science fair
10 experiment where you put ink on a piece of paper
11 and you let the solvent move it and separate it
12 into its component picture. That's chromatography
13 on a very simple scale.
14 In this case, if we have a column
15 (indicating), and the size of that column in this
16 particular case was about six feet long, and it's
17 coiled up, about an eighth of an inch in diameter,
18 and that column is filled with a packing material.
19 In this case they used a carbowax column. It has
20 a polar packing material. That just speaks to its
21 charge density so that it tells you how that
22 column interacts with the samples that go through
23 it.
24 If I have a mixture of samples, if I have
25 some ethanol and something else, a blue compound

1 and a red compound, and they get injected into
2 that column (indicating), those different chemical
3 compounds interact differently with the packing
4 material in this compound. They are pushed
5 through with gas, that's why we call it gas
6 chromatography, and they interact differently
7 based on physical properties, kinetic properties,
8 diffusion characteristics, a lot of different
9 characteristics, and there are a lot of formulas
10 to figure out how it works. But the way it works
11 is as these things get pushed down the column,
12 maybe the blue ones move out much faster and the
13 red ones take longer to go through the column,
14 because as they are moving through, the red ones
15 are interacting more with the material in the
16 packing.
17 So as gas is moving through, as the sample is
18 going through the column, the detector isn't
19 seeing anything. So it's just at a flat line
20 (indicating). But as soon as the blue thing hits
21 that detector, as soon as that blue compound hits
22 that detector, you are going to get a peak
23 (indicating).
24 Q Can I show -- did I show you before we came in a
25 little graph?

1 A Yes.
2 Q And did that represent what you are saying?
3 A Yes.
4 As the gas keeps pushing, the next compound
5 to come off will also have a peak (indicating).
6 MR. SHERMAN: Your Honor, may I approach so
7 we can show the Court?
8 THE WITNESS: The high tech version.
9 THE COURT: Okay. Well, I can step down.
10 **(Mr. Sherman is showing the Court the**
11 **diagram.)**
12 MR. SHERMAN: This is essentially what it
13 looks like (indicating).
14 BY MR. SHERMAN:
15 Q This is what it looks like.
16 A Start out together, some of them go through very
17 quickly and some of them take a long time
18 (indicating). The one that goes through quickly,
19 that's the first peak (indicating), second peak
20 (indicating), and the third peak (indicating).
21 Q Going back to what you said earlier, three things
22 went there. In other words, three colors. So
23 there were three peaks. If there are more than
24 three peaks, what does that tell you?
25 A It means that you don't have what you thought you

1 had going in.
2 Q So there is something else?
3 A There is something else in there.
4 If this first one came out at one minute, and
5 the second one came out at two minutes, how would
6 I know what those compounds were? I would have no
7 way of knowing. There is no scientist in the
8 world that can look at a GC-FID chromatogram and
9 tell you what a peak is without some extra
10 information. And the extra information is we have
11 to teach the instrument the retention time for the
12 compounds that we are interested in. That is, if
13 I'm interested in ethanol, when I run a known
14 solution of blue ethanol through this
15 chromatograph (indicating) and get a peak at one
16 minute, that tells me that's the retention time
17 for ethanol under these conditions, with that
18 column, and that flow rate, and that temperature.
19 Then if I run an unknown sample and I get a
20 peak at one minute, that is an indication that it
21 might be ethanol. It does not confirm it. It's
22 what's called a tentative identification. The
23 reason it's only tentative is because there are
24 literally thousands and thousands of volatile
25 organic pounds. Many, many of those organic

1 compounds put through this same instrument in
2 these same conditions would also come out in one
3 minute.
4 The literature is ripe with examples of
5 compounds being misinterpreted as ethanol when
6 they were actually something else because of it
7 being single column GC.
8 The way we get around this in science is by
9 doing what's called dual column GC. Instead of
10 just having one column in there with the
11 instrument, and their instrument is actually
12 configured to allow two columns, so this --
13 Q Just to -- the proper scientific practice is to
14 use two columns, but Allegheny County uses one?
15 A That's correct.
16 Q But their machine is actually set up to do two
17 columns if they wanted to do it?
18 A These instruments are in fact configured to allow
19 two columns.
20 The problem is that in one column if these
21 blue and red ones were not separated, if these
22 were coming out at the same retention time, when
23 it gets to the detector, you are going to have the
24 signal that corresponds to the red peak, plus you
25 are going to have the signal that corresponds to

1 the blue peak, but that's a stupid detector, it
2 can't tell the difference, it just burns it all
3 up, and it gives you one big peak that corresponds
4 to the additive property (indicating), the sum of
5 both of those compounds. And there is no way to
6 know by looking at a single column GC whether that
7 peak represents one compound or more than one
8 compound.
9 Q I want to talk about just some specifics with
10 regard to the practices. You heard about this
11 duplicate testing. And my understanding is,
12 correct me if I'm wrong, essentially two analysts
13 load up the machine, one pushes a button, one
14 sample goes to the path for the one analyst, one
15 sample goes to the computer path of the second
16 analyst, and they call that duplicate testing. Is
17 that duplicate testing in accordance with the
18 rules of science?
19 A It is not in accordance with the rules of their
20 own procedure, which says that they do them
21 separately, from separate blood vials.
22 Q So Allegheny County will take -- basically, they
23 are running the same sample in two different
24 points in the same batch?
25 A Yes.

1 Q So it's essentially one test twice?
2 A Essentially. There are a lot of problems with the
3 way this laboratory configures and practices what
4 they call batch. A batch is very, very important
5 in the principle of analytical chemistry. Because
6 we don't just run one sample at a time. We run a
7 whole lot of unknown samples at a time.
8 And as a result, in a production laboratory,
9 how you handle this whole batch of samples should
10 be that they are all processed in exactly the same
11 manner, the same conditions, the same analyst, the
12 same time without interruption so that the results
13 from the known samples, what are called controls,
14 can be used to infer how well the unknown sample
15 testing was performed.
16 This laboratory has really turned that whole
17 system on its head by the way that they run their
18 batches.
19 They essentially run an analytical batch of
20 their calibrators and controls all by itself
21 without any unknowns, just their calibrators and
22 controls. And then later they come along and they
23 run a batch of unknown samples that is unknown
24 after unknown. And at the very end they run one
25 quality control positive, and one quality control

1 negative. And then after a while, they run
2 another batch of samples. They are running three
3 separate analytical batches, but all the
4 calibrators on the first one, and most of the
5 controls are in the first one. It's not
6 uninterrupted. The best I can do -- we didn't get
7 all the data in this case. We only got your guy's
8 chromatograms. I didn't get all the
9 chromatograms, so I couldn't really reconstruct
10 it, but it's apparent that there was a delay of at
11 least a couple of hours during the day, presumably
12 at those mid points between the batches. That
13 means that this was not a contemporaneous batch.
14 This was not samples that were also processed and
15 treated in the same manner, under the same
16 conditions.
17 Q So in other words, there needs to be controls run
18 all throughout the samples?
19 A Controls should be interspersed throughout the
20 samples, and the instrumental analysis should not
21 be interrupted during the course of the testing.
22 The problem is, an analyst can stop it and
23 tweak with it, and alter things, and you won't
24 know that. And so that's why it needs to continue
25 uninterrupted without any intervention during the

1 batch.
2 Q What about the use of blanks? It seems that
3 Allegheny County uses one at the end, and then one
4 at the beginning, but there is no blanks in
5 between the samples. What's the significance of
6 that?
7 A It's very significant because the way they have
8 structured their blanks, they are only looking for
9 instrument carryover. They are only looking for a
10 situation where I ran a really high sample and
11 there wasn't enough time to get it all through, so
12 some of it carried over into the next sample.
13 That's the only way their blank placement is
14 looking for the presence of contamination.
15 In my experience, specifically with respect
16 to blood alcohol testing laboratories, it's more
17 likely that a contamination problem exists in the
18 sample preparation stages, when the samples are
19 actually being prepared. I've seen some very
20 significant instances of contamination occurring
21 there. But the way they are preparing their
22 samples where they -- the way they pipet them at
23 different times, means they are not even
24 evaluating that with their blanks. If they are
25 contaminating samples, they will be blistfully

1 ignorant of that fact because they are not
2 checking for that the way they are preparing and
3 running their blanks.
4 Q Now you heard earlier the testimony with regard to
5 how Allegheny County Lab prepares a sample in that
6 they put the sample in the rack, so to speak, they
7 put a diluter in there, take it out and put it in
8 the vial. Is that proper laboratory practice?
9 A It certainly is not. I've read many, many, many
10 procedures of forensic toxicology labs, and the
11 better labs always specifically address the fact
12 that nothing ever should be introduced into the
13 blood tube. No pipet tips, nothing should ever be
14 introduced directly into the blood tube. They
15 generally, in the better procedures, they will
16 actually address how that process should happen
17 for collection of the aliquot by removing a small
18 portion from the tube, pouring it out in the tube
19 into a container designed for that purpose for
20 purposes of the doing the pipetting.
21 Q You heard that during this process, after they use
22 the dispenser and put it into the next sample,
23 they take Clorox bleach to clean it. Does Clorox
24 have ethanol?
25 A I don't know. That would be a specific question I

1 would have to answer on the basis of empirical
2 data. But it wasn't clear to me exactly when from
3 her testimony exactly when they were using bleach.
4 My problem with their pipetter diluter is the fact
5 that this unit that was possibly used to measure
6 out a sample, at least the one for which we got
7 records, was not calibrated by an accredited
8 calibration lab until two months after the testing
9 in this case.
10 So the pipetter diluter that they used to
11 measure out the sample, and to measure out the
12 internal standard was calibrated by an external
13 accredited calibration lab two months after the
14 testing in this case. What should happen is they
15 should be externally calibrated prior to use, and
16 thereafter, and then checked periodically during
17 the use in the laboratory.
18 Q Now you also mentioned the term aliquot, and we
19 heard testimony this morning that essentially in
20 layman's terms is aliquot is just getting the
21 sample prepared to put into the machine, and you
22 heard that it takes basically essentially seconds
23 per sample. Does that make sense?
24 A That was really interesting. I would dearly love
25 to observe the sample preparation process in which

1 that can only take seconds. I can grant you it
2 only takes seconds for the actual dispensing and
3 so forth to happen, but the process of verifying
4 the information, uncapping the tube, taking the
5 aliquot, crimping the vial, placing it in the
6 tube, that whole process I would be surprised if
7 it would only take seconds.
8 Q The aliquot form essentially said, broke it down
9 into, they were doing it in ten minutes, and 15
10 minutes at a time. Does it make sense that under
11 the times that were given by the Allegheny County
12 Crime Lab that they could have properly aliquoted
13 67 samples and not even including the calibrators
14 and controls?
15 A I don't place a lot of faith in that document,
16 that I believe it's called a traceability form,
17 for a number of reasons. One of which is that
18 multiple entries appear to have been made by one
19 analyst for a second analyst's work. That's
20 unacceptable.
21 In addition, under the lab's procedures, they
22 purportedly used this as their internal chain of
23 custody records for the actual analytical samples.
24 There is absolutely zero, no possible way that
25 that form explicitly identifies which person

1 handled which samples and prepared which samples.
2 Q I want to now switch gears as to the maintenance.
3 We were given some maintenance records. I believe
4 you have reviewed maintenance records probably
5 back to 2010, if I'm not mistaken. It seemed from
6 the testimony of the analyst earlier that
7 Allegheny County is essentially reactionary. As
8 long as there is no problem, there is no
9 maintenance. But if there is a problem, they will
10 try to go out and fix it. Are they maintaining
11 that machine properly?
12 A What they call their maintenance form, all they
13 really record is gas pressures. That is the
14 operating pressures of the gases during the course
15 of testing. They don't actually record those
16 values. They just say they were okay. So they
17 are really documenting so little maintenance.
18 It's really very striking. I heard testimony this
19 morning or this afternoon that seemed to indicate
20 that essentially every bit of the maintenance for
21 that instrument was handled through service call
22 to the manufacturer, that she was unaware of basic
23 kinds of activities that are typically done by the
24 analysts.
25 When you have a chromatography, they are very

1 accustomed to replacing parts and doing basic
2 preventative maintenance on the instrument.
3 In this laboratory they apparently just wait
4 until the chromatography is bad enough or it
5 doesn't work to call a service rep.
6 Q Now you heard earlier that based on the records,
7 there was no proof that any septum had been
8 changed in several years. How many uses do you
9 get out of one septum?
10 A Typically up to a couple hundred. It really
11 depends on what you are doing.
12 Q A septum is what prevents air from getting in when
13 you put the sample in the machine?
14 A Yes, the syringe passes through.
15 Q And it eventually eats away?
16 A Yes. It's a consumable part. Instrument
17 manufacturers will typically publish regular
18 maintenance schedules for their operators. And
19 they will have daily, weekly, monthly, quarterly
20 tasks that need to be done. Those just don't seem
21 to be done in this laboratory, at least by the
22 analysts.
23 Q So if the lab says, well, I didn't see it written
24 in our maintenance book, is that sufficient
25 laboratory practice?

1 A That would be considered a very sub normal
2 preventative maintenance program.
3 Q I want to go back and talk to you -- you heard
4 earlier about the standard matrix and whatnot.
5 That's where you put in a bunch of different
6 alcohols to determine whether it can differentiate
7 between other alcohols and ethanol. Allegheny
8 County doesn't put ethanol in their standard
9 matrix. Is that a standard practice?
10 A I probably reviewed blood alcohol procedures from
11 well over a hundred laboratories. I've never seen
12 anybody do it that way. I can't even imagine why
13 you would.
14 Q I mean, is it normal to be looking for a certain
15 compound and not include it in the thing where you
16 want to differentiate whether the machine can read
17 it?
18 A The purpose of a resolution mix sample, a volatile
19 mix sample, when you have the kinds of common
20 volatiles that may be present in a blood sample,
21 that are recognized and may be present in blood
22 samples, you include them in a sample, along with
23 ethanol, so that you can demonstrate at the time
24 that this batch was run, that this measurement
25 system was capable of determining the difference

1 selectively being able to identify ethanol
2 separately from all these other volatiles that may
3 be present in the sample.
4 This lab didn't do that. When they ran the
5 mix, it didn't include ethanol. When they ran
6 ethanol, it didn't include the mix. And you can't
7 simply assume that it wasn't there because it
8 wasn't where I thought it should be.
9 Q Now you also heard testimony this morning
10 regarding the calibration, and there were
11 different calibration solutions used, and the
12 practice in Allegheny County is essentially to
13 open it up, use it, cap it, and then wait until
14 the next time to use it. Is that contrary to the
15 manufacturer's own guidelines?
16 A It is contrary to the manufacturer's own
17 guidelines. It does not comply with international
18 standards. It means they don't have traceable
19 measurements. It means that the true
20 concentration of their calibration solutions was
21 not known at the time that they did their testing.
22 They simply assumed it was okay in spite of the
23 fact that they use it in a manner that the
24 manufacturer specifically warns them against.
25 Q So based on the word calibration alone, would that

1 compromise the reliability of the result in this
2 case?
3 A Yes.
4 Q You saw the peaks -- back up.
5 In all of the chromatograms that you were
6 provided, whether they were controls, whether they
7 were calibrated, and even in Mr. Johnson's sample,
8 there were extra peaks. In other words, you
9 explained earlier on the little graph there, you
10 are only supposed to have what you know is being
11 put in the machine. But here we are seeing extra
12 peaks. What's the significance of that? Could
13 they be ethanol?
14 A The significance of that is that this laboratory
15 has an uncontrolled measurement system. They are
16 introducing other materials to their system that
17 are being detected by the instrument.
18 Now, the analyst said that she wasn't
19 concerned about it because it wasn't ethanol, it
20 wasn't at the ethanol retention time. But what it
21 shows you is something else is getting into their
22 samples. Even samples that are supposed to be
23 purely pristine, if other things are getting in
24 there, what's to say other things aren't getting
25 in under the internal standard. They won't know

1 that either because it's this problem
2 (indicating). Anything that's at the same
3 retention time won't show up. They don't have any
4 criteria to monitor the area count of their
5 internal standard.
6 So they have evidence of contamination being
7 introduced into their system, but they have not
8 identified where it's coming from, or demonstrated
9 that it's not a problem. Because if something is
10 being introduced to their system, it's a problem
11 if it interferes with either ethanol or the
12 internal standard.
13 Q Let's take Dan Johnson's actual chromatogram.
14 Without getting too detailed in an explanation,
15 the bottom line is these peaks (indicating) are
16 supposed to essentially be long?
17 A You are no better of an artist than I am.
18 Q Essentially they are supposed to be long,
19 straight --
20 A They are supposed to be symmetrical. They should
21 have an even curve up to the top, and even curve
22 on the other side, and it should be symmetrical on
23 both sides of that middle.
24 Q So what happens when the peak goes up and it tails
25 off a little like in our case (indicating)?

1 A The problem with tailing is that it can be caused
2 by a number of things, and one of the things that
3 it can be caused by is the presence of another
4 peak, that the instrument isn't capable of
5 resolving, and therefore it just does that overlap
6 that I did with the pens in two colors. It can't
7 tell the difference, so it just smooths them out
8 and you don't see the difference.
9 Q In other words, the peak for ethanol, which we are
10 looking for here (indicating), could actually
11 include additional ethanol and we just don't know?
12 A It could include something besides ethanol.
13 Q So in other words, there could be two substances
14 coming out, but it's being read or reported as
15 ethanol, but it could be two different things?
16 A That is the concern.
17 Q So it could be that this is reported as a .125. I
18 know we can't speculate, but essentially it could
19 be a .04, and other substances could be in there
20 as well?
21 A There are three possibilities. It can be all
22 ethanol. That peak can be arising only from
23 ethanol. It can be arising from something else
24 entirely and have no ethanol whatsoever. Or it
25 could be a mixture of ethanol and something else.

1 But if it's a mixture, you have no idea of how
2 much of one thing and how much of the other.
3 Q With the peak tailing, there is no way that we can
4 definitively say that this sample is all ethanol?
5 A With peak tailing and single column, there is no
6 way that you can say that peak arose solely from
7 ethanol.
8 Q The laboratory in this case reported that Mr.
9 Johnson's blood alcohol result was a .125. Are
10 these results reliable?
11 A No.
12 Q Can the Court make a conclusion or a finding on
13 them based on everything that we have heard today?
14 A I would say that they cannot. Not with
15 confidence.
16 MR. SHERMAN: I have no further questions,
17 Your Honor.
18 THE COURT: All right. Cross-examination,
19 Ms. Aldridge.
20 MS. ALDRIDGE: Yes, Your Honor.
21 THE COURT: Why don't we take two minutes.
22 - - - -
23 **(A recess was taken in the proceedings.)**
24 - - - -
25 THE COURT: All right. Ms. Aldridge.

1 - - - -

2 **CROSS-EXAMINATION**

3 BY MS. ALDRIDGE:

4 Q Would you state your name for me?

5 A Janine.

6 Q Okay. Because I was going to have trouble with

7 the last name.

8 You talked about that you were attempting to

9 reconstruct, I guess, what happened or how the lab

10 processes materials. Would that be correct?

11 A Yes.

12 Q It's through sample integrity, method validity,

13 and method reliability?

14 A Yes.

15 Q And you talked about sample integrity. You had

16 expressed some concerns in your report. And some

17 of the concerns were whether or not they labeled

18 it correctly, or did a change, or got mixed up

19 with other vials, is that right?

20 A The labeling issue was a procedural compliance

21 observation in my report, that it explicitly

22 called for a procedure and there was not evidence

23 that that was actually followed.

24 Q You were in the courtroom earlier when the

25 toxicologist, or the scientist, Susan Stanich,

1 testified?
2 A Yes, I was.
3 Q And she testified that the procedure as to what
4 they get, as to what they do when they receive the
5 tubes in the lab?
6 A Yes.
7 Q And that they are properly labeled with the lab
8 label, in addition to the hospital label, because
9 you heard the phlebotomist testify how they label
10 as well?
11 A Yes. My observation related to the receiving
12 document, the instructions essentially for the
13 field in how things should be labeled before they
14 are received. That's one of the things labs
15 typically check is all the necessary information
16 in accordance with procedure on the material at
17 the time it is received.
18 Q Okay. So you are saying that you don't believe
19 that was done?
20 A I didn't have any records to demonstrate that that
21 check was made. I don't ever rely on somebody's
22 memory of what we do as opposed to exactly what
23 the records indicate was done.
24 Q We presented an exhibit earlier, it would have
25 been Exhibit Number 2, from the Allegheny County

1 Crime Lab, and it is a receipt for the blood
2 sample indicating the defendant's name, perhaps
3 his date of birth, the date and time that they
4 took those items from the police officer and
5 turned them in. So that information --
6 A That would have been good to see. I did not see
7 that in the materials provided to me by the
8 laboratory.
9 Q Well, I guess they might have a copy, but the
10 officer is bringing the sample to the laboratory,
11 and the laboratory is issuing the officer a
12 receipt. So we do have that. We presented it as
13 People's Exhibit Number 2.
14 So when the lab takes that information in,
15 they record that information and --
16 MR. SHERMAN: Your Honor, are we making an
17 argument with the witness, or are there any
18 questions here? It seems like there is sort of a
19 disagreement as to the evidence.
20 THE COURT: All right. If you want to try to
21 be a little more precise.
22 MS. ALDRIDGE: I will try to do that, Your
23 Honor. I apologize.
24 BY MS. ALDRIDGE:
25 Q So that intake form is completed. Hence, there

1 was no mix-up with the samples.
2 You heard Ms. Stanich testify that when she
3 removes the samples, that she puts her initials,
4 she takes the samples and she documents what
5 number it is before she starts to -- and I'm going
6 to get really confused with all the technical
7 jargon, but before she starts the actual process,
8 that it's properly labeled?
9 A I heard her testimony about her entering her
10 initials, if that's your question. I'm not sure I
11 understood your question though.
12 Q That she identified that that was in fact the
13 sample she was working on?
14 A Yes.
15 Q So it wasn't somebody else's sample. It was in
16 fact Mr. Johnson's sample that she was working on?
17 A Presumably. I'm used to seeing a much cleaner
18 more complete paper trail than this laboratory.
19 For example, I can't tell exactly when
20 Ms. Stanich aliquoted Mr. Johnson's sample. The
21 records do not indicate that at all. They simply
22 indicate that she did a couple of different sets
23 of aliquots at a couple of different times, but it
24 doesn't say which samples specifically were
25 prepared at any given time.

1 More typically, labs that have a good audit
2 trail will actually have a record for each
3 individual sample of how it was packaged, how it
4 was received, what volume was received, any
5 notation, and when the analytical vial was
6 prepared.
7 Q Would you think that would be dependent on the
8 volume of vials received and work to do that day
9 that you would document each particular vial with
10 all that specificity?
11 A Absolutely not. It should not be driven by
12 volume. In fact, high volume like high volume
13 production laboratories, it's all the more
14 important to do that level of documentation
15 because the potential for mix-ups is that much
16 greater.
17 Q Related to the collection of the sample, you
18 indicated that perhaps there was only
19 three milliliters of blood in the sample?
20 A That is what's reported in the laboratory's
21 report.
22 Q And you said that the manufacturer said that the
23 tube was designed for, was it 9.7 milliliters?
24 A 9.7 is considered the minimum acceptable volume.
25 I'm sorry, 9.3, plus or minus .7. So as long as

1 there is at least 9.3 milliliters in the tube,
2 it's considered a complete fill. Anything less
3 than that is considered an under fill.
4 Q If it were an under fill, but more than
5 three milliliters, or more than two milliliters,
6 would that affect the test?
7 A The issue is it's either full or it's not. If it
8 was under filled, it --
9 Q That's not what I asked. Would it affect the
10 test?
11 A It always has the potential to affect the test if
12 it's less than 9.3 milliliters. And it could be a
13 silent error, so you can be unaware of the fact
14 that it's affected the test. That's the problem.
15 That's why it's so important to adhere to the
16 manufacturer's requirements.
17 Q You mentioned that the use of an under filled tube
18 could lead to poor performance. Perhaps a glass
19 seal that was leaking, that it was a leaky seal?
20 A Yes, the manufacturer's specs state that it's
21 designed for fill 9.3 to 10.7 milliliters. Under
22 fill, that is, less than 9.3, can lead to poor
23 product performance and inaccurate results.
24 That's the manufacturer's statement to user.
25 Q So if it wasn't a leaky seal, what other reason

1 could there be for not filling the tube?
2 A There are other reasons that a tube could be under
3 filled. If the phlebotomist actually withdraws
4 the tube before it's completely full, that could
5 be one reason. It could be affected by the
6 individual's blood pressure. If you have a
7 severely injured person whose blood pressure is
8 severely depressed, then they may not get a
9 complete fill.
10 There are other reasons that could be an
11 under fill too, but in a draw where there are not
12 medical complications, and where you have an
13 appropriately trained phlebotomist, it should be a
14 full tube.
15 Q Well, you heard the phlebotomist who testified
16 earlier this morning?
17 A Yes.
18 Q She seemed rather competent in her work?
19 A She did.
20 Q So the presumption here, or the assumption that
21 because it was less than a full tube of blood was
22 a tube error, or that the tube was not being kept
23 to the manufacturer's specifications, I would
24 think would be inaccurate?
25 A Something was wrong. Something didn't work

1 properly. Either the person did not collect it
2 properly, or because of poor vacuum, insufficient
3 vacuum due to compromise of the seal integrity,
4 something had to happen, because that tube was
5 manufactured for a complete ten milliliter volume
6 fill. It's like a warning sign. It's like when
7 they put labels on --
8 Q I understand. Now you mentioned 39 to 77 degrees?
9 A Yes.
10 Q Is that Celsius, Fahrenheit?
11 A That's Fahrenheit.
12 MS. ALDRIDGE: We mentioned earlier for Your
13 Honor to take judicial notice of the Pennsylvania
14 Bulletin, that the hospital, where the tubes come
15 from, where they are initiated, would store
16 those --
17 MR. SHERMAN: Your Honor, I would object.
18 All the Pennsylvania Bulletin does is say this lab
19 is --
20 THE COURT: I didn't take judicial notice,
21 but I'm aware of the Pennsylvania Bulletin.
22 BY MS. ALDRIDGE:
23 Q So the hospital, what's the likelihood that the
24 hospital is storing them someplace that's
25 someplace below 39 degrees or above 77 degrees?

1 A On a day like today, I don't know. If it was
2 transported, for example, on a day like today,
3 that could be a problem.
4 Q A 20 minute ride in the car?
5 A In the trunk of a car, perhaps. I'm not trying to
6 give you an answer, but I'm saying there are
7 possible examples if these materials are not
8 handled properly and stored properly, the seal
9 integrity could be lost.
10 Q That's prior to their usage.
11 A That's before they are ever filled with blood,
12 yes.
13 Q Right. That's prior to their usage. So the
14 transportation is not a storage issue?
15 A I'm sorry. Transportation from the manufacturer
16 to the hospital.
17 Q Would not be a storage issue.
18 You mentioned that if there is a leaky seal,
19 that air could get in and contaminate it? Is that
20 what you said?
21 A Yes. That's one of the things that could be
22 manifested in an under filled tube. If the seal
23 is compromised --
24 Q That's not alcohol, is it?
25 A I'm sorry. I don't understand your question.

1 Q You are saying air could get into the tube?
2 A Yes.
3 Q That's not alcohol.
4 A That's not alcohol in the air, no, not
5 necessarily. That's not my concern.
6 Q You talked about the possibility of fermentation.
7 How long does that take?
8 A How long did what take?
9 Q You said there could be the possibility of
10 fermentation. How long does that take?
11 A Fermentation can occur over a period of time, and
12 it can start very quickly, and it can proceed for
13 days, and it would effectively ultimately be
14 limited by the food source available in any given
15 blood sample. That is, the sugars or fermentable
16 materials present in any given blood sample. So
17 it would eventually hit a plateau at which point
18 there would be no more fermentation.
19 Q You mentioned NCCLS, and CLSI, and you said that
20 they had standards for specific preservation
21 refrigerator times between gathering and testing?
22 A It specifically addresses the need to have special
23 controls for blood alcohol samples because these
24 gray top tubes, many of the gray top tubes that
25 are used in a hospital environment only have a

1 .25 percent or .2 percent of sodium fluoride
2 present in them, because they were designed for
3 testing glucose. And the preservatives simply
4 serves to limit the glycolysis function.
5 In contrast, for a blood alcohol procedure,
6 they address the need to control time, temperature
7 and preservative at an increase level specifically
8 to prevent fermentation because that's the
9 parameter of interest for a blood alcohol, not
10 blood glucose.
11 Q And how long is this time?
12 A I'm sorry? How long is what time?
13 Q You said that they say there is a time. How long
14 of a time?
15 A They discuss a series of -- I'm not sure if I
16 remember exactly in their discussion if they put a
17 target. I don't recall that they put a specific
18 target. Just that you should minimize the time,
19 keep it refrigerated and include at least
20 one percent of sodium fluoride.
21 Q You mentioned about the lot number needing to be
22 recorded?
23 A Yes.
24 Q Based on what you understand here today, who do
25 you think is responsible to record the lot number?

1 A It would be somewhere, I don't know who, whether
2 it be Ms. Stanich or a different person. Some
3 jurisdictions choose to record the lot number at
4 the point of collection. That's probably the best
5 practice, because that's the first point of use.
6 Q So the hospital?
7 A At the point of collection. Many legal blood draw
8 forms actually have a spot for recording the lot
9 number and the expiration date of the tubes. That
10 would be the best practice. It could also be
11 acceptable to have a laboratory be responsible for
12 making that record on receipt in the laboratory.
13 But it doesn't -- I can't say who would be
14 responsible for doing it.
15 Q Well, if the blood is coming from the hospital
16 where the phlebotomist drew the blood, and the
17 tube is probably no bigger than this (indicating)?
18 A Yes.
19 Q And they stick a label on the tube. Suppose they
20 cover the lot number?
21 A Well, you have to take pay attention to that.
22 Q Who does?
23 A Whoever puts the label over it. I get these
24 pictures of tubes all the time, because actually
25 photographing the evidence at the time of receipt

1 is the normal and best practice for an audit
2 trail. And you will frequently see the label on
3 the tube that was there that has a lot number and
4 expiration date, and then the label that is
5 introduced after that by the laboratory off to the
6 side. It's perfectly possible to accommodate both
7 of those. You just have to be aware when you are
8 putting a label on something that you are not
9 covering up important information.
10 Q But the labeling by the lab would be the second
11 label.
12 A Correct. That's why --
13 MR. SHERMAN: Your Honor, I object to the
14 extent that what's the difference? We already
15 know there is no proof of what the expiration date
16 was, the lot number or nothing. It doesn't matter
17 whose job it was to get it. The bottom line is
18 this is a forensic test done for purposes of
19 prosecution in criminal cases. It wasn't done.
20 Who should do it? Or what the proper procedure
21 is? What would have been best? The bottom line
22 is nobody did it.
23 THE COURT: All right. Next question.
24 BY MS. ALDRIDGE:
25 Q You mentioned the ISO 7025?

1 A 17025, yes.
2 Q And you said that they establish general
3 requirements?
4 A Yes.
5 Q Then you mentioned SOFT, and the AAFC?
6 A AAFS.
7 Q And you said that they establish minimum
8 standards?
9 A Theirs are published as guidelines described as
10 what the consensus of the forensic toxicology
11 community considers to be minimum standards for a
12 forensic toxicology lab.
13 Q You talked about method validation and you said
14 that it was addressed. Method validation is
15 addressed by ISO, the ASCLD and the SWGT, is that
16 right?
17 A Yes.
18 Q And the process used. So they are suggesting that
19 you do method validation to insure reliability for
20 your tests, is that right?
21 A Yes, that is sort of a foundation of the
22 scientific process, that you validate your methods
23 before you use them to test unknowns.
24 Q And ASCLD/LAB, you said they were one of three
25 independent agencies that accredit labs in the

1 country?
2 A That accredit forensic labs. There are others
3 that accredit different types of labs.
4 Q Is it easy to be accredited by ASCLD?
5 A It is comparatively easy. It is certainly easier
6 than other accrediting bodies, in my opinion.
7 Q What are the other accrediting bodies?
8 A Probably the largest one is A2LA, American
9 Association for Laboratory Accreditation.
10 Q Say that again.
11 A American Association for Laboratory Accreditation.
12 They go by A2LA.
13 Q And you said that's the largest one?
14 A Yes. In the United States.
15 Q You testified that Mr. Johnson's sample was run on
16 a packed system?
17 A Yes.
18 Q You derived that information from?
19 A From the materials provided to me by the
20 laboratory. They provided a printout from the
21 instrument of the instrument operating conditions,
22 and it explicitly identified the column as a
23 packed column.
24 Q You had an opportunity to review defense's
25 exhibits?

1 A Yes.
2 Q Which would also have been provided to you by the
3 lab?
4 MS. ALDRIDGE: May I approach, Your Honor?
5 THE COURT: Yes.
6 BY MS. ALDRIDGE:
7 Q This is Defendant's Exhibit Number 6. Could you
8 read this line here for me, please?
9 A "It's the result file: C:/toxicology/susie/data/
10 BAC1/6-20-18/5762-1A.RST".
11 Q Those probably didn't mean very much to you, did
12 it?
13 A I understood it.
14 Q What does that refer to?
15 A It's the electronic location where the electronic
16 data went from the instrument. It's the file name
17 where they saved that particular chromatogram.
18 Q Susie would have been the operator, Susan Stanich?
19 A I inferred that from -- not necessarily the
20 operator, because there was only one operator for
21 this instrument. That is identified in the header
22 information, but the data was directed to a file,
23 to a location with her name.
24 Q The BAC-1, are you familiar with that instrument?
25 A Only insofar as I reviewed the materials from this

1 laboratory.
2 Q The BAC-1 is actually a single column GC?
3 A Yes.
4 Q So this test does not run on a packed column, but
5 was in fact run on a BAC-1 --
6 A May I show you the record that was provided to me
7 for this case?
8 Q This is the Defense's Exhibit. This is the
9 record.
10 A No, that is not the method filed.
11 THE COURT: Maybe you can sort it out. It is
12 about a quarter after 4:00.
13 Are we going to pick this up tomorrow
14 morning?
15 MS. ALDRIDGE: What time are you trying to
16 leave, Your Honor?
17 THE COURT: Pardon?
18 MS. ALDRIDGE: What time are you trying to
19 leave?
20 THE COURT: Now. It is snowing pretty badly
21 out there.
22 MS. ALDRIDGE: I believe that we should
23 finish it tomorrow. I have more questions for
24 Ms. Janine and also --
25 MR. SHERMAN: She traveled to get here. We

1 can't have her come back. I would like to do it
2 tomorrow.
3 THE COURT: Yeah. Tomorrow.
4 MR. SHERMAN: Okay.
5 THE COURT: Okay. Why don't we try to start
6 a little early tomorrow, about a quarter after
7 9:00 or so.
8 MS. ALDRIDGE: Okay. Sounds good.
9 MR. SHERMAN: Yes.
10 THE COURT: All right. Have a good evening
11 everyone. We will see you tomorrow.
12 - - - -
13 **(Court adjourned for the day.)**
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1 - - - -

2 **Friday Morning**

3 **January 24, 2014**

4 - - - -

5 THE COURT: Okay. You may proceed,

6 Ms. Aldridge.

7 MS. ALDRIDGE: Yes, Your Honor. I believe we

8 were in the middle of the cross of the witness.

9 - - - -

10 **JANINE ARVIZU**

11 **having been first duly sworn,**

12 **was examined and testified as follows:**

13 - - - -

14 **CROSS-EXAMINATION (Cont.)**

15 BY MS. ALDRIDGE:

16 Q Good morning.

17 A Good morning.

18 Q Just a few more questions I have here today.

19 May I call you Janine?

20 A Please.

21 Q Thank you.

22 Have you ever performed a headspace gas

23 chromatography analysis for volatiles?

24 A Yes.

25 Q Are you familiar with the configuration of the gas

1 chromatograph that was utilized for Mr. Johnson's
2 blood test?
3 A Yes.
4 Q How was the gas chromatograph -- can I just say
5 GC? How was it set up?
6 A How was it set up?
7 Q Yes.
8 A The operating conditions and the configuration was
9 documented by the laboratory at the time of
10 testing. It was printed out in what's
11 traditionally called a method file by the
12 instrument. And it was printed on the date of
13 testing that morning, on June 20 of 2012, and it
14 documents the operating conditions for the
15 instrument because there are a large number of
16 parameters that are subject to user control that
17 the user sets. So those settings are all
18 essentially documented in that method file. A
19 copy of that was included in the materials
20 submitted with discovery, and it documents the
21 fact that this particular test method was using a
22 packed column. And it describes things like the
23 temperature of flow rates and those kinds of
24 parameters.
25 Q These are Defendant's Exhibit 3, 6 and 7. Is this

1 the sheet you are talking about?
2 A No.
3 Q On this sheet, however, and we read this
4 yesterday, Defendant's 6 and 7, does that indicate
5 what type of instrument was used?
6 A It does not identify what type of instrument was
7 used. It can be inferred from this information.
8 It describes the instrument name as Alcohol A, and
9 this is a gas chromatogram, so it's derived from a
10 GC instrument. I'm not sure I understand your
11 question otherwise.
12 The serial number of the instrument is not
13 identified, for example.
14 Q This line here we read yesterday about it being a
15 BAC-1.
16 A That does not identify the instrument. That is
17 simply a file name. That is a file location on a
18 hard drive.
19 Q That doesn't tell you the type of instrument that
20 was used or how the test was run?
21 A No, it does not.
22 Q Are you familiar with how the sample is injected
23 into the instrument?
24 A Yes.
25 Q Does it use a transfer line?

1 A I will tell you that it is clear to me from the
2 previous testimony that the analyst seems to think
3 that she used a particular configuration that I
4 don't believe is supported by the records. So I'm
5 not confident that I can reconcile that
6 inconsistency.
7 Q So are you saying you don't know?
8 A I'm saying that there is an inconsistency between
9 the analyst's recollection and the records
10 produced by the instrument.
11 Q So you don't know?
12 A So I don't know. The records might be
13 inconsistent with practice.
14 Q Were you provided with the S.O.P.s, the Standard
15 Operating Procedures for a volatile analysis?
16 A I have a copy of the S.O.P. that is the 2008
17 version produced by this laboratory. And in her
18 testimony, the analyst was unclear as to
19 specifically which version of their procedure was
20 in use in 2012 when this test was performed.
21 Q Did the S.O.P. that you received, did it designate
22 that the Restek BAC-1 or 2 column was being
23 utilized for testing?
24 A The procedure does document use of the capillary
25 column, which is again inconsistent with what the

1 records show in this case. Which was why it was
2 clear to me that they are not following their
3 procedure.
4 Q You are saying that the S.O.P.s that you received
5 indicated that it was a capillary column test?
6 A That is correct. The 2008 procedure prescribes
7 use of a capillary column, a single capillary
8 column.
9 Q If in fact they were using the Restek BAC-1 or 2
10 column, would that make a difference?
11 A It would create a very, very troubling problem in
12 that they printed on the day of testing, they
13 printed the method file that ostensibly described
14 the operating condition, and it specifically
15 identified a packed column configuration, so it
16 would mean that we can't rely on contemporaneously
17 printed documents that are printed off a system to
18 document system conditions. It would take a -- if
19 in fact it is true that they ran a capillary
20 column, and we can't rely on somebody's memory for
21 that after the fact, that would be such a serious
22 inconsistency with a record printed by the
23 instrument that it would merit a full scale
24 investigation to determine the origin of such a
25 problem.

1 Q Okay.
2 A It's as if your --
3 Q How could the machine --
4 MR. SHERMAN: Let her finish answering your
5 question.
6 MS. ALDRIDGE: No. She was trying to
7 explain.
8 BY MS. ALDRIDGE:
9 Q How can a machine print something that wasn't from
10 that machine? I mean, because essentially if I'm
11 understanding you correctly, you are saying that
12 the instrument is printing something that it
13 shouldn't print because it's not coming from that
14 source?
15 THE COURT: You have an objection?
16 MR. SHERMAN: Your Honor, what Mrs. Arvizu is
17 stating is that the machine printed the name of
18 the column that day that was used. What counsel
19 is trying to say is well the standard operating
20 procedures called for a different column. What
21 the witness is saying is that may be, but for the
22 test run on that day, the machine printed out the
23 name of the column, and it's different than the
24 standard operating procedures. So there is a big
25 problem there. That's what she is saying.

1 THE COURT: Do you wish to answer it?
2 THE WITNESS: The printed form that we are
3 discussing, which was identified with a
4 handwritten number 41 up in the upper right-hand
5 corner of the pages that I received --
6 MR. SHERMAN: I believe it's 34.
7 THE WITNESS: Was it 34? I'm sorry.
8 That printed form is a form that I routinely
9 see from laboratories that use Perkin Elmer
10 instruments. It is a routinely printed output to
11 document the operating conditions for the test.
12 That is required to document how you actually
13 performed the test. In lieu of such a document,
14 you would have to write down every one of your
15 operating parameters, so we just have the
16 instrument print what its operating parameters
17 were.
18 The morning of June 20, the analyst, as
19 identified in the header information by her code,
20 SAS00 and then some number that I don't remember,
21 but it's also on all the chromatograms, that
22 analyst, Ms. Stanich, printed that method file,
23 and it specifically identifies the column in the
24 instrument as a Supelco carbowax packed column.
25 That is not consistent with the laboratory's

1 procedure if in fact they were using their 2008
2 procedure at the time of this test.
3 BY MS. ALDRIDGE:
4 Q I have a question about Page 34. I don't know if
5 you have committed all of it to memory.
6 A No, I certainly have not.
7 Q In the heated zone space, or area, does it
8 indicate what type of injector was used?
9 A The injection temperature? Is that what you are
10 interested in?
11 Q No, in the heated zones, like at the bottom --
12 A Down at the bottom?
13 Q Yes.
14 Does it indicate what type of injector?
15 A It says injector A cap.
16 Q What would that mean?
17 A I don't know.
18 I would refer you to the top of the page
19 where it says Instrument Conditions. It says,
20 packed column GC. It describes the instrument,
21 and it gives the serial number of this instrument.
22 It describes the column as a Supelco carbowax
23 column. That's a polar packing material column
24 designed for use in this type of volatile. Column
25 length of six feet. A carrier gas of helium.

1 These are all options.
2 There are other carrier gases that could be
3 used. This is documenting what was used on this
4 day for this test that is described in top as
5 alcohol A. That same alcohol A method file also
6 is printed out, for example, on the corresponding
7 calibration curve from that same day. This
8 describes the conditions.
9 Q Would you say that proficiencies are an effective
10 means to monitor a laboratory's performance?
11 A They are one of the number of potentially very
12 effective means.
13 Q That would be a yes?
14 A It's a qualified yes.
15 Proficiency tests as frequently administered
16 are what's known as open proficiency tests. That
17 is, the laboratory knows that they are being
18 tested. They receive these samples and realize
19 that they are proficiency samples at the time they
20 are being tested.
21 Studies have consistently demonstrated that
22 when that kind of open testing occurs, performance
23 is better than if the tests were conducted on a
24 blind basis. That is, if the tests just come in
25 and are indistinguishable from a routine sample.

1 So they represent sort of the best theoretical
2 performance of the laboratory.
3 Q When the scientist, or Susan Stanich was on the
4 stand earlier -- you heard her testify regarding
5 her proficiencies?
6 A Yes.
7 Q She has never failed in a proficiency exam.
8 A That's what she said. I haven't seen all of her
9 records, but that was her testimony, yes.
10 Q So if she hasn't failed a proficiency exam,
11 wouldn't that indicate that the methods used are
12 reliable and accurate?
13 A Not necessarily, no.
14 Q If the laboratory hasn't failed a proficiency
15 exam, wouldn't that indicate that the methods are
16 reliable and accurate?
17 A No, not necessarily. And the reason for that is,
18 as I indicated earlier, performance in open
19 proficiencies is usually better. In addition,
20 those kinds of open proficiency tests the lab
21 participates in don't necessarily test for the
22 problems that can arise due to the laboratory's
23 use of a single column GC. That is, they don't
24 necessarily include interfering compounds that
25 could potentially be misidentified as Ethanol in

1 their mix. So they don't challenge the kind of
2 failure that this lab is at risk of.
3 Q If the proficiency sample consists of an unknown,
4 and it's treated like a regular sample that's
5 submitted, so it gets logged into evidence, it's
6 logged, it's categorized, cataloged with
7 everything else, how can one's performance be
8 tainted if they are treating it like every other
9 sample?
10 A Proficiency tests are designed to accomplish
11 different things. And proficiency tests, the ones
12 that this laboratory participates in, the cap
13 proficiencies, for example, they include ethanol.
14 They do not include interfering compounds. Other
15 volatile compounds that, depending on your
16 instrument operating conditions, could coelute
17 with ethanol and be misinterpreted as ethanol.
18 They only are spiked with a known quantity of
19 ethanol.
20 Q But the quantity is not known to the tester?
21 A The quantity is not known. But you are missing my
22 point. The point is that the serious inherent
23 failure of this laboratory is it only uses a
24 single column GC. So if there is a another
25 volatile compound present in a sample, they won't

1 necessarily know it because it coelutes with
2 ethanol. Because they don't do two column
3 testing, they won't be able to identify the fact
4 that an interfering compound is present. They
5 will misinterpret it as ethanol.
6 Q I believe that we heard testimony earlier that the
7 two column instrument was not functional that day
8 and they used the single column?
9 A I don't recall hearing that the two column
10 instrument was not functional that day.
11 Q Prior to there being two columns for testing
12 purposes, what were laboratories across the
13 country using?
14 A You can use two different instruments, just have
15 one kind of column in one instrument and a
16 different column in a different instrument.
17 Q So they were using single column testing?
18 A The reference to do a column is a reference to the
19 fact that you are testing the sample with two
20 different columns. It doesn't have to be on the
21 same instrument. You can use dual column on two
22 different instruments.
23 Q But single column testing was being used prior to
24 the institution of dual column.
25 A Single column means you stop after use of a single

1 column --
2 Q I'm not asking for a definition.
3 MR. SHERMAN: Your Honor, let her answer the
4 question.
5 MS. ALDRIDGE: She is giving me a definition,
6 Your Honor. I'm asking if they used the test.
7 MR. SHERMAN: She is trying to answer the
8 question and she won't let her.
9 THE WITNESS: I am trying to answer the
10 question.
11 THE COURT: Go ahead and answer the question.
12 THE WITNESS: You are misunderstanding the
13 terminology.
14 The reference to dual column has nothing to
15 do with whether it's done on one instrument or two
16 instruments. It is a reference to the need to
17 have different chemistry in different columns, to
18 effectively have two different techniques for
19 making the measurement that rely on different
20 chemistry principles. And so single column GC,
21 that is, as you are understanding it, a GC with
22 only a single column inside, can in fact be used
23 to accomplish that necessary second chemistry
24 confirmation. It's just that you have to have two
25 different instruments with a different chemistry

1 column in each instrument. So single column GC
2 can be used to qualitatively identify ethanol.
3 You simply have to have two different instruments
4 with each instrument having a different type of
5 column.
6 Q You talked yesterday about the ISO 17025
7 certification?
8 A When a lab is accredited, the term is
9 accreditation to ISO 17025.
10 Q If that's the standard for accreditation, ISO
11 17025, does it matter that A2LA or ASCLD is the
12 accrediting body?
13 A I'm not sure I understand your question.
14 Q If under ASCLD you can be accredited to the ISO
15 standard, and under A2LA you can be accredited to
16 the ISO standard, it's the same standard
17 regardless of the body?
18 A That's correct. That's correct. These are just
19 alternative options as an accrediting agency.
20 They are all accrediting to the same standard.
21 Q The crime lab, are you aware that the lab is
22 accredited by ASCLD?
23 A Their accreditation under ASCLD/LAB, that they're
24 posted on ASCLD/LAB's web site, is to the Legacy
25 Standard, the 2005 Legacy Manual, not to ISO

1 17025, and the one that's posted on ASCLD/LAB's
2 web site actually indicates that their
3 accreditation expired in September of 2013.
4 Q But it was valid at the time of the test?
5 A Presumably, yes.
6 MS. ALDRIDGE: I don't have any other
7 questions, Your Honor.
8 THE COURT: Any redirect, Mr. Sherman?
9 MR. SHERMAN: Just briefly, Your Honor.
10 - - - -
11 **REDIRECT EXAMINATION**
12 BY MR. SHERMAN:
13 Q The whole purpose of any lab, especially a
14 forensic lab, is, would you agree, is to produce
15 an audit trail, so somebody on the outside can
16 look in and see what happened?
17 A That is really essential. The scientific process
18 requires complete documentation so that work can
19 be subject to independent review by a competent
20 professional. We can't rely on peoples' memories,
21 we must rely on contemporaneous records.
22 Q I want to make it a part of the record, the Page
23 34 that we discussed.
24 MR. SHERMAN: I'm going to mark this as
25 Defendant's Exhibit 9 and move for its admission.

1 THE COURT: Any objection?
2 MS. ALDRIDGE: No, Your Honor.
3 THE COURT: All right. So admitted.
4 BY MR. SHERMAN:
5 Q If the standard operating procedures state we
6 should use one method, for example, a capillary
7 column, and the machine is printing out that they
8 use a packed column, that means the lab isn't even
9 following their own procedure, is that right?
10 A That's correct.
11 Q There would be no reason for this machine to print
12 out packed column if it wasn't a packed column?
13 A No.
14 Q I want to show you what I've marked as Defendant's
15 Exhibit 10, which shows -- is that the
16 manufacturer's documentation or from their web
17 site that relates to the column that's in
18 Defendant's Exhibit 9?
19 A Yes, it does appear.
20 Q And that indicates that it's a packed column?
21 A Yes.
22 MR. SHERMAN: Your Honor, I would move for
23 the admission of Defendant's Exhibit 10.
24 THE COURT: Any objection?
25 MS. ALDRIDGE: No objection.

1 THE COURT: It's admitted.
2 BY MR. SHERMAN:
3 Q Is there any reason or explanation that you can
4 think of how they audit labs across the country
5 why the machine would print out that it uses a
6 packed column Perkin Elmer and it not be the
7 column that they use?
8 A As I indicated earlier, that really merits some
9 very direct investigation to determine how such an
10 error could occur. It's not only an issue of
11 procedural non-compliance, because there were
12 other areas of procedural non-compliance, it's
13 foundationally and completely different analytical
14 method than use of a capillary column. It has
15 completely different validation requirements. So
16 it's a very troubling error.
17 Q You were asked about ASCLD and whatnot and
18 proficiency testing. Have the overwhelming
19 majority of labs that have been in lab scandals
20 through either intentional fraud or just
21 incompetent, have they all been ASCLD certified?
22 A In about a --
23 MS. ALDRIDGE: Objection, Your Honor.
24 THE COURT: What's your objection?
25 MS. ALDRIDGE: He is talking about other labs

1 and scandals. I think that's not appropriate
2 here.
3 MR. SHERMAN: It relates to the accrediting
4 body that really doesn't do a very good job
5 accrediting.
6 THE COURT: Overruled. Go ahead.
7 BY MR. SHERMAN:
8 Q Go ahead and answer.
9 A Over a period of time, a majority of the labs that
10 have had either fraud or incompetence or
11 malfeasance kinds of errors and problems have held
12 active ASCLD/LAB accreditation at the time that
13 those problems were identified. So it should
14 not -- it's common on the part of lay people to
15 think that the lab is accredited, then they are
16 always producing good work. That is not the case.
17 It should not be misunderstood as a guarantee of
18 good quality results.
19 What accreditation should demonstrate is the
20 lab should have the ability to produce an audit
21 trail so that they can produce direct data of
22 known quality, not necessarily of good quality.
23 But the records all stand together so that you
24 have a basis for going back and assessing the
25 quality of the results.

1 Q And all of these labs that have been deemed
2 efficient by ASCLD, or proficient, and there have
3 been scandals, either intentional or
4 unintentional, they have all passed proficiency
5 testing from ASCLD?
6 A Yes. ASCLD doesn't actually administer the
7 proficiency testing. There is external suppliers
8 that do that. ASCLD just has a program that they
9 have to follow.
10 Q You were asked earlier or yesterday about the
11 under filling of the tube and the significance of
12 that. Is it the fact that when a tube is under
13 filled, that air and contaminants can get inside?
14 A That can be the cause for an under filled tube.
15 It's not the fact that it's only filled part way.
16 It's that that can be the cause of an under filled
17 tube. That air leaked in, bringing contaminants
18 into the tube.
19 Q One of the questions that you were asked earlier
20 in your testimony and which apparently seems to be
21 the problem, this involves a time issue, right?
22 If you do everything right, it takes more time?
23 A It does. Actually, it would be pretty easy to
24 come bring a GC into this building, into this
25 courtroom and set it up and run a blood alcohol.

1 It wouldn't take a long time. The time in doing
2 analytical work properly is involved in putting in
3 place all the quality control and documentation
4 measures necessary to produce reliable data.
5 That's the hard part.
6 Q And that's what's woefully lacking here?
7 A That's correct.
8 MR. SHERMAN: I have no further questions
9 Your Honor.
10 THE COURT: Any recross-examination?
11 MS. ALDRIDGE: No, Your Honor.
12 THE COURT: Okay. You are excused. Thank
13 you.
14 Next witness, Mr. Sherman.
15 MR. SHERMAN: Your Honor, at this point, the
16 defense rests.
17 THE COURT: I just have a few questions as to
18 Mr. Johnson's decision not to testify.
19 MR. SHERMAN: Yes.
20 - - - -
21 **DANIEL JOHNSON**
22 **having been first duly sworn,**
23 **was examined and testified as follows:**
24 - - - -
25 THE COURT: Good morning, sir, your name?

1 THE DEFENDANT: Daniel Johnson.
2 THE COURT: Do you understand that it's your
3 Constitutional Right to testify in your own
4 defense on your own behalf?
5 THE DEFENDANT: Yes, Your Honor.
6 THE COURT: Have you discussed your right to
7 testify with your lawyer, Mr. Michael Sherman?
8 THE DEFENDANT: I have, sir.
9 THE COURT: Do you understand if you wish to
10 testify, no one, including Mr. Sherman, can
11 prevent you from doing so?
12 THE DEFENDANT: I understand.
13 THE COURT: Do you feel as if anyone has
14 interfered with your right to testify on your own
15 behalf?
16 THE DEFENDANT: No, Your Honor.
17 THE COURT: Has anyone coerced, threatened,
18 forced you to give up your right to testify?
19 THE DEFENDANT: No, sir.
20 THE COURT: Has anyone promised you anything
21 in exchange for your agreement not to testify?
22 THE DEFENDANT: Absolutely not.
23 THE COURT: Are you waiving your right to
24 testify freely, voluntarily and intelligently?
25 THE DEFENDANT: Yes, Your Honor.

1 THE COURT: Finally, do you understand that
2 by waiving your right to testify today, if there
3 should be an appeal on this case, you cannot
4 allege that you were prejudiced in any way by not
5 testifying at your trial?
6 THE DEFENDANT: I understand, sir.
7 THE COURT: All right.
8 Finally, after reviewing your rights, do you
9 still wish to waive your right to testify on your
10 own behalf, and not testify on your own behalf?
11 THE DEFENDANT: Yes, Your Honor.
12 THE COURT: Do you have any questions, Mr.
13 Sherman?
14 MR. SHERMAN: No, Your Honor, thank you.
15 THE COURT: The Court finds Mr. Daniel
16 Johnson is knowingly, voluntarily, intelligently
17 waiving his right to testify.
18 One other area. You may have discussed this
19 with Mr. Sherman. Will you be calling any
20 character witnesses?
21 MR. SHERMAN: We will not, Your Honor.
22 THE COURT: You have discussed that with
23 Mr. Johnson?
24 MR. SHERMAN: We discussed the witnesses and
25 whatnot.

1 THE COURT: Mr. Johnson, are you aware that a
2 character witness in itself could lead to this
3 Court finding you not guilty? Possibly? That in
4 itself?
5 THE DEFENDANT: I understand, sir.
6 THE COURT: Do you understand the character
7 witness would come in and would testify to your
8 good, general reputation in the community that
9 would be contrary say to what you are charged
10 with? For example, if a person is charged with an
11 assault, a character witness could come in and say
12 that person would never assault anyone, they are a
13 very peaceful person. Do you understand how that
14 concept works?
15 THE DEFENDANT: I understand.
16 THE COURT: All right. Will you be calling
17 any character witnesses?
18 THE DEFENDANT: No, Your Honor.
19 THE COURT: Okay. I find that Mr. Daniel
20 Johnson knowingly, voluntarily, and intelligently
21 is waiving his right to call character witnesses.
22 Thank you, Mr. Johnson, Mr. Sherman.
23 MR. SHERMAN: Thank you, Your Honor.
24 THE COURT: Ms. Aldridge, are you going to be
25 calling any rebuttal?

1 MS. ALDRIDGE: Yes, Your Honor. I would call
2 Jen Janssen.
3 - - - -
4 **JENNIFER JANSSEN**
5 **having been first duly sworn,**
6 **was examined and testified as follows:**
7 - - - -
8 **DIRECT EXAMINATION**
9 BY MS. ALDRIDGE:
10 Q I was going to start from the beginning and work
11 backwards, but let's work backwards since that
12 seems to be the contention.
13 When was the last time that the lab used the
14 packed column testing --
15 I'm sorry. Would you please state your name
16 and spell it for the Court, please?
17 A Jennifer Janssen, J-a-n-s-s-e-n.
18 Q Are you currently employed, ma'am?
19 A I am the Assistant Chief Toxicologist at the
20 Allegheny County Office of the Medical Examiner,
21 the Forensic Toxicology Section.
22 Q How long have you been in this position?
23 A Since 1996.
24 Q What would be some of your duties and
25 responsibilities?

1 A I oversee the Toxicology Section. Half of our
2 work is post mortem work where we try to determine
3 if drugs or alcohol were significant and were the
4 cause and manner of death, and the other half of
5 the work is DUI or DUI type work where we try to
6 determine if drugs or alcohol impaired an
7 individual's ability to operate a motor vehicle
8 safely.
9 Q In that capacity, how many tests would you
10 guesstimate are run through the lab for testing
11 for blood alcohol?
12 A We receive approximately 3,500 DUI cases per year.
13 We also test post-mortem cases for the presence of
14 the alcohol, and we receive approximately 1,200
15 cases per year. And on each one of those cases we
16 receive multiple fluids. So we would test blood,
17 urine, and what other fluids might be submitted in
18 a post-mortem examination.
19 Q There were some issues that were brought up
20 regarding sample integrity. Could you address
21 some of those issues, such as they were looking at
22 chain of custody?
23 A Yes.
24 THE WITNESS: Your Honor, may I refer to
25 notes?

1 THE COURT: Sure.
2 THE WITNESS: Yes. We received blood samples
3 from Daniel Johnson. When the items were
4 submitted to the lab, we provided a receipt. And
5 on that receipt we indicate how the sample is
6 identified. And we indicated on that receipt that
7 it was identified by Johnson, Daniel E.
8 When the tubes are transferred to the
9 Toxicology Section, they are sub itemized. Each
10 tube receives a bar code which is a particular
11 unique identifier for that tube. And that item
12 is, tasks are assigned to that item. There is an
13 estimate made of the amount of blood that is
14 present in that tube.
15 The size of the tube is not documented at
16 that time. We indicate that it is a zero to 10 ml
17 tube. We do not indicate what size tube was
18 submitted. But we do provide an estimate in terms
19 of how much blood was in each particular tube.
20 On Daniel Johnson we received two gray top
21 tubes of blood and two green top tubes of blood.
22 Subsequently, we store those tubes refrigerated.
23 And we store them for at least one year.
24 We were able to take those out of long-term
25 storage and look at the tubes to see what size

1 tubes were actually submitted in this case. And
2 the tubes were 13 by 75 millimeter tubes and they
3 each contained, one contained two mls, one
4 contained three mls. When I looked up the
5 information on those particular tubes, they are
6 designed to either draw two mls or four mls.
7 Each vacutainer tube has a particular label
8 on it. When that tube is submitted to the lab,
9 often the hospital has put on their own label and
10 it is difficult to actually read the information
11 on that label. It contains the expiration dates,
12 it will contain also what the fill volume is.
13 I retrieved those tubes to look at those
14 tubes to see could I decipher what the actual
15 expiration dates were. It was very easy for me to
16 determine what they were on the green top tubes.
17 On the gray top tubes, it was somewhat more
18 difficult because when I pulled the label back, it
19 was more difficult to actually determine the exact
20 expiration date for those tubes.
21 I do have pictures of those tubes at this
22 time. And I believe on the gray top tubes the Lot
23 Number was 1178412. It says it was a sterile tube
24 and I believe the expiration date was 2015 --
25 MR. SHERMAN: Your Honor, if we don't know,

1 you can't say what you believe. It either is or
2 it isn't.
3 THE COURT: Ms. Aldridge.
4 BY MS. ALDRIDGE:
5 Q Is this what you read on the tube?
6 A Yes, it is what I read on the tube.
7 Q So an expiration date of 2015?
8 A That's correct.
9 THE COURT: I'll allow it. You can cross on
10 that.
11 BY MS. ALDRIDGE:
12 Q So for the size of the tube of the draw volume,
13 was the sample provided sufficient?
14 A Yes.
15 Q Was it within accordance with the volume of the
16 tube?
17 A Yes, I believe it was either a two or four ml tube
18 because that was what was commercially available.
19 I could not read on the specific tube whether it
20 was a two ml draw or a four ml draw.
21 Q What causes a tube to expire?
22 A There is a number of things that can cause a tube
23 to expire. The gray top tubes have sodium
24 fluoride present in the tube as well as potassium
25 oxalate, both of which are inert, and Becton

1 Dickinson has indicated that those preservatives
2 will not expire. What will expire in the test
3 tubes is the vacuum. With time the vacuum may
4 dissipate if it is beyond the expiration date.
5 Q There was some question regarding the blood
6 samples themselves. Were the blood samples
7 collected using aseptic technique?
8 A I believe that the phlebotomist testified that she
9 swabbed the arm with povidone-iodine and she would
10 have used the technique that she normally uses to
11 draw blood, and that would be utilizing aseptic
12 techniques.
13 Q What can you tell us about the stability of
14 ethanol in a specimen that has been taken using
15 aseptic techniques?
16 A The ethanol is stable in a tube that has been
17 collected using aseptic techniques. Whether it's
18 refrigerated or non-refrigerated, preserved or
19 non-preserved, a study was conducted in our
20 facility, which was published in Clinical
21 Chemistry, which demonstrated that whether a tube
22 is refrigerated or non-refrigerated, whether there
23 was a preservative or no preservative, there will
24 be no change in the blood alcohol content for a
25 period of 14 days.

1 Q How many days lapsed between the time that
2 Mr. Johnson's blood was collected and the time the
3 test was performed?
4 A The incident was on 6/14/2012, and the test was
5 run on 6/20/2012, so a period of six days.
6 Q So well within your 14 day window?
7 A Yes.
8 Q We are going to talk about the chain of custody.
9 What happens when the sample arrives at the lab?
10 A When this sample arrived at the lab, an evidence
11 technician signed in the blood sample. They will
12 compare it against a Submittal Form that the
13 police officer fills out. They will verify the
14 name, and it will indicate what types of tubes
15 they received.
16 In this particular case they indicated that
17 they received two gray capped tubes of blood and
18 two green capped tubes of blood, and it was
19 identified by the name Johnson, Daniel, E.
20 Once they have received it, it will be
21 transferred to the Toxicology Section. And each
22 step of the chain of custody is documented.
23 The evidence receives a bar code. It is
24 transferred using that bar code to the Toxicology
25 Section, and we maintain an electronic chain of

1 custody for each particular item.
2 Q When the sample moves to Toxicology and they are
3 ready to perform the testing, when the sample is
4 aliquoted, how is the chain of custody maintained?
5 A The only handwritten chain of custody occurs on
6 the Reagent Traceability Form, and that is when
7 the actual analyst takes it into their custody and
8 aliquots off the sample for the test that day.
9 Q Are Mr. Johnson's samples still being stored at
10 the lab?
11 A Yes. The samples are stored for a minimum period
12 of one year, or longer, as space allows. And at
13 this time we still do have Daniel Johnson's
14 specimens.
15 Q And this would be available for independent
16 testing?
17 A Yes, it would.
18 Q And it has been available for independent testing?
19 A Yes.
20 Q For the validation methods, what was the method
21 that was utilized to test Mr. Johnson's blood for
22 alcohol?
23 A Headspace gas chromatography.
24 Q Was this sample tested on a packed column or
25 capillary column?

1 A It was tested on a capillary column.
2 Q Why would Janine conclude that the testing was
3 conducted on a packed column?
4 A One of the pages that was provided to her during
5 discovery indicated that it was in the header
6 information that a packed column was utilized.
7 That was incorrect. It was a capillary column
8 that was used on the day of that testing. There
9 is other information that was provided that
10 indicated that, in fact, a BAC-1 column was
11 utilized. The S.O.P. indicated that at that time
12 only a BAC-1 or a BAC-2 column would be utilized.
13 In addition, if you look at some of the
14 parameters within that instrumental method, it
15 specifies that it is a split splitless injector
16 and it is a capillary injector, which could only
17 be used on a capillary column and not a packed
18 column.
19 Other additional information is the analysts
20 themselves indicated in that data file name which
21 column was used. She indicated that it was a
22 BAC-1 column that was utilized for the testing. I
23 do acknowledge that the information on, I believe,
24 it is Page 34 is typed incorrectly. That that
25 should have read that it was a Restek BAC-1

1 capillary column.
2 Q Referring to Page 34, Defendant's Exhibit Number
3 9, what date was this sheet created?
4 A It was created the day that the test was
5 conducted, 6/20/2012.
6 Q What's the November of 2009 date?
7 A I believe that was the date the method was
8 actually created. But this was printed out on
9 this particular date.
10 Q On the June date?
11 A Yes.
12 Q So this is a typing error, you say?
13 A Yes, it is.
14 Q The other Defendant's Exhibits 6, 7, and 3, all
15 indicate in the request file that it was a BAC-1?
16 A Yes. In the result file it indicates that a BAC-1
17 was utilized for the testing.
18 Q Is the defendant's reading on D-6, on the
19 Defendant's Exhibit 6?
20 A Could you please repeat the question?
21 Q You said the testing was done on the BAC-1?
22 A That's correct.
23 Q Is the defendant's reading, his actual test, is
24 that this piece of evidence, the Exhibit D-6, is
25 that his reading?

1 A Yes, that is.
2 Q And what was his reading?
3 A His reading was a 125 milligram percent which
4 would convert to a 0.125 percent ethanol.
5 Q Was the procedure that was used to test
6 Mr. Johnson's blood, was that validated?
7 A Yes, it was.
8 Q What does this validation process entail?
9 A This particular method utilizing the Perkin Elmer
10 auto system, that is, the gas chromatograph, and
11 using the headspace auto sampler, the turbo matrix
12 headspace auto sampler, as well as a Restek BAC-1
13 capillary column, that was validated in July of
14 2001. The validation consisted of establishing
15 the linear area of the method and it was
16 established that the lowest or limited
17 quantitation was .010 and the higher limited
18 quantitation was 0.400 percent. It also
19 established the limited detection to be
20 ten-milligram percent or 0.010 percent. Precision
21 and accuracy were determined. It was determined
22 on a daily basis or intra assay as well as inter
23 assay.
24 So it was determined on a daily basis, and it
25 was determined over the course of five separate

1 days of analysis. So both the precision and
2 accuracy were determined.
3 We also determined whether or not there was
4 carry over between samples. And a correlation
5 study was conducted at the time to determine how
6 those new results compare to what was being
7 utilized for testing at that time. And prior to
8 the institution of using this particular system,
9 we had used a packed column. And a packed column
10 is what was actually listed on this method, which
11 we used a carbowax carbo packed column at that
12 time.
13 So I believe that from 1980 all the way up to
14 2001 we did use packed column gas chromatography
15 to actually identify and quantitate ethanol.
16 Q But you were not using packed columns in 2012?
17 A We were not. In fact, we were using this
18 particular method that had been validated in 2001.
19 Q Were these records provided to Mr. Sherman as part
20 of the discovery?
21 A Yes, they were. And they were provided to him
22 over the course of a number of different discovery
23 motions. Initially, there was a discovery motion
24 in, I believe it was a case, Wright, where he had
25 requested the validation procedure that was

1 utilized in his testing. And we provided that
2 validation procedure at that time. And when he
3 asked for further discovery, he said don't provide
4 anything that you have already provided, so it was
5 not provided again.
6 Q What actual validation information was provided as
7 part of this discovery motion?
8 A As part of this discovery motion, we provided the
9 documentation of a validation that was conducted
10 in 2011. And in that particular validation study,
11 we had validated a new GC column, which was a
12 BAC-2 column, and we provided it to him, even
13 though a BAC-2 column was not used in the analysis
14 of this case because a correlation was done
15 between the BAC-1 and the BAC-2 column. So it was
16 a validation that had occurred prior to Daniel
17 Johnson's testing.
18 Q This was done as a summary?
19 A It was done as a summary. Initially when he
20 requested the validation study, he just asked for
21 a summary because I had indicated that the
22 validation summaries were quite lengthy, and he
23 said just provide the summary.
24 Q At the time of Mr. Johnson's test, was the
25 laboratory utilizing the single column to perform

1 blood alcohol analysis?
2 A Yes.
3 Q When you get equipment, does the manufacturer
4 provide a list of volatiles that have been tested
5 on the Restek BAC-1 column and a list of their
6 retention times?
7 A Yes, it does.
8 Q Are there any compounds listed with a retention
9 time that is identical to ethanol?
10 A No, there isn't any compound with an identical
11 retention time to ethanol.
12 Q Are there compounds that would interfere with the
13 analysis of the ethanol?
14 A There is no compound listed on the list provided
15 with the Restek BAC-1 column with an identical
16 retention time to ethanol.
17 Q If there were such an interference, would it be
18 detected?
19 A If it had an identical retention time, it would be
20 difficult to detect. However, I indicated that
21 there was not a compound listed with an identical
22 retention time to ethanol. And it is something
23 that if it were slightly different from ethanol,
24 that the peak shape of the ethanol would have been
25 distorted, and it would have been identified as an

1 interference.
2 Q Procedures that are utilized to test for
3 volatiles, they evolved over the years, is that
4 correct?
5 A Yes.
6 Q When you first started in the lab, what was the
7 method used for the analysis of ethanol?
8 A I started in 1980, and at that time we were using
9 a procedure that was a packed column procedure.
10 And it required a manual dilution for the ethanol
11 and it required that you would directly inject it
12 by hand into the injector.
13 And over the course of the years, the
14 technology has changed. We used that method for
15 probably a period of 20 years. We performed
16 proficiencies during that 20 year period where we
17 never have had a failed proficiency in ethanol.
18 We have always accurately identified the amount of
19 alcohol present in the sample. And we never had a
20 single result that had been outside of the
21 acceptable range.
22 In 2001 we purchased an instrument that was
23 capable of performing headspace gas chromatography
24 which is quite different from what we had been
25 performing in the past, and that was the

1 validation procedure which I indicated was
2 conducted in 2011. And that was actually the
3 procedure that was utilized for the testing on
4 Mr. Johnson's blood. That procedure differed from
5 the packed column procedure in that you were using
6 a capillary column. A capillary column has
7 different parameters than a packed column. The
8 stationary phase is coded on the interior wall of
9 the column. And the separation occurs in that
10 fashion.
11 The injection is different. It is set up so
12 that you create -- you put the sample in a
13 particular vial, the vial is heated up at
14 80 degrees centigrade, and what occurs is that the
15 volatile substances actually go into what is
16 considered to be the headspace of that particular
17 vial. So you are actually separating out all the
18 volatile components from the acquiesce components.
19 They are then carried through a transfer line into
20 an injection port and then onto a column where the
21 separation of the alcohol occurs.
22 Q In 2001, when the laboratory began using the
23 headspace gas chromatography, was it common to
24 utilize two columns for the analysis of ethanol at
25 that time?

1 A I would believe in 2001 that it was not a standard
2 practice. At that time companies were
3 manufacturing columns which were designed to set
4 up a dual column type situation.
5 MR. SHERMAN: Your Honor, I think maybe we
6 should get up to 2012. It doesn't matter what was
7 done in 2001.
8 MS. ALDRIDGE: It is relevant, Your Honor,
9 because the defense's expert is saying that the
10 only system, or the best system, is the dual
11 column system, and as technology evolves, you use
12 what you have present. So for 20 years, the
13 packed column was the industry standard. In 2001
14 it moved to the single column. And then it has
15 such evolved into the dual column. So we are
16 establishing here that it is relevant.
17 THE COURT: I'll allow it. Go ahead.
18 BY MS. ALDRIDGE:
19 Q Was the procedure at the time typical and standard
20 at that time for ethanol analysis?
21 A It was.
22 Q What did the SOFT Guidelines indicate regarding
23 the analysis of ethanol.
24 A The SOFT Guidelines specifically indicated in 2006
25 that for ethanol, although close positives are

1 unlikely, confirmation using a second system is
2 encouraged. So at that time they were indicating
3 that a single column system is adequate, but we
4 are encouraging you to move towards using a dual
5 column system.
6 Q Did the lab do that?
7 A Yes, we worked on -- it entailed purchasing a
8 second headspace auto sampler to actually achieve
9 that goal. But yes, we did work towards
10 instituting a dual column analysis.
11 Q There seems to be something about the word batch
12 and what the Crime Lab's definition of batch is as
13 opposed to the definition here in court. Could
14 you define batch in your operating procedures?
15 A Yes. It is defined as a group of specimens that
16 are run utilizing the same reagents and are run
17 against the same calibration curve with the same
18 controls.
19 Q In the batch that was run on the day that Daniel
20 Johnson's blood was tested, how many calibrators
21 were run?
22 A It is our routine to run a calibration curve each
23 day. We do not run any historical curves, and the
24 calibrators that were run on that given day were a
25 ten-milligram percent or 0.01 percent, a

1 0.05 percent, a 0.08 percent, a 0.10 percent, a
2 0.20 percent, 0.30 percent, 0.40 percent.
3 Q That would indicate that there are multiple levels
4 that you were testing for?
5 A Right. It is a seven point calibration curve.
6 Q For the solution, I believe there was a question
7 about the solution that indicates that it's
8 supposed to be immediately used after opening to
9 prevent evaporation. How do you interpret
10 immediately? What does the lab do?
11 A They open a vial and they will immediately aliquot
12 off what they would use for the calibration curve
13 that day. They would then immediately transfer
14 the remainder of the solution, they would seal it
15 in a vial, and they would refrigerate it until the
16 next day when the remainder of that solution would
17 be utilized.
18 Q Have you had a problem with the solution?
19 A No.
20 Q Has it failed in any other tests?
21 A Those solutions are very, very stable. We use
22 them on a daily basis. And if you look at the
23 calibration curve, you can see that it is a linear
24 curve. And the calibration curve that was run on
25 the day that Daniel Johnson's blood was run, the

1 R-squared value was a 0.999, which indicates it is
2 a linear curve. And if you look at that
3 particular curve, it actually calculates the
4 percent difference of each one of those
5 calibrators from the actual target concentration.
6 Q Are the calibrators that are run each day, are
7 they tested against the control specimens?
8 A Yes, they are.
9 Q If evaporation had occurred, would the controls be
10 in the acceptable range?
11 A I do not believe they would be.
12 Q How many controls were run?
13 A On that particular day, we ran a .02, a .079, a
14 .1, a .158, and a .395. That was followed by a
15 negative or a blank. That .395 was run again a
16 second time. The first one was run at 8:47 a.m.
17 The second one was run at 11:47 a.m. And then the
18 third .395 was run at 6:33. So it was run three
19 times over the course of that day. And each time
20 it was followed by a blank.
21 Q So that would say that three blanks were also run
22 that day?
23 A That's correct.
24 Q Were all of the controls in the acceptable range?
25 A Yes.

1 Q When you say acceptable range, what does that
2 mean?
3 A We establish when the controls are prepared, we
4 establish what the mean is, and then we allow plus
5 or minus five percent from the actual established
6 mean.
7 Q There was some concerns regarding maintenance.
8 What does the manufacturer indicate in the manual
9 regarding the maintenance of your instrument?
10 A Give me a second, please.
11 The manual indicates that it's constructed of
12 high quality components and requires little
13 maintenance. And then it gives suggestions in
14 terms of how frequently the maintenance should be
15 conducted. But they do indicate that it will vary
16 depending on usage.
17 And the headspace auto samplers are used by a
18 number of different industries. They are used for
19 different purposes. And some of the applications,
20 they're testing for things that are corrosive that
21 may indicate that that instrument, that certain
22 components may need to be changed more frequently.
23 Ethanol is not corrosive. And so the seals on the
24 auto sampler are changed as needed.
25 Q Would you be able to detect if one of the seals in

1 the auto sampler was leaking or not performing
2 properly?
3 A Yes.
4 Q What would happen at that time?
5 A The retention times would shift and so we would
6 easily be able to determine if one of the seals
7 needed to be changed.
8 Q Does the GC have a septa that needs to be changed
9 routinely?
10 A No, it does not. The configuration for this
11 particular instrument, it uses a transfer line,
12 and that transfer line goes directly into the
13 injection port, so that septa does not need to be
14 changed as it does in a system where you are doing
15 direct injection of a blood sample.
16 Q We have heard a lot of talk about proficiencies.
17 What are proficiencies?
18 A Proficiencies are samples that are provided to us
19 by an accrediting agency such as the Pennsylvania
20 Department of Health, or by the College of
21 American Pathologists. What they are are blood
22 samples that contain a certain amount of ethanol
23 which is unknown to the laboratory. The samples
24 come to us, and we test them according to the
25 procedures that we normally use for testing our

1 samples. And we report out a value. And they
2 will issue a report to us to indicate whether we
3 have passed the proficiency or whether we have
4 failed it.
5 Q What agencies do you receive the proficiencies
6 from?
7 A We receive whole blood alcohol proficiencies from
8 the College of American Pathologists, and we
9 receive them three times a year. We receive five
10 samples each time. So it's a total of 15 whole
11 blood proficiencies from the College of American
12 Pathologists.
13 We also receive from the PA Department of
14 Health three different groups of proficiencies
15 each year. Each group will contain five whole
16 blood and five serum proficiencies. So we receive
17 a total of 30 proficiencies from the PA Department
18 of Health.
19 And overall we receive 45 alcohol
20 proficiencies per year.
21 Q Have the values always been in the acceptable
22 range?
23 A We have never failed an alcohol proficiency.
24 Q Has there been a single value outside of the
25 acceptable range?

1 A Never.
2 Q That would deem a failure?
3 A That's correct. We have never had a failure.
4 Q The proficiencies that were run by Susie, how did
5 she do?
6 A I provided as part of discovery proficiencies that
7 were analyzed by both Susie Stanich as well as Dan
8 Kinkaid. And the proficiencies that Susie
9 conducted in 2011 and in 2012 were provided.
10 Susie analyzed -- I can go through each one
11 of them. The cap AL1A 2011 proficiencies, and all
12 of them were in the acceptable range. And I
13 calculated what the difference from the actual
14 result was, or from the mean, or the target result
15 was, and for each one of those it was less than
16 one percent difference from the actual target or
17 mean value.
18 The proficiency that she performed on
19 3/10/2011, they were state alcohol whole blood and
20 serum proficiencies. And once again, she passed
21 all of those proficiencies and they were all
22 within five percent of the target or the mean
23 value for that proficiency.
24 She conducted a third one in 2011, and that
25 was a cap whole blood proficiency that was

1 conducted in October, and all of those were within
2 the acceptable range and they were all within
3 2.5 percent of the mean.
4 And in July of 2012, she conducted analysis
5 on the state blood serum proficiencies. They were
6 all within the acceptable range. And the highest
7 percent difference was .6 percent from the mean.
8 So she has successfully completed proficiency,
9 demonstrated that the lab is proficient in the
10 analysis of both whole blood and serum alcohol.
11 Dan Kinkaid also performed proficiencies, and
12 these were provided as part of the discovery
13 motion. And he conducted three different
14 proficiencies that year. And they were all within
15 the acceptable range.
16 Q The lab itself, is the lab certified or
17 accredited?
18 A Yes, it is.
19 Q Which agencies?
20 A We are certified by the Pennsylvania Department of
21 Health. We are also certified by CLIA, which is
22 the Clinical Lab Improvement Act. And that is a
23 federal accrediting body. And we are also
24 certified by ASCLD/LAB. And at the time we had
25 the Legacy accreditation.

1 Q In your opinion, or do you have an opinion on the
2 processes used in the lab. Are they effective?
3 A Yes, I believe that the methods that are utilized
4 to test for alcohol in the lab are reliable, they
5 are scientific, and they are accurate.
6 MS. ALDRIDGE: Thank you. I have no more
7 questions, Your Honor.
8 THE COURT: All right. Mr. Sherman, cross.
9 - - - -
10 **CROSS-EXAMINATION**
11 BY MR. SHERMAN:
12 Q Do you consider yourself a scientist?
13 A Yes.
14 Q So scientists are independent.
15 A Can you please define independent?
16 Q Scientists are not supposed to show bias.
17 A That's correct.
18 Q Scientists are not supposed to favor one side over
19 the other.
20 A That's correct.
21 Q Scientists are supposed to -- you work for the
22 Medical Examiner's office.
23 A That's correct.
24 Q You don't work for the District Attorney's office.
25 A That's correct.

1 Q You render independent opinions.
2 A That's correct.
3 Q And you are not supposed to -- there is no such
4 thing as a prosecution scientists?
5 A I would testify the same way regardless of who
6 called me to testify.
7 Q It's not right to show a bias towards one side
8 over the other?
9 A That's correct.
10 Q In your preparation for this case, you prepared
11 questions for the district attorney?
12 A Yes, I did.
13 Q You typed them out for her?
14 A I --
15 MS. ALDRIDGE: Objection, Your Honor.
16 THE COURT: Yes.
17 MS. ALDRIDGE: What's the relevance?
18 MR. SHERMAN: It clearly shows bias.
19 MS. ALDRIDGE: It doesn't show bias. I am
20 not a scientist. I have seen Mr. Sherman
21 conferring with his expert. So I don't understand
22 why I wouldn't be allowed the same --
23 MR. SHERMAN: I'm entitled to cross-examine.
24 THE COURT: I'll allow it.
25 BY MR. SHERMAN:

1 Q You typed out the questions for the prosecutor?
2 A Yes, I did. I did provide questions.
3 Q You typed out the questions for the prosecutor in
4 addition to giving her a binder?
5 A I do not believe I provided a binder to the
6 prosecutor.
7 Q Did you provide materials?
8 A We reviewed the information and we reviewed the
9 expert opinion by Ms. Arvizu. I did not provide
10 her a binder with information. But we did discuss
11 the points that were brought up by Ms. Arvizu.
12 Q Like I said, you have told her questions to ask
13 during the proceeding?
14 A And I routinely provide questions for the
15 prosecutor to ask me. And the reason why I do is
16 because they are not as familiar with the work
17 that I conduct. They are not scientists. So it
18 is very common for me to provide questions that
19 are pertinent to our testing.
20 Q The overwhelming majority of defense lawyers are
21 not scientists. Do you provide them any
22 questions?
23 A I do not believe that they have ever asked me for
24 any questions.
25 Q So if I had asked you in this case, you would have

1 provided me questions?
2 A Yeah, quite possibly I might have.
3 Q But you didn't. You prepared questions for the
4 prosecutor?
5 A That's correct.
6 Q And you sat down at your computer and typed them
7 out?
8 MS. ALDRIDGE: Objection, Your Honor. That
9 was asked and answered.
10 MR. SHERMAN: It's cross-examination.
11 THE COURT: I'll allow it, but I think you
12 made your point.
13 BY MR. SHERMAN:
14 Q Is that right?
15 A Yes, I did provide pertinent questions regarding
16 the scientific testing that was conducted in this
17 case.
18 Q And the questions you prepared were questions that
19 would further your point of view?
20 A They would enable me to describe how the testing
21 was conducted within our facility. They would
22 also allow me to indicate how the validation
23 procedures were conducted. So, yes, they would
24 enable me to explain how the testing was conducted
25 within our facility.

1 Q Would the questions help you further your point of
2 view?
3 A They help me, and they would help any individual
4 understand how the testing was conducted, whether
5 it is the defense, whether it is the prosecutor,
6 or whether it is the trier of fact. The questions
7 that I provided were such that an individual would
8 be able to understand how the testing was
9 conducted, and what safeguards are taken to insure
10 that the tests are reliable. And those are the
11 questions that were provided.
12 Q The questions helped you further your point of
13 view?
14 A They helped me defend the fact that I believe that
15 our testing is accurate. They help me educate the
16 individuals within the courtroom, whether it is a
17 jury, whether it is a --
18 Q Let me ask you the question the fourth time. The
19 questions help you further your point of view?
20 MS. ALDRIDGE: Your Honor.
21 THE WITNESS: Not my point of view, but the
22 accuracy of the testing.
23 BY MR. SHERMAN:
24 Q And that's your point of view, that it was done
25 accurately?

1 A That's correct.
2 Q Going back to Defendant's Exhibit Number 9, which
3 is the method file, printout of the method file,
4 that's prepared in your lab?
5 A Yes.
6 Q That was prepared by the lab analyst on this case?
7 A It was printed out by the analyst who ran the
8 samples in this case.
9 Q The lab analyst had to enter information into the
10 computer?
11 A It had already been entered into the computer and
12 she printed it out.
13 Q And it printed out what was there?
14 A That's correct.
15 Q The 2001 validation study -- you perform
16 approximately 5,000 ethanol tests a year?
17 A I would say it is more than that.
18 Q 10,000?
19 A If you are referring to single cases, it would
20 be --
21 Q I'm just referring to tests, how many ethanol
22 tests?
23 A An estimate of the number of tests per year, each
24 DUI sample is tested in duplicate, so that would
25 be -- we are run approximately 3,500 a year. That

1 would be 7,000 tests. We receive 1,200
2 post-mortem cases, and in those cases we always
3 test at least two fluids if they are available,
4 singly. So between probably 10,000 and 20,000
5 tests per year.
6 Q So since the 2001 validation study, that would
7 mean you have run over 200,000 tests on this
8 device?
9 A I would say we have run quite a few tests in the
10 ten year interval, yes.
11 Q Over 200,000, according to your numbers?
12 A Quite possibly.
13 Q And you have never done another validation study
14 since 2001?
15 A In my opinion, this method is validated routinely.
16 We routinely make --
17 Q You have never done another validation study since
18 2001?
19 A A complete validation study?
20 Q Yes.
21 A And you are saying at the time of Daniel Johnson's
22 testing, or after that?
23 Q I'm saying this pretty clear. Since 2001 you have
24 never done another validation study.
25 A We did conduct, recently we conducted an

1 additional validation study because we purchased a
2 new instrument.
3 Q That was after Daniel Johnson?
4 A And that was what I was trying to say, yes, that
5 after Daniel Johnson's we did --
6 Q Between 2001 and Daniel Johnson's test, you have
7 only performed one validation study?
8 A One complete validation study, that's correct.
9 Q In 2001 Ms. Stanich didn't work for the lab,
10 right?
11 A I would have to look to see what her start date
12 was. I believe she has worked in the lab for 15
13 years. And once I find a copy of her CV, I can
14 tell you exactly whether she was working in the
15 lab in 2001.
16 Q Now, as a result of the questions you provided the
17 prosecutor, Ms. Arvizu was asked regarding the
18 name of the method file, name and method file of
19 the BAC-1, that's something that's prepared by the
20 analyst?
21 A It was prepared by the person who actually entered
22 that information. She printed out that
23 information, but she did not prepare it herself.
24 Q So she didn't prepare the path that said
25 data/Susie --

1 A She prepared the path, but if you are asking me
2 did she actually enter the information into the
3 description on Page 34, I do not believe she did.
4 Q I'm asking you about the path, that there was a
5 path created, that's not on Page 34, is it?
6 A She prepared a batch file folder on that
7 particular day.
8 Q She decides what that file is called?
9 A She prepared a batch file folder on that given day
10 and the batch --
11 Q She decides what the name of the file is?
12 A On the batch file folder, she would have indicated
13 what the name was, yes.
14 Q That's not something that's automatically done by
15 the computer. She did that manually?
16 A That's correct.
17 Q If you were giving a proficiency test to the lab
18 and the lab printed out Number 34, Page 34,
19 Defendant's Exhibit Number 9, and it said that a
20 packed column was used, and it wasn't used, you
21 would find that unreliable?
22 A I understand what occurred here, and I have
23 acknowledged that there was a typographical error
24 listing --
25 Q You would find that unreliable?

1 A It is a typographical error that occurred on the
2 instrument conditions. I am aware and a hundred
3 percent sure what was utilized for testing that
4 day.
5 Q If you were given a proficiency test that printed
6 this out as a packed column and it wasn't a packed
7 column, you wouldn't pass proficiency testing?
8 A That's not correct. This is just a header. It
9 was typed in incorrectly. It should have said
10 Restek BAC-1. This has no bearing on how the
11 instrument operates.
12 Q You didn't prepare this sheet?
13 A I did not.
14 Q The analyst did?
15 A That's correct.
16 Q And now you are here to defend it, right?
17 A I am very familiar with what procedures were used
18 on that particular day. We have not used a packed
19 column since before the validation in 2001. A
20 packed column has not been utilized for testing.
21 So I am absolutely certain that a packed column
22 was not utilized.
23 Q So for 12 years it's been printing out packed
24 column, even though one hasn't been used for 12
25 years?

1 A That's correct.
2 Q So when the ASCLD came down to certify your lab,
3 you were printing out method files of columns that
4 you weren't even using and yet you still got
5 accredited right?
6 A That's correct. They must not have caught that
7 typographical error.
8 Q They obviously didn't catch a typographical error,
9 but neither did the lab?
10 A And it is strictly that, a typographical error.
11 Q For 12 years?
12 A That's correct.
13 Q You mentioned with regard to the tubes, you say,
14 it's your opinion that 10 milliliter tubes were
15 not used in this case?
16 A I know for a fact they were not because I looked
17 at the tubes. I removed them from long-term
18 storage.
19 Q Tubes less than 10 milliliters, especially a 4
20 milliliter tube do not contain the same amount of
21 preservative as a 10 milliliter tube, correct?
22 A It all depends. There are many different tubes
23 available and on the market, and I can't say
24 specifically what is in each tube.
25 Q So then you can't say whether a 2 to 4 milliliter

1 tube has the same amount of preservative as a
2 10 milliliter tube?
3 A Becton Dickinson makes many different types of
4 tubes --
5 Q So your answer is you can't say?
6 A I can't say, no.
7 Q The business about the sample being able to be out
8 for 14 days and whatnot, those studies, even if
9 you assume they are accurate, were all done in 10
10 milliliter tubes?
11 A I don't believe that that is the case.
12 Q They weren't done on 2 to 4 milliliter tubes?
13 A It indicated that the testing that was conducted
14 was conducted on samples that were submitted to
15 the lab.
16 Q Name one study that used 2 to 4 milliliter tubes
17 regarding storage.
18 A In this particular case it was indicated that they
19 had no --
20 Q Name one study that used 2 to 4 milliliter tubes
21 regarding storage issues.
22 A It is quite possible that this particular study
23 that was conducted by Doctor Winek received tubes
24 that were not 10 ml tubes.
25 Q But you don't know that?

1 A I do not know specifically what the size of that
2 tube was.
3 Q Any scientist knows that a 10 milliliter tube has
4 a certain amount of preservative, right?
5 A There is listed on each vacutainer tube how much
6 preservative is present.
7 Q A gray top tube is supposed to have a certain
8 amount of preservative, a 10 milliliter gray top
9 tube?
10 A There are different amounts of preservative in
11 different gray top tubes.
12 Q In a 10 milliliter gray top tube for forensic
13 purposes there is supposed to be a certain amount
14 of preservative.
15 Let me ask you this. Everyone has seen, in
16 science, has seen the Becton Dickinson chart
17 listing their tubes, right?
18 A That's correct.
19 Q You probably have one hanging in the lab?
20 A I have one right here.
21 Q And there is only supposed to be a certain amount
22 of preservative in a 10 milliliter tube.
23 A I believe the amount of preservative differs.
24 There are heavy gray top tubes with 12 milligrams.
25 If it is necessary, I can look up the information

1 to determine exactly how many gray top tubes they
2 offer and what types of preservatives are present.
3 Q The point is the 2 to 4 milliliter tubes have less
4 preservative in them?
5 A Not necessarily.
6 Q You just don't know. You are just saying this
7 stuff and you don't know. If you don't know, say
8 you don't know.
9 You don't know if a 2 to 4 milliliter tube
10 has less preservative than a 10 milliliter tube?
11 A I'm saying that the amount of preservative
12 differs.
13 Q You don't know if a 2 to 4 milliliter tube says --
14 you are allowed to say it. Say it. I want to
15 hear you say I don't know.
16 A I can't say that. I can't say that --
17 MS. ALDRIDGE: Your Honor, he is badgering
18 the witness.
19 THE WITNESS: I can say there are gray top
20 tubes which contain varying amounts of
21 preservative.
22 BY MR. SHERMAN:
23 Q And you don't know if a 2 to 4 milliliter tube has
24 the same amount of preservatives as a 10
25 milliliter tube?

1 A I don't know specifically, no.
2 Q You are familiar with the concept of coelution?
3 A I am.
4 Q Coelution means two substances are coming out
5 essentially at the same time?
6 A That's correct.
7 Q Coming out of the GC, correct?
8 A That's correct.
9 Q You can't tell which substance is coming out when
10 they both come out at the same time? You can't
11 tell or specify separate retention times?
12 A Right.
13 Q You had Ms. Arvizu's report since October, right?
14 A I believe in this particular case I just received
15 it last week.
16 Q Just last week. The proper standard -- you are a
17 member of SOFT, Society Of Forensic Toxicology?
18 A That's correct.
19 Q You go to their seminars all the time?
20 A I attend their annual meetings quite frequently.
21 Q According to their guidelines, they recommend dual
22 column testing?
23 A They encourage it.
24 Q In other words, single column, they are saying
25 don't use it?

1 A They are saying it's very unlikely that there
2 would be an interference; however, we realize we
3 encourage the use of dual columns. That's
4 specifically the language that's used.
5 Q Scientific testing, according to SOFT, encourages
6 the use of a dual column?
7 A That's correct.
8 Q Allegheny County, at least through the time
9 Mr. Johnson's test was done, uses a single column
10 test?
11 A That's correct.
12 Q Now you used the term earlier duplicate testing.
13 Duplicate testing, according to the SOFT
14 Guidelines, involves two different devices,
15 correct?
16 A That is not -- I would like to see that language
17 in the SOFT Guidelines --
18 Q Is there any scientific guidelines that say
19 duplicate testing is not either two different
20 devices or two different batch runs?
21 A I have not seen language in the SOFT regulation
22 regarding duplicate testing. I would like to see
23 it if you have it available.
24 Q In any scientific area, is there anything that
25 says duplicate testing is anything other than

1 running a specimen on two different devices or in
2 two different batch runs?
3 A I believe that you are referring to something
4 different than duplicate testing.
5 Q Is there anything that says -- duplicate testing
6 is your testing a sample twice, correct? Either
7 it is or is it isn't. In duplicate testing, you
8 are testing the sample twice?
9 A Yes.
10 Q In this particular case, the Allegheny County
11 Crime Lab took it from the unknown sample and put
12 it in one slot of the auto sampler and then put it
13 in a slot later on, right?
14 A That's incorrect.
15 Q It wasn't in the same run?
16 A It was in the same run. There were two separate
17 aliquots by two different individuals.
18 Q What I'm saying is -- when you say aliquot,
19 someone walked up with the pipettor and pulled the
20 sample out, pulled blood out of the sample and put
21 it in a vial, right?
22 A That is one test.
23 Q Then comes analyst two. They take the same
24 pipettor and put it in another vial, right?
25 A That's correct.

1 Q And they took it from the same vial?
2 A That's correct.
3 Q And you have two vials but they took it from the
4 same vial, right?
5 A We have four vials.
6 Q Two with gray top tubes?
7 A That's correct.
8 Q And for ethanol you require gray top tubes?
9 A That's correct.
10 Q For drugs you require a different color tube?
11 A We do our ethanol testing in the gray top tubes if
12 it is available.
13 Q So you have two different analysts taking from the
14 same vial?
15 A That's correct.
16 Q They put it in the same batch run, right?
17 A That's correct.
18 Q Push the button and the device does its thing?
19 A Correct.
20 Q And it then spits out the answers?
21 A Yes.
22 Q So you have the same sample in the same machine in
23 the same batch run?
24 A Correct.
25 Q Duplicate testing, according to any scientific

1 thing that's out there, says you need either two
2 machines, a dual column, or you run it on the same
3 machine at two different times? Wouldn't you
4 agree on that?
5 A I wouldn't.
6 Q So you are the only person in the world that says
7 duplicate testing --
8 MS. ALDRIDGE: Objection, Your Honor.
9 THE COURT: What's your objection,
10 Ms. Aldridge?
11 MS. ALDRIDGE: He is badgering the witness.
12 I don't understand the direction of his questions.
13 THE COURT: I'll allow it. It's cross-
14 examination.
15 BY MR. SHERMAN:
16 Q So you are the only person who claims to be a
17 scientist that says duplicate testing is running
18 in the same batch?
19 A I do not believe that I would be the only
20 scientist that would say that.
21 Q Can you name out of any of the forensic guidelines
22 that says duplicate testing is permissible to run
23 in the same batch?
24 A I looked in the ABFT Guidelines and I looked at
25 the SOFT Guidelines and I did not see where it

1 addressed duplicate testing.
2 Q Is there any scientific journal, article, anything
3 that says it's permissible to run duplicate
4 testing from one batch?
5 A Duplicate testing just means it was tested two
6 times.
7 Q Can you name any journal or article, anything that
8 says duplicate testing is permissible for forensic
9 purposes in the same batch?
10 A I'm saying that I have read the SOFT
11 Guidelines and I have --
12 Q I'm saying can you name --
13 THE COURT: Allow her to answer the question.
14 MR. SHERMAN: Well, she wants to keep saying
15 the same thing --
16 THE COURT: Let her answer the question.
17 THE WITNESS: I am saying that I'm familiar
18 with the SOFT Guidelines, and I am familiar with
19 the ABFT Guidelines and I have not seen where they
20 address duplicate testing.
21 BY MR. SHERMAN:
22 Q Is there any scientific journal, manual, that says
23 duplicate testing for forensic purposes can be run
24 in the same batch?
25 A I am not familiar with any guideline which

1 addresses duplicate testing.
2 Q Your own guidelines require that this, quote,
3 unquote, duplicate analysis come from the two
4 different blood tubes? Isn't that right?
5 A I don't believe so.
6 Q So you don't think your very own guidelines
7 require that?
8 A No.
9 Q You were asked about the expiration of the
10 simulator solution. As we said earlier, you are a
11 supervisor, right?
12 A I'm a manager.
13 Q You don't do the testing?
14 A Very rarely.
15 Q So you rely on your analysts to do the testing?
16 A That's correct.
17 Q And your analyst testified, contrary to what you
18 said, that the solution lasts approximately a
19 week. Once you open the calibration solution,
20 according to the manufacturer's own guidelines, it
21 has to be used immediately. Would you agree with
22 that?
23 A It indicates to use it immediately to prevent
24 evaporation. We use it immediately, then we take
25 the remainder and we seal it in a vial and then we

1 refrigerate it to prevent evaporation.
2 Q But that's not what the manufacturer's guidelines
3 say. It says to use immediately.
4 A And it is used immediately on the first day.
5 Q Well, sure it's used immediately on the first day,
6 but it's not immediate on the second day, is it?
7 A It is stored appropriately and then --
8 Q It's not immediate on the second day, is it?
9 A It isn't immediate, but it's stored
10 appropriately --
11 Q But it's not --
12 THE COURT: Let her answer the question.
13 Go ahead.
14 THE WITNESS: It is stored appropriately and
15 used on the second day.
16 BY MR. SHERMAN:
17 Q And it's not immediate if it's used a week later,
18 is it?
19 A It is not immediate.
20 Q You were asked about certain things that the
21 operator's manual says and whatnot. A lot of
22 forensic science is not contained in the
23 operator's manual. You would agree with that?
24 A That's correct.
25 Q There are some times there are things that you

1 have to do to a machine in order to maintain it
2 that are not contained in the operator's manual?
3 A There are times when the instrument falls in
4 disrepair and it's required that we call a service
5 engineer to repair it.
6 Q And sometimes there are problems that just aren't
7 talked about in the manual?
8 A When a problem occurs in the analysis, the first
9 thing that we would do, we would refer to the
10 manual to see if there is any information in the
11 manual that might be helpful in solving the
12 problem.
13 Q And sometimes there are things that take place
14 that are not in the manual?
15 A That's correct, and that's why we pay for a
16 service contract where we would then call
17 technical support, and we would say this is what's
18 happening with my system, do you have any
19 suggestions. Can you come and service the
20 instrument and repair it.
21 Q So then the answer is, yes, there are some times
22 things happen that are not in the manual?
23 A That's correct.
24 Q Have you authored any standards that federal
25 agencies use for laboratory quality assurance?

1 A No.
2 Q Have you ever audited a laboratory other than the
3 Allegheny County Laboratory?
4 A I have not.
5 Q Have you ever been accepted in court as an expert
6 regarding the audit of a lab other than Allegheny
7 County?
8 A No.
9 Q Have you ever taught classes on quality assurance
10 to labs other than Allegheny County?
11 A No.
12 Q As a scientist who essentially manages the
13 Allegheny County Forensic Lab, at least with
14 respect to ethanol, I'm sure you do other things,
15 but I'm just not familiar with that, but as a lab
16 manager, you pay particular interest to the lab
17 scandals that take place across the country,
18 right?
19 A That's correct. As it applies to my field.
20 Q Right. I mean, it's of interest to almost anyone
21 in the criminal justice system, especially if you
22 work in a lab. You would agree with that, right?
23 A What specifically are you asking?
24 Q As someone who manages a lab that primarily does
25 testing for criminal justice cases, when there are

1 lab scandals involving the criminal justice
2 system, that's something that peaks your
3 curiosity, right?
4 A I would say I'm most concerned with the testing
5 that is conducted within my own facility.
6 Q Are you familiar with the scandal going on in
7 Boston right now?
8 A No, sir.
9 Q You haven't heard of the Annie Dookhan scandal?
10 MS. ALDRIDGE: Your Honor, objection. What's
11 the relevance?
12 THE COURT: I'll allow it.
13 THE WITNESS: I've heard bits and pieces but
14 I cannot relay specific information regarding it.
15 BY MR. SHERMAN:
16 Q With regard to the vials in your lab that are used
17 for the testing, do you use a new one for every
18 test or do you clean them?
19 A A new one.
20 Q And then they are destroyed?
21 A Yes.
22 Q I'll go back to Defendant's Exhibit Number 9, the
23 one missing the packed column. You had testified
24 that Susan didn't edit the information -- or I'm
25 sorry, Susan didn't prepare the description, but

1 she is definitely listed as someone who edited
2 that information on that date on June 20, 2012?
3 Do you agree with that?
4 A I believe that she printed out the information
5 that was already in the system.
6 Q The form says edited by. Do you know what the
7 word edited means?
8 A I do.
9 Q And it says edited on June 20, 2012, right?
10 A It does.
11 Q As to the lab, according to you, you can trust
12 this document, right?
13 A And I can't --
14 Q I'm just asking you as a member of the lab, you
15 want us to trust this document, right? Or you
16 don't want us to trust the document?
17 A I am admitting that there is something, that there
18 was a typographical error --
19 Q I'm just asking you -- I know you said that
20 several times. I'm asking you, you want us to
21 trust this document, right?
22 A That's correct.
23 Q The lab has general forms concerning the
24 preparation of sample, but there is no
25 documentation as to the preparation of the

1 individual samples, is that right?
2 A In terms of specifically when --
3 Q Each individual sample. It's a simple question.
4 A No, there is not.
5 Q So you want us to trust all of the information you
6 are telling us, but just not this one method file,
7 is that right?
8 A Yes, that's correct.
9 Q You also said there is no -- you mentioned the
10 BAC-1 and 2 and whatnot. Those are columns made
11 by Restek?
12 A That's correct.
13 Q Restek is a company that makes scientific
14 supplies, right?
15 A That's correct.
16 Q And you purchase columns from Restek?
17 A That's correct.
18 Q Restek, in their own literature, recommends the
19 use of dual column devices. True?
20 A That's correct, and they provided technical
21 information on that subject at one point, and last
22 year they actually updated it and included
23 information on a new column that was developed and
24 is called the Restek BAC+2. So they provided more
25 technical information on a second column that was

1 available for testing.
2 Q I'm asking you if they recommend dual column
3 testing. Their literature recommends. That's why
4 there is a BAC-1 and BAC-2, right?
5 A They are selling their product as a system for
6 dual column analysis for volatiles.
7 MR. SHERMAN: I have no further questions,
8 Your Honor.
9 THE COURT: Okay. Any redirect?
10 MS. ALDRIDGE: I think just a few questions.
11 - - - -
12 **REDIRECT EXAMINATION**
13 BY MS. ALDRIDGE:
14 Q If the heading is incorrect, does it change the
15 information that's on the report?
16 A No.
17 Q So the rest of the information on Defendant's
18 Exhibit 9 was accurate?
19 A Correct.
20 Q For the duplicate testing, does the testing take
21 place right after another? Does Susan do the
22 pipet, get up and move, and Dan come right behind
23 her for the same sample?
24 A No.
25 Q What would happen?

1 A Susan would set up a series of vials that she is
2 going to test on a given day, and then she would
3 label the auto sampler vials with the appropriate
4 laboratory I.D. number, and she would set up her
5 samples. And then after she was done, she would
6 let Dan know that she had completed it, and more
7 than likely Dan would come and then set up his
8 samples. So they are not in immediate succession
9 to one another.
10 Q Have you authored any articles related to forensic
11 labs and testing?
12 A Yes, I have. I think I have four publications in
13 various journals.
14 Q Your function at the lab is not as a quality
15 auditor, is it?
16 A No.
17 MS. ALDRIDGE: I don't have any other
18 questions.
19 THE COURT: Okay. Any recross?
20 - - - -
21 **RECROSS-EXAMINATION**
22 BY MR. SHERMAN:
23 Q As the manager of the Allegheny County Crime Lab,
24 there is no one who should be more attune and more
25 familiar with quality assurance than you. Would

1 you agree with that?
2 A We have a quality manager within the laboratory
3 who is very involved with the quality assessment
4 of the entire laboratory.
5 Q You are her boss, right?
6 A No.
7 Q As someone who runs the ethanol testing for all of
8 Allegheny County, that's you?
9 A My facility does do testing for Allegheny County,
10 yes.
11 Q Are you in charge of that? Would you be
12 considered the person in charge of ethanol
13 testing?
14 A I am the manager of the Toxicology Section.
15 Q As a manager of the Toxicology Section, is there
16 anyone who should be more familiar with quality
17 assurance in the area of toxicology than you?
18 A In relation to blood alcohol testing? No.
19 Q You would agree with that?
20 A Yes.
21 Q On the aliquot form, you could probably find it
22 faster than I can, it's Page 36. Each analyst is
23 supposed to be filling out their respective
24 portion of the form, right?
25 A I believe that Susie filled out the initial part,

1 which included the aliquoting of the calibrators
2 and controls --
3 Q I'm just asking each analyst is supposed to fill
4 out what they do?
5 A They should sign their initials to what they do,
6 yes.
7 Q So it's okay for one analyst to put in just dates
8 and times, and the other person to put in their
9 initials?
10 A I can see exactly what occurred on this form, if
11 you are referring to Page 36 --
12 Q I'm just asking.
13 A Yes, it would be possible for another analyst to
14 put in a date and time.
15 Q We know that's possible, but that's not the way
16 it's supposed to work, right?
17 A In this particular case, can I explain what
18 occurred?
19 Q I'm just saying, that's the way -- when you do an
20 audit for a lab, one analyst isn't supposed to be
21 putting in information for another analyst, right?
22 Simple question.
23 A In this particular case what was done was
24 acceptable.
25 Q I'm asking you, for the proper running of a lab,

1 one analyst is not supposed to be putting in
2 information for another analyst?
3 A In this particular case --
4 Q When running a lab, one analyst is not supposed to
5 be filling out information for another analyst.
6 Simple question.
7 A In this particular case I can't answer it all or
8 none.
9 Q I'm talking about, you are the lab manager, you
10 run the Allegheny County Crime Lab, Toxicology --
11 A I am, and what was done on this form is
12 acceptable.
13 Q You run the Toxicology Section of the Allegheny
14 County Crime Lab, right?
15 A I do.
16 Q We know you want to defend the lab, but when
17 filling out forensic forms that come from the lab,
18 one lab analyst is not supposed to be filling out
19 the portion of the form that the other one is
20 supposed to fill out, right? That just smacks as
21 not being proper, doesn't it?
22 A In this particular case, not in my eyes.
23 Q I'm talking about in general when filling out lab
24 documents. They are made for an audit trail,
25 correct?

1 A That's correct.
2 Q The documents are prepared so anybody can come in,
3 so ASCLD can come in, right? Any accrediting
4 agency can come in and see what you are doing?
5 A Yes.
6 Q And they want to see if you are doing it right or
7 if you are doing it wrong, correct?
8 A That's correct.
9 Q And when filling out these documents, it's like
10 your own -- I can't sign your tax return, right?
11 A I don't think so.
12 Q Because if there is an audit, I can't sign it.
13 So in the lab, it's the same thing. One
14 analyst is not supposed to be signing for another?
15 A And that is not the case here.
16 Q I'm saying one analyst is not supposed to be
17 signing for another. Would you agree with that?
18 A That's correct.
19 Q And one analyst should not be filling out
20 information that another analyst did?
21 A In this particular case --
22 Q We know about this particular case. You answered
23 that five times.
24 A Good.
25 Q I'm talking about right here. One analyst should

1 not be filling out a section that the other
2 analyst is supposed to fill out. You can say it.
3 It's not supposed to be done, right?
4 A I'm saying it's dependent on what is actually
5 being filled out.
6 Q On any lab form where analysts are filling in
7 information, one analyst is not supposed to be
8 filling in information for another analyst.
9 A In most instances --
10 Q In all instances.
11 A And I'm saying in this particular instance, what
12 was done here is not critical.
13 Q It didn't matter if it's critical or not, I'm
14 asking you if it's proper. It's not proper.
15 A It depends on the situation is my answer.
16 Q So you are saying that one analyst can fill out
17 forms for the other as long as it's not critical?
18 A That's correct.
19 Q Is there any support in any forensic auditing
20 journals, manuals, or anything that would support
21 what you just said?
22 A It depends what you are looking at.
23 Q I'm just asking you if there is any --
24 A If I create a reagent, if I put a label on it --
25 Q I'm not asking --

1 THE COURT: Wait. Wait. Allow her to answer
2 it.
3 THE WITNESS: If I create a label, and I put
4 it on the bottle, and someone else prepares the
5 reagent and signs it, that's acceptable. So it
6 depends what specifically that individual is
7 putting their initials to.
8 BY MR. SHERMAN:
9 Q So when you say acceptable, it's acceptable to
10 you?
11 A It's acceptable to our lab practice. And it is
12 something that --
13 Q You have a manual that you receive from ASCLD in
14 preparing for the accreditation process?
15 A Yes.
16 Q And that manual doesn't allow one analyst to enter
17 information for another. You would agree with
18 that?
19 A Like I said, it's going to vary depending on what
20 the circumstance is.
21 Q The manual doesn't have any variance for the
22 circumstance, does it?
23 A If someone is reporting a result and issuing a
24 report, there is no way someone else --
25 Q I'm asking you what the manual -- you keep saying,

1 you said all morning about how proud you are of
2 the ASCLD certification. You have a manual you
3 have to follow to be accredited by ASCLD, right?
4 A I do.
5 Q And the manual specifically prohibits one analyst
6 for entering information for another for any
7 purpose, isn't that right?
8 A I would like to see that standard.
9 Q I'm asking you. So then you don't know or you
10 don't recall?
11 A I don't recall the specific standard, and I would
12 like to see a standard that says that an analyst
13 cannot enter information for another analyst. I
14 understand that in terms of actually the report
15 itself, that it can not be done. There are
16 certain instances where an analyst cannot say it
17 was their testing and sign for it when it was not
18 their testing. But there are other situations
19 where a lab analyst might sign for another
20 analyst.
21 Q So it's permissible on an aliquot form for one
22 analyst to fill out the times and another analyst
23 to sign it?
24 A In this particular instance, yes.
25 MR. SHERMAN: I have no further questions,

1 Your Honor.
2 THE COURT: Any redirect, Ms. Aldridge?
3 MS. ALDRIDGE: No, Your Honor.
4 THE COURT: Okay. You are excused. Thank
5 you.
6 Any other rebuttal witnesses, Ms. Aldridge?
7 MS. ALDRIDGE: No, Your Honor.
8 THE COURT: Mr. Sherman?
9 MR. SHERMAN: Just briefly. I just wanted to
10 re-call Mrs. Arvizu. It won't take long.
11 THE COURT: Would you rather take a break
12 now?
13 MR. SHERMAN: I don't think it's going to
14 take long.
15 THE COURT: We are going to take a break now.
16 We will return around noon.
17 - - - -
18 **(A recess was taken in the proceedings.)**
19 - - - -
20 THE COURT: Okay. Are arguments in order?
21 MR. SHERMAN: We just have one more rebuttal.
22 THE COURT: Oh, you are right, Mr. Sherman.
23 I'm sorry.
24 MR. SHERMAN: This will be quick.
25 THE COURT: Very good.

1 - - - -

2 **JANINE ARVIZU**

3 **having been previously sworn,**

4 **was examined and testified as follows:**

5 - - - -

6 **DIRECT EXAMINATION**

7 BY MR. SHERMAN:

8 Q I know we were talking about that last report

9 earlier but didn't admit it, Page 36, which was

10 the aliquot form. Is that the form we were

11 talking about where one analyst was putting in

12 information for another?

13 A That's correct.

14 MR. SHERMAN: I actually marked this as

15 Defendant's Exhibit 2 and I would move for its

16 admission.

17 THE COURT: Any objection, Ms. Aldridge?

18 MS. ALDRIDGE: No objection, Your Honor.

19 THE COURT: Okay, so admitted.

20 BY MR. SHERMAN:

21 Q Just briefly, you are Janine Arvizu?

22 A Yes.

23 Q With regard to -- the purpose of a forensic

24 auditing of a lab is to be able to trace on paper

25 what was done, is that accurate?

1 A Yes. The purpose of generating technical
2 reference in the laboratory is to provide an audit
3 trail so that the process can be reconstructed
4 after the fact. So somebody else can tell
5 precisely what was done by whom and at what time.
6 Q Is it proper for one analyst to sign or to fill
7 out information that another analyst was supposed
8 to fill out?
9 A No, it is not. Technical records, the person who
10 is responsible for them, generates them. The
11 example that was given in previous testimony was
12 labeling a bottle. A bottle label is not a
13 technical record. The technical record is the log
14 book, for example, that documents preparation of
15 that material. That must be created by the
16 individual responsible for doing that work.
17 Original observations, original record of
18 activities, those kinds of things must be
19 documented by the responsible party.
20 Q And apparently that's not what's done in the
21 Allegheny County Crime Lab?
22 A That was not done in this case.
23 Q There was also testimony regarding the tubes being
24 two to four milliliters. Do they have the same
25 amount of preservative that a 10 milliter tube

1 has?
2 A The small volume gray top tubes produced by Becton
3 Dickinson has a proportionally smaller quantity
4 that yields a significantly smaller percentage of
5 preservative. They are designed not for blood
6 alcohol testing, but for blood glucose testing.
7 They have 0.2 percent of the preservative instead
8 of the one percent that is mandated in the NCCLS
9 standard for blood alcohol testing. The
10 one percent sodium fluoride is only present in the
11 10 milliliter tube manufactured specifically for
12 blood alcohol testing.
13 The small volume tubes are not manufactured
14 for blood alcohol. They are specifically for
15 blood glucose testing and have a smaller
16 percentage of preservative.
17 Q There is also testimony concerning whether,
18 according to Ms. Janssen, there is no other
19 compounds that interfere with ethanol. Is that
20 accurate?
21 A It is not. She was actually, in her testimony,
22 describes Restek's promotional materials that
23 don't show any coelution with ethanol. That's for
24 their conditions. It's up to each and every lab
25 to see what the conditions are in their laboratory

1 because you don't get the same retention times
2 that are in those published materials. Every
3 instrument, everyday it's different. And every
4 operating condition is different. That's why
5 Restek's materials specifically say dual column is
6 required for blood alcohol.
7 Q Lastly, with respect to the exhibit that listed
8 the packed column as the column that was used in
9 this case, is the item information where it has
10 packed column list the manufacturer and whatnot,
11 is that manually entered?
12 A It is typed in by an individual who sets up the
13 method or who edits the method. It is manually
14 typed in. So it's not a typographical error. As
15 I understand a typographical error is when I type
16 "ie" instead of "ei", or hit the wrong key. It's
17 a matter of typing Supelco carbowax and that big
18 long string instead of Restek RTF BAC-1. That's
19 more than a typographical error.
20 Q Would an error, would missing an error like that
21 for 12 years, is that a significant, material,
22 substantive error?
23 A I would consider that a substantive error because
24 it's documentation of the conditions of the test,
25 and that's an essential element of scientifically

1 demonstrating the work that was performed, not to
2 remember what our practice was, but to actually
3 contemporaneously document it at the time the work
4 is done. It's a material error.
5 MR. SHERMAN: I have no further questions,
6 Your Honor.
7 THE COURT: Okay. Any cross, Ms. Aldridge?
8 MS. ALDRIDGE: Just a few.
9 - - - -
10 **CROSS-EXAMINATION**
11 BY MS. ALDRIDGE:
12 Q You discussed the size of the tube. You said that
13 the smaller volumes are for glucose. Is that just
14 because -- I mean they both have gray tops,
15 correct?
16 A They have a whole series of gray top tubes. The
17 smaller volume tubes are manufactured for blood
18 glucose testing and the certificate of compliance
19 issued for the 10 milliliter tubes clarify that
20 they are manufactured specifically for blood
21 alcohol testing.
22 Q So you are saying that the hospital couldn't use
23 the 10 milliliter for glucose testing?
24 A I don't know that they validate it for that
25 purpose. It probably would not be a problem

1 because it would be an excess of preservative
2 rather than insufficient. The problem with using
3 the smaller tubes for blood alcohol testing is
4 that there is less percentage of preservative than
5 is required by NCCLS standards for blood alcohol
6 testing.
7 Q And the preservative does what?
8 A The function of the preservative is essentially to
9 help maintain the integrity of the blood sample,
10 to prevent microbial activity that would change
11 the character of that blood sample. And in fact,
12 the preservative does prevent some species from
13 acting in terms of fermentation, not candida
14 albicans, but other kinds of microbial action. It
15 does retard. And it also prevents glycolytic
16 activity.
17 Q Is it supposed to prevent clotting?
18 A No. The preservative does not address clotting.
19 That is the anti-coagulant. Both compounds are
20 present in those tubes.
21 Q Do you consider yourself to be a scientist?
22 A Yes, ma'am.
23 Q Do you consider yourself to be unbiased?
24 A I do.
25 Q So your testimony here should be neutral?

1 A I believe so, yes.
2 Q I saw you looking at the Internet earlier. During
3 the testimony you were looking at your computer
4 and discussing with Mr. Indovina. Helping perhaps
5 to write questions or preparing information?
6 A I wasn't looking at the Internet. I should
7 clarify. I don't have Internet access here in the
8 courtroom. I was looking at my own documents from
9 the discovery in this case, and pointing out
10 issues related to the previous testimony.
11 Q So you were assisting the defense in looking at
12 issues in this case?
13 A Yes, ma'am.
14 Q And that would be your job?
15 A Yes. I was hired to help this client understand
16 the reliability of the issues, data quality issues
17 for the sample. Any client who hires me for that
18 service, that's the service I will provide.
19 Q The information on the aliquot form that may have
20 been written by one person, what was that
21 information?
22 A That was documenting the preparation of aliquots
23 or the analytical vials from the blood vials and
24 from the calibrators and controls. It should
25 serve the function to allow an independent party

1 to know exactly who prepared which aliquots of
2 which materials. I would submit that it does not
3 do that.
4 Q Is that a function of the form, or is that a
5 function of what was filled in?
6 A Probably a little bit of both.
7 Q On the form, the information that was written,
8 that you are saying was written by the same
9 person, which information specifically? This is
10 Defendant's Exhibit 2.
11 A What appears in this case is that there are a set
12 of five separate entries for aliquot start date
13 and time on this form. There are one, two, three,
14 four of those entries that are in the same style
15 of handwriting. And the final entry is in a
16 clearly different style of handwriting. Yet the
17 first four entries have different initials
18 associated with them.
19 Q But the information that's recorded is the date
20 and time?
21 A Yes. It is an aliquot start date and time.
22 Q And each scientist initialed which was their start
23 time and the date and time?
24 A Correct.
25 Q So you didn't have another scientist initialing

1 something that says that it got done?
2 A I'm sorry, I don't understand your question.
3 Q Susan Stanich didn't initial for Dan to say his
4 work was done. Dan initialed for himself?
5 A Dan initialed a record created by Susan.
6 Q But he initialed it for himself that he did it?
7 A I presume that those are his initials, and the
8 laboratory should have a record on file of all
9 their staff's initials so that that can be
10 verified.
11 MS. ALDRIDGE: I don't have any other
12 questions, Your Honor.
13 THE COURT: Any redirect?
14 MR. SHERMAN: No, Your Honor. Thank you.
15 THE COURT: Thank you, Ms. Arvizu.
16 Any other witnesses?
17 MR. SHERMAN: Not for the defense, Your
18 Honor.
19 THE COURT: Okay.
20 Closing, Mr. Sherman.
21 MR. SHERMAN: Thank you, Your Honor.
22 I know you have heard a lot of testimony, and
23 you just heard it in the last day or two and I'm
24 sure you can remember it.
25 I'm not here on a referendum to close the

1 Allegheny County Crime Lab, I'm not here to attack
2 them. I'm just here for Daniel Johnson. I'm just
3 here to suggest that in Daniel Johnson's
4 particular case, that you can't rely beyond a
5 reasonable doubt on the blood sample.
6 The Commonwealth called the head of the lab
7 and never once asked about the additional peaks
8 that were in the samples. Mrs. Arvizu testified
9 that it may be ethanol. She even testified and
10 showed how on Dan Johnson's particular
11 chromatogram that was printed out, how there could
12 be, it may not be accurate because there was a
13 tail on the end, which it's not supposed to do
14 that. That doesn't mean that's what happened in
15 every single case, that's just in Dan Johnson's
16 case, that there was a tail there.
17 You have to look at the testimony. I mean,
18 Mrs. Arvizu is an internationally known lab
19 auditor. She was a lab auditor for the Department
20 of Energy, she was a lab auditor for the United
21 States Navy, she wrote the standards for the
22 United States Navy labs. So we are sending men
23 and women into war and who rely on labs that Mrs.
24 Arvizu audited.
25 She has a significant background in lab

1 auditing. She answered the questions honestly.
2 If she didn't know something, she said I don't
3 know. If she didn't understand the question, she
4 said she didn't understand.
5 But what did the county's witnesses say?
6 They bring in the head of the Toxicology Section
7 who refused to answer a question. I mean, she
8 just wanted to put forth her point of view. And
9 she did that. She wrote all the questions for the
10 prosecutor. Does that sound wise? I mean, I
11 don't think there is any judge sitting, other than
12 Your Honor, that has more experience in a
13 professional capacity as an auditor. I mean, you
14 were the City's Chief Auditor. If one employee is
15 signing off for somebody else, you wouldn't put up
16 with that. You can't generate documents where the
17 witness says, wow, yeah, it's not supposed to be
18 done, but this was important. This was the
19 document regarding the sample preparation. It's
20 the only document that's there, contrary to the
21 lab practice that's supposed to talk about when
22 each sample is prepared. That's the only
23 document.
24 So there is contamination in the samples,
25 there is contamination in the calibration process,

1 there is contamination all throughout the process.
2 There's peaks that the analyst, Susan Stanich,
3 said she didn't know what they were. It's not
4 supposed to work like that. I mean, there is no
5 close enough is good enough. This is forensic
6 testing. This is all they do. And they just
7 didn't do what they were supposed to in this
8 particular test.
9 And when you take the way that Dan Johnson
10 was out on the road, it clearly doesn't mesh.
11 It's like a disconnect. You have a guy who drove
12 down Mt. Nebo Road, made a left onto the ramp, he
13 signaled, he went down the ramp which is a half a
14 mile long, didn't swerve, didn't do anything
15 improper, he merged onto the road. The officer
16 said, oh, he went into the next lane, and then he
17 kept going. And I know Your Honor mentioned,
18 well, maybe he gave him a break. If this
19 particular officer thought that this guy was
20 driving under the influence, he would have stopped
21 him, and he didn't. He would have at least
22 followed him, and he didn't. He kept driving.
23 And then he is driving down the road and there is
24 a point where the officer gets in front of Dan
25 Johnson, and Dan is driving down the road,

1 2.7 miles with no problems. I mean, it was a long
2 road. 2.7 miles, no problem. And then he says he
3 sees, while talking to the intern, past the intern
4 in his right passenger mirror, he saw Dan touch
5 the berm twice. And then he pulled him over.
6 On the one leg stand he holds his leg up for
7 17 seconds, he put his foot down once. He did
8 that again. I think we would all agree that
9 that's a difficult thing to do, but yet Dan did
10 it. He didn't hop, he didn't use his arms for
11 balance, didn't do anything else.
12 On the walk and turn, remember, he has to
13 follow all of these directions. And he took the
14 right number of steps. He didn't use his arms for
15 balance, didn't stagger, didn't sway when he got
16 out of the car. I mean, everything he did
17 indicated sobriety.
18 And so, Your Honor, can the Court say beyond
19 a reasonable doubt that Dan Johnson's blood
20 alcohol content level was as reported? Because
21 remember, just because it might be near or close,
22 that's not the issue. It's can you say beyond a
23 reasonable doubt that he was a .125 based on the
24 documentation, the testimony of Mrs. Arvizu which
25 is essentially unassailed. The lab didn't even

1 address half the information that she said, like I
2 said, the additional peaks. And these are
3 problems. They weren't addressed.
4 So you have this quote, unquote independent
5 lab helping the prosecution put forth the case,
6 telling them what to ask. And that's their
7 evidence. So they didn't even rebut what
8 Mrs. Arvizu said.
9 I know you sat in hundreds of these cases. I
10 know you understand what happened, but I would ask
11 that the Court respectfully, can it say beyond a
12 reasonable doubt that Dan Johnson is guilty, and I
13 respectfully suggest that it can't.
14 Thank you, Your Honor.
15 THE COURT: All right.
16 Ms. Aldridge.
17 MS. ALDRIDGE: Your Honor, I just wanted to
18 clarify on the record if judicial notice was taken
19 of the PA Bulletin when it was presented, of the
20 hospital and the lab being approved by the
21 Department of Health?
22 THE COURT: No, I didn't take judicial
23 notice, but we are aware of the Pennsylvania
24 Bulletin.
25 MS. ALDRIDGE: I would ask that you

1 reconsider that in light of this case, and there
2 was a ruling in Commonwealth versus Brown that
3 indicated that the PA Bulletin, that judicial
4 notice can be taken of the bulletin for purposes
5 of blood alcohol testing. I have that case.
6 THE COURT: Let me see it. What specifically
7 are you asking me to take judicial notice of, that
8 the lab was certified?
9 MS. ALDRIDGE: That both the lab and the
10 hospital are certified regarding the blood alcohol
11 analysis.
12 THE COURT: Your position on that, Mr.
13 Sherman?
14 MR. SHERMAN: Your Honor, all that states is
15 that the lab can come in and say they were
16 approved. It doesn't mean it was done right. It
17 doesn't mean that they put on their packed column
18 when they used a different column. It doesn't
19 mean they did the test right. It just means they
20 received approval to do tests.
21 MS. ALDRIDGE: Well, it indicates that the
22 lab is presumptively valid, and the things that it
23 does at the lab, and the burden is on the defense
24 to show that it is not in compliance with the
25 standards provided by the Pennsylvania Department

1 of Health.
2 THE COURT: I don't think just because the
3 lab is certified by the Pennsylvania Bulletin that
4 they are infallible.
5 MR. SHERMAN: That's exactly right. It just
6 says we are going to allow them to come in and say
7 they have certification. It doesn't mean --
8 THE COURT: Just like a police officer is
9 certified or whatever.
10 All right. I'll take judicial notice that
11 the Allegheny County Medical Examiner's Office
12 Crime Lab is certified for the testing of the
13 blood alcohol.
14 On reconsideration, after reviewing this
15 case, Commonwealth versus Gary Brown, the cite on
16 it is 428 Pa. Superior 587 A.2d, that the
17 Allegheny County Medical Examiner's Office Crime
18 Lab is certified to do blood alcohol testing.
19 I'll accept that. I'll give judicial notice on
20 that.
21 MS. ALDRIDGE: Thank you, Your Honor.
22 THE COURT: You're welcome.
23 MS. ALDRIDGE: We have heard a lot of mind
24 boggling stuff in the last two days. This is a
25 DUI case. It's a DUI case involving a traffic

1 stop, failed field sobriety tests, suspected
2 impairment and a BAC of .125 to confirm that
3 impairment, that the defendant was in fact driving
4 under the influence and was not safe to operate a
5 motor vehicle.
6 We have heard testimony from many witnesses.
7 We have heard testimony from the officer who
8 described how he came into contact with the
9 defendant on the roadway. That he observed
10 multiple vehicle code violations. It's the
11 officer's discretion as to what he does at what
12 time. And he observed the defendant leave the
13 roadway. He observed the defendant change lanes
14 without a turn signal. And once the defendant had
15 left the roadway several times.
16 The defense is saying, well, he should have
17 pulled him over right away. The defense has also
18 cited at least six cases where officers did in
19 fact pull defendants over right away, or within a
20 short distance, and their cases were overturned in
21 court because they said that that wasn't
22 sufficient. It was a momentary lapse.
23 So the police officer maintained contact, he
24 didn't speed off, he didn't drive away. He was
25 within a few car lengths of the defendant and

1 could notice his behavior if there was any
2 behavior to be noticed. He noticed the two lane
3 changes without turn signals. He noticed the
4 defendant drive off the berm of the road on three
5 separate occasions. This a heavily traveled
6 roadway. So he did what was prudent, he made a
7 traffic stop. During the traffic stop he observed
8 the defendant to have bloodshot glassy eyes, which
9 are some indicators of possible impairment. He
10 smelled the odor of alcohol about the defendant's
11 breath, and his person. The officer again did
12 what was prudent. He conducted -- he called for
13 back-up, he conducted the field sobriety tests in
14 a well lit flat area.
15 The defendant during the walk and turn -- the
16 test, the field sobriety tests are designed to
17 task two things. There are physical tasks but
18 they are also a mental task, to see if you are
19 listening and can follow directions. The defense
20 said, oh, he could not make the turn properly
21 because he started off on the wrong foot. And
22 there you go. If he were listening to the
23 directions, if he were following the directions,
24 he would have started off on the correct foot and
25 would have been able to complete the turn as

1 required and as directed.
2 The defendant was swaying during the one leg
3 stand. He put his foot down before he was
4 instructed to do so. Again, that's a failure to
5 follow directions. The officer deemed that he was
6 impaired and unsafe to drive, operate a motor
7 vehicle. And advised the defendant that he should
8 consent or he could consent to the blood draw.
9 He read him the chemical warnings. The
10 defendant consented. They went to the hospital,
11 the phlebotomist did her job, she withdrew the
12 blood using the tubes that are provided by the
13 hospital, using the procedures that are provided
14 by the hospital for alcohol draws which is a
15 Betadine wipe. There is no alcohol in the wipes
16 so there is no possibility of insertion or
17 confusion of some other type of alcohol.
18 The vials were turned over to the officer.
19 They were transferred to the Crime Lab. They were
20 entered into evidence at the Crime Lab. They were
21 receipted. The officer has a receipt that was
22 entered into evidence. The officer received a
23 report from the Crime Lab indicating that the
24 defendant's blood draw was .125, which is more
25 than one and-a-half times the legal limit here in

1 the state of Pennsylvania.
2 So the defendant was in fact impaired, was in
3 fact incapable of safely operating his vehicle.
4 The laboratory. The defense has provided an
5 expert who is a quality auditor, who has no
6 forensic experience, has not done blood work or
7 blood analysis for alcohol, is not familiar with
8 all of the processes and procedures at the lab.
9 She is looking at this from a quality assurance
10 expert opinion, where there are so many variables.
11 The size of the tube. The lab has no ability to
12 determine what size tubes the samples come in.
13 Those are coming from hospitals all over the
14 county.
15 The preservatives. The preservative is not
16 necessary. Jen Janssen testified that a study was
17 done, reports were made, she was published that
18 says that a tube with unpreserved blood,
19 unrefrigerated blood did not ferment, it didn't
20 denigrate, it didn't change the sample.
21 So all of the controversy about how big the
22 tube was, how much blood was in there, was it the
23 proper draw, was it the proper vacuum, all of
24 those things. The tube had an expiration date of
25 2015. It's still valid today. So the amount of

1 preservative is irrelevant. It didn't coagulate,
2 it wasn't fermented. So when they did the blood
3 draw, when they did the aliquot, the way that they
4 are doing or performing the test, the defense made
5 it seem, it's the same person and they are rushing
6 to do this and writing their names on everything,
7 that didn't happen at all.
8 They ran several batches that day. When one
9 technician completes the samples -- Mr. Johnson's
10 sample was not the only sample run that day.
11 There were multiple samples run that day. She
12 completes the aliquoting of the samples and
13 prepares them to be on the machine. When she has
14 completed that, the other scientist would come, in
15 this case that would have been Dan Kinkaid, would
16 come and he would run the same samples. He would
17 do the aliquoting of those samples. When they go
18 into the machine, it's not a mass testing. It's
19 an individual testing and they have to go through
20 all of the samples in order. So if there were 30
21 samples run by Ms. Stanich, then there would have
22 been 30 samples run by Mr. Kinkaid, and the
23 samples would be 30 vials apart. So it would be
24 impossible for there to be equal contamination in
25 both samples. It would be impossible for there to

1 be contamination in the blank files and the
2 control samples which were put in there. And
3 there was none because nothing was reported.
4 When you look at some of the other testimony.
5 We did provide rebuttal testimony for what Janine
6 said. Did Ms. Janssen write some questions? Yes,
7 she did. Did she have food for thought? Did she
8 have information about the defense expert
9 testimony? Yes, she did. Did I have questions?
10 Yes, I did. Are all of my questions appropriate?
11 I don't know. I have to ask the person who would
12 know and that would be Ms. Janssen at the lab. So
13 I think for the defense to insinuate that the
14 questions only were asked because that's what she
15 asked, she knows, Ms. Janssen would know what
16 would clarify the situation. So the questions
17 aren't being asked to say, let me make up
18 something. The questions are being asked to say
19 let me clarify, this is how this is actually done.
20 The defense's expert testified that she
21 didn't have much, quote, unquote, bench work,
22 which means she didn't do a lot of practical
23 testing. She quickly moved to the quality
24 assurance side, auditor side. So there are
25 testing procedures and there are things that go on

1 in testing that the defense's expert would not be
2 familiar with.
3 We know the defendant was drinking. One of
4 his witnesses says he was drinking. The defendant
5 admitted to the officer that he was drinking. The
6 defendant told the phlebotomist that he was
7 drinking. So that's very clear. He doesn't have
8 to be stumbling or fall down to be impaired. The
9 law says that if he is greater than .08, he is
10 impaired. He was a .125. So he is more than one
11 and-a-half times the legal limit. And I would say
12 to you that the lab is certified by CLIA, the lab
13 is certified and held by the Pennsylvania Bulletin
14 that they are accredited, the lab is also
15 certified by ASCLD. They have never failed a
16 proficiency. They do 45 proficiencies a year and
17 they haven't failed a proficiency. The operators
18 in question have never failed a proficiency.
19 I would propose to you, Your Honor, that in
20 fact that the lab is effective, that their methods
21 are valid, that they are reliable and that in this
22 case the results were that the defendant was in
23 fact driving under the influence and that you
24 should find him guilty of such.
25 THE COURT: All right.

1 MR. SHERMAN: Your Honor, I don't want to go
2 through everything again, but counsel just
3 hasn't -- some of the things she said, the
4 testimony just didn't take place.
5 Mrs. Arvizu testified that she has run a gas
6 chromatograph, she has worked in a lab, that she
7 was certainly good enough to tell the United
8 States Navy and the Department of Energy what they
9 were doing wrong in their lab. You have got a
10 form here that doesn't even have the right column
11 in it. They say it's a typo. I mean, someone
12 typed that in there.
13 There is no proof beyond a reasonable doubt
14 that Dan Johnson was over a .08. His witnesses
15 said that he was sober. You got a witness that
16 saw him literally about five minutes before he was
17 pulled over and said that they discussed about
18 graduation, she didn't see any glassy eyes, she
19 would have never let him leave the restaurant if
20 she thought he wasn't capable of driving. And the
21 field sobriety testing is not the ultimate
22 determination of whether somebody is impaired. So
23 I just say based on this record that there is
24 insufficient proof.
25 THE COURT: I'll give you a chance.

1 MS. ALDRIDGE: Your Honor, the witness that
2 saw the defendant drinking at the restaurant, she
3 said 7:00ish. The defendant wasn't pulled over
4 until 9:00. So he left within 30 to 40 minutes of
5 her arriving at the restaurant. She had no idea
6 where he went afterwards. She had no idea how
7 many drinks he had before. She testified that he
8 did not have slurred speech. Well, slurred speech
9 is not the only indicator of impairment.
10 His other witness testified that she talked
11 to him several times on the phone. He didn't
12 appear to have slurred speech. I asked her
13 specifically when he is drinking does his speech
14 get slurred. She said no, he just talks a lot.
15 So if slurred speech is the only indicator that he
16 might be impaired, that would be incorrect.
17 The defense pointed out that Officer Hartzell
18 here is the leading DUI guy in his unit. So I
19 would imagine that that would say that Officer
20 Hartzell has a good aptitude for finding drivers
21 who are impaired.
22 THE COURT: All right. Well, this certainly
23 was a very interesting trial as far as the
24 testimony goes. I do find some reasonable doubt
25 on this case. As far as Count 1, that being the

1 blood alcohol content, driving under the influence
2 of alcohol or a controlled substance, an ungraded
3 misdemeanor, I feel that there was some doubt
4 created by the cross-examination of Mr. Sherman
5 coupled with the testimony of Mrs. Arvizu.
6 I mean, I felt that there might be some
7 reasonable doubt as far as the issue as far as the
8 evaporation of the columns.
9 I do want to go on the record though saying
10 that I find Ms. Jen Janssen credible. I certainly
11 don't see anything wrong with Ms. Janssen
12 assisting Ms. Aldridge or any other lawyer if she
13 feels that the evidence supports the
14 Commonwealth's case. And I believe that she felt
15 that the evidence did support. I certainly am not
16 casting any aspersions on the Allegheny County
17 Medical Examiner's Crime Lab.
18 But Mr. Sherman is quite masterful and is
19 viewed I think generally as one of the top DUI
20 lawyers, and he created some reasonable doubt on
21 his cross-examination. I'm sure that -- I
22 shouldn't say I'm sure, but perhaps Ms. Janssen
23 will review some of these issues as far as further
24 testing. I know that she may have in future cases
25 or perhaps change some of the operation.

1 I'm also concerned about the employees
2 signing off on another employee's work. Although
3 it just may be something that is a practice that
4 has developed and maybe it only happens on what
5 might be viewed as a guarded variety DUI case, and
6 maybe not on a more significant kind of case. But
7 nevertheless, it does open it up for a skilled
8 advocate to create reasonable doubt.
9 Mr. Sherman made a reference to Boston.
10 That's sort of ancillary, but I certainly don't
11 see that in the case here. But it is sort of
12 interesting, in Boston, I think they tossed out
13 tens of thousands of DUI convictions due to
14 certain procedural issues that had occurred, I
15 believe, in the Suffolk County Crime Lab there.
16 But there is certainly no indication that is any
17 indicia of Allegheny County.
18 As far as the unsafe driving, I reviewed the
19 cases more closely than Mr. Sherman presented when
20 he made the motion on his suppression issue. And
21 I ruled against him because I believed that the
22 Commonwealth did present a prima facie case. And
23 that evidence was to be viewed in the matter
24 favorable to the Commonwealth, but there is case
25 law that cars that go on the berm two or three

1 times, it's a close call, but nevertheless, it
2 creates a reasonable doubt.
3 The Gleason standard, the Supreme Court case,
4 major opinion by former Supreme Court Chief
5 Justice Stephen Zappala was that going off the
6 berm of the road can be a momentary and minor
7 standard.
8 It's a close call, but nevertheless there is
9 a little reasonable doubt. I was a little
10 concerned that Mr. Johnson even went off the berm
11 after Officer Russell Hartzell pulled over. But
12 there is some reasonable doubt there. It seems he
13 went off and came back on. And this is certainly
14 not casting any aspersions on Officer Hartzell.
15 I've always found him to be a credible witness in
16 this courtroom. Just not in this case. But at
17 other times I can't specifically recall.
18 As far as driving on roadway laned for
19 traffic, I reviewed that -- so I also find
20 Mr. Johnson not guilty on Count 2.
21 As far as driving on a roadway laned for
22 traffic, that statute, the way it reads is a
23 little ambiguous, so that plays to Mr. Johnson's
24 favor as far as whether that includes the berm or
25 not. It seems to be a minor issue in that it's a

1 summary offense, so I find him not guilty there.
2 I want to commend the lawyers. I think they
3 did an excellent job. I think the witnesses,
4 Ms. Janssen did a good job, Ms Stanich did a good
5 job, and Ms. Arvizu did a good job.
6 So that concludes this matter.
7 MR. SHERMAN: Thank you, Your Honor.
8 MS. ALDRIDGE: Thank you.
9 THE COURT: You're welcome.
10 - - - -
11 **(The hearing was concluded.)**
12 - - - -
13 **(Court adjourned for the day.)**
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COMMONWEALTH OF PENNSYLVANIA)

) SS:

COUNTY OF ALLEGHENY)

CERTIFICATE OF REPORTER

I, Jane B. Hirsch, do hereby certify that the evidence and proceedings are contained fully and accurately in the machine shorthand notes taken by me at the hearing of the within cause, and that the same were transcribed under my supervision and direction, and that this is a correct transcript of the same.

_____

Jane B. Hirsch, RPR
Official Court Reporter
Court of Common Pleas

The foregoing record of the proceedings upon the hearing of the above cause is hereby approved and directed to be filed.

_____

Judge