

Case: State of Missouri v. Darren Wilson

Transcript of: Grand Jury Volume XIX

**Date:** November 4, 2014

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STATE OF MISSOURI

VS.

DARREN WILSON

GRAND JURY

November 4, 2014

VOLUME XIX



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1 GRAND JURY HEARING VOLUME XIX

2 MS. ALIZADEH: Good morning, it is  
3 Tuesday, November 4th, at 8:46 a.m. This is Kathi  
4 Alizadeh, Sheila Whirley is present, all 12 grand  
5 jurors are present, as is , the court reporter.  
6 And we had a brief discussion before we went on the  
7 record this morning about some matters, about  
8 matters that the grand jury had inquired about, and  
9 I've answered them to the best of my ability.

10 And, uh, now we discussed that yesterday  
11 we attempted to play a disc for the grand jury which  
12 is marked as Grand Jury Exhibit Number 63, and it is  
13 a disc that contains the statement of ,  
14 a witness who has testified last week. And we  
15 weren't able to play that for some reason, the disc  
16 doesn't play, can't open it.

17 So I have another disc that we're going to  
18 play that is also a disc that I received from the  
19 FBI, which is Grand Jury Exhibit 56.

20 (Deposition Exhibit Number 56  
21 marked for identification.)

22 MS. ALIZADEH: And hopefully this will  
23 play. This is the statement of . It  
24 is 29 minutes and 11 seconds long. We do not have a  
25 transcript because this was actually the statement

1 that he made last week. I'm not sure of the date,  
2 but it was done after he came from the State of  
3 to come up here and testify. It was recently  
4 done, we don't have a transcript for that.

5 So, , if you can transcribe it, but  
6 we will go ahead and pause the recording during the  
7 playing of the disc. And at this time I'm going to  
8 leave the room because we have a witness here who I  
9 would like to speak with before he testifies. And  
10 so at this time, , if you want to pause that.

11 (This is the playing of the audio  
12 recording interview of . I am also  
13 transcribing it.)

14 : This is special agent  
15 We're at the FBI field office 2222 Market  
16 Street, St. Louis, Missouri. It is October 27th,  
17 2014, 3:28 p.m. I'm here with USA and  
18 DOJ trial attorney and we are  
19 interviewing.

20 :  
21 Okay. Get some info from  
22 you. Is your first name ?

23 Legally it's , but it  
24 was supposed to have been .

25 : Okay. But you go by .

1 : Yes, ma'am.  
2 : It is ?  
3 Yes, ma'am.  
4 You go by , okay. What  
5 is your current address?  
6 :  
7  
8 Okay. What town?  
9 :  
10 Okay. What's a good phone  
11 number for you?  
12 :  
13 Okay. What's your date of  
14 birth?  
15 **A**  
16 : Okay. Do you know  
17 your social security number?  
18 : Yes, ma'am.  
19 Okay. And where were you,  
20 what was your address on August 9th, 2014.  
21 :  
22  
23 : Okay.  
24 MS. : So you guy by is it okay  
25 with you if we call you ?

1 : Yes, ma'am.

2 MS. : So we talked a little bit  
3 before the recording started, but we basically just  
4 want to hear what you know about what happened. So  
5 if you tell us what other people told you that's  
6 fine, but just let us know those are what other  
7 people told you.

8 We're just looking to find, to figure out,  
9 like I said, what happened, we are just looking for  
10 you to tell us the truth.

11 We tell everybody who comes in here that  
12 it could be a crime to lie to the FBI, it is a crime  
13 to make material false statements to the FBI.

14 So I'm not assuming you are going to lie,  
15 but we want you to know that, okay?

16 : Yes, ma'am.

17 MS. All the answers need to be out  
18 loud, we are making a recording. If we ever do a  
19 transcript or you shake your head, obviously, the  
20 recording doesn't pick that up, okay?

21 : Right.

22 MS. So if you nod your head you are  
23 going to probably hear me say is that a yes or if  
24 you shake your head I will say is that a no, okay?

25 : Yes.

1 MS. : Okay. If at any point you  
2 don't understand a question that we're asking you,  
3 let us know because we are not trying to trick you,  
4 we are just trying to figure out what happened. So  
5 sometimes we ask bad questions that doesn't make  
6 sense, just let us know. Because if you answer a  
7 question we are going to assume that you understood,  
8 it is that fair?

9 : Yes, ma'am.

10 MS. : Okay. I just want to generally  
11 go through what you remember happening and then when  
12 we go back and ask you some questions to clarify to  
13 help us understand more what your perspective was.

14 : Okay.

15 MS. : Okay. So you were living, you  
16 just said on Canfield Court back on August 9th?

17 : Yes, ma'am.

18 MS. : And this is, you know Michael  
19 Brown?

20 : Not really.

21 MS. : I think you said he was a  
22 friend of a friend?

23 : Yes, he's a friend of a  
24 friend.

25 MS. : Okay. Which friend is he a

1 friend of?

2 : I have a friend name

3

4 MS. Okay. And did you ever hang  
5 out with Michael Brown?

6 : No, ma'am.

7 MS. : When did you first meet him?

8 Probably when we were going  
9 to the store. There was three of us. Me,  
10 and Mike.

11 MS. When was that relative to when  
12 this all happened?

13 : It was a couple years ago.

14 MS. : Years ago?

15 Yes, ma'am.

16 MS. All right. So we will go to  
17 that in a second. What I want to talk about first  
18 is what you remember happening on August 9th.

19 Okay. Well, I seen Mike  
20 and some other young man walking down the street.  
21 And I was just sitting down on the porch just  
22 looking around and I seen the officer approach. Not  
23 sure if he said anything because I'm too far away.  
24 I didn't see or hear anything, but then I seen him  
25 almost like sort of run him over, run his foot over

1 or something like that.

2 And I guess they got into a scuffle, but I  
3 went in the house to get my phone because I was  
4 going to go record it. But I heard a gunshot, so I  
5 raced outside. I went to the other side of the  
6 balcony and then I seen Mike Brown holding himself.

7 MS. : (inaudible) You saw that he had  
8 his hand down around his stomach?

9 : Yes, he had his hand like  
10 around his torso area.

11 MS. : Okay. Which hand, do you  
12 remember?

13 : Um, I really don't remember  
14 which hand it was.

15 MS. : Okay.

16 : I just know he was holding  
17 himself and he turned around towards the officer and  
18 the officer kept firing. And I guess he was, I  
19 don't know if he stepped forward or if he was  
20 falling forward, but as he was falling forward, the  
21 officer was still firing.

22 MS. : Okay. So you're saying and  
23 that is in total what you saw.

24 : Yes, ma'am.

25 MS. : You said the officer was still

1 firing, what did the officer do at some point, did  
2 the officer stop firing?

3 **A** Yes, ma'am afterwards.

4 MS. After what?

5 : After he hit the ground.

6 MS. : Okay. What did the officer do  
7 once Michael hit the ground?

8 I'm not sure. I was  
9 looking around making sure that someone else saw  
10 what I saw.

11 MS. Okay. So let's back up a  
12 little bit, okay. So you were sitting on your porch  
13 and you see Mike Brown and this other kid, where  
14 were they walking?

15 : Down the street like coming  
16 from the main street.

17 MS. : West Florissant?

18 : Yes, ma'am.

19 MS. : Where on the street were they  
20 walking?

21 : They're in the middle of  
22 the street I believe.

23 MS. : Okay. What about the police  
24 officer, where was he?

25 Um, he wasn't around until

1 they got towards like the other, there was another  
2 apartment complex across the street from where I  
3 was. So he didn't pull up until they got to that  
4 part.

5 MS. Okay. Which direction is the  
6 police officer going?

7 : Um, he was coming towards,  
8 coming down.

9 MS. : The opposite direction?  
10 : He was coming the same way  
11 they were coming.

12 MS. : So the police officer is coming  
13 from West Florissant also?

14 **A** I believe so.

15 MS. : Okay. And then what happened?  
16 Then it just went from  
17 there. He, I guess, he according to everyone else  
18 they said that.

19 MS. Okay, go on.

20 : He told them to get out of  
21 the street. I'm not sure if that's what happened  
22 because I couldn't hear it.

23 MS. : Let me be clear, if I ask you a  
24 question that you don't know the answer to, that's  
25 fine, let me know, let us know that, right?

1 Everyone has a little piece of this, nobody is going  
2 to make or break the case in one fell swoop, right?  
3 Everyone has to say what they know. If you know  
4 something, great. If you don't know, that's fine  
5 too, as long as it's the truth, okay?

6 Yes, ma'am.

7 MS. Okay. You see Mike and his  
8 friend walking down the street and then you see the  
9 police officer coming in the same direction as  
10 they're going?

11 Yes, ma'am.

12 MS. : Okay. So what is the next  
13 thing? I know that you heard, tell me what  
14 happened, what is the next thing you either see or  
15 hear yourself?

16 I seen them actually at the  
17 police car. I think he was inside. I'm not sure if  
18 he was inside or if he was outside it, all I know is  
19 that I just went in the house to grab my phone.

20 MS. : Okay. Before you went in the  
21 house to grab the phone, was there any sort of  
22 interaction with the police officer and Mike and his  
23 friend or you didn't even see that?

24 : I didn't see that part  
25 because I wasn't thinking that it wasn't going to

1 escalate that far.

2 MS. : All right. So you went inside  
3 to get your phone. I think what you told the FBI  
4 agents in , you went to get your phone  
5 separate and apart from anything that was going on.  
6 You just happen to want your phone at that time?

7 : Yes.

8 MS. : So when you're sitting on your  
9 porch, you see Mike and his friend and you see, when  
10 you run in, do you actually see the police officer  
11 there or he showed up afterwards?

12 No, he was there already.

13 MS. : Okay. And he stopped his car?

14 No, ma'am.

15 MS. : When you went to get your  
16 phone, the police officer had yet to even stop his  
17 car?

18 : No, ma'am.

19 MS. : Okay. So you didn't see  
20 anything about the interaction between Michael Brown  
21 and the police officer?

22 **A** No, ma'am. I just seen him at the car I  
23 just seen him like he was sort of kind of by the  
24 car, but then again, he was not inside of the car at  
25 the time when I saw.

1 MS. Is this before or after you get  
2 your cell phone?

3 This is before I went to  
4 get my cell phone.

5 MS. All right. Let's divide it  
6 out. Let's talk about before you went to get your  
7 cell phone, you see the boys walking in the street?

8 : Yes, ma'am.

9 MS. : You see the police officer  
10 driving in the same direction that they are walking?

11 : Yes, ma'am.

12 MS. : Okay. What do you remember the  
13 police vehicle doing?

14 : Just pulled up towards them  
15 and that's it, that's all I can remember seeing.

16 MS. : Pulled up toward them how?

17 Um, I wouldn't say that he  
18 pulled up cautiously, but he pulled up as if he  
19 noticed that they did something wrong or something.

20 MS. : Okay. And so what, when the  
21 police officer pulled up to them, where was the  
22 police officer's vehicle in relation to the boys?

23 Probably, I mean, they  
24 turned around so they was probably in front, they  
25 was in front of each other.

1 MS. : What kind of car was it?

2 It was a police cruiser, I  
3 don't know.

4 MS. : Was it a car, a SUV?

5 It was a SUV.

6 MS. Okay. Did the SUV, did it pull  
7 up alongside of them, did it stop and go forward,  
8 did it stop, where was it relative to them?

9 : I mean, they turned around  
10 when he pulled up.

11 MS. : Okay.

12 : were they in relation to the  
13 car, does that make it easier?

14 : I guess in front of it.

15 In front of it?

16 MS. : If you don't know, you don't  
17 know.

18 : I'm not sure, my memory is  
19 kind of --

20 MS. : Okay.

21 : -- hazy, but I remember  
22 most of it.

23 MS. Okay. So you see the SUV stop  
24 and you see the boys standing by the vehicle, right?

25 : Yes, ma'am.

1 MS. : And then is that when you go  
2 and get your phone?

3 : Yes, ma'am.

4 MS. : You don't see any sort of  
5 interaction between them?

6 : No, ma'am.

7 MS. : When you went to go get your  
8 phone, while you were getting your phone, did you  
9 hear anything?

10 : Yes, ma'am, I heard a  
11 gunshot.

12 MS. : Okay. So what did you hear?  
13 I went immediately outside.

14 MS. : Okay. Describe for us what you  
15 saw?

16 : When I went outside, they  
17 were, the police cruiser was still like by the  
18 apartment complex.

19 MS. : Okay.

20 : But they were up towards  
21 the street.

22 MS. : When you say they, who do you  
23 mean?

24 : Police officer Mike Brown,  
25 the friend was nowhere in sight.

1 MS. : You didn't see the friend after  
2 that?

3 : No, ma'am.

4 MS. The only time you saw the  
5 friend was before you went and got your cell phone?

6 : Yes.

7 MS. You come back out and you see  
8 Mike Brown and the police officer and you say where  
9 were they?

10 They were up the street  
11 like a few feet, not too much, like 10, 15, 20 feet.

12 MS. : What were they doing, were they  
13 standing there, were they running, were they  
14 walking?

15 : Actually, he was standing  
16 there.

17 MS. Who is he?

18 Mike Brown and the police  
19 officer. The officer had his gun drawn at him.

20 MS. : Okay.

21 : And that's when Mike Brown  
22 turned around holding his wounds.

23 MS. : Okay. Did you actually see  
24 Mike Brown turn around or you assuming he turned  
25 around?

1 : I'm assuming he turned  
2 around.

3 MS. So describe what you actually  
4 saw when you walked out there?

5 When I walked out there, he  
6 was already facing towards the officer holding his  
7 wound.

8 MS. Okay. You don't know how far  
9 he ran?

10 No, ma'am.

11 MS. : And you don't know, you're  
12 assuming he turned around, you don't know whether he  
13 turned around or what he did that landed him in the  
14 position that you saw, which was standing with his  
15 arm in front of his torso, correct?

16 : Correct.

17 MS. : I think you just used the word  
18 holding his wound, did you see a wound?

19 : No, I didn't see a wound.  
20 I'm too far away. I'm just assuming that he had a  
21 wound right there, he's holding himself.

22 MS. Based on his position?

23 : Yes, ma'am.

24 MS. And when you saw, so what you,  
25 yourself, saw was Michael Brown facing the police

1 officer and he was holding his front, his torso,  
2 right front of his stomach area?

3 : Yes, ma'am.

4 MS. Lower stomach?

5 : Yes, ma'am, lower stomach,  
6 I believe.

7 MS. You couldn't hear what he was  
8 saying?

9 : No, ma'am.

10 MS. : Did it look like they were  
11 saying anything or you too far away to see?

12 To me it didn't look like  
13 they were saying anything.

14 MS. : Okay. You say you saw the  
15 police officer with his gun drawn?

16 : Yes, ma'am.

17 MS. : Did you see any shots fired?

18 : Yes, ma'am. I seen the  
19 last probably four.

20 MS. : Okay.

21 : As he was going to the  
22 ground, I seen every shot that he got hit with going  
23 to the ground.

24 MS. : Okay. Let's back up for a  
25 second, this is my fault. So Michael Brown is

1 standing there with his arm around his torso and the  
2 police officer is standing in front of him, so  
3 describe what you see?

4 The officer starts to fire  
5 while he's holding himself and he starts to fall  
6 forward.

7 MS. When you say he, you mean  
8 Michael Brown?

9 Yes, ma'am, Michael Brown.  
10 He starts to fall forward, Michael Brown starts to  
11 fall forward and the police officer, I think, fires  
12 two more times as he's falling forward and then  
13 after that he stops.

14 MS. : Okay. When you walk out onto  
15 the balcony, was the police officer already  
16 shooting?

17 : No, ma'am.

18 MS. : All right. So you heard the  
19 first shot when you were inside and then you saw the  
20 last four or five shots I believe you said?

21 : Yes, ma'am.

22 MS. : Okay. So just to be clear, you  
23 didn't see, you only saw the police officer pull up  
24 when the boys were first walking in the street,  
25 correct?

1           **A**       Yes, ma'am.

2                   MS.       :   You didn't see the interaction  
3 by the vehicle?

4                                   No, ma'am.

5                   MS.       :   You went to get your phone, you  
6 heard a gunshot, correct?

7                                   :   Yes, ma'am.

8                   MS.       :   By the time you came back out,  
9 Michael Brown was facing the police officer and  
10 Michael Brown had his hand around his torso,  
11 correct?

12                                   :   Yes, ma'am.

13                   MS.       :   And then you saw a police  
14 officer shoot four or five times and Michael Brown  
15 go to the ground?

16                                   Yes, ma'am.

17                   MS.       :   Is that correct?

18                                   :   Yes, ma'am.

19                   MS.       :   Did I miss anything?

20                                   :   No, ma'am.

21                   MS.       :   Did I put any words in your  
22 mouth or I got that right?

23                                   :   You got that right.

24                   MR.       :   Do you recall about how far  
25 the police officer and Michael Brown were when the

1 last shots were fired?

2 : Mike Brown, he is in the  
3 middle of the street and the officer was towards the  
4 curb.

5 MR. Can you put a distance on  
6 it?

7 : Probably about six, seven,  
8 six or seven feet apart.

9 MR. : Okay.

10 MS. : So let's go back for a second.  
11 You first met Michael Brown when you were going to  
12 the store. What's your friend's name again?

13

14 MS. What's his last name?

15

16 MS. Does still live in the  
17 Canfield area?

18 I'm not sure. I moved so.

19 MS. : I know you moved in August.

20 : But he moved before I  
21 moved. When I came back in July, to come back to  
22 St. Louis in July, he was already gone.

23 MS. So before July, when was the  
24 last time you saw him?

25 : Before I moved to .

1 MS. : How long did you live in  
2 for?

3 Since November.

4 MS. : So prior to that, other than  
5 the time going to the store, did you hang out with  
6 him ever?

7 : No, ma'am.

8 MS. Just that one time?

9 : Yes, ma'am.

10 MS. What was he like when you saw  
11 him that one time?

12 He was pretty quiet. We  
13 didn't exchange too many words. I was just riding  
14 basically.

15 MS. : You just what?

16 I was just riding  
17 basically.

18 MS. You were on the way to the  
19 store?

20 : Yes, ma'am.

21 MS. Did you graduate high school?

22 : Yes, ma'am.

23 MS. : Where did you go?

24 : High  
25 School.

1 : Is that in --

2 .

3 : Did you ever go to high  
4 school in Missouri?

5 : Yes, ma'am.

6 : Where did you go?

7 I went to

8 High School.

9 : ?

10 : Yes, ma'am.

11 MR. I think earlier when you  
12 were taking us through what you saw that day, you  
13 said something about Mike Brown took a step towards  
14 him, couldn't tell what exactly if he was stumbling  
15 or if he was taking a step, can you describe that?

16 : Well, it looked like as if  
17 he was just falling, I mean. But he took his step,  
18 his right foot went forward and I just seen him just  
19 drop to his knees and fall to the ground.

20 MR. All right.

21 MS. : Did you see the friend that  
22 showed up out on Canfield after that at all?

23 No, ma'am, not until  
24 probably the next day.

25 MS. Okay. Did you have any

1 interaction with the friend?

2 : No, ma'am. I have no idea  
3 who he is.

4 MS. : Where did you see him when you  
5 saw him the next day?

6 : He was in Canfield.

7 MS. : Was he just like hanging out,  
8 what was he doing?

9 : He was walking.

10 MS. : Okay. Did you talk to anyone  
11 about this when it happened?

12 : Just my parents.

13 MS. How about any of your  
14 neighbors?

15 : No, not that I know of.

16 MR. : You said initially that  
17 people were talking about what went on at the side  
18 of the police car. You said that when you saw it  
19 you didn't really see anything that happened there  
20 and you didn't know if he was inside the car or not,  
21 but other people were talking about that, remember  
22 that?

23 Yes, sir.

24 MR. : Who were those people, were  
25 those people up there?

1 : Just neighbors, everybody  
2 in the neighborhood was talking about it.

3 MR. : When was that?

4 : This was the same day.

5 MR. : People coming out and  
6 talking about it?

7 : Yes, sir.

8 MR. : All right. You turned a  
9 little bit of video over to the FBI. That video,  
10 you took that on your phone; is that right?

11 : Uh-huh.

12 MR. : That's after the shooting  
13 was over?

14 : Yes, sir.

15 MR. : You didn't capture any of  
16 the actual shooting on your phone?

17 : No, sir.

18 MR. : Right at the beginning of  
19 that video people, you say people are going crazy.  
20 You hear some voices on that, what were you  
21 referring to there, what was going on?

22 : I believe his kin, Michael  
23 Brown's kin, his family, they were all by his body  
24 on the curb, they was just yelling and screaming,  
25 you know.

1 MS. : Do you know any of his family  
2 members?

3 No, ma'am.

4 MR. : Based on what you saw, do  
5 you have any idea what happened from the time the  
6 police first pulled up there until the time the  
7 policeman fired those last four or five shots, do  
8 you know what went on there at all based on what you  
9 saw or heard that day?

10 : From what I heard is that  
11 they had a scuffle inside the car.

12 MR. : Okay. I'm not talking about  
13 what you heard from other people, I'm just talking  
14 about what you actually saw?

15 : I didn't see what happened  
16 at all.

17 MR. : You didn't see what happened  
18 until those last four or five shots?

19 : Yes, sir.

20 MR. Based on what you saw there  
21 at the end, did you have feeling about what had  
22 happened there?

23 : Yes.

24 MR. And what was that?

25 I felt that the police

1 officer did that very unjustly, he overkilled  
2 basically. After the first shot, I mean, he didn't  
3 really have to shoot the young man in the first  
4 place. They have other means of, you know,  
5 corralling the suspect, you know, taser, anything  
6 else.

7 He shot him the first time, even if you  
8 did have to shoot him, he didn't have to keep going,  
9 he didn't have to kill him because he was unarmed.

10 MR. : From what you saw that day,  
11 could you tell why the police officer shot at Mike  
12 Brown?

13 I'm not sure why.

14 MR. : Okay.

15 MS. : And you don't know what  
16 happened in the car, right?

17 : No, ma'am.

18 MS. : And you don't know what  
19 happened while you were inside, correct?

20 : No, ma'am.

21 MS. : Okay.

22 MR. : That's one of the reasons  
23 I'm asking because on that video you referred to,  
24 you said he shot him like six times. And you said  
25 for no reason, do you recall that?

1 : Yes, sir.

2 MR. : Is it fair to say you didn't  
3 see what happened before those last four or five  
4 shots; is that right?

5 Yes, sir.

6 MR. : So do you know what the  
7 reason was the police officer shot him, if any?

8 No, sir.

9 MR. : Okay. That's fair enough.

10 MS. : I think when you originally  
11 spoke to the FBI in you heard like two shots  
12 when you were inside, did you hear two or one or not  
13 sure?

14 I'm not sure. I heard one  
15 for sure, I know that for sure.

16 MS. And just so you know what I'm  
17 looking at, when you are interviewed by the FBI  
18 though and what you said, that's all I'm looking at.  
19 So it is a summary of what you told them.

20 MR. : After that one shot that  
21 you're sure you heard while you were inside, you  
22 didn't hear any other shots after that until the  
23 four or five that you actually saw?

24 I mean, not that I  
25 remember.

1 MR. : Okay.

2 : But other than that --

3 MR. : I'm not suggesting that  
4 should or shouldn't of, I'm just trying to be sure  
5 that basically when you are in the apartment getting  
6 your cell phone, you hear at least one shot inside?

7 : Yes, sir.

8 MR. : You mentioned two before, as  
9 said at the FBI you mentioned two. You  
10 remember one for sure, maybe two, and then is it  
11 fair you don't recall hearing or seeing any other  
12 shots until those last four or five that you  
13 actually saw right before Mike Brown went down?

14 Correct.

15 MR. : Take a break.

16 MS. : Give us a minute.

17 MR. : We'll be back with you in  
18 just a minute. You can step outside with your mom  
19 if you want. We're just going to go in the other  
20 room here. We'll be back in just a minute. Thank  
21 you.

22 (Pause in the interview.)

23 MR. , come back in and we'll  
24 finish up. Just a couple minutes. Thank you,  
25 ma'am.

1 All right. Just to be clear, we took a  
2 break, obviously, we left the recorder running here  
3 just so we don't have to start it over again, but  
4 when we're on the break you went out to the lobby  
5 and sat with your mom for a little while?

6 Yes.

7 MR. : She's out there waiting for  
8 you.

9 : Yes.

10 MR. : We weren't out there, right?

11 : You weren't.

12 MR. : Okay. We just went to a  
13 different room, we didn't talk about this at all  
14 during the break, correct?

15 : Right.

16 MS. We just want to ask you a  
17 couple other things just so we understand better.  
18 What made you move back to , you moved the day  
19 after?

20 : Yes. Just didn't want to  
21 stay with my father any more.

22 MS. : Did it have anything to do with  
23 this incident, the shooting?

24 No, ma'am.

25 MS. Before you said you went and

1 got your cell phone, you had mentioned on your  
2 actual video that you gave to the FBI that you wish  
3 you would have recorded it. So you ran and got your  
4 cell phone, how come you didn't record what you saw?

5 : Because it all happened too  
6 fast.

7 MS. : Okay.

8 : Way too fast. I had to  
9 unlock my phone and go all the way to my camera and  
10 all that, I didn't have no time to do none of that.

11 MS. : It was like right when you  
12 walked outside it was happening?

13 : Yes, ma'am.

14 MS. Okay.

15 MR. : All right. You talked a  
16 little bit about some of the talk that kind of went  
17 on that day. And after that, can you just kind of  
18 tell us about that, about what people were talking  
19 about, or we know, we already talked about what you  
20 actually saw that day.

21 : Right.

22 MR. : But just what you heard or  
23 what people were talking about?

24 : The people were telling me  
25 that apparently the officer pulled him inside of the

1 car and I guess he was reaching for his gun or  
2 something, and the officer shot him in his hand or  
3 shot at him or something and then he ran away.  
4 That's all I know.

5 MS. People were saying that right  
6 when it happened?

7 : Yes, ma'am.

8 MS. : You left the next day, right?

9 : Yes.

10 MS. : You really only had that first  
11 day on Canfield. What was it like around there,  
12 like the people around?

13 Terrible.

14 MS. : Could you describe it?

15 : It was very chaotic, I will  
16 tell you that. And the police officers really  
17 didn't make anything better than what it was,  
18 especially when they brought the dogs out. That was  
19 very unnecessary.

20 MS. : How were the people in the  
21 community acting?

22 : They were all riled up for  
23 the incident. They all just doing crazy things,  
24 yelling all over the place, some were praying, some  
25 were like, I wouldn't say intimidating the officers,

1 but they were just standing in front of them with  
2 their hands up saying don't shoot and things like  
3 that.

4 MR. : At the time that you saw  
5 Mike Brown before he went down, he had his arms down  
6 around his torso at that time?

7 : Yes.

8 MR. : Okay. Um, I don't think I  
9 have anything else.

10 MS. : I don't have any more  
11 questions.

12 : Just real quick, this is very  
13 small. ?

14 .

15 MS. Okay. That's it. Is there  
16 anything else you want to tell us?

17 : No, ma'am.

18 MS. : Do you think that we treated  
19 you fairly?

20 : Yes.

21 MS. Did we put any words in your  
22 mouth?

23 No, ma'am.

24 MS. : Everything you told us is what  
25 you wanted to tell us and the truth?

1 : Yes, ma'am.

2 MS. Thank you for coming here.

3 : No problem.

4 : The interview is over at  
5 3:57 p.m.

6 (Playing of the recorded interview is  
7 over.)

8 MS. ALIZADEH: It is 9:16. We just  
9 completed listening to Grand Jury Exhibit 56, the  
10 statement of .

11 (Grand Jury Exhibit Number 64  
12 marked for identification.)

13 MS. ALIZADEH: Just some housekeeping  
14 things. I made a copy for each of you of the  
15 journal entry that was done by the last witness  
16 yesterday and I marked that previously as Grand Jury  
17 Exhibit Number 64, and so I will pass that around.  
18 For each of you. And also last night you indicated  
19 that you would like to get a copy of the transcript  
20 of Darren Wilson's testimony, and I made one copy  
21 because as you can see, it is like thick and  
22 voluminous.

23 I can make extras if you all want your own  
24 and feel like you want your own, I will be happy to  
25 make you extras. I didn't know if maybe while you

1 are talking and deliberating somebody can be looking  
2 through this as kind of to read for the rest of  
3 them.

4 And I will tell you that at the end of the  
5 transcript there is an index and it will tell you  
6 what page and line a certain word appears on. So if  
7 you know what you are looking for, you could  
8 probably go back and search for it by referring to  
9 the index.

10 For example the word easy, you recall he  
11 said something was easy, you know, and you're not  
12 sure about that. You might look back and find the  
13 word easy and you find that it appears on page 265  
14 and line seven. And that would be the way for you  
15 to kind of reference if you are looking for  
16 something in particular.

17 So I will give this to you now. You can  
18 look at it during the lunch hour and if you guys  
19 decide each one want your own copy, I can make  
20 copies. So I will give that to since  
21 you are right there.

22 So we're going to have the first witness  
23 for today, he's here. He's a toxicologist. You all  
24 ready, you want to take a break. Can we start with  
25 him? I anticipate might be about an hour that he's



1 jurors a little bit about your educational  
2 background?

3 **A** Well, I have a bachelor's degree in  
4 chemistry from Marist College, which is in New York.  
5 I have a second master's, I have a master's in  
6 pharmacology and toxicology from St. John's  
7 University in New York. I have a second master's in  
8 medical biology from Long Island University, also in  
9 New York. And my doctorate is in toxicology and  
10 that's from St. John's and I have been working in  
11 the field of toxicology now about 35 years.

12 **Q** Where are you employed?

13 **A** I work for St. Louis University Med School  
14 and I'm the chief toxicologist for St. Louis County.

15 **Q** And so do you work with the Medical  
16 Examiner as the chief toxicologist for St. Louis  
17 County?

18 **A** Yes, ma'am.

19 **Q** And so are there times when you are asked  
20 to do testing or perform test on samples that are  
21 received or obtained from deceased persons?

22 **A** Yes. We do cases for the city and the  
23 county. We do a lot of the driving under the  
24 influence cases too. Our caseload goes from New  
25 Orleans, to Wisconsin, to California and all over

1 Illinois. We do a lot of work for a lot of  
2 different municipalities.

3 **Q** Did I ask you or did you bring with you  
4 today your curriculum vitae?

5 **A** Yes, ma'am.

6 (Grand Jury Exhibit Number 65  
7 marked for identification.)

8 **Q** (By Ms. Alizadeh) I'm going to hand you  
9 what I've marked as Grand Jury Exhibit Number 65.  
10 Is that your CV that you brought with you today?

11 **A** Yes, ma'am.

12 **Q** I made a copy for each of the grand  
13 jurors, so I will pass that around.

14 And you have your doctorate; is that  
15 correct?

16 **A** Yes, ma'am.

17 **Q** And so I will call you Now,  
18 just for clarification sake, you are not a  
19 physician, correct?

20 **A** No, ma'am, I'm not a physician.

21 **Q** Okay. And so you didn't go to med school?

22 **A** That is correct. My area is toxicology,  
23 affects of drugs.

24 **Q** All right. And in the course of your  
25 employment as the chief toxicologist for St. Louis

1 County, back in August of 2014, did you receive some  
2 samples from a deceased person named Michael Brown?

3 **A** Yes, ma'am.

4 **Q** And those, what were the samples that you  
5 received?

6 **A** Oh, blood, urine and I think vitreous, or  
7 eye fluid.

8 **Q** So samples that were obtained by someone  
9 else were preserved and then delivered to your  
10 laboratory; is that correct?

11 **A** Yes, the samples were taken at autopsy.

12 **Q** And is your laboratory in the same  
13 building where the medical examiner performs  
14 autopsies?

15 **A** Yes.

16 **Q** So this is not like the sample had to be  
17 shipped anywhere?

18 **A** No. They take the samples in the back and  
19 they walk them over and we sign for them.

20 **Q** And did you test some of those samples?

21 **A** Yes.

22 **Q** And, um, did you prepare a report that  
23 summarized your findings?

24 **A** Yes.

25 (Grand Jury Exhibit Number 66



1 things of that nature that can alter the drug  
2 concentration.

3 **Q** Okay. So let me ask you from the time  
4 that the sample is retrieved from the deceased and  
5 then if it is properly preserved or maintained, is  
6 that sample going to degrade over time so that  
7 whatever chemicals may be found within that sample  
8 might change over time?

9 **A** There can be some degradation, but as soon  
10 as the sample is drawn, it is refrigerated and then  
11 we start performing the test on it right away. So  
12 anything along those lines is minimal.

13 **Q** Do you recall when it was that you  
14 obtained these samples or got them out again, your  
15 process or testing them?

16 **A** Yeah, we received them August 11th of  
17 2014.

18 **Q** And so if Michael Brown passed on  
19 August 9th and the autopsy was conducted on  
20 August 10th, Sunday, and then you received those  
21 samples on that Monday?

22 **A** That's correct.

23 **Q** And when you receive the samples, did it  
24 appear to you that they had been properly packaged  
25 and that they had been refrigerated properly?

1           **A**     Yes, ma'am.

2           **Q**     Okay. So now you mentioned that you had  
3 received urine and blood and you said vitreous  
4 fluid, what is vitreous fluid?

5           **A**     Vitreous fluid is the fluid in your eye  
6 that keeps it round, okay. It is the fluid in the  
7 eyeball.

8           **Q**     And what is it, why would it be important  
9 to have a sample of the fluid in the deceased  
10 eyeball?

11          **A**     Well, see there is several things that can  
12 go on with your chest cavity, even motor vehicle  
13 accidents, trauma to the chest, you can get  
14 contamination of everything in here, okay.

15                   The eyeball, because it is so  
16 protected in the skull, if something happens to it,  
17 any trauma you don't have it because it ruptures.  
18 So other than that, you get a very good sample,  
19 relatively clean and pure sample and it represents  
20 the brain concentration, okay. So it is very close  
21 to whatever is in the brain to give you a handle on  
22 that.

23          **Q**     Now, in this particular case, did you test  
24 the vitreous fluid from Michael Brown?

25          **A**     No, ma'am.

1           **Q**     And why didn't you do that?

2           **A**     Well, in our case there was no reason to  
3 because of the nature of the drugs that we found,  
4 they don't get to the vitreous. It just takes too  
5 long and they are not present.

6                     The vitreous is very slow for  
7 equilibration. That is the concentration goes up in  
8 the blood and then it declines and the vitreous lags  
9 on some drugs. On these drugs the vitreous stays  
10 very low, the drugs do not penetrate into the  
11 vitreous.

12          **Q**     So you tested blood and urine that you had  
13 received from Michael Brown, correct?

14          **A**     Yes, ma'am.

15          **Q**     And we'll talk about the actual process of  
16 testing those, but did you first do a test on the  
17 blood for alcohol?

18          **A**     Yes.

19          **Q**     And you don't need to go into that  
20 necessarily because the tests of the blood for  
21 alcohol, which are ethanol, acetone, isopropanol and  
22 methanol were all negative, correct?

23          **A**     Well, we list those, but we test for  
24 others, like toluenes, Xylene, and so forth.

25          **Q**     And so you had, is it true then that all

1 of the tests for alcohol were negative on -- in your  
2 test of the blood of Michael Brown?

3 **A** Yes.

4 **Q** Now, let me ask you this. If there was a  
5 subsequent test done on a sample of blood that was  
6 done by another professional, and if they had  
7 actually had a different finding that perhaps had a  
8 level of .023, how would you describe, do you have  
9 an explanation as to why that could be positive,  
10 another test done later?

11 **A** Sure. The reason for that is  
12 decomposition. As I said, the longer a sample sits  
13 and then transport and everything else that goes  
14 along with it, you can get a little bit of alcohol  
15 generated. And .02 is nothing, so it would just be  
16 decomposition.

17 **Q** So that could possibly be explained by the  
18 decomposition that occurred in the sample?

19 **A** Yes.

20 **Q** And, all right. So let's talk about the  
21 drug screening for the blood that you ran. And if  
22 everybody can refer to your report on Grand Jury  
23 Exhibit 66, which I don't think I marked actually on  
24 your report, there are a number of drugs that you  
25 tested for; is that correct?

1           **A**     Yes.

2           **Q**     And every one of those tests was negative  
3     except for the test for cannabinoids, correct?

4           **A**     Correct.

5           **Q**     And so just to be clear, when you say you  
6     have a negative test, is there like a threshold or a  
7     level that could be present but not detected?

8           **A**     Yes.

9           **Q**     And so when you run tests for various  
10    chemicals, if the level that is detected in the  
11    sample that falls below a threshold, then that is  
12    considered a negative, correct?

13          **A**     Correct.

14          **Q**     All right. And so you receive negative  
15    reading on amphetamines, antidepressants,  
16    barbiturates, and all the other drugs that you  
17    tested for except for the cannabinoids, correct?

18          **A**     Correct.

19          **Q**     All right. So explain, Dr.       , when you  
20    tested the blood and you were looking for positive  
21    or negative affects, explain the testing procedure  
22    or process that you used to get a negative or a  
23    positive reading?

24          **A**     See, we use a scatter approach. And that  
25    is we use what's called an immunoassay. An

1 immunoassay is an allergic reaction in a test tube  
2 to a class of compounds such as amphetamines,  
3 opiates, phencyclidine and so forth. What happens  
4 is we mix the sample with the antibody and if we get  
5 a reaction, then we know it is present or it is  
6 indicated as present.

7                   That has to go on for further  
8 confirmation, which in our case is always gas  
9 chromatography mass spectrometry. And what that  
10 does is give you molecular structure identification.  
11 The molecules introduced into the instrument, and  
12 chromatography means separation. So gas  
13 chromatography means separation at the gas phase.

14                   So what we'll do is separate out all  
15 of these compounds and then introduce them into the  
16 mass analyzer. The mass analyzer hits the molecule,  
17 sort of like my hand here, with very high energy  
18 causing it to explode and that gives you fingerprint  
19 identification. That's how we identify each of the  
20 drugs. We look to see the ions that are present,  
21 the ratios and so forth, other criteria that gives  
22 us the identification on that.

23                   That is also quantitative, telling us  
24 how much is present. So that's the one part.

25                   The other part is we run a gas

1 chromatography for the other drugs and this will  
2 pick up everything from strychnine to ecstasy, and  
3 pick all of those up on one screen. And  
4 unfortunately, we have even seen strychnine cases.  
5 If I didn't like you, that's what I'd use. That's a  
6 nasty poison.

7 **Q** Good to know.

8 **A** If I can, what it does it causes  
9 constriction of all the muscles in your body. And  
10 your back can actually constrict to a point where  
11 you break your own back. Yeah, so it is nasty. But  
12 that screen will pick up everything. And again, all  
13 of that would have to go on for further  
14 confirmation.

15 **Q** So your initial testing of the blood  
16 sample was the allergic reaction test that gives you  
17 an indication that the drug is present?

18 **A** That's correct.

19 **Q** Now, did you, now, the gas  
20 chromatography --

21 **A** GCMS.

22 **Q** GCMS is shorthand for that. Is that an  
23 instrument that is used in the lab?

24 **A** Yes.

25 **Q** And this is an instrument that is used in

1 every laboratory in the country, is that fair to  
2 say?

3 **A** Yes.

4 **Q** Very well accepted as what it does and  
5 what it can do?

6 **A** Absolutely.

7 **Q** And the GCMS instrument that is in your  
8 laboratory, is it, do you check that on a regular  
9 basis to make sure that it is calibrated properly  
10 and giving you proper readings?

11 **A** Yes. We run it through a whole series.  
12 We do what's called an auto-tune, which is a  
13 compound is entered into it and we have to see a  
14 particular fingerprint analysis. We then run  
15 standards, controls to make sure that the test is  
16 running properly. So everything is fully  
17 controlled.

18 **Q** All right. And how often do you do those  
19 checks to make sure that the instrument is working  
20 properly?

21 **A** Every time we run the instrument.

22 **Q** How many samples at a time can this  
23 instrument run?

24 **A** Probably about 50, but out of that  
25 10 percent are control samples, so run a control

1 periodically.

2           **Q**     And so out of the 40 that are not control  
3 samples, are these all 40 samples from the same  
4 subject?

5           **A**     No.

6           **Q**     You might have John Doe's blood, you might  
7 have Michael Brown's blood, you might have Suzie Q's  
8 blood?

9           **A**     That's correct, there is no identification  
10 as to the person when it is going through the  
11 instrument. All we have is a number that's  
12 associated with a particular person.

13          **Q**     So how is it that you insure that these  
14 samples don't get mixed up?

15          **A**     Well, it is all done under chain of  
16 custody and everything is sequenced and when we load  
17 it into the instrument to check it and then the  
18 person who takes the data off checks the same  
19 sequence to make sure it's correct. And we also run  
20 the samples, well, not on marijuana. We only do the  
21 blood and urine ones. The other drugs are run  
22 differently.

23          **Q**     Okay. And so let's talk about the  
24 positive test that, positive result that you got for  
25 the cannabinoids, what is a cannabinoid?

1           **A**     That's marijuana basically. Cannabinoid  
2     is the class of compounds, it's marijuana.

3           **Q**     All right. So once you received the  
4     positive for cannabinoids, did you then run the  
5     blood through the GCMS?

6           **A**     Yes.

7           **Q**     And when you ran the blood of Michael  
8     Brown through the GCMS, did you just check for  
9     cannabinoids or do you check for all these other  
10    drugs that you indicate was negative?

11          **A**     No, we specifically look for the  
12    cannabinoids. Delta-9, 11-Hydroxy and the carboxy.  
13    The reason for that is it is what's called a dwell  
14    time. It is how long the instrument gets to look  
15    for a particular compound.

16                    Because we are dealing with  
17    nanograms, which are basically a billionth of a  
18    gram. It is like you have a dollar, that's as close  
19    as you are to be being a billionaire, that's what we  
20    are looking for.

21                    So the instrument really has to focus  
22    in. We can do screens, but that's under a different  
23    criteria. For this we would just use, focus the  
24    instrument in on the cannabinoids.

25          **Q**     All right. And so when you ran the blood

1 sample of Michael Brown through the GCMS, did you  
2 get any quantitative information about, you had  
3 talked about Delta-9, hydroxy and the carboxy  
4 levels, did you get quantitative information about  
5 those?

6 **A** Yes.

7 **Q** Okay. And so let's talk about what is the  
8 difference between the Delta-9, hydroxy and carboxy.  
9 And for everybody's clarification, the Delta-9, is  
10 Delta-9-THC on your report, correct, and the hydroxy  
11 is 11-Hydroxy-THC. And then the carboxy, which is  
12 what we are calling it, is actually  
13 11-NOR-Delta-9-COOH, correct?

14 **A** Yes.

15 **Q** And so is that COOH the carboxy?

16 **A** Yes.

17 **Q** Okay. So it doesn't say carboxy, that is  
18 what we are referring to, correct?

19 **A** Yes.

20 **Q** When we talk about carboxy. So can you  
21 explain to the grand jurors, what are these  
22 compounds and how are they different?

23 **A** Okay. The first compound, the Delta-9, is  
24 the reason you smoke marijuana. That produces the  
25 desired affects, the euphoria.

1                   When it is in your body your body  
2 looks at it as a foreign substance. So it starts to  
3 metabolize or alter it chemically. One of the  
4 things it forms is the 11-Hydroxy-THC.

5                   This is also a psychoactive compound,  
6 but rarely do we find it because it is so short  
7 lived in the human body. And then it goes on  
8 further to be metabolized into the carboxy. We call  
9 it carboxy because the full name for it is  
10 11-NOR-Delta-9-Tetrahydro-Cannabinoid-Carboxylic  
11 acid.

12           **Q**     Which I can't say so we will call it  
13 carboxy.

14           **A**     That's why we call it carboxy.

15           **Q**     Okay.

16           **A**     And that's the final metabolite. That's  
17 the compound you hear, well, if you smoke a joint,  
18 you can test positive for a month, which isn't true,  
19 but that's what you hear.

20           **Q**     So does, so you explained that the  
21 Delta-9-THC has a psychoanalytic effect?

22           **A**     Psychoactive.

23           **Q**     Psychoactive. So that's what makes people  
24 feel differently when they smoke marijuana?

25           **A**     Yes, euphoria and so forth.

1           **Q**     And then the Hydroxy-THC, does that have a  
2 psychoactive effect on the human body?

3           **A**     Yes, it does. But as I said, we rarely  
4 find it. Only in a very, very acute use with death  
5 following.

6           **Q**     And then on the 11-Hydroxy molecule.

7           **A**     Yes.

8           **Q**     Is there a psychoactive effect on the body  
9 for that?

10          **A**     No, you could eat a pound of it, it  
11 wouldn't do anything.

12          **Q**     Okay. So why is it that these, why is it  
13 that it is important to test for all three of these  
14 compounds when you are testing the cannabinoids?

15          **A**     Well, for example, suppose you only had  
16 the Delta-9 and nothing else, that would raise  
17 severe questions about the sample. You want to see  
18 the parent drug, the 11-Hydroxy right off, you know  
19 it is not going to be there, and you want to see the  
20 Carboxy-THC. That tells you the drug was consumed  
21 by the individual and it was being metabolized.

22                         So you have a good handle on its use  
23 and one verifies the other. Much the same as we do  
24 in a tube biologicals like blood and urine. The  
25 reason for that is it avoids any question was it

1 contaminated or mixed up.

2 If we find it in the blood, we want  
3 to find it in the urine because one validates the  
4 other.

5 **Q** Okay. And so in this testing, going off  
6 what you said there, you ran the sample of urine  
7 that you had received from Michael Brown that was  
8 received from Michael Brown. You ran those same  
9 three for those three compounds. Delta-9, hydroxy  
10 and the carboxy, correct?

11 **A** Yes.

12 **Q** So let me ask you because we can see from  
13 your report that you, when you ran this through the  
14 GCMS you got for the Delta-9-THC, you got 12  
15 nanograms per milliliter. Yet when you ran the  
16 urine you got negative for the Delta-9-THC?

17 **A** Yes.

18 **Q** Isn't that inconsistent, why would that be  
19 different?

20 **A** No, well, the Delta-9-THC is subject to  
21 other things particularly in the urine. It can even  
22 bind up to the plastic in the container, the urinary  
23 excretion due to dilution. Any one of a number of  
24 things can cause the urine to be negative for the  
25 Delta-9.

1                   If it was negative for the carboxy,  
2     that would be a real concern, but not for the  
3     Delta-9.

4           **Q**     Is the fact that the blood was 12  
5     nanograms per milliliter and the urine was negative,  
6     does that tell you anything about the recency the  
7     drug may have been ingested? In other words, I  
8     assume the urine is the final process of the body,  
9     processing the substance, correct?

10          **A**     The urine serves to get rid of chemicals  
11     in your body, okay. That's probably the main group.  
12     What you are looking at, the urine really doesn't  
13     count as far as the interpreting it. The Delta-9 in  
14     the blood tells you because Delta-9 in the blood  
15     only hangs around for a short period of time, like  
16     maybe two hours. It has a relatively short half  
17     life. It is in, produces its affects, the affects  
18     last longer in the presence of the Delta-9, but when  
19     you have it in there it goes to acute use, that's  
20     within a couple of hours.

21          **Q**     Okay. So, and you also had mentioned that  
22     depending upon the sample that in the urine, the  
23     urine sample could be diluted? In other words,  
24     there could be more water in the urine or other  
25     liquids or chemicals?

1           **A**     Yes, it depends on the location of the  
2 urine, how the kidneys were functioning, what's  
3 going on in the body and there is a lot of variables  
4 there. That's why you can't interpret urine  
5 concentration as far as impairment, you just don't  
6 know.

7           **Q**     Okay. So then the next chemical or  
8 compound was the hydroxy, which was negative when  
9 you tested it in the blood, but it was greater than  
10 25 nanograms per milliliter when you tested it in  
11 the urine?

12          **A**     Yes.

13          **Q**     Why is that not inconsistent?

14          **A**     The urine serves to collect and  
15 concentrate waste products. The body looks at  
16 metabolites, and actually the Delta-9 is waste  
17 product it wants to get rid of it.

18          **Q**     So can you draw any conclusions about the  
19 time or the recency of the ingestion of the THC  
20 based upon the fact that the hydroxy was negative in  
21 the blood and yet greater than 25 nanograms in the  
22 urine?

23          **A**     Well, that alone would put it within ten  
24 hours because you find it in the urine, but a short  
25 half life, maybe a little less than that. So really

1 it wouldn't narrow it down very much. The Delta-9  
2 in the blood is the key.

3 **Q** And then your, the levels that you  
4 detected in the urine for the hydroxy, as well as  
5 the Delta-9-Carboxy, those are quantified as greater  
6 than so many nanograms, is that a cutoff level that  
7 the lab has?

8 **A** In our quantitation, we run a series of  
9 standards going up the long. Okay. If it exceeds  
10 our upper limit, we just report it as greater than  
11 because it is an academic number.

12 **Q** Okay. So there's no conclusion that you  
13 could draw then that if it is greater than 25  
14 nanograms, we can't say that. Well, then it was,  
15 could have been 100 nanograms, which would be four  
16 times any level?

17 **A** You can't say anything based on a urine  
18 concentration for THC.

19 **Q** Okay. And so then let's talk about then  
20 the testing, you mention the carboxy level in the  
21 blood that you found. And you also said that you  
22 would be concerned if you did not have carboxy if  
23 you had a positive for the Delta-9-THC, but no  
24 carboxy that would be problematic?

25 **A** Yes, that would be inconsistent.

1           **Q**     So in this case you detected 45 nanograms  
2 per milliliter of the carboxy in the blood of  
3 Michael Brown, correct?

4           **A**     Yes.

5           **Q**     And is that, can you draw any conclusions  
6 from that the fact that it was also present in the  
7 urine or the fact that it was 12 nanograms that the  
8 THC, Delta-9THC was 12 nanograms per milliliter and  
9 the carboxy was 45 nanograms per milliliter. Can  
10 you draw any conclusions about the time of the  
11 ingestion of the THC from that?

12          **A**     Well, not from the urine, no, but as I  
13 said, from the blood THC, yes.

14          **Q**     Okay.

15          **A**     That is really a hard marker for a couple  
16 of hours. The urine can easily test positive for a  
17 couple of days for the Carboxy-THC. And if you are  
18 smoking like a rastafarian type stogey, it can go  
19 longer.

20          **Q**     Can you tell anything from your findings  
21 about the, about the, I don't know how to phrase  
22 this, about how often the person may have ingested  
23 THC? In other words, would numbers look different  
24 if you were testing a sample from a chronic  
25 marijuana user, somebody that smoked daily, maybe

1 multiple times a day?

2 **A** You can't tell the difference between an  
3 acute dose and a chronic dose in one snapshot.

4 **Q** When you say acute dose, in your lingo  
5 acute means?

6 **A** Say within a couple of hours versus  
7 somebody who smokes every day for a month or two.

8 **Q** Okay. So from your findings you can't  
9 conclude that Michael Brown was a chronic marijuana  
10 user versus perhaps this was just an acute dose. In  
11 other words, something that was taken within a  
12 couple of hours prior to his death?

13 **A** That's correct.

14 **Q** Okay. Now, the 12 nanograms per  
15 milliliter for the THC, you stated that that is the  
16 compound that makes people feel the affects of  
17 marijuana?

18 **A** Yes.

19 **Q** How would you describe, or what do you  
20 conclude from that finding that there were 12  
21 nanograms per milliliter in his blood?

22 **A** The Delta-9 is psychoactive, that means it  
23 has an affect. So when you have a drug that is  
24 psychoactive in your blood stream, it is having an  
25 affect.

1                   You can argue, well, more effect,  
2   less effect, you can argue that yes, but it is  
3   definitely having an affect on you. When you start  
4   looking at it in terms of the overall, well,  
5   marijuana generally, you know, you smoke a joint and  
6   you chill out, that's generally what happens. Okay  
7   does that have to happen? No, it doesn't. There is  
8   a lot of other variables that are associated with it  
9   that depends on your basic chemistry, your basic who  
10   you are as it were.

11                   So that it can have somewhat  
12   different affects. Add to that the question of  
13   dose. If you take, take alcohol. You have a glass  
14   of wine with dinner, okay, or whatever with dinner,  
15   that's one way of doing it.

16                   You are getting the drug, it is  
17   psychoactive, it is having an affect on you. Now  
18   instead you have a quart with dinner, a quart of  
19   scotch. Well, that's going to produce a very  
20   different effect. It is a function of the  
21   concentration, how much goes in you.

22                   Same thing is true with marijuana.  
23   You can get desirable affects one level, but if you  
24   get a massive dose, and you have to remember  
25   marijuana is not regulated. So you don't know the

1 purity you are getting. You don't know if you are  
2 getting Illinois ditch-weed or Acapulco Gold, for  
3 lack of a better example, okay. So it could be very  
4 low purity or very high purity.

5 Again, the same thing can happen. It  
6 is like having a glass of wine with dinner versus a  
7 bottle of scotch. You can get very different  
8 affects depending on how much you use.

9 **Q** Is there also a variable that would  
10 perhaps effect how it was felt by the person  
11 depending on their body mass or their weight? So,  
12 in other words, if a smaller, we know this to be  
13 true with alcohol, a smaller person can have a glass  
14 of alcohol and a larger person maybe twice or three  
15 times the size can have the same amount of alcohol  
16 and the smaller person's blood alcohol level will be  
17 higher, you would expect it, would that be correct?

18 **A** Yes. See, marijuana is technically  
19 classified as a hallucinogen. Cause what it does is  
20 it alters your perception of your surroundings. How  
21 you see things, okay. What information comes into  
22 your mind. It slows it down and distorts it. That  
23 is why it is classified as hallucinogen. .

24 Technically speaking, I mean, you are  
25 not look at pretty birds and flying snakes and so

1    forth, but you are altering your perception of  
2    senses. That's a function of dose. So the more you  
3    have in you, the more effect you can get out of it.

4                   Some people, for example, with  
5    marijuana, it is bound up to nonspecific fat sites.  
6    So if you smoke a joint the first time, you don't  
7    really get a good buzz out of it. The reason for  
8    that is the drug is binding up to nonspecific fat so  
9    it is not hitting your brain, it is not giving you  
10   the effect.

11                   After a couple of times these  
12   nonspecific sites are filled. So the drug is now  
13   free, it gets to your brain and produces, gets to  
14   the threshold and starts producing the effect.

15                   The more you have, the greater the  
16   effect, and it becomes variable at high end. So if  
17   you have, take a mil of highly concentrated  
18   Delta-9THC, that will give you a completely  
19   different effect in smoking a joint. A lot of the  
20   studies they have even done with injections. They  
21   can't really, with alcohol it is straight line  
22   depressant. That just means the more you drink, the  
23   more it depresses you. I don't mean sad, I mean  
24   your nervous system. It slows it down, stops it  
25   from working, makes you goofy, okay.

1                   With THC you can come up, you hit a  
2     certain threshold level that will produce an affect.  
3     As you go up from there, if you take a massive dose,  
4     you can get significantly different affects. Those  
5     affects that are not generally associated with  
6     marijuana.

7           **Q**     So we've discussed a little bit last week,  
8     Sheila and I had a long conversation with you as  
9     well this morning, I spoke with you, we talked about  
10    the affects that you might see or experience, a  
11    person might experience if they were ingesting THC.  
12    And starting with euphoria being the feeling of  
13    happiness or well being, perhaps?

14           **A**     Yes, you are feeling about.

15           **Q**     That's kind of like the chill, right?

16           **A**     Yes.

17           **Q**     And then the next one perhaps could be  
18    lethargy?

19           **A**     Yeah.

20           **Q**     And that's when you don't really feel like  
21    you have the energy to get up and you're just going  
22    to lay around?

23           **A**     You don't do things. It is amotivation.

24           **Q**     After that would be a possible paranoia?

25           **A**     Yes.

1           **Q**     And then would there be hallucination?

2           **A**     It is possible to go to a full-blown  
3 hallucination, yes.

4           **Q**     Okay.

5           **A**     Paranoia and psychotic episodes.

6           **Q**     So when we talked about, you had mentioned  
7 when we talk about hallucinations, it doesn't mean  
8 the person sees pink elephants. It means that  
9 they're not perceiving reality the way it is,  
10 correct?

11          **A**     That is correct.

12          **Q**     Okay. And so if you have a massive dose  
13 of THC, could you experience the hallucination  
14 and/or the psychosis if you had a high enough dose  
15 of THC?

16          **A**     If you got a high enough dose, you could  
17 have a psychotic episode into hallucinations, yes.

18          **Q**     Now, in this particular case when you  
19 tested the blood and you got 12 nanograms per  
20 milliliter for the Delta-9-THC, do you consider that  
21 a high dose?

22          **A**     Okay --

23          **Q**     What conclusions did you make from that?

24          **A**     Well, you have to put things in  
25 perspective. This was a very large individual, I

1 think he was about 300 pounds. So for concentration  
2 of 12 nanograms in a large person, that shows it was  
3 a large dose.

4 In a small person, say like  
5 100 pounds to get to 12 nanograms wouldn't take a  
6 lot. A single joint could easily do that. But when  
7 you talk about a larger body mass, just like  
8 drinking alcohol, larger persons can drink more  
9 alcohol because they have the receptacle to hold it.

10 Q Now, let's compare, because I think most  
11 of us probably have had the experience of consuming  
12 alcohol and over time feeling the affects of  
13 alcohol. And, you know, so, for example, one of the  
14 things that I think we all can probably relate to is  
15 that, for example, if I were to consume a certain  
16 amount of alcohol and my mother who doesn't drink  
17 might consume the same amount of alcohol, we have  
18 the same body mass, she may experience different  
19 affects than I might because I have experienced  
20 drinking alcohol.

21 Now, some people call that tolerance,  
22 is there any similar effect from people that are  
23 used to using marijuana, could they have the same  
24 levels in their system but experience different  
25 feelings?

1           **A**     Well, of course different people with the  
2     same concentration can experience different  
3     feelings. But see, with marijuana, like your  
4     example was the correct straight line depressant.  
5     With marijuana it's the reverse. So the person who  
6     is naive will get much less affects than a person  
7     who has been using it and that's due to the non  
8     specificity of binding sites.

9           **Q**     So based upon your finding that there were  
10    12 nanograms of THC, 12 nanograms per milliliter of  
11    Delta-9-THC in Michael Brown's blood, first off, can  
12    you make any conclusions from your findings within a  
13    reasonable degree of toxicology certainty or as to  
14    the recency in which he may have ingested the THC?

15          **A**     Yes, it is within a couple of hours, maybe  
16    two, three hours on the outside.

17          **Q**     Can you make any conclusions or do you  
18    have an opinion as to the dose that Michael Brown  
19    may have ingested based upon your tests and your  
20    test results?

21          **A**     Given his large body mass, yes. It would  
22    have been a very significant dose. It wouldn't be  
23    just toking on like a simple joint.

24          **Q**     Now, based upon your testing and your  
25    conclusions, can you make any conclusions about the

1 level of impairment that Michael Brown may have  
2 experienced if, before he passed?

3 **A** I can't tell you how he was impaired. It  
4 is like predicting what somebody would do. I can't  
5 tell you that. I can tell you that the drug is  
6 present at a significant concentration that  
7 represents a large dose into Mr. Brown.

8 How he would have behaved and what he  
9 would have done I cannot predict. I know the drug  
10 was having an affect and was impairing his nervous  
11 system.

12 **Q** You would consider he was impaired in some  
13 way?

14 **A** Yes.

15 **Q** But you cannot draw any conclusions that  
16 he was suffering or that he was experiencing  
17 hallucinations or having a psychotic break?

18 **A** That is correct.

19 **Q** Um, we discussed when we came out to talk  
20 to you last week, we also discussed with you, we  
21 asked you if you were familiar with the process  
22 called waxing?

23 **A** Yes.

24 **Q** And you indicated that you were familiar  
25 with what that is?

1           **A**     Yes.

2           **Q**     Can you describe for the grand jurors what  
3 you understand waxing to be and what happens?

4           **A**     Waxing is a process of concentrating the  
5 Delta-9 present in marijuana. It uses gases like  
6 butane and basically it extracts the Delta-9 out of  
7 the marijuana and it is in a highly concentrated  
8 form. So you get a lot more bang for the buck out  
9 of it.

10          **Q**     So you can ingest a smaller piece or  
11 smaller physical quantity and get a more  
12 concentrated level of THC?

13          **A**     A much greater effect, yes.

14          **Q**     Okay. And is there any difference if you  
15 ingest a much higher concentration of THC, is there  
16 a difference in how quickly you would feel those  
17 affects or how long it would last?

18          **A**     Well, it would depend at that point if you  
19 were inhaling it, putting it under your tongue,  
20 smoking it, however you were doing it. But  
21 generally speaking, it is less than ten minutes.

22          **Q**     And less than ten minutes for you to feel  
23 the affects or it would last less than ten minutes?

24          **A**     No, for you to feel the affects. The  
25 affects would come within ten minutes.

1           **Q**     If you ingested a highly concentrated  
2 amount of THC, do you have any opinion as to how  
3 long those affects would last that you would  
4 experience some type of effect?

5           **A**     Probably four to five hours.

6           **Q**     Now, this morning we talked about, and we  
7 did also briefly last week talk about levels of THC  
8 that would indicate or that legally would indicate  
9 someone is presumed impaired.

10          **A**     Yes.

11          **Q**     Now, states such as Colorado and  
12 California, are you familiar, are you aware that  
13 those states have legalized marijuana either  
14 medically or in the case of California  
15 recreationally or Colorado, correct?

16          **A**     Yes.

17          **Q**     And we discussed the fact that those  
18 states have made determinations as to the level that  
19 they would if they detect in the person's blood that  
20 would indicate impairment much in the same way that  
21 alcohol level of .08 is presumptively in most  
22 states, in the State of Missouri you are presumed  
23 impaired.

24                                 Are you aware of the level that  
25 Colorado and California have set for them to presume

1 someone is impaired?

2 **A** Yes.

3 **Q** What is that?

4 **A** 5 nanograms per mil.

5 **Q** So in this case, Michael Brown's level was  
6 over twice that; is that correct?

7 **A** Yes.

8 **Q** But again, you're not, and the same thing  
9 with actually the consumption of alcohol, it impairs  
10 people, but their affects might be different  
11 depending on some of the factors that we've talked  
12 about?

13 **A** Yes.

14 **Q** Um --

15 MS. ALIZADEH: I don't have any further  
16 questions right now. Sheila, do you have any  
17 questions for Dr. ?

18 MS. WHIRLEY: Regarding the waxing, if  
19 Michael Brown ingested through the waxing method  
20 that you discussed, would the butane appear in his  
21 body?

22 **A** No. Butane is so volatile, if I squirted  
23 it here on the desk, talked to you and go back, it's  
24 gone. So it is extremely volatile.

25 MS. WHIRLEY: And in this case, was he

1 actually checked to see if butane was in his brain?

2 **A** Yes, that's part of our routine. We would  
3 check for volatiles such as butane, other inhalants.

4 MS. WHIRLEY: Okay. Obviously, it didn't  
5 appear it is so volatile or whatever. There is no  
6 way to know whether or not he participated in waxing  
7 or not, there is no evidence?

8 **A** Not based on our testing, that is correct.

9 MS. WHIRLEY: Okay. I'm not sure of  
10 everything Kathi asked. I will open it for the  
11 jurors.

12 MS. ALIZADEH: I just want to real quickly  
13 be clear, you cannot say, you're not saying, I'm  
14 assuming you're not saying that Michael Brown was  
15 hallucinating or suffering a psychotic break, there  
16 is no way to know that; is that correct?

17 **A** I can't say that based on our testing,  
18 that is correct.

19 MS. ALIZADEH: But based upon the levels  
20 that you tested or that you got in your testing, you  
21 consider that this dose was within two to three  
22 hours and it was a large dose of THC?

23 **A** That is correct.

24 MS. ALIZADEH: Any more questions?

25 I have a

1 question about a person's hydration level, how that  
2 affects the test. Either prior to or even in this  
3 incident the individual on the street in August for  
4 four plus hours, do you know how that may effect the  
5 result in any way, if it would?

6 **A** Okay. What you are looking at there is an  
7 alteration between the water and the fat in your  
8 body and you are depleting the water, so the fat  
9 becomes a hire percentage. Not a lot of difference  
10 because we lose too much water, you have electrolyte  
11 imbalance, you have a heart attack and die. So  
12 there is a difference on that.

13 On a drug like marijuana where it is  
14 highly lepid soluble, fat soluble, it would just  
15 have more, it would soak up more of it. That's all  
16 it would do. So it really wouldn't alter much of  
17 anything.

18 : Okay. Thank you.

19 **A** Yes.

20 Dr. , with  
21 reference to the psychotic affects of certain types  
22 of drugs, specifically THC. Can you explain to me,  
23 trying to think how to phrase this. For someone who  
24 is at a certain level, you mention that if they  
25 smoked for a month at a time or two weeks at a time,

1 they can build up a certain level in their body.  
2 Can a massive dose at any particular point produce  
3 an entirely different affect than what a person is  
4 used to, you know what I'm saying?

5 **A** Yes.

6 : It is kind of hard to  
7 explain. If somebody who smokes is used to a  
8 certain type of reaction out of a level of THC, all  
9 of the sudden you see a spike in the quantity of it,  
10 what potentially could happen. Is it something that  
11 could be totally different?

12 **A** Yes. See, what you are looking at is like  
13 a steady state so that using the drug on a regular  
14 basis. Then you get a massive dose, it jumps up and  
15 you can switch over into complete toxicity. Most of  
16 the drugs behave that way that you are stable and  
17 then it jumps up.

18 Some drugs, like a couple of the  
19 amphetamines. You can take the same dose today,  
20 tomorrow, then you take it the next day and it's  
21 lethal. Those are the real dangerous drugs.  
22 Marijuana is not like that. So your point is well  
23 taken. You are stable and you have a massive dose  
24 you are going to get a big difference in the affects  
25 and could be completely different.

1 : Thank you.

2 MS. WHIRLEY: Could this amount of THC  
3 that was found in the blood be, is it possible that  
4 someone who is ingesting that amount on a regular  
5 basis and not be dead?

6 **A** Well, marijuana really isn't lethal.

7 MS. WHIRLEY: Okay.

8 **A** So it couldn't kill him. As far as the  
9 affects, it would take a lot of marijuana on a  
10 regular basis to stay at this kind of level. So I  
11 would say that's less likely.

12 MS. WHIRLEY: That's less likely.

13 **A** Yeah.

14 MS. WHIRLEY: That you are consuming this  
15 amount of marijuana?

16 **A** On a daily basis.

17 MS. WHIRLEY: On a daily basis or regular  
18 basis?

19 **A** Yes.

20 Would a  
21 cigar size, I guess, you know how they take the  
22 cigar and they put the marijuana in it. Will a  
23 cigar size give you that kind of dose? I know you  
24 mentioned a joint, but now we're talking about a  
25 cigar?

1           **A**     Is that possible? Yes. See again, purity  
2     like low end purity is like 3 percent Delta-9, high  
3     end is like 20 percent. So that's a huge range,  
4     okay. Is it possible that the cigar got stuck with  
5     the higher end stuff? Yes, it is.

6                                 : You can reach this without  
7     waxing, I guess regular marijuana in the cigar?

8           **A**     I'm not sure, I'm not sure. I think it  
9     would be possible, but I'm not positive on that.

10                                 . I want to make  
11     sure I understand regarding larger person, you talk  
12     about the affects of --

13                         MS. ALIZADEH: Can you speak up a little  
14     bit, sorry?

15                                 : I just wanted to make  
16     sure when you are talking about that, you are  
17     talking about the difference between the affects of  
18     a person who is larger versus the content in the  
19     blood. The affects would not be affected by the  
20     size of the person, but the content in the blood  
21     would be.

22           **A**     That is correct. It is a dose response.  
23     So it's like a smaller person takes less, a larger  
24     person takes more, you get the same affects.

25                                 MS. WHIRLEY: I guess going back to

1 question. When you smoke marijuana and  
2 he's talking about a blunt, through the cigar  
3 wrapper versus the cigarette papers, are you -- you  
4 are likely ingesting more of the marijuana when you  
5 are smoking it in a blunt versus the cigarette  
6 papers because they burn much quicker and smoke,  
7 would you agree or not?

8 **A** Yeah, if it burns much quicker, yes.

9 MS. WHIRLEY: Not that we are marijuana  
10 smokers, you know, but it appears if you watch it on  
11 TV, that the cigarette is burning much faster than  
12 when they smoke with a blunt. I think that's why a  
13 lot of people do the blunt?

14 **A** Yes, because it is the dose and it's the  
15 destruction of the drug while you are not inhaling,  
16 yes.

17 That raises a  
18 question. How is waxing taken into the body, is it  
19 smoked or is it, I mean, is it a waxy, sticky  
20 substance?

21 **A** Yeah, it could be. It could be put in a  
22 blunt and smoked, it could be whatever as long as it  
23 gets into your body.

24 MS. ALIZADEH: Is there a depending, you  
25 know, I think we can all understand that marijuana

1 can be eaten, it can be smoked, apparently it can be  
2 injected, the THC at least. Is there a difference  
3 in how quickly it would impair you or how quickly it  
4 would be in your system depending on how it is  
5 ingested.

6 **A** Sure, oral is the worst. Anything that  
7 goes in your mouth goes to your stomach. It has a  
8 bunch of acids in there, it chews it up and then it  
9 goes to the liver. Once it is picked up by the  
10 blood, it goes into the liver. The liver chews it  
11 up as metabolism. So the oral would give you the  
12 least bang for the buck and probably take the  
13 longest because it has to be absorbed and  
14 metabolized and so on.

15 When you inhale something it goes  
16 into your lungs, okay. And the heart blood goes  
17 from the right side to the lungs, to the left side  
18 and to the body, and goes to what is called the  
19 carotid arteries here in the aortic arch. So  
20 anything that goes in by inhalation gets up to the  
21 brain within like two, maybe three heartbeats. So  
22 it gets in and gives you a much quicker effect.  
23 Especially than oral.

24 So just  
25 in your experience, we'll talk to others who have

1 more hands on with this specific, in your experience  
2 then would you assume that an autopsy or examination  
3 would show in the internal organs would be able to  
4 tell if something was smoked or ingested orally?

5 **A** No, reasonably, no. Not unless there was  
6 something really unusual, like you are inhaling  
7 silica gel, or something like that.

8 MS. ALIZADEH: Or perhaps if the stomach  
9 contents contained.

10 **A** Leafy green material in the stomach  
11 contents.

12 MS. ALIZADEH: Right. Any other  
13 questions?

14 . You said  
15 this THC stuff, if I heard you correctly, it binds  
16 with the fat cells; is that right?

17 **A** Yeah, it does.

18 : Is that why you get hungry  
19 after you smoke a joint? Seriously, I'm just  
20 saying.

21 **A** No.

22 MS. ALIZADEH: I don't know what you are  
23 talking about?

24 : I don't either apparently.

25 **A** No, that has nothing to do with it. What

1 it is, reasonably that is lowering the blood sugar.

2 So you start feeling hungry and get the munchies.

3 MS. WHIRLEY: You said marijuana lowers  
4 the blood sugar?

5 **A** That would be my, yes, that's what I  
6 believe.

7 . If it lowers  
8 the blood sugar, I had an uncle who is diabetic,  
9 when his blood sugar would be very low, he would  
10 get, I'm just going to say it he would get volatile,  
11 he would get agitated very easily. So would that be  
12 a possibility?

13 **A** That would be a possibility, yes. If the  
14 blood sugar got down low enough, that would take,  
15 that would be work.

16 And would the Delta-9-THC  
17 levels have an affect on the blood sugar level?

18 **A** No.

19 : So the higher the  
20 Delta-THC would not necessarily constitute a lower  
21 blood sugar level?

22 **A** Well, it would indicate that, yes, okay,  
23 but it hasn't been like so much THC and so much  
24 sugar, it hasn't done that.

25 . According

1 to the readings of the 45 grams, and in your  
2 opinion, how well could Michael Brown function?

3 **A** That's really tough to say just looking at  
4 the lab test. It is really tough to say. I know  
5 the drug was impairing the system, the exact parts  
6 of his nervous system that were impaired, how that  
7 would be demonstrated I can't predict.

8 MS. ALIZADEH: Any other questions?

9 So you  
10 are saying he could experience some kind of  
11 impairment?

12 **A** Yes, it would be impairment.

13 : Or he could be functioning  
14 normally?

15 **A** No, not normal. The impairment would be  
16 present. The degree of the impairment would be  
17 based on him personally, his history with marijuana,  
18 his underlying chemistry, a whole bunch of other  
19 factors. So how it would exactly affect him is, I  
20 can't predict. I know it would have an affect  
21 because it is psychoactive.

22 MS. WHIRLEY: So a person could be  
23 impaired, because they have this in their system,  
24 but they could be sitting here talking and you might  
25 not even know they were impaired?



1           **A**       I'm not aware of anything.

2                               :   Okay, thank you.

3                   MS. ALIZADEH:   To tell you, I do not  
4 believe we have any kind of medical history or  
5 anything of that nature on him.

6                               Because my question would  
7 be, could some of the drugs be in his system versus  
8 when he was smoking it.  Could that, you know --

9           **A**       Well, it is possible some drugs could be  
10 present, but below detection, our cutoff limits.  
11 There is actually a theory that says you have your  
12 first, from your first spoon of baby food, the  
13 molecules are still floating around in your body,  
14 which is interesting.  So there could be other drugs  
15 present at very low levels.

16                   MS. ALIZADEH:  And just to be clear, THC  
17 is only found in marijuana, correct?

18           **A**       Yes.

19                   MS. ALIZADEH:  It is not like we hear  
20 about people saying I had a poppyseed bagel and so  
21 now I'm going to test positive, THC is only detected  
22 if you have ingested marijuana, correct.

23           **A**       Yes.

24                   MS. ALIZADEH:  Or the concentrated level  
25 of THC?



1 spell your name, please.

2 **A** My name is . It is ,

3

4 **Q** I'm going to ask that you keep your voice  
5 up because there are quite a few fans on, we can't  
6 hear really well. I generally stand back here, so  
7 speak loud enough to have a conversation, okay?

8 **A** Okay.

9 **Q** So, , what is your occupation?

10 **A** I'm a forensic scientist for St. Louis  
11 County Police department.

12 **Q** What does that mean, forensic scientist?

13 **A** Uh, I analyze evidence collected from  
14 crime scenes for bodily fluid. I write reports and  
15 when needed, testify in court.

16 **Q** How long have you been doing that, been in  
17 that capacity as forensic scientist?

18 **A** Almost nine years.

19 **Q** Nine years. Always with St. Louis County?

20 **A** Yes.

21 **Q** And what type of education is required to  
22 do what you do?

23 **A** Um, well, what is required is a bachelor's  
24 degree in biology or a science of that nature. I  
25 have a bachelor's degree in microbiology and a

1 master's of business administration from Miami  
2 University of Ohio.

3 **Q** We have your CV and we are going to pass  
4 that out. It is marked as Grand Jury Exhibit Number  
5 67.

6 (Grand Jury Exhibit Number 67  
7 marked for identification.)

8 **Q** (By Ms. Whirley) It kind of outlines your  
9 training and education as you provided it for me,  
10 correct?

11 **A** Yes.

12 **Q** Okay. Now, what is, you told us what a  
13 forensic scientist is or kind of the job  
14 description, what do you do on a day-to-day basis?  
15 That's what we want to know.

16 **A** Well, I test evidence that comes in for  
17 various cases for, when I say bodily fluids, it is  
18 blood, semen and saliva. I also retain samples for  
19 possible DNA from trace cases, and then write  
20 reports.

21 **Q** Okay. And so you do the initial screening  
22 of items before it goes to DNA for analysis, or to  
23 the DNA unit for analysis?

24 **A** Yes. In our lab we have two separate  
25 sections. So I would, I'm in the biology section, I

1 would do the screening and then if there is anything  
2 that needed to be forwarded or retained for DNA,  
3 that would be packaged and retained and that would  
4 go to the DNA unit and they would do their analysis.

5 **Q** Do you know who did the DNA analysis in  
6 this case?

7 **A** Yes.

8 **Q** Who was that?

9 **A** .

10 **Q** Okay. Did you work alone doing the  
11 biology on this case or did someone else work with  
12 you?

13 **A** I worked alone, I did the case. We did  
14 have a, we are training a new biologist, so she was  
15 actually with me for part of it.

16 **Q** Okay. So I don't know if you actually  
17 told us what type of analysis you performed. You  
18 said you check body fluids and that kind of thing.  
19 What kind of items could have possible DNA on them?

20 **A** In general?

21 **Q** Yeah, in general.

22 **A** Well, body fluids tend to have high  
23 amounts of DNA, so blood from a lot of DNA, as well  
24 as semen and then saliva. And then as far as trace,  
25 I'm sure you've heard, I don't know if you know

1 about trace DNA.

2 **Q** Tell us what that means.

3 **A** Okay. Trace evidence is what is left  
4 behind when a material or a person made contact, so  
5 that can be footprints, fingerprints, soil samples,  
6 hair, fibers, or DNA. In our lab, what we refer to  
7 as a trace case, is something that the biologist  
8 doesn't actually examine, I don't actually test it,  
9 but I would save samples to be tested for DNA.

10 Some examples of this are, um, like a  
11 swab taken from the steering wheel of a recovered  
12 stolen vehicle where it isn't blood, you are trying  
13 to find out who stole the car, who was driving the  
14 car.

15 It could be a shirt left behind from  
16 a robbery, so you would swab that for DNA, or a  
17 knife from a domestic assault. You wanted to know  
18 who was actually holding the knife, so you would  
19 swab it for user DNA.

20 So those are the kind of things that  
21 we consider trace. Where it is not actually a body  
22 fluid that we are testing for, but we think that  
23 there might be DNA left behind. And usually what  
24 this is is from allele cells or skin cells.

25 **Q** Now, at the crime scene the officer or

1 someone actually collects what they think might be  
2 useful for the lab in determining whether there is  
3 DNA present, correct?

4 **A** Yes.

5 **Q** Someone is swabbing and someone is doing  
6 that at the crime scene and then they submit it to  
7 you. Is there a certain way that that must be  
8 presented to you in order for it to be useful, for  
9 you to determine whether or not it has DNA or  
10 potentially --

11 **A** Well, I mean, we don't know because you  
12 can't see anything. So a lot of times the crime  
13 scene will swab things themselves and submit the  
14 actual swabs, or they will submit actual items like  
15 knives or shirts that I would then swab.

16 **Q** Okay.

17 **A** Areas that I think would be useful areas  
18 to swab.

19 **Q** Does the crime scene or the case officer  
20 tell you a little bit about the case for you to  
21 figure out what might be useful?

22 **A** Yes. You do get a brief scenario of what  
23 happened. Like that gives you information about  
24 what is relevant or probative. For example, for a  
25 shirt, typically I would swab areas that would most

1 likely touch the skin. So like cuffs or the  
2 neckline, things like that.

3 **Q** Can you tell us how you began a case, I  
4 mean, it comes to the lab, I guess, and then how do  
5 you get ahold of it?

6 **A** When evidence is submitted to the lab, it  
7 is submitted to the front counter where evidence  
8 technicians take it in, make sure that it is  
9 properly packaged and sealed. We do not except  
10 improperly packaged evidence.

11 So you would get evidence, either in  
12 a box or a package, it would also have a receipt  
13 with it. And the evidence receipt just details all  
14 of the pertinent information as when the incident  
15 happened, the location, what kind of offense it is,  
16 um, who the victim is, who the suspect is, and then  
17 what actually is inside of the packages or boxes.

18 So this evidence is then entered into  
19 our lab system, the actual evidence would be stored  
20 in our vaults, a secure location, until it is  
21 actually worked and the receipts would, they're  
22 stored back in biology and then we work them. It  
23 depends, but usually first end, first out. We do  
24 the crimes against persons cases first, they are  
25 more of a priority.

1           **Q**     And you go to the vault and get the  
2 evidence when it is your case?

3           **A**     Yes.

4           **Q**     And you verify the things you just told us  
5 what is marked as on the evidence receipt is  
6 actually what is contained in the box or the bag?

7           **A**     Yes.

8           **Q**     And that it is sealed, you verify it  
9 hasn't been tampered with?

10          **A**     Well, it comes, when it comes into the  
11 lab, we don't accept improperly packaged evidence.

12          **Q**     And that's your way of verifying that it  
13 is not tampered with?

14          **A**     Right.

15                                 (Grand Jury Exhibit Number 68  
16                                 marked for identification.)

17          **Q**     (By Ms. Whirley) I was going to ask you,  
18 let me move on to something else. What's marked as  
19 State's Exhibit Number 68, which is one of your  
20 crime lab reports, I think it is the first one.

21                 MS. ALIZADEH: Is Q22 the first one?

22                 MS. WHIRLEY: Actually, it is not the  
23 first one, it's the second one. This is the one  
24 with the baseball cap, Q22. Do you have that one?

25                 MS. ALIZADEH: You want me to pass this

1 along?

2 MS. WHIRLEY: Why don't we pass both of  
3 them, if you don't mind, both Grand Jury Exhibit 68,  
4 which starts with specimen Q22. And then 69 is  
5 actually the first one I think you probably worked  
6 that starts with specimen Q1. You have both of  
7 those in front of you?

8 A I do.

9 Q (By Ms. Whirley) We are going to talk a  
10 little bit more specifically about the Michael Brown  
11 case or the Michael Brown shooting. You took some  
12 photographs also, is that right, associated with  
13 this case?

14 A I did.

15 Q We will look at those. And tell me why  
16 did you take photographs?

17 A I can't, when I write my report, I can  
18 describe the items with words, but a picture is  
19 always better.

20 Q Okay. All right. And you take those  
21 pictures for yourself as you are writing your  
22 report, is that what you told us?

23 A What was that?

24 Q You take those pictures for your purposes  
25 to complete your report?

1           **A**     No, we are not required to take pictures.  
2     In specific cases we do take pictures. In this  
3     case, I decided to take pictures of certain items.

4           **Q**     Okay. Now, in this specific case, we see  
5     a Q and then numbers. Can you tell us what that  
6     represents?

7           **A**     A Q is, it just means a questioned item,  
8     so it is something that I am actually testing.  
9     Whereas later in the report you might see a K, and  
10    the K stands for a known, which is just a known  
11    reference standard taken from a person to be used  
12    for elimination or comparison purposes in DNA. And  
13    it is a known reference standard which means it came  
14    from that person in the forms of blood or saliva.

15          **Q**     So you know whose blood or saliva you  
16    have?

17          **A**     Yes.

18          **Q**     And you had a known reference sample from  
19    Michael Brown; is that correct?

20          **A**     Yes.

21          **Q**     Is that in the form of blood?

22          **A**     His blood.

23          **Q**     Okay. Did you have a known sample of the  
24    officer, Darren Wilson?

25          **A**     Yes.

1           **Q**     Was that in the form of saliva?

2           **A**     Yes, it was a buccal swab.

3           **Q**     It is what you referred to as a buccal  
4 swab?

5           **A**     A buccal swab is a swab that is used to  
6 rub against the side of the mouth, against the  
7 cheek. So it takes, actually, where the DNA is  
8 coming from the cheek cells, but in the form of  
9 saliva.

10          **Q**     So that was your way of having a DNA  
11 sample from both the officer and Michael Brown; is  
12 that correct?

13          **A**     Yes.

14          **Q**     Now, you can see we all have a copy of  
15 your report dated, it was entered, it says  
16 8/11/2014, approved on 8/19/2014. What does  
17 administrative approval mean?

18          **A**     That is the signature of a person who  
19 tech-reviewed my report. What a tech review is, it  
20 is just kind of a double-check done by a peer in the  
21 same discipline to insure accuracy between the  
22 analyst notes and the report.

23          **Q**     Now Q1 through Q21 are items that you, I  
24 guess, that are questionable, is that what you said?

25          **A**     Yes.

1           **Q**     Are these items that you took photographs  
2     of also?

3           **A**     I did not take photos of every single  
4     item.

5           **Q**     Okay. All right. Let's start to go  
6     through these. This tells us the items that you  
7     checked based on the information that you were told  
8     and the items that were brought to you; is that  
9     correct?

10          **A**     Yes.

11          **Q**     All right. So you did, just go ahead and  
12     tell us what you did.

13          **A**     Well, you are looking at the first report.  
14     I started with Michael Brown's clothing. So do you  
15     want me to go through Q1 or say everything I did?

16          **Q**     Tell us what you did. You can go through  
17     by Q1, whatever works for you, as long as you tell  
18     us, you know, what you did.

19          **A**     Sure. Q1 was Michael Brown's T-shirt, I  
20     just, we first do a visual examination so I would  
21     describe it, what it looked like.

22                     It had red brown stains, there were  
23     several holes in his shirt. I tested for blood.  
24     And then I also did a swabbing of the non blood  
25     stained areas for possible trace, since it was

1 alleged that there was contact between Officer  
2 Wilson and Michael Brown.

3 It was hard to do this because the  
4 shirt was extremely bloody. So I just swabbed the  
5 areas that were not blood stained.

6 **Q** You, of course, always wear gloves when  
7 you are handling any items; is that correct?

8 **A** Yes, we wear personal protective  
9 equipment, which includes a lab coat, a mask,  
10 gloves, we use sterile equipment, we open one  
11 package of evidence at a time, we clean our work  
12 area.

13 **Q** And these are things you do to prevent  
14 contamination or cross-contamination; is that  
15 correct?

16 **A** Yes.

17 **Q** Just to kind of, I guess, make it go a  
18 little faster since everyone has a copy of the  
19 report, all of these items you actually, did you  
20 test all of these items?

21 **A** I have to go through --

22 **Q** Yeah, go ahead and look at it.

23 **A** All of the clothing I tested, I tested for  
24 blood. As well as there was swabs taken from  
25 Michael Brown's hands, those were all tested for

1 blood as well. And then there were fingernail  
2 scrapings that were submitted, and I tested those  
3 and also swabbed those again for trace in case there  
4 was contact, such as scratching, things like that.

5 MS. ALIZADEH: Can I ask you what did you  
6 swab for trace, the fingernail scrapings?

7 **A** Yes.

8 MS. ALIZADEH: So these fingernail  
9 scrapings were done by someone else, correct, like  
10 at the morgue?

11 **A** Yeah. They labeled it fingernail  
12 scrapings, clippings, but they actually, I looked  
13 back, they were actually clippings.

14 MS. ALIZADEH: Nail clippings.

15 **A** They take nail clippings.

16 MS. ALIZADEH: Okay.

17 MS. WHIRLEY: That was forwarded to the  
18 lab, the nail clippings?

19 **A** Yes. So what we do we swab the underside  
20 that you can tell for possible trace in case, again,  
21 there was contact.

22 MS. ALIZADEH: All right. I didn't know  
23 if you were swabbing a swab when you talked about  
24 it.

25 **A** No, I swab them.

1           **Q**     (By Ms. Whirley) It looks like you  
2     swabbed, there was a swab collected and forwarded to  
3     you that represented the Brown's, the left back of  
4     his hands; is that correct?

5           **A**     Yes.

6           **Q**     And also the right palm, the right palm of  
7     hand?

8           **A**     Yes.

9           **Q**     And right back of hand?

10          **A**     Yes. Those were all tested for blood.

11          **Q**     And then there was a piece of, you have  
12     Q11, apparent skin or hardened nasal mucus?

13          **A**     Yes, when I, when I received it, all the  
14     information really said was something from the  
15     exterior of the door. And looking at it, I did  
16     ultimately know right away what it was. So I called  
17     it apparent skin, or harden nasal mucus, because I  
18     wasn't sure. It was very small. I took a picture  
19     of it.

20          **Q**     Okay. We'll look at those pictures. And  
21     you were told, or it was on the evidence receipt,  
22     where these items came from?

23          **A**     Yes.

24          **Q**     Like from the front exterior door of the  
25     Ferguson Police Department Vehicle 108 for that one?

1           **A**     Yes.

2           **Q**     Then there's also a swab of the rear  
3 passenger exterior door of that same vehicle, which  
4 is Q12?

5           **A**     Yes.

6           **Q**     All right. And then blood stains from the  
7 area on Canfield. And then Q15, actually, the other  
8 items that I talk about when I mention swabs taken  
9 from Brown's hands, it says suspect Brown, and now  
10 on Q15 it says victim's uniform pants, and that is  
11 the officer; is that correct?

12          **A**     Yes.

13          **Q**     The officer's uniform pants when you label  
14 as suspect and victim, what does that mean for you?

15          **A**     When we receive the evidence receipts that  
16 come with the evidence, they are, each case is  
17 assigned a victim or a suspect. I don't declare  
18 this, it was what was already like that when it came  
19 to the lab.

20          **Q**     From the police?

21          **A**     Right.

22          **Q**     So it is not that you are determining who  
23 the victim is or who is the suspect is in this case?

24          **A**     No.

25          **Q**     So you have the officer's uniform pants

1 and you swab the left thigh, why did you do that?

2 **A** Well, those swabs were actually taken by  
3 crime scene.

4 **Q** I'm sorry, that's true, you didn't swab,  
5 they swabbed it. And did you have any information  
6 about why that was swabbed or you just tested it?

7 **A** Well, all I knew was that there was  
8 possible blood on the officer's pants. So they did  
9 swab that to find out whose blood that was.

10 **Q** Okay. And then there was swabs from the  
11 interior left front door of vehicle number 108,  
12 which is Q18?

13 **A** Yes.

14 **Q** Okay. And then you also received swabs of  
15 the officer's weapon; is that correct?

16 **A** Yes.

17 **Q** Now, in Q19, which is the weapon, it says  
18 blood was presumptively detected. Quantity was not  
19 sufficient for confirmatory testing. What does that  
20 mean?

21 **A** Well, I was able to do a presumptive test  
22 for blood, which is just the first step in our  
23 process of testing blood. Presumptive test, it is a  
24 sensitive test, but it is not specific. So it  
25 indicates that the substance you are testing for is

1 possibly there. In this case, blood, so that was  
2 positive.

3 To do a confirmatory test, you need  
4 to actually take more of that sample. Since there  
5 wasn't that much to begin with, I didn't want to use  
6 any more of a sample since there wasn't that much,  
7 it would have to go to DNA.

8 So rather than, I guess, use up any  
9 more of a sample, I just indicated that confirmatory  
10 testing was impossible, but blood was presumptively  
11 detected.

12 **Q** So in this case the DNA section could test  
13 further?

14 **A** Yes.

15 **Q** Okay. And you do say that the swabs were  
16 retained. You also tested Q20, is Wilson's blue  
17 uniform shirt, a swab was submitted?

18 **A** No, I actually swabbed.

19 **Q** You swabbed it, okay. So you swabbed the  
20 left side of his shirt and collar area. So you  
21 just, the whole shirt was submitted and you  
22 determined what to swab?

23 **A** Yes.

24 **Q** Okay. And the uniform pants, is that the  
25 same thing in Q21 with the swabbing?

1           **A**     I did do the swabbing.  And since there  
2     was, there was a blood stain on the pants.  So when  
3     I was swabbing for trace, I avoided that stain.

4           **Q**     Okay.  And now if we look at the other  
5     report, which is Grand Jury Exhibit 68, Q22 through  
6     Q26.  Now, this report looks like it is done on a  
7     different day, or is entered on a different day, and  
8     it is also, I imagine, tested on a different day; is  
9     that correct?

10          **A**     Yes.

11          **Q**     Do you know why it wasn't all given to you  
12     at the same time?

13          **A**     Right.  And typically this happens when  
14     you are working a case right away, right after it  
15     happens.  Sometimes all the evidence doesn't come in  
16     at the same time.  So in this case, I worked all  
17     that I had on the first date and then we received  
18     more to be tested.  So I did that work on a later  
19     date, like a week later.  I work part-time.

20          **Q**     Okay.

21          **A**     So everything would have been done on a  
22     Tuesday or a Thursday.

23          **Q**     That makes me think of something else.  
24     This case was done pretty quickly, correct?

25          **A**     Yes.

1           **Q**     And by that, I mean, you had mentioned  
2     that kind of first-come first-serve, or something to  
3     that effect, generally as you work cases. Was this  
4     case given a priority?

5           **A**     It was.

6           **Q**     Because of the significance?

7           **A**     The significance and the sensitivity of  
8     the nature of the case.

9           **Q**     Okay. So there was a baseball cap, Q22,  
10    that a swabbing, it says, so you swabbed the  
11    baseball cap?

12          **A**     I did.

13          **Q**     And then the flip flop, a separate  
14    swabbing was retained for trace. Did you do  
15    something with the flip flop in Q23?

16          **A**     Yes, there were some reddish brown stains,  
17    so I tested those for blood, but then I also tested  
18    for trace, or as I mentioned before, kind of a wear  
19    profile to identify whose they were.

20          **Q**     And then it looks like you did in Q24,  
21    that was another flip flop, and in Q25 is the  
22    bracelet?

23          **A**     Yes.

24          **Q**     And did you swab the bracelet?

25          **A**     Yes, I swabbed the bracelet for a wear

1 profile.

2           **Q**     And Q26 was another bracelet, correct?

3           **A**     Yes.

4           **Q**     Okay. I want you to look at these  
5 photographs. And this is Grand Jury Exhibit Number  
6 70.

7                                 (Deposition Exhibit Number 70  
8                                 marked for identification.)

9           **Q**     (By Ms. Whirley) I think you looked at  
10 those already, but I want you to confirm that you  
11 are familiar with those photographs and tell us how?

12          **A**     Yes. Do you want me to hold them up?

13          **Q**     We are going to put them on --

14                         MS. ALIZADEH: I will assist in that.

15                         MS. WHIRLEY: Okay, thank you.

16          **A**     Yes, I can identify them. You will see  
17 when it gets up there, but on pictures that I take,  
18 I write the complaint number, which is just the  
19 number assigned by the county for which case it is,  
20 and the Q number and my initials and DSN, which is  
21 my department serial number, and then the date.

22          **Q**     And so this is on the back, there's a  
23 number of the photograph, what number is that one?

24          **A**     26.

25          **Q**     26. I believe these photographs are

1 Numbers 26 through 44. We will make sure as Kathi  
2 is assisting.

3 MS. ALIZADEH: Oh, I need my glasses for  
4 that.

5 MS. WHIRLEY: I'll call out the number.

6 MS. ALIZADEH: That's okay. This is  
7 Number 26.

8 MS. WHIRLEY: Grand Jury Exhibit, which is  
9 all going in this evidence is Number 70. And I am  
10 just identifying the photograph by a number.

11 MS. ALIZADEH: We've done that in the  
12 past.

13 MS. WHIRLEY: Right, okay. So that first  
14 one, Kathi had put it on, and you have kind of  
15 already told us about this one. But again, what are  
16 we looking at now that everybody can see it.

17 **A** That is what, again, because I didn't know  
18 exactly what it was at the time, but that was what I  
19 called apparent skin, or hardened nasal mucus, from  
20 outside of the car on the door.

21 **Q** Okay.

22 **A** You can see it's small, the measurement is  
23 in centimeters.

24 **Q** I see. And those numbers at the top, that  
25 99 represents what?

1           **A**     99 represents County.

2           **Q**     Their municipal code?

3           **A**     Their municipal codes to, like Ballwin is  
4     like 02. So anything that is not in a municipality  
5     is considered County, which is 99. 14 is the year,  
6     and the 43984 is just the actual number that was  
7     assigned.

8           **Q**     Okay. And then that Q11 would correspond  
9     with the report that we have that has Q11; is that  
10    correct?

11          **A**     Yes.

12          **Q**     We look on our report dated, entered on  
13    8/11/2014. Q11 says one small piece of apparent  
14    skin or hardened nasal mucus, which you talked about  
15    already.

16                    And those are your initials?

17          **A**     Yes.

18          **Q**     And that's your DSN?

19          **A**     Yes.

20          **Q**     And then the date that you worked it?

21          **A**     Yes.

22          **Q**     Okay, all right, thanks.

23                    MS. ALIZADEH: Just to clarify, you said  
24    this measure is centimeters?

25          **A**     Yes.

1 MS. ALIZADEH: How do you know that? Did  
2 you notate that or do you just know by looking at it  
3 or do you remember it?

4 **A** Those are our rulers that we use, they're  
5 disposable rulers that are measured, they're  
6 centimeters.

7 MS. ALIZADEH: Okay. The way it is laying  
8 it appears to be about 1 centimeter in length?

9 **A** Yes.

10 MS. ALIZADEH: Okay. We're done with that  
11 one.

12 MS. WHIRLEY: Yeah.

13 MS. ALIZADEH: Moving on.

14 **Q** (By Ms. Whirley) And then this is Number  
15 27 and tell us what we are looking at on that one.

16 **A** That is Officer Wilson's shirt.

17 **Q** Now, I want you to speak up a little bit  
18 if you can.

19 **A** Sorry. Officer's Wilson uniform shirt.

20 **Q** Okay. And that Q20 would correspond with  
21 Q20 on our report, right, that we looked at?

22 **A** Yes.

23 **Q** Okay. And as you are talking, would you  
24 let us know which items, I'm not going to assume  
25 that they all were, which items were forwarded to

1 DNA for further analysis? We know that first one,  
2 Number 26 photo was, correct?

3 **A** Yes.

4 **Q** Number 27, was it forwarded to DNA for  
5 analysis?

6 **A** The shirt, yes. This is -- I swabbed the  
7 left side of the shirt, the collar, the shirt area,  
8 for trace. Again, the alleged contact between  
9 Michael Brown and Officer Wilson. So I would have  
10 just taken a sterile swab, got it wet, swabbed the  
11 area, and did that for DNA.

12 **Q** That's the actual shirt?

13 **A** That is the shirt. This picture is a  
14 little better.

15 **Q** Okay. And this is Number 28.

16 MS. ALIZADEH: Can I ask a question? In  
17 the old days you used to take cuttings from fabric  
18 items, correct? When I say the old days, might have  
19 been before your time.

20 **A** We did. You can do either.

21 MS. ALIZADEH: In this case you didn't  
22 take cuttings?

23 **A** Right. You can get, you could cover a  
24 larger area surface area. If I'm actually taking a  
25 swab to get the most possible DNA with trace cases

1 with trace evidence, there is not going to be as  
2 much DNA left behind as if someone is bleeding.

3 MS. ALIZADEH: Okay.

4 **A** So to try to maximize that rather than  
5 take a cutting of a small area. Plus, you don't  
6 know where, you know, where there was contact.

7 MS. ALIZADEH: Correct. And in this case,  
8 when you visually examine this shirt, did you see  
9 anything that looked like apparent blood?

10 **A** No.

11 MS. ALIZADEH: And had you seen something  
12 that looked like apparent blood, would you have  
13 actually swabbed that spot?

14 **A** Yes.

15 MS. ALIZADEH: But in this case, because  
16 you didn't see anything, you just kind of doing a  
17 broad brush on the shirt?

18 **A** Yes.

19 MS. ALIZADEH: And that's cause you have  
20 had information from a case officer that perhaps  
21 Michael Brown touched the shirt of the officer on  
22 the left side?

23 **A** Yes.

24 MS. ALIZADEH: Okay. And so when you said  
25 this was forwarded to the DNA section, you forwarded

1 the swabs, correct?

2 **A** Yes.

3 MS. ALIZADEH: The shirts repackaged?

4 **A** The shirt was, yes, kept in. Would have  
5 been finished, completed and sent to property  
6 control, which is our evidence goes.

7 MS. WHIRLEY: Would that be true for all  
8 clothing items, is that you just submit the swabs to  
9 DNA?

10 **A** Yes.

11 **Q** (By Ms. Whirley) And repackage?

12 **A** The actual clothing items, they weren't  
13 sent to DNA. It would be either cuttings that I  
14 took or swabbings that I took, that would go to DNA.

15 MS. ALIZADEH: And to be clear on this  
16 shirt, you swabbed two areas, the collar area; is  
17 that correct?

18 **A** Yes.

19 MS. ALIZADEH: When you say the collar  
20 area because this collar goes all away the around  
21 the shirt, was it what area?

22 **A** I just swabbed anything on the left front  
23 side. Nothing around the back. So I think in the  
24 other picture is better.

25 MS. ALIZADEH: This is 28, Sheila already

1 identified that as 28. So you can see the shirt,  
2 there's a laser pen right in front of you, laser  
3 pointer. Can you show the jurors when you talk  
4 about swabbing the collar, where did you swab?

5 **A** So, I would have swabbed or I did swab  
6 this area right here, just the front. And then the  
7 left side of the shirt, all right here.

8 MS. ALIZADEH: Including the sleeve?

9 **A** Including the sleeve, yes.

10 MS. ALIZADEH: So when you swabbed that  
11 left side, the whole left side of the shirt pretty  
12 much, did you just use one swab or did you take  
13 several swabs of that area?

14 **A** I think I took two. Usually something in  
15 that area, that big I would have taken two, two  
16 swabs.

17 MS. ALIZADEH: Okay. Both of those were  
18 forwarded to DNA?

19 **A** Yes.

20 MS. ALIZADEH: And then for the collar,  
21 did you do one or two, do you recall?

22 **A** It was two swabs for the entire area.  
23 They weren't separated.

24 MS. ALIZADEH: So you didn't swab the  
25 collar and the left side separately?

1           **A**     No.  So I basically, pretend my laser  
2 pointer is two swabs.  So I swabbed here, swabbed  
3 here, swabbed here, swabbed here.  (indicating)

4                   MS. ALIZADEH:  Okay.

5           **A**     Altogether.

6                   MS. ALIZADEH:  So, for example, if swab  
7 has DNA on it that identifies somebody, you are not  
8 going to be able to say whether it was on the collar  
9 or elsewhere on the shirt?

10          **A**     No.

11                   MS. ALIZADEH:  Okay.  That's what I wanted  
12 to know.

13          **Q**     (By Ms. Whirley) What is your next photo?

14          **A**     That is Officer Wilson's pants.

15          **Q**     This is Number 29.

16          **A**     Uh-huh.  And again, I did a close-up  
17 picture to get my information on them and then  
18 there's one taken from farther away, which is  
19 probably a little more helpful to see the item in  
20 its entirety.

21          **Q**     What did you do with this piece of, this  
22 item?

23                   MS. ALIZADEH:  I'm showing Photo 30.

24          **A**     So the left, I swabbed the left, again,  
25 the left side.  So just swab the areas.

1 MS. WHIRLEY: Can you see it okay?

2 **A** Yeah, I can see it. I swabbed, again,  
3 take two swabs, swabbed this area. There was an  
4 area, I think it was in this location. This picture  
5 isn't perfect to see the blood stain, but I did not  
6 swab that area because swabbing that area you would  
7 get blood of whoever at the time. I didn't know  
8 whose it was. So for trace, since I'm trying to  
9 find if there was contact, so swabbed any of the non  
10 blood stained areas.

11 **Q** (By Ms. Whirley) So there was blood stain  
12 on the pants?

13 **A** Yes.

14 MS. ALIZADEH: And you tested that for  
15 blood?

16 **A** I tested that in the swabs that were  
17 submitted.

18 MS. ALIZADEH: Okay. So the blood stain  
19 was swabbed by the crime scene?

20 **A** Yes.

21 MS. ALIZADEH: All right.

22 **Q** (By Ms. Whirley) This is marked as photo  
23 number, these should be sequential, this one is 31.  
24 What is that?

25 **A** That is Michael Brown's T-shirt.



1 : Yeah.

2 MS. WHIRLEY: You did swab the non blood  
3 areas for that purpose?

4 **A** Yes, uh-huh. In case, if there was,  
5 again, if Officer Wilson grabbed his shirt.

6 Okay.

7 **A** It was hard in this instant. The shirt  
8 was blood soaked. So I did, again, do the same  
9 thing for trace DNA. I took two swabs and just  
10 swabbed the non stained areas.

11 **Q** (By Ms. Whirley) This is the back of the  
12 shirt in Exhibit 31, I think we said?

13 **A** That is the back.

14 MS. ALIZADEH: There will be a DNA person  
15 testifying about the DNA at some point.

16 MS. WHIRLEY: So that will be Photo Number  
17 32.

18 MS. ALIZADEH: Yes.

19 **Q** (By Ms. Whirley) Were you told or did you  
20 have any idea where the officer allegedly grabbed  
21 Michael Brown?

22 **A** No.

23 **Q** You just swabbed all non blood, well, not  
24 all, but I mean, what did you swab, show us what you  
25 swabbed. This is the front of the shirt, is this

1 32?

2 **A** Yes.

3 **Q** This is the front of the shirt?

4 **A** It is the front of the shirt.

5 **Q** Most of the blood appears to go on the  
6 right side of the shirt?

7 **A** Yes.

8 **Q** Okay.

9 **A** So I just swabbed, you know, areas that  
10 were not blood stained, you know.

11 **Q** Okay.

12 **A** Whether or not there was contact at these  
13 places, I don't know. It was just --

14 **Q** Okay.

15 MS. ALIZADEH: You are just looking for an  
16 unbloody place?

17 **A** Yes.

18 MS. ALIZADEH: When you said, you moved  
19 the laser pointer a lot in the area of that shirt,  
20 were you using, when you swab, are you holding two  
21 swabs at the same time?

22 **A** Yes.

23 MS. ALIZADEH: Do you just do one swabbing  
24 of that whole area or did you do different areas?

25 **A** Different areas. So again, they were

1 riddled with blood stains. I just had to do  
2 different areas.

3 MS. ALIZADEH: How many swabs total did  
4 you do?

5 **A** I think two.

6 MS. ALIZADEH: That was my question, the  
7 same two swabs are covering the entire places you're  
8 swabbing?

9 **A** Yes.

10 MS. ALIZADEH: You are not going underarm  
11 here and the tail of shirt from another spot?

12 **A** No. And again, for a trace, we are trying  
13 to collect as much DNA as possible. So by keeping  
14 it to two swabs, rather than separating it. If  
15 there was something to collect, would be more likely  
16 to collect it with less swabs than large quantity.

17 **Q** (By Ms. Whirley) Okay. And this one,  
18 which is Number 33, what did that represent?

19 **A** That's actually the first picture that I  
20 took, just to zone in on the Q and my initials and  
21 complaint number.

22 **Q** That says Q7?

23 **A** Yes. I usually take a picture close-up so  
24 that you can get the information, the date, my  
25 initials, my DSN, and then take my picture from

1 farther away so you can see the whole item.

2 MS. ALIZADEH: Can I just go back really  
3 quickly.

4 The apparent skin, or hardened nasal mucus  
5 that you looked at, did you swab that and forward  
6 the swabs to the DNA section, or did you forward the  
7 whole piece you said of whatever it was.

8 **A** The whole piece did go, but I took a  
9 cutting of it. What we do with either the swabs in  
10 this case, that little piece, I would have sampled a  
11 section and put it in a tube and that's what DNA  
12 would actually test. And the remainder of that  
13 section I took approximately 4 millimeters by 3  
14 millimeters, and that's what actually the DNA unit  
15 would actually test.

16 The rest of that, the remainder also  
17 went to DNA in case they need to do further testing.

18 Same thing would happen with the  
19 swab. Like those two swabs that I took for trace, I  
20 sampled half of each swab, put that in a tube and  
21 that's what DNA you would be testing. And then the  
22 remainder of those swabs would be put in a container  
23 and they would be transported together. Does that  
24 make sense?

25 MS. ALIZADEH: Yes, I think so. So the

1 apparent skin or hardened nasal mucus, did you do  
2 any testing on that yourself other than to take a  
3 swab, take the piece out of it?

4 **A** I tested it for blood, and then I did a  
5 test to confirm blood and determine probable  
6 species. What that means, this test is called  
7 Hemastix. What it does is that if it's positive, it  
8 confirms that it is blood and it is also presumptive  
9 for human species. And the reason why we can't say,  
10 oh, it is human blood for sure is that there are  
11 some other primates and ferrets blood that will --

12 MS. ALIZADEH: Ferrets?

13 **A** Ferrets, yeah. I don't know why. That  
14 have reported given positive results. So in that  
15 case, the way we report it on my report is that for  
16 Q11, that examination discloses presence of blood as  
17 probably human organ.

18 **Q** (By Ms. Whirley) Okay. For this item as  
19 Q7; is that correct?

20 **A** It's Q1.

21 **Q** Q1. That's what threw me off because I'm  
22 looking at the report, still looks like a seven to  
23 me, I don't know if anybody else thought that or  
24 that's just me. But that's actually Q1?

25 **A** Yeah, I think what maybe you are seeing is

1 the bracket that I put after that.

2           **Q**     I'm glad you clarified that. So Q1 is  
3 the, because it was not corresponding with the  
4 report, that's why I was a little confused, but now  
5 it does. It is the gray T-shirt. Okay, all right.  
6 This should be 34.

7                                 And these are?

8           **A**     These are Michael Brown's shorts.

9           **Q**     Okay.

10          **A**     It's the front, no, the back.

11          **Q**     That's the back of the shorts. Just  
12 zooming in and focusing, but these are the back of  
13 the shorts. Do you know what kind of stain that is  
14 on the back, did you test that?

15          **A**     I tested overall for blood. I confirmed  
16 blood. I don't confirm each stain.

17          **Q**     Do you know which stain you confirmed?

18          **A**     Um, the one that I tested was on the lower  
19 left leg.

20          **Q**     Show us with the laser pointer.

21          **A**     Um, it would be on the front in the next  
22 photo.

23          **Q**     So you didn't confirm any blood on the  
24 back?

25          **A**     No.



1 bleeder, would you have maybe tested more areas of  
2 the pants.

3 **A** They could have been tested in that  
4 situation. That is where actual cuttings would have  
5 been taken from different areas to be tested for  
6 DNA. The only things that was tested for DNA, and  
7 this was for trace, again, on the nonstained areas.

8 **Q** (By Ms. Whirley) You checked nonstained  
9 areas on these shorts too?

10 **A** Yes. So again, areas that were not  
11 stained did the same thing, two swabs.

12 **Q** Did you know if there was anything in the  
13 pockets or is that something that you would not deal  
14 with?

15 **A** Yes, I checked.

16 **Q** You checked the pockets. Okay. It looks  
17 like something, I was just wondering.

18 MS. ALIZADEH: Was there anything in the  
19 pockets?

20 **A** No.

21 MS. ALIZADEH: Would that be the inside of  
22 the pockets, you know when you turn a pocket inside  
23 out, there's fabric. Do you know what that is that  
24 looks like in that picture?

25 I'm going to let you look at it.

1           **Q**     (By Ms. Whirley) But did you check the  
2     pockets?

3           **A**     Oh, actually, I think it is the velcro,  
4     there's velcro.

5                   MS. ALIZADEH: For the pocket?

6           **Q**     (By Ms. Whirley) And then here --

7           **A**     That's the inside of the pocket.

8           **Q**     Okay. And you checked, there was nothing  
9     in the pockets?

10          **A**     Right.

11          **Q**     Correct, okay. So --

12                   MS. ALIZADEH: You want this still up  
13     here? You were done with that.

14                   MS. WHIRLEY: I think I'm done with that.

15          **Q**     (By Ms. Whirley) So Number 36. What are  
16     we looking at there?

17          **A**     This is, these were kind of backwards. So  
18     this, again, was the first picture that I took of  
19     the shorts just to show the complaint number, my  
20     initials, DSN, date.

21          **Q**     So what is that Q number?

22          **A**     Q2.

23          **Q**     Q2. What's that other number next to it,  
24     or symbol?

25          **A**     A bracket.

1           **Q**     Just a bracket.  That's what is throwing  
2 my math, that's Q2?

3                   MS. ALIZADEH:  Kind of like a greater than  
4 symbol.

5           **A**     Yes.

6                   MS. ALIZADEH:  Like an arrow kind of  
7 thing.

8           **Q**     (By Ms. Whirley) What does it represent?

9           **A**     It doesn't mean anything.  It just is,  
10 that's just how I write it.  I do the Q and then  
11 just showing my initials and the date all done at  
12 the same time.

13          **Q**     I see, okay.  And what did you do with  
14 this piece of, this item?

15          **A**     Well, these are Michael Brown's shorts  
16 that I swabbed the non stained areas for trace.

17          **Q**     You also swabbed this area, is that near  
18 the waist band?

19          **A**     Yes, so any non stained areas.

20          **Q**     Okay.

21                   MS. ALIZADEH:  Did you swab the belt as  
22 well?

23          **A**     Yes, because that is a good place.  When  
24 you are swabbing for trace on clothing, a lot of  
25 times pockets, collars, belts, those are areas that

1 are easily grabbed. So, yes.

2 **Q** (By Ms. Whirley) Okay. This is Photograph  
3 Number 37. That's on your other report beginning  
4 with, I think, Q22, correct?

5 **A** Yes.

6 **Q** Okay. And this was submitted another day.  
7 What did you do with this item?

8 **A** I swabbed this hat for wear DNA just  
9 because it wasn't identified on the receipt as  
10 belonging to someone in particular. So I just  
11 swabbed areas that would touch skin. If you're  
12 wearing it on the hat, it is the inner rim of the  
13 hat of the bill.

14 **Q** This is number 38, also a photograph of  
15 the Cardinal baseball cap, correct?

16 **A** Yes.

17 **Q** You just gave us another view of it I see?

18 **A** Yes.

19 **Q** All right. And then Number 39. So you  
20 also took photographs of the flip flops that you  
21 were told he was wearing; is that right?

22 **A** Yes.

23 **Q** And that's 39 and 40, which I will show in  
24 a moment. Did you do anything with that spot that's  
25 there that we're looking at?

1           **A**     Yes.

2                   MS. WHIRLEY: We had an interruption for  
3 the alarm sounding. We are good now. So we were on  
4 Number 39, Photograph Number 39 and Number 40, which  
5 we will show in a minute. They are both pictures of  
6 the flip flops that you were told Michael Brown was  
7 wearing, correct? Tell us was there anything of  
8 evidentiary value that was lifted from those flip  
9 flops?

10           **A**     Well, I tested orange brown stain for  
11 possible blood.

12           **Q**     Is that what we are looking at here?

13           **A**     For Q23, I tested reddish brown stain on  
14 the outside left side, so yes.

15           **Q**     (By Ms. Whirley) Everybody see that stain?

16           **A**     And then I also, let me see. I also  
17 swabbed the top of the sole area and the under side  
18 of the strap, the white strap, for trace for who was  
19 wearing. Again, like the hat, I didn't know who it  
20 belonged to.

21           **Q**     Okay. And this is Number 40. We see a  
22 little speck on 40 too, did you test that also?

23           **A**     I did. I tested, my notes one of four  
24 small reddish brown stains.

25           **Q**     Okay. And did you confirm it to be blood?

1           **A**     The quantity was not sufficient so I  
2     didn't confirm it. And then I also, like the other  
3     flip flop I swabbed, I will show you, I swabbed the  
4     sole area and then underneath the strap for trace.

5           **Q**     And this is 41. This was submitted to  
6     you, correct?

7           **A**     Yes.

8           **Q**     What did you do with this?

9           **A**     Again, there was no one code as to who it  
10    belonged to. To get a wear DNA, I just swabbed the  
11    entire bracelet for trace DNA.

12          **Q**     So that's a bracelet?

13          **A**     Yes.

14                 MS. ALIZADEH: And just to be clear  
15    because we have two bracelets, this is the bracelet  
16    that is rubber with yellow, white and black  
17    coloring?

18          **A**     I described it as black, yellow and white  
19    rubber rainbow type.

20          **Q**     (By Ms. Whirley) I'm sorry, go ahead.

21          **A**     Type bracelet. Per the receipt, it was  
22    recovered in front of 2964 Canfield.

23          **Q**     It is identified as Q25, which is also in  
24    your report identifying it, correct?

25          **A**     Yes.



1 : Okay.

2 . Were these his  
3 bracelets, do we know that?

4 MS. WHIRLEY: We'll talk to the DNA person  
5 to see if anything of evidentiary value came from  
6 the swabbing because you really can't talk about  
7 that, correct?

8 **A** No, I just swab and prepared all the  
9 samples for DNA. The DNA analyst will be able to  
10 answer those questions.

11 MS. WHIRLEY: The skin cells or anything  
12 on it, yes.

13 **Q** (By Ms. Whirley) The last two photos are  
14 43 and 44, and they are socks, correct?

15 **A** Yes.

16 **Q** We'll do 43 first.

17 **A** They are from the first report.

18 **Q** Okay. And from the first report, and  
19 that's Q?

20 **A** It is Q3.

21 **Q** Q3.

22 **A** So those were Michael Brown's socks.

23 **Q** You were told they were his socks,  
24 correct?

25 **A** Yes, it was indicated on the receipt that

1 they were his socks.

2 **Q** Okay. And you indicate that they had  
3 reddish brown stains throughout, at least Q3 did?

4 **A** Right.

5 **Q** You have both of them as Q3, pair of  
6 socks, got it. I see now. I just had to look. So  
7 reddish brown stains, did you swab that for, or was  
8 it --

9 **A** No, I just tested for blood.

10 **Q** Okay. And you confirmed blood?

11 **A** Yes.

12 MS. ALIZADEH: And this is Photograph 44.

13 And, , when you look at that, in this  
14 area right here, did you mark with, is that your  
15 marking of the area?

16 **A** Yes.

17 MS. ALIZADEH: Like with a Sharpie or  
18 something?

19 **A** With a Sharpie. That's the area that I  
20 tested.

21 MS. ALIZADEH: For blood?

22 **A** For blood.

23 MS. WHIRLEY: That's really all I have,  
24 Kathi.

25 **Q** (By Ms. Alizadeh) So just in summary, can

1 you tell me of the items, of the items you tested,  
2 you found apparent blood on the officer's pant leg,  
3 correct? Did you test that stain on the officer's  
4 pant leg?

5 **A** I tested the swabs, I didn't doubly test  
6 it, so I tested the swabs that came from the crime  
7 scene from the pant.

8 **Q** Okay. And did you determine that was  
9 blood?

10 **A** Yes, they were blood.

11 **Q** And you didn't see any apparent blood on  
12 the shirt of the officer, correct?

13 **A** Correct.

14 **Q** And then, you know, we've talked about the  
15 shirt of Michael Brown, the pant and the socks all  
16 had apparent blood on them, correct?

17 **A** Or confirmed blood, yes.

18 **Q** Or confirmed. I'm mixing my terms.  
19 Apparent is when you're not you sure what it is, but  
20 it looks like it?

21 **A** Right.

22 **Q** And then on the sandals, you didn't have  
23 enough to confirm that it was blood; is that right?

24 **A** Yes.

25 **Q** And then what about the swab from the gun,

1 there were two swabs submitted from the gun. Did  
2 you test those swabs?

3 **A** I tested that for blood. Yes, the swabs,  
4 they were, they had reddish brown stains and black  
5 stains on the swab. Since it had a reddish brown  
6 stain, I tested it for blood. It was presumptively  
7 positive for blood, but the quantity was not  
8 sufficient for confirmatory testing. Again, I  
9 didn't want to --

10 **Q** Destroy the sample?

11 **A** Yes.

12 **Q** Consume the sample?

13 **A** Yes.

14 **Q** That was presumptive positive for blood,  
15 but you didn't do a confirmatory test and you  
16 forwarded that to the DNA section, would that be  
17 right?

18 **A** Yes.

19 **Q** And then what about the swabs from the  
20 interior of the door of the police vehicle, did you  
21 test those swabs?

22 **A** I tested, well, there were, there were  
23 several. So you're saying that interior, I received  
24 numerous swabs from the car. Do you mean in  
25 general, or you want me to go through each one?

1           **Q**     Well, I'm thinking in particular there  
2     were photographs that were taken by                    that  
3     there was reddish brown stain on the driver's side,  
4     on the driver's door, on the inside of the door?

5           **A**     Okay. So what I have is Q12 was a swab  
6     with reddish brown stains from the driver rear  
7     passenger exterior door.

8           **Q**     Driver rear?

9           **A**     Rear passenger exterior door, Ferguson PD  
10    108.

11          **Q**     That's the exterior. Do you have one for  
12    the interior of that door?

13          **A**     Yes. Swabs with reddish brown stains from  
14    interior left front door handle.

15          **Q**     Yes?

16          **A**     Yes, I confirmed blood on those.

17          **Q**     So that was confirmed blood?

18          **A**     Yes.

19          **Q**     Let's go back. You talked about the swab  
20    that you received that was from the exterior rear  
21    driver's door.

22          **A**     Yes.

23          **Q**     And I recall we had a photograph that was  
24    taken by                    that had a reddish brown spatter  
25    perhaps, I don't know what you might call it, but if

1 that is the swab that you tested, what did you  
2 determine about that?

3 **A** I determined that it was blood of probable  
4 human origin.

5 **Q** Is that a presumptive test or is that a  
6 confirmatory test?

7 **A** It is confirmatory for blood, but it is  
8 presumptive for the species just because there has  
9 been reporting of some upper primates and ferrets  
10 producing the same result. So we say probable human  
11 origin for that.

12 And since it was on the exterior of  
13 the car, that's why I wanted to do that to test or  
14 give a possible species result just because it was  
15 outside the car.

16 **Q** So it is conclusive for blood on the  
17 outside of the door, conclusive for the blood on the  
18 inside of the door, conclusive or presumptive for  
19 blood on the gun?

20 **A** Yes.

21 **Q** And then conclusive for blood on the swabs  
22 that were on the pant leg for the stain on the pant  
23 leg, correct?

24 **A** Yes.

25 **Q** And then Mike Brown's clothes you have

1 already testified about that.

2 Did you do any blood, did you test  
3 for blood on the apparent skin or hardened nasal  
4 mucus? I know you said you took a sample from that  
5 to forward to the DNA section, did you test it for  
6 blood?

7 **A** I did. I confirmed it for blood and also  
8 for presumptive species for that was positive.

9 **Q** And that was on the outside of the car as  
10 well?

11 **A** Yes.

12 **Q** And all of these things that tested  
13 positive for blood were forwarded to the DNA lab,  
14 the DNA section, correct?

15 **A** Not every item, but the probative items I  
16 confirmed blood on, such as Michael Brown's  
17 clothing, those samples weren't forwarded. I can go  
18 through each of the items that I did forward, I have  
19 a sheet.

20 **Q** Well, if I asked you the skin/nasal mucus,  
21 that actually a sample got forwarded to the DNA  
22 section, correct?

23 **A** Yes.

24 **Q** And then what about the reddish, the blood  
25 that you determined on the outside of the driver's

1 door, did that go to DNA?

2 **A** Yes.

3 **Q** The blood that you confirmed on the inside  
4 of the driver's door, that went to DNA?

5 **A** Yes.

6 **Q** And then the blood that was on the,  
7 swabbed from the officer's pant leg?

8 **A** Yes.

9 **Q** That went to DNA, correct?

10 **A** Yes.

11 **Q** And then the, now, you said that you could  
12 not do a confirmatory test on what you detected was  
13 presumptive positive for blood on the gun swabs, but  
14 you forwarded those swabs to the DNA section,  
15 correct?

16 **A** Yes.

17 **Q** And then you've already testified about  
18 the swabs, places you swabbed for trace evidence.  
19 On the officer's shirt that was forwarded to the DNA  
20 section, correct?

21 **A** Yes.

22 **Q** On the officer's pants?

23 **A** Yes.

24 **Q** And the pants and shirt of Michael Brown,  
25 did you forward those, the trace swabs?





1           **Q**     Are employed with the St. Louis County  
2 Police Department; is that correct?

3           **A**     That's correct.

4           **Q**     And how long have you been employed with  
5 them?

6           **A**     It will be four years in February.

7           **Q**     Did you do any other scientific work  
8 before?

9           **A**     Yes, previous to my work with St. Louis  
10 County, I was a biologist and a DNA analyst with the  
11 St. Louis Metropolitan Police Department Crime  
12 Laboratory for just over six years.

13          **Q**     You have a total of what, is it ten years  
14 or more?

15          **A**     Approximately, yes.

16          **Q**     What type of work, tell us about your  
17 education?

18          **A**     I have a bachelor's degree in biology, as  
19 well as a bachelor's degree in anthropology from the  
20 University of Missouri-Columbia. And then I have a  
21 master's degree in biology from Washington  
22 University.

23          **Q**     Okay. And we also have a copy of your CV  
24 that you provided for us. We have it marked as  
25 State's Exhibit, I'm sorry, Grand Jury Exhibit

1 Number 72.

2 (Grand Jury Exhibit Number 72  
3 marked for identification.)

4 Q (By Ms. Whirley) That kind of outlines all  
5 of your credits and education and training. So we  
6 don't have to spend a lot of time talking about  
7 that.

8 A Okay.

9 Q At least at this stage. Now,  
10 approximately how many DNA cases have you worked?

11 A Approximately 1,400.

12 Q Okay. Can you tell us, a case comes to  
13 you, how does it start for you, a case?

14 A Sure. Generally evidence is collected  
15 from a scene or from a hospital or from other  
16 medical examiner's office, et cetera. That evidence  
17 is submitted to the laboratory and a biologist or  
18 biological screener obtains that evidence from the  
19 vault, they process it for whatever bodily fluids or  
20 potential DNA may be there.

21 They perform their testing and they  
22 collect samples from the various areas of the items  
23 and then they forward that on to DNA, which is where  
24 I come in.

25 Q They forward that to you?

1           **A**     Correct.

2           **Q**     You are one of the DNA analyst.

3           **A**     Correct.

4           **Q**     How is it determined who is going to get  
5 the case?

6           **A**     It's generally just availability, so  
7 whoever the next available person is will take the  
8 case.

9           **Q**     And I want to get a little bit more  
10 general information out there, but before I go to  
11 ask those questions, I do want to specifically state  
12 that you worked the Michael Brown shooting case; is  
13 that correct?

14          **A**     Yes.

15          **Q**     And did you work this one in an  
16 expeditious fashion or any different than any other  
17 case?

18          **A**     It was worked just like any other case,  
19 but it was worked, I guess, as a priority.

20          **Q**     Okay. Priority is a better way to put it.  
21 Why, do you know why it was made a priority?

22          **A**     Due to the sensitive nature of the case.

23          **Q**     Within the United States, all the  
24 information that's coming out, we are trying to get  
25 this completed, right?

1           **A**     Yes.

2           **Q**     Or you were trying to get it completed?

3           **A**     Correct.

4           **Q**     I think you kind of told us what your  
5 responsibilities at the crime lab are, correct? Is  
6 there anything else you wanted to add to that?

7           **A**     Not that I can think of.

8           **Q**     Okay. And what is DNA, we are going to  
9 play a little film, is this a good time do it?

10          **A**     Yeah, that would be great.

11          **Q**     You provided us with a CD. I'm going to  
12 keep talking as I get set up.

13                    You provided us with a CD on, I guess  
14 a little animated feature regarding DNA section?

15          **A**     Yes.

16          **Q**     This film, you put it together for us; is  
17 that correct?

18          **A**     Yes.

19          **Q**     To kind of give us a little illustration  
20 of what DNA is and how it works. So that might be  
21 helpful and kind of break up the afternoon. So let  
22 me get it started here. Can you see all right from  
23 where you are or do you want to stand up?

24          **A**     I think I can see all right. I can stand  
25 up if need be.

1           **Q**     All right.

2                   MS. ALIZADEH:  You might be able to  
3     advance by doing that.

4           **Q**     (By Ms. Whirley) Tell us that first slide.  
5     That first slide, DNA processing, talk to us about  
6     it and then indicate to Kathi when she should go to  
7     the next slide.

8           **A**     Sure.  So if at any point you all have  
9     questions, feel free to interrupt me.  If I start  
10    talking too fast or anything.

11                   So this first slide is giving a  
12    little bit of background information on what  
13    forensic DNA testing is and the type we perform in  
14    our laboratory.  We do what is called nuclear DNA  
15    testing.  That just means that we're looking at DNA  
16    that's in the nucleus of a cell.

17                   So if you think of an egg, would be  
18    like the egg yoke.  That's where the nucleus is.

19                   And more specifically the technology  
20    that we use is called short tandem repeat or STR.  
21    Basically the thing to take away is that we are not  
22    sequencing genomes here, we are not able to  
23    determine if there's genetic diseases or any sort of  
24    information like that.

25                   We're actually looking at areas of

1 the DNA that are, what we call junk DNA. So they're  
2 just sequences that are scattered throughout the  
3 genome that differ from person to person, but they  
4 don't have any known function, so they are not  
5 genes.

6 **Q** All right. So next slide?

7 **A** So here is a little graphic of DNA. It is  
8 basically a chemical blueprint of your body. We get  
9 half of our DNA from our mother and half from our  
10 father. It varies from person to person and it is  
11 found in almost all cells in the human body. So  
12 again, I mention the nucleus. Any cell that has a  
13 nucleus is going to contain nuclear DNA. Next.

14 This is just a little slide on what  
15 exactly I mean by short tandem repeat. Essentially,  
16 you have a little segment that is usually by four  
17 base pairs long that repeats over and over again.  
18 And so in forensics, what we do is actually  
19 determine how many times that little unit repeats.

20 So you can see here there is an  
21 illustration of that. You can see there is seven  
22 repeats there on the top and eight on the bottom.

23 I also mentioned that we get half of  
24 our DNA from our mother and half from our father.  
25 So for all of your chromosomes you basically have a

1 pair of each chromosome, so one from mom and one  
2 from dad. So in this illustration, perhaps the  
3 seven repeats came from mom and the eight repeats  
4 came from dad. So that's essentially what STR  
5 technology is.

6 The way that we're able to actually  
7 obtain the DNA profile is something called  
8 polymerase chain reaction, basically it is just a  
9 fancy word for copying for amplification. We are  
10 able to target specific areas on the DNA and amplify  
11 millions of copies of those so that it can be  
12 detected by an instrument. So again, we are not  
13 sequencing genomes, we are just looking at very  
14 specific points on the DNA.

15 Just another thing that's important  
16 to note. I know on CSI and shows like that they  
17 sort of just get a profile and they magically know  
18 who it is, but in reality it is just like  
19 fingerprints where you have to have reference DNA  
20 from an individual to obtain what their profile is  
21 to compare it to the case.

22 **Q** (By Ms. Whirley) So when you say  
23 reference, you are talking about some known sample?

24 **A** Yes.

25 **Q** So if you take my blood or my buccal swab

1 and you are comparing it, I'm the reference sample?

2 **A** That's correct.

3 **Q** Not just some unknown entity out there?

4 **A** Right.

5 **Q** And then when you talked about the  
6 copying.

7 **A** Yes.

8 **Q** Is that what allows you to get a DNA  
9 sample from something as minute as a little blood  
10 stain?

11 **A** That's correct, yes. With older  
12 technologies like RFLP that's mentioned on the  
13 slide, you needed a blood stain about the size of a  
14 quarter. Whereas now with PCR you can get DNA  
15 profile from a tiny speck of blood or even  
16 potentially skin cells left behind from someone  
17 grasping an object.

18 **Q** So sometimes when the police aren't able  
19 to get a fingerprint sample, they may, latent print,  
20 you may be able to find with DNA?

21 **A** Sure.

22 **Q** Or DNA sample or profile, rather, of  
23 someone?

24 **A** Yes.

25 **Q** Okay.

1           **A**     And it is also important to note at all  
2 stages we have controls that are run along with the  
3 samples, both positive and negative controls, just  
4 to make sure that all the reagents are free of  
5 contamination and that the analyst isn't introducing  
6 any contamination.

7           **Q**     That raises another question. What do you  
8 do to make sure your own DNA isn't getting into  
9 sloughing or flaking off into things that you are  
10 testing?

11          **A**     Yes, there is couple things that we do.  
12 We wear protective equipment, so lab coats, masks,  
13 gloves, we change gloves in between samples, we use  
14 all of the consumables, et cetera, are one-time use.  
15 We don't reuse any of the plastics.

16                   The second thing is we actually have  
17 all of our DNA profiles in a local database. So  
18 every sample that we run, we crosscheck it against  
19 all of the individuals in the laboratory to insure  
20 that we are not being detected in the sample.

21           MS. ALIZADEH: I have a question. Talking  
22 about the copying or amplification, I know in some  
23 cases I've had where the report will say that there  
24 wasn't a sufficient amount of DNA to obtain a  
25 profile. Why can't you just, can't you just copy it

1 over and over again until you can get a big enough  
2 thing to test?

3 **A** Yes. So when you see that sometimes in  
4 our record, we do actually amplify all samples, even  
5 if the, well, I guess there's a step before it  
6 called quantitation, where we estimate how much DNA  
7 is there. Some labs stop at the quantitation step,  
8 if there is no DNA indicated in the samples. We go  
9 ahead and carry it through and amplify everything.

10 So when that sentence appears in the  
11 report, it just indicates that basically the result  
12 that we got, there was just not information there to  
13 do a comparison. We weren't able to amplify enough  
14 to get a result.

15 MS. ALIZADEH: Is it possible that you  
16 wouldn't have any DNA in that sample?

17 **A** It is possible, yes.

18 MS. ALIZADEH: So when you say you amplify  
19 it, it undergoes a process whether you know there's  
20 DNA there or not?

21 **A** Correct. We go ahead and amplify all the  
22 samples.

23 MS. ALIZADEH: Okay.

24 **A** Yes. I think that's all for this slide.

25 And so this is sort of a little bit

1 technical here. This just goes through the various  
2 steps. You can see the first step shows a biologist  
3 with an alternate light source. Typically that's  
4 used to look for semen or potentially saliva stains.  
5 We don't usually use this to look for blood. You  
6 probably see that on CSI though.

7 So after the biologist prepares  
8 everything, the next step in DNA is called  
9 extraction. Basically all that's doing is purifying  
10 the DNA. The cells have a lot of proteins and other  
11 debris that we're not interested in. So the  
12 extraction part gives us a clean DNA sample.

13 Quantitation is the next step. I  
14 just mentioned that a minute ago. Again, we are  
15 trying to estimate how much DNA is there. This is  
16 important because we have a target range that we're  
17 trying to get to. We have a target number of copies  
18 we want to get to.

19 If we have, for example, a blood  
20 stain that has a lot of DNA in it, we might,  
21 basically, we need to use less of that to get to  
22 that target amount. Whereas if we have a swab of a  
23 steering wheel where maybe there is just skin cells,  
24 we probably need to amp a little bit more of that.  
25 So that step just lets us know how much to load into

1 our amplification.

2 **Q** (By Ms. Whirley) What is this target, did  
3 you say target number?

4 **A** Yes.

5 **Q** Where does that come from?

6 **A** Typically it is based on validation  
7 studies. There is something called developmental  
8 validation and then there's also internal  
9 validation. So internal validation is what I'm  
10 responsible for, any time we're bringing in new  
11 technology online. That number is determined during  
12 that process.

13 **Q** Is this part of the accreditation that you  
14 determined, I mean, who determines what the number  
15 should be is I guess what I'm trying to figure out?

16 **A** In our case, it would be me, since I'm the  
17 one performing the validation. So I look at data  
18 that's available in the community from the  
19 developmental validation, which is typically done by  
20 the manufacturer. And then we do additional testing  
21 to make sure that it works in our hands just like it  
22 does in the manufacturer's laboratory.

23 **Q** Okay.

24 **A** So you can see pictures of the instruments  
25 there. Number 4, the yellow, that's the thermal

1 cycler. And that's what does the copying.  
2 Basically it is just a heat clock, it heats and  
3 cools the sample for certain amount of time and  
4 certain temperatures. And it allows the DNA to be  
5 copied.

6 And then the last step, the green,  
7 that's called the CE, capillary electrophoresis.  
8 Basically it's just a fancy term for the instrument  
9 that actually gives us the DNA profile. So it's  
10 able to separate out those copy fragments by size.

11 And then also during the copying step  
12 there were fluorescent tags that were added. So  
13 that's what the instrument is actually seeing are  
14 those fluorescent tags. So it is able to give us a  
15 DNA profile tag.

16 This is what a profile actually looks  
17 like. You can see there is green boxes above the  
18 peaks. Basically that is just the name of the  
19 location on the DNA that we're looking at. It is  
20 too small to read, but let's say D3, for example,  
21 that just means it is on the third chromosome.

22 The other thing to note here, there  
23 is either one or two peaks under each of those  
24 spots. And that just goes back to what I was  
25 mentioning earlier about you getting half of your

1 DNA from your mother and half from your father.

2 So that is how we are able to do  
3 paternity testing as well. If you have reference  
4 standards from the parents and the children, you can  
5 look location by location to see if those parents  
6 contributed the DNA to the child.

7 **Q** At the bottom it says every person has a  
8 unique DNA profile except for identical twins?

9 **A** That's correct, yes. Everyone on earth  
10 has unique forensic DNA profile except for identical  
11 twins.

12 **Q** Okay.

13 **A** And then the numbers under each peak,  
14 that's just how many times it's repeating. Some of  
15 them say 15, 16, that's what we call the genome  
16 type, that set of numbers, and that is what we  
17 compare to the reference standards.

18 This is just a slide on touch DNA. I  
19 mentioned it briefly earlier. Touch DNA is also  
20 called trace DNA. Essentially, that's just when we  
21 are trying to obtain DNA left behind by contact with  
22 an object.

23 So a steering wheel swab, for  
24 example, the handle of a knife, let's say that was  
25 used in an assault, swab of sunglasses, earrings,

1 there is all sorts of things that we can attempt to  
2 get touch DNA on.

3 There is a lot of factors that go  
4 into whether or not we can actually get a profile  
5 from that. The length of time that the contact was  
6 actually made can be a determining factor. The  
7 biology of the individual. Some people shed a lot  
8 of DNA, some people don't, and there is no way to  
9 predict that.

10 If the individual is sweating and  
11 really worked up, then they are more likely to leave  
12 larger amounts of DNA behind. And also the surface  
13 of the item that's being contacted, so typically it  
14 is kind of like the opposite of a fingerprint. This  
15 might be a smooth surface, it might be great for  
16 fingerprints, but not as good for DNA. And that's  
17 really just a twofold thing.

18 Essentially, when you have something  
19 like fabric, there is more friction that's going to  
20 be pulling cells off. And then there's also more  
21 places for the cells to kind of cling to and  
22 maintain and stay in there.

23 Q With the touch DNA, someone's DNA profile  
24 may be on an item, but can you say whether it is  
25 saliva, skin cells, I mean, can you speak exactly to

1 what that bodily item is or not?

2 **A** No. Forensic DNA profile is going to be  
3 the same throughout your body. So whether it's from  
4 blood or semen or skin cells, the DNA profile that I  
5 showed you a minute ago is going to look exactly the  
6 same.

7 So screening test can kind of, I  
8 guess, illustrate, or maybe point to a probable  
9 source of the DNA, but the DNA profile itself will  
10 not indicate that.

11 **Q** You can say this is the profile?

12 **A** Yes.

13 **Q** But you can't say what the actual bodily  
14 fluid was?

15 **A** Correct.

16 **Q** Okay.

17 **A** We'll have to kind of press through these.

18 **Q** These are just like pictures for us?

19 **A** These are just some limitations, we just  
20 talked about one, but DNA, again, that profile is  
21 not going to tell us when it was deposited. The  
22 next one.

23 MS. ALIZADEH: Let me back up, I have a  
24 question.

25 **A** Sure.

1 MS. ALIZADEH: And it probably is not  
2 particularly relevant in this case. The DNA  
3 degrades, so like you said, you can't tell when it  
4 was deposited, you know, we see on TV where they  
5 will dig up, exhume a body that's been buried for  
6 100 years they will do DNA on it. Is there any way  
7 to tell if the DNA is recent or fresh DNA, as  
8 opposed to something that's been degrading over  
9 time?

10 **A** Well, there's certain things in the  
11 profile where you can tell if the sample has been  
12 degraded, but there is nothing to indicate  
13 specifically how long something has been degrading  
14 for or how long it has been in the ground or  
15 anything to that effect.

16 Domestic incidents. So let's say,  
17 for example, husband and wife living together, wife  
18 stabs husband with a steak knife. Let's say we find  
19 her DNA on the handle, that's great, but since she  
20 lives in the house and handles the knife all the  
21 time, maybe she just ate a steak the hour before.  
22 So DNA is less useful in situations like that.

23 Intent. So this typically has to do  
24 with sexual assault cases. Again, DNA profile is  
25 not going to tell us whether the sex was consensual

1 or whether it was a rape. We simply obtain a  
2 profile or we don't, that's all.

3 We just talked about this a little  
4 bit. We can't determine what fluid the DNA profile  
5 is from definitively.

6 MS. ALIZADEH: You use the word fluid, you  
7 can get DNA from skin cells, correct?

8 **A** Correct. And then as we mentioned  
9 earlier, identical twins will have the same profile.

10 MS. ALIZADEH: What are those little  
11 things in the middle there?

12 **A** Those are angry sperm. That has to do  
13 with the consensual sex or not. I always say it  
14 would be great if they looked like that under the  
15 microscope, but they don't.

16 And then as Kathi just touched on,  
17 DNA can be degraded by environmental conditions,  
18 chemicals, like bleach.

19 So in this case there was some DNA  
20 mixture obtained. I just wanted to touch briefly on  
21 what that is exactly. You can go ahead and hit the  
22 forward.

23 Mixture is just where we have DNA  
24 from more than one individual on an item. Sometimes  
25 we have so many people on an item that we are not

1 able to discern any particular profile and we're not  
2 able to make any useful comparisons or inclusions.

3           And then other times we have cases  
4 where maybe there's a large amount of DNA from one  
5 contributor, but the other people on the sample are  
6 not contributing very much. So we might be able to  
7 get a great result for the person who is donating a  
8 lot of DNA, but the minor contributors, as we call  
9 it, might be inconclusive because there is not  
10 enough there.

11           **Q** (By Ms. Whirley) If the minor person or  
12 the minor profile is too little to tell, you know,  
13 it is not a full profile, do you include or make any  
14 determinations whether or not that person can be  
15 included or excluded?

16           **A** So it depends on, well, let me back up.  
17 The first thing that we do is when we get the DNA  
18 profile back, we actually perform our interpretation  
19 prior to looking at any reference standards. So we  
20 go location by location and look to see is the  
21 profile complete enough to be a comparison. And if  
22 so, what locations do we feel fully represent the  
23 DNA samples, so which location are conclusive.

24                           So after marking all of that out and  
25 making all of our interpretations, then we go and do

1 the comparison.

2                   So if we ran into a situation where  
3 a, let's say there's a minor contributor, but there  
4 is just not a lot of DNA from them, but the peaks  
5 that are there perhaps are consistent with a  
6 reference standard that we are looking at. Again,  
7 if the data is not of sufficient quality, then we  
8 would say it is inconclusive and we can't determine  
9 if they're there or not.

10                   If those peaks simply don't match  
11 that person, then we would do what's called an  
12 exclusion, and we would indicate that they're  
13 excluded from that sample.

14                   You know  
15 when we are born and take our footprints and  
16 fingerprints, do you ever have to go like back to  
17 the hospital and look up birth records or anything  
18 like that sometimes to determine?

19           **A**     No, we actually don't have access to that  
20 kind of materials.

21                   MS. ALIZADEH: I have a question.           ,  
22 of course, testified before you about areas of a  
23 shirt that she swabbed and chose not to swab for  
24 trace DNA. And she testified about the bloody areas  
25 on a shirt and that she didn't swab those areas for

1 trace DNA. She said something about the DNA section  
2 from the blood would overwhelm the trace. So can  
3 you explain what that means?

4 **A** Yes, so that exactly what we're talking  
5 about we are talking about here. If here's a huge  
6 amount of DNA from one person, essentially, that's  
7 going to do what we call preferential amplification.  
8 It just means that's going to be copied much more  
9 than the person that left the tiny bit of DNA.

10 So if there is not enough there, it  
11 is not going to amplify up, so we might not be able  
12 to make a conclusive determination about that  
13 person.

14 So I know we all have post-lunch food  
15 coma, but it is getting a little technical here, but  
16 this is just an illustration or what it actually  
17 looks like when we say major contributor.

18 So you can see there is numbers, 10,  
19 11, 13, 16, 17, et cetera, you can see how some of  
20 those peaks are very distinctly higher above the  
21 rest of the peaks. So that's what we are talking  
22 about when we say major contributor. So the 10 and  
23 the 16 in the first location, the 11, 13, 17, those  
24 would be what we call minor contributor.

25 MS. ALIZADEH: And you mean those little

1 tiny peaks.

2           **A**     Yeah, those little tiny down at the  
3 bottom, correct. So, again, typically our  
4 separation is about four to one, that's where we  
5 would determine there is a major contributor. So  
6 when those peaks are four times higher than the  
7 people down in the graph.

8                     And then we can also have a major  
9 mixture where there is two people that are  
10 contributing a lot of DNA and then there might be  
11 just a couple tiny trace peaks from another  
12 individual.

13                    So everywhere you see the red M in  
14 those boxes, that's what is being called the major  
15 mixture. So the majority of the DNA is being  
16 contributed by those two individuals.

17                    So we can sort of treat that like a  
18 separate mixture from the stuff that's down in the  
19 graph.

20                    MS. ALIZADEH: And I recall from your  
21 report, which I know we haven't passed out yet,  
22 there is places where you talk about a mixture of at  
23 least two people or a mixture of, so is it possible  
24 then when you say that it could be a mixture of more  
25 than two people?

1           **A**     Correct.

2                   MS. ALIZADEH:  You're not able to say it  
3  is six people?

4           **A**     Correct.

5                   MS. ALIZADEH:  Okay.

6           **A**     Yes, in that scenario the report wording  
7  will say, there was a major mixture component of two  
8  individuals detected and then it will say an  
9  additional allele indicated a possible trace  
10 contributor or something to that effect.

11          **Q**     (By Ms. Whirley) So when it says that,  
12 that means that there is another profile there, but  
13 you just don't have enough?

14          **A**     Correct.  From the trace individual, yes.

15          **Q**     Okay.

16          **A**     When we do our comparison and we find a  
17 probative match, probative just means something  
18 that's important to the context of the case.  So it  
19 can perhaps disprove or prove key statements, et  
20 cetera.

21                         We do a statistical measure of that  
22 to give weight to that evidence or to that match so  
23 the jury can determine is this a really good match,  
24 a really strong match or is it just so-so.

25                         There is two statistical models that

1 were used in this case. The first is called the  
2 RMP, random match probability. Essentially, what  
3 that's saying is it's looking at a single source  
4 profile, so from one individual, and it is saying  
5 how rare is that profile. How often would we expect  
6 to encounter it in the general unrelated population.

7 If that profile reaches a certain  
8 threshold of rarity, we are able to conclude that  
9 the profile came from an individual that's listed in  
10 the case if they match. So we can say this profile  
11 is unique and it matches this particular individual.

12 The second statistic is used for  
13 mixtures, so you just need a slightly different  
14 model when you are dealing with a mixture versus a  
15 single source sample. So the particular statistic  
16 that was used is called a likelihood ratio.

17 Again, this is used when you can  
18 determine the number of contributors. So earlier I  
19 said a major mixture of two individuals. That would  
20 be a case where you could use the likelihood ratio.  
21 You can go ahead and forward it. I'll get a little  
22 bit more information on that in a minute.

23 This is just a slide, again, on  
24 random match probability. So, again, the way that  
25 we are able to determine how rare a profile is in

1 the population, we do what are called population  
2 studies.

3 So, essentially, a sample is taken  
4 from the population of the United States in our  
5 case, and they look to see how often are certain  
6 genome types detected, how often are certain alleles  
7 detected.

8 So think of it as a parking lot where  
9 you are looking to see how rare or common a certain  
10 car is. So if you have a parking lot, it is your  
11 driveway, you have only two cars in there, it is  
12 probably not enough, not a large enough sample size  
13 to say, okay, this is a rare car or not. It is only  
14 two, but if you compare that to, let's say, a  
15 parking lot at Busch Stadium, where you have  
16 hundreds of thousands of cars, you can probably  
17 determine, okay, I see 50 Toyota Camrys and et  
18 cetera.

19 So you can determine approximately  
20 how rare or common a particular allele is. So  
21 that's what the statistics are based on are these  
22 population data basis.

23 The more locations that we use, the  
24 more discrimination the profile is, that is the  
25 better able we are to differentiate one profile from

1 another.

2                   So this is just a little bit more  
3 information. This is what I was saying about when  
4 it reaches a certain threshold of rarity, then we  
5 can conclude that there was a common source. So the  
6 evidence stain matches the suspect, for example.

7                   Very often you will see in the media  
8 where you read newspaper accounts of trials and  
9 things, they will very often say that the, they will  
10 quote the statistic as being the chance someone else  
11 committed the crime. That's called the prosecutors'  
12 policy, there is actually a name for it because it  
13 happens a lot, but that's not what we are looking at  
14 here. No offense. They don't do that, they're  
15 good. Again, we are just looking at the rarity of  
16 profile. It has nothing to do with the context of  
17 the case or, you know, anything to do with innocence  
18 or guilt.

19                   And there's also a defense attorney  
20 fallacy, and that assumption is everybody else with  
21 the same profile has an equal chance committing the  
22 crime. DNA statistics have nothing to do with  
23 access to the scene or any of those factors.

24                   Go ahead. We pointed this out  
25 earlier, but DNA testing and testimony will not

1 indicate how a stain was deposited. Again, we're  
2 just looking to inform the jury as to the likelihood  
3 that the DNA from a crime scene sample matches that  
4 of a particular individual.

5 This is a little bit on the  
6 likelihood ratio, that's the stat we used when we  
7 have mixture. Basically it is just a mathematical  
8 way of saying how much particular hypothesis  
9 explains the evidence.

10 So let's say in a rape case, for  
11 example, one hypothesis might be that victim and  
12 suspect explain the mixture. And the defense might  
13 say, well, I agree the victim is there, it is a  
14 vaginal swab, let's say, but that's not my guy. It  
15 is some random guy.

16 So the defense hypothesis would be  
17 the mixture is explained by the victim and some  
18 unknown guy. So, essentially, we perform a  
19 statistic that just weighs those two options and  
20 determines which one is more likely.

21 And this is just a verbal equivalent  
22 of what that number means. So if you have a  
23 likelihood ratio of one to ten, it is limited  
24 support for that hypothesis. 10 to 100 is moderate  
25 support, on and on. Anything over 10,000 is very

1 strong evidence is to support that hypothesis.

2 This is just a real quick summary of  
3 what we do. Obviously, we interpret the profiles  
4 first, then we compare it to any reference  
5 standards. If there's a probative inclusion, we  
6 give statistical weight. We complete the report and  
7 then we submit it to technical administrative  
8 review.

9 So there's a second qualified analyst  
10 that's required to review everything in the report.  
11 All the processing documentation, just to make sure  
12 that they agree with the assumptions and everything  
13 that was done.

14 MS. ALIZADEH: I have a question about  
15 that because testified about there being a  
16 technical review. Does the reviewer run the same  
17 test as you to see if they are getting the same  
18 result, or they just looking at your work to see  
19 that it was done correctly?

20 **A** They look at my work to make sure that it  
21 was done correctly.

22 MS. ALIZADEH: Okay.

23 **A** I don't know, we can leave this up while  
24 we're talking. This is just a summary of the  
25 evidence that I tested from the first report and

1 then the next slide is the second report. I don't  
2 know if you can even read that, but it is a summary.

3 MS. ALIZADEH: I can pass out --

4 MS. WHIRLEY: That report is Grand Jury  
5 Exhibit Number, the first one is Number 73.

6 (Grand Jury Exhibit Number 73  
7 marked for identification.)

8 MS. WHIRLEY: That's Q1, I think bottom  
9 K2, I will have you explain what those symbols mean.

10 **A** Okay.

11 MS. WHIRLEY: Grand Jury Exhibit Number  
12 74, that's a supplemental report to the first one.

13 (Grand Jury Exhibit Number 74  
14 marked for identification.)

15 **Q** (By Ms. Whirley) So basically you get the  
16 items, for example, the person that was here earlier  
17 who did the screening for DNA, she didn't do any  
18 analysis, she just checked the swabs, did a report,  
19 forwarded it to your DNA section?

20 **A** Yes.

21 **Q** And then what do you do?

22 **A** Um, so I go through the process that we  
23 outlined earlier where I process the sample, I  
24 obtain a DNA profile, I perform my interpretations  
25 and then I perform my comparisons.

1           **Q**     Okay. So we're passing out the reports  
2     that you prepared, these are reports that you  
3     prepared, correct?

4           **A**     Yes.

5           **Q**     And tell us what the Q1 and the K1 and 2,  
6     what does that mean?

7           **A**     Sure. That's the item designation that's  
8     given in the laboratory. So that would be what  
9           designated it as.

10                    If you look on the first page of my  
11     report, there's in parentheses after each item, it  
12     says Item Number, for example, Q1-1. At the end it  
13     says Item Number 3 and that's referencing crime  
14     scene designation.

15           **Q**     Okay. And on her report, I don't have it  
16     in front of me, let me look and see. Like when she  
17     does, I have it, thank you though. Her report where  
18     it says Q1 specimen, now yours says us Q1-1. Tell  
19     us about that, what's the difference?

20           **A**     Yes. So any time an item is separated or  
21     a sample is taken from an item, it gets a new item  
22     number to distinguish it. So Q1 would have been the  
23     T-shirt and then Q1-1 just means that she took a  
24     sample from that item.

25           **Q**     Okay. And what is the K1 and K2?

1           **A**     The reference standards are given K  
2     designations for known.  So in this case PO Wilson  
3     is K1 and Michael Brown K2.

4           **Q**     You actually have their DNA sample?

5           **A**     Yes.

6           **Q**     Buccal swab for the officer and blood for  
7     Michael Brown?

8           **A**     Correct.

9           **Q**     All right.  And as I mentioned with the  
10    lab biology person was here.  On your report it also  
11    has victim suspect.  That's not anything that you  
12    made a determination of; is that correct?

13          **A**     That's correct.

14          **Q**     How does that get that designation?

15          **A**     We process it as it was submitted by the  
16    investigating agency.

17          **Q**     So it comes to you from the police victim  
18    suspect?

19          **A**     (Nods head.)

20          **Q**     All right.  Looking through items examined  
21    is on the Elmo, in addition to what we are looking  
22    at, they are the same thing, correct?

23          **A**     Yes.

24          **Q**     Okay.  What items did you do analysis on  
25    that were of an evidentiary value?  And when I say

1 evidentiary value, do you know what I mean?

2 **A** Yes.

3 **Q** What do I mean?

4 **A** To me it means probative value. So  
5 potentially proving or disproving statements or just  
6 anything to be potentially probative.

7 **Q** That's exactly what I mean. What did you  
8 analyze that was of evidentiary value?

9 **A** Well, I can list the items that I list  
10 statistical calculation on.

11 **Q** Okay.

12 **A** Um, so Q5 was the palm of Michael Brown's  
13 left hand, swabs from his palm.

14 **Q** What did you observe, tell us about your  
15 analysis about his palm and Q5, it would be on the  
16 second page of your first, of your three page  
17 report?

18 **A** Yes.

19 **Q** Marked Grand Jury 73, and it is the palm  
20 of Michael Brown's left hand?

21 **A** Yes.

22 **Q** And RBS means what?

23 **A** Red brown stain, something that would have  
24 tested either presumptively or confirmatory in  
25 biology for blood.

1           **Q**     What was your conclusion about that?

2           **A**     The DNA typing results obtained from Q5  
3 are consistent with being a mixture of two or more  
4 individuals. This profile can be separated into a  
5 major component profile consistent with Michael  
6 Brown and a minor contributor.

7                     There was an additional allele that  
8 indicates a possible trace contributor, but again,  
9 that was inconclusive.

10                    PO Wilson is included possibility  
11 minor contributor profile. So then the next  
12 sentence is the likelihood ratio where it is giving  
13 weight to that statement. The observed mixture  
14 profile is 98 times more likely if it originated  
15 from Michael Brown and PO Wilson than it originated  
16 from Michael Brown and an unknown individual in the  
17 general unrelated population.

18           **Q**     And that's kind of, I don't want to say  
19 confusing, when you say 98 times more if it  
20 originated from Michael Brown and PO Wilson. So you  
21 are not confirming that it did originate from those  
22 two?

23           **A**     Correct.

24           **Q**     Okay. So how is it probative of anything?

25           **A**     Um, so in this case generally with any

1 case when you have DNA from a particular individual  
2 and another individual, then it's potentially  
3 probative. So if there were accounts that there was  
4 a struggle and we find DNA from individual A on  
5 individual B, then it's probative.

6 **Q** Okay. We know it is Michael Brown,  
7 correct, as the major contributor?

8 **A** Yes.

9 **Q** And are you saying that it's more likely  
10 that it is PO Wilson is the minor contributor?

11 **A** That's correct, then if it were an unknown  
12 person in the general population.

13 MS. WHIRLEY: You all have questions on  
14 that? Okay, all right.

15 What else do you have?

16 **A** So moving down. Q11, this was tissue from  
17 the driver front exterior door.

18 **Q** Okay.

19 **A** There is several items in this particular  
20 sentence. You want me to list those out before I  
21 read that?

22 **Q** Yeah, that is on page two of three. Okay,  
23 go ahead.

24 **A** Yes, it is about the third paragraph from  
25 the bottom. So Q11 was the apparent tissue from the

1 vehicle. Q12 was the driver rear passenger exterior  
2 door of vehicle 108, that would have been PO  
3 Wilson's vehicle.

4 Q13 and Q14 are reddish brown stains  
5 from the roadway in front of 2943 Canfield.

6 Q Okay.

7 A So all of those items Michael Brown is the  
8 source of those, of the profile obtained from those  
9 items.

10 Q Did you do any numbers on that one?

11 A Yes, I have the actual statistic is listed  
12 farther back in the DNA report. Would you like me  
13 to read that?

14 Q Yeah, if you would.

15 A This would be in the larger stack of  
16 things that we made copies of.

17 Q Okay.

18 MS. ALIZADEH: , is it on the third  
19 page of your report where it says conclusion based  
20 on the calculated frequency?

21 A That's an informational statement that  
22 says what the threshold is, but the actual number is  
23 back in this report, which is what I'm looking for  
24 here.

25 MS. ALIZADEH: All right.

1           **A**     So I mention earlier that we have,  
2     basically these databases are based on samples of  
3     the population. So the database that we use has  
4     four ethnic groups; Caucasian, black, Hispanic and  
5     Asian. So there is four numbers that you will see  
6     in this report. This is on page 42 of the notes.

7           **Q**     (By Ms. Whirley) They don't have those.

8           **A**     Okay. So, let's see. So this would be a  
9     rarity of 1 in 36 nonillion, which is a very large  
10    number. I actually have a chart here. Nonillion is  
11    10 to the 30th, so 30 zeroes behind it. So it goes  
12    million, billion, trillion, quadrillion,  
13    quintillion, sextillion, septillion, octillion,  
14    nonillion.

15          **Q**     How many people are in the world?

16          **A**     Approximately 7 billion.

17          **Q**     7 billion?

18          **A**     Yes.

19          **Q**     So this is many, many, many, many more  
20    times people than in the world?

21          **A**     That's correct.

22          **Q**     For you to get that match again?

23          **A**     That's correct.

24          **Q**     So that's Michael Brown?

25          **A**     Right, yes.

1           **Q**     All right.  And this was blood that was,  
2     we are on Q11, that nasal mucus or tissue that was  
3     on the car; is that correct?

4           **A**     Correct.

5           **Q**     And the driver rear passenger exterior  
6     door and the roadway at 2943, it says Canfield and  
7     looks likes two samples from that area, Q13 and Q14,  
8     all Michael Brown is the source?

9           **A**     Correct.

10          **Q**     What else do you have?

11          **A**     All right.

12          **Q**     Q15, tell us about Q15, tell us about  
13     that.

14          **A**     Okay.  Sure.  So this sample was from a  
15     reddish brown stain on the upper left thigh of PO  
16     Wilson's uniform pants.  DNA from Q15 are consistent  
17     with being a mixture of two or more individuals.  
18     This profile can be separated into a major male  
19     component profile and a minor contributor consistent  
20     with PO Wilson.

21                     One additional allele indicates  
22     possible trace contributor.  Again, that's  
23     inconclusive.  Michael Brown is the source of the  
24     major male component profile connected from Q15.

25          **Q**     And is this one of those occasions where

1 you talked about there could be more than two that  
2 trace, you can't say what that is, but it is not  
3 either of these two individuals?

4 **A** That's correct.

5 **Q** Okay. And then on Q16, since we are in  
6 that area.

7 **A** Um, Q16 was a swab from the top exterior  
8 left front door of the vehicle. The DNA typing  
9 results obtained from Q16 are consistent with the  
10 mixture of three or more individuals. This profile  
11 can be separated into a major mixture of two  
12 individuals, with a trace contributor, and the trace  
13 contributor is inconclusive.

14 **Q** Okay.

15 **A** And then this is the likelihood ratio  
16 statistic again. Michael Brown and PO Wilson are  
17 included as contributors to this major mixture  
18 profile. The observed major mixture profile is 6.9  
19 million times more likely if it originated from  
20 Michael Brown and PO Wilson than if it originated  
21 from PO Wilson and an unknown individual in the  
22 general unrelated population.

23 **Q** Okay. And you kind of explained that to  
24 us already.

25 **A** Yes.

1           **Q**     And then for Q17, which was the exterior  
2 left front door mirror of vehicle 108, there was  
3 limited amount of genetic information to make any  
4 determination regarding the officer or Michael  
5 Brown?

6           **A**     That's correct.

7           **Q**     Okay. How about Q18?

8           **A**     Sure. Q18 was the interior left front  
9 door handle of the vehicle. The DNA typing results  
10 obtained from Q18 are consistent with being a  
11 mixture of two or more individuals. This profile  
12 can be separated into a major male contributor  
13 profile and one or more minor contributors. Michael  
14 Brown is the source of the major male contributor  
15 profile. Due to the limited genetic information  
16 available from the minor component, the presence or  
17 absence from PO Wilson cannot be determined.

18          **Q**     Okay. And then again, what we've talked  
19 about so far with Michael Brown is the source of the  
20 major male contributor, or even part of a mixture,  
21 can you tell us whether it was blood or saliva or?

22          **A**     No, I cannot.

23          **Q**     Okay. Or skin cells, no?

24          **A**     No.

25          **Q**     All right. Let's look at Q19.

1           **A**     Okay.  So Q19 is swabs from PO Wilson's  
2     weapon.  The Sig P229, and this particular swab did  
3     test positive for blood, I have RBS listed there.

4           **Q**     When we say RBS, that means that it's  
5     blood?

6           **A**     Yes.

7           **Q**     Okay.  The reddish brown stain?

8           **A**     Correct.

9           **Q**     Okay.

10           MS. ALIZADEH:  Do you --

11           **A**     Assuming she was able to confirm it.

12           MS. ALIZADEH:  That's what I was going to  
13     say.  Do you know if it was presumptive?

14           **A**     I believe on this item it was presumptive,  
15     I don't believe there was enough there to do the  
16     confirmatory test.

17           MS. WHIRLEY:  You do have enough to get a  
18     DNA profile, you did get a DNA profile from the  
19     weapon?

20           **A**     Yes.

21           **Q**     (By Ms. Whirley) You can't say again  
22     whether it was blood or skin cell?

23           **A**     Correct.

24           **Q**     Saliva or what, or sweat?

25           **A**     Correct.

1           **Q**     So tell us about the weapon.

2           **A**     Okay. The DNA testing results obtained  
3 from Q19 are consistent with being a mixture of  
4 three or more individuals. This profile can be  
5 separated into a major mixture of two individuals  
6 with a trace contributor. Again, the trace  
7 contributor is inconclusive. Michael Brown and PO  
8 Wilson are included as contributors to this major  
9 mixture profile.

10                           The observed major mixture profile is  
11 2.1 octillion times more likely if it originated  
12 from Michael Brown and PO Wilson than if it  
13 originated from PO Wilson and an unknown individual  
14 in the general unrelated population.

15           **Q**     And again, we're talking about a number so  
16 high, you know, as many, many, many more times than  
17 the population of the whole world before you find  
18 another profile like this?

19           **A**     Well, this is actually the likelihood  
20 ratio statistic, so it is a little bit different on  
21 the assumptions, but that hypothesis has very, very,  
22 strong support.

23           **Q**     Okay, all right. And this is, I don't  
24 know if you have some different numbers somewhere  
25 else. This is a pretty important part of what they

1 need to know, the DNA on the gun. So what can you  
2 tell us about the DNA on the gun again?

3 **A** The hypothesis that it's these two  
4 individuals, PO Wilson and Michael Brown, is 2.1  
5 octillion times more likely than it was PO Wilson  
6 and some unknown.

7 **Q** When you say hypothesis, what do you mean?

8 **A** Basically it's just how well that  
9 hypothesis explains the data.

10 **Q** What does hypothesis mean?

11 **A** Hypothesis would be that supposing that  
12 these two particular individuals contributed it  
13 versus another individual and PO Wilson.

14 **Q** Okay.

15 MS. WHIRLEY: Questions on that?

16 : Let me understand this,  
17 . So are you saying his DNA was on  
18 the gun?

19 **A** That statement is supported by the data,  
20 yes.

21 . You can't  
22 determine if it was from skin cells or fluid?

23 **A** Correct. The DNA profile would be the  
24 same throughout your body, so we're not able to  
25 determine if the DNA profile originated from blood

1 or skin cells.

2 Yes.

3 You talked  
4 about the door, the front door handle?

5 **A** Yes.

6 : You could tell it was  
7 Michael Brown?

8 **A** Yes.

9 : He was the more major  
10 contributor. So if he was the last person to touch  
11 it, would his DNA, would it have overrode whoever  
12 touched it prior?

13 **A** It's possible, yes.

14 **Q** (By Ms. Whirley) There's evidence that, or  
15 information that, and you probably know this  
16 already, you get some information from the police  
17 when you are doing this testing, correct?

18 **A** Some.

19 **Q** There was a shooting involved in the car?

20 **A** Yes.

21 **Q** And then there was blood and actually some  
22 blood swabs were submitted, correct?

23 **A** Yes, and I believe at the time of the  
24 testing, I don't know that I actually knew of a  
25 shooting.

1           **Q**     But you know now before I told you?

2           **A**     I do know now.

3           **Q**     So if his DNA is on the gun and the car  
4 and the door of the car, there's no way you can tell  
5 us is it because he touched the gun or because his  
6 blood may have been on there or some other portion,  
7 sweat or saliva, probably not saliva, but some other  
8 bodily fluids, you can't tell us exactly how his DNA  
9 got on that gun?

10          **A**     That's correct.

11                   MS. WHIRLEY: Any questions on that?

12                                 : I do,                         I just  
13 have a question about Number 11, 12, 13 and 14. It  
14 says apparent tissue or hardened nasal mucus from  
15 vehicle 108. And it says apparent tissue or  
16 hardened nasal mucus --

17                   MS. ALIZADEH: If you recall that was  
18 Officer            testified that he used a pair of  
19 tweezers to remove something from the outside of the  
20 door.

21                                 : There was, none of this  
22 was from inside of the door?

23                   MS. ALIZADEH: That tissue/hardened nasal  
24 mucus is on the outside of the door.

25                                 Okay. Thank you.

1 MS. ALIZADEH: But there are swabs taken  
2 from the inside of the door that she's testified  
3 about from the door handle, and that's the interior  
4 door handle.

5 : Interior door handle.

6 MS. ALIZADEH: I believe so.

7 **A** Yes, Q18, interior left front door handle.

8 So interior left front  
9 door handle has DNA from Michael Brown inside the  
10 car?

11 **A** Yes.

12 **Q** (By Ms. Whirley) Again, we don't know how  
13 the DNA got there?

14 **A** Correct.

15 **Q** Okay. Let's go onto, were we done with  
16 Q19?

17 . What my question  
18 is, Q11, they introduced that to us a long time ago.  
19 We don't know what it is. If you can answer any  
20 more, was the suggestion that it was a hardened  
21 nasal mucus just an assumption because it looked  
22 that way?

23 **A** That's correct, but the biologist, she  
24 actually called me in to kind of look at it and just  
25 see what I thought. We didn't know what it was,

1 that's just what it appeared to be.

2 : Would there be any way of  
3 knowing --

4 MS. ALIZADEH: It's been tested.

5 : We know he had a close  
6 range wound to his hand. Is there any way of  
7 knowing, could have been skin that came off his hand  
8 or not any way of knowing that?

9 **A** I'm not sure. I know I can't determine  
10 that from DNA.

11 MS. ALIZADEH: Dr. is going to  
12 return to talk about because that tissue, that  
13 hardened nasal mucus tissue was forwarded to him for  
14 his testing. He's going to come back tomorrow and  
15 tell you what he found that to be.

16 MS. WHIRLEY: Thursday.

17 MS. ALIZADEH: Or Thursday.

18 **Q** (By Ms. Whirley) So Q20-1, I'm sorry, were  
19 there any other questions before we go on?

20 Q20-1. Tell us about that.

21 **A** Those were swabs from PO Wilson's uniform  
22 shirt. They were from the left side and the collar  
23 area, and I believe testified regarding  
24 that. The DNA typing results obtained from Q20-1  
25 are consistent with being a mixture of three or more

1 individuals. This profile can be separated into a  
2 major mixture of two individuals with a trace  
3 component. And again, the trace component is  
4 inconclusive.

5 MS. ALIZADEH: Again, what?

6 **A** The trace component is inconclusive.

7 **Q** (By Ms. Whirley) So that's that person  
8 other than Michael Brown and PO Wilson?

9 **A** Yes.

10 **Q** Okay, go ahead.

11 **A** Michael Brown and PO Wilson are included  
12 as contributors to this major mixture profile. The  
13 observed major mixture profile is 2.1 trillion times  
14 more like that it originated from Michael Brown and  
15 PO Wilson, than if it originated from PO Wilson and  
16 an unknown individual in the general unrelated  
17 population.

18 **Q** Okay. So again, we don't know how his DNA  
19 got on his shirt?

20 **A** Correct.

21 **Q** Okay. Questions on that one?

22 Q21-1.

23 **A** This was PO Wilson's uniform pants on the  
24 left side. The DNA typing results are consistent  
25 with being a mixture of three or more individuals.

1 This profile can be separated into a major mixture  
2 of two individuals with a trace component, and the  
3 trace component is inconclusive.

4 Michael Brown and PO Wilson are  
5 included as contributors to this major mixture  
6 profile. The observed major mixture profile is 34  
7 sextillion times more likely it originated from  
8 Michael Brown and PO Wilson than if it originated  
9 from PO Wilson and an unknown individual in the  
10 general unrelated population.

11 **Q** So those are on the pants?

12 **A** Yes.

13 **Q** Now, we started with Q5 and we talked  
14 about things of evidentiary value. K1-1 is Michael  
15 Brown's shirt, and you did not consider that to be  
16 of evidentiary value because it said that Wilson is  
17 excluded as a contributor to this mixture profile?

18 **A** Well, I started with samples that I  
19 performed statistical measures on and when we do  
20 exclusions, there is no statistical measure. So I  
21 can certainly get those results now.

22 **Q** Okay. Go ahead.

23 **A** So Q1-1 was Michael Brown's T-shirt. I  
24 believe this is where attempted to swab areas  
25 that did not appear to have blood staining. The DNA

1 typing results obtained from Q1-1 are consistent  
2 with being a mixture of two or more individuals.  
3 This profile can be separated into a major component  
4 profile consistent with Michael Brown and one or  
5 more trace contributors.

6 And then, again, there's limited  
7 genetic information from the trace component, so  
8 inclusionary statements can be made regarding this  
9 portion of the mixture.

10 However, PO Wilson is excluded as a  
11 contributor to this mixture profile.

12 **Q** So that means whatever the trace component  
13 was did not have any of the alleles or any of the  
14 profile of Officer Wilson?

15 **A** That's correct.

16 **Q** So Q2-1?

17 **A** This was Michael Brown's shorts. The DNA  
18 typing results obtained from Q2-1 are consistent  
19 with being a mixture of three or more individuals.  
20 This profile can be separated into a major component  
21 profile consistent with Michael Brown and two or  
22 more trace contributors. Due to the limited genetic  
23 information available from the trace component of  
24 the mixture, no inclusionary statements will be made  
25 regarding the trace component. PO Wilson is

1 excluded as a contributor to this mixture profile.

2 **Q** So to say the thing that we said earlier,  
3 none of those little points or the alleles match  
4 Officer Wilson?

5 **A** Yes.

6 **Q** If one of two would have matched, you  
7 would have said what?

8 **A** It is possible that maybe one or two did,  
9 but overall he was excluded. So if you have one or  
10 two, it's possible you just might have adventitious  
11 inclusion, I guess, because people do share alleles,  
12 they share peaks, but when you look across an entire  
13 profile, that's how when you are able to determine  
14 if they are excluded or not.

15 **Q** Do you use a certain number of peaks or  
16 alleles to make an exclusion?

17 **A** There is really not a specific number, it  
18 is just dependent on the mixture. But again, if  
19 there are peaks that are foreign to the individual  
20 then they're excluded.

21 **Q** So in this case, is that what we are  
22 seeing is that they were foreign to Officer Wilson?

23 **A** Yes.

24 **Q** The trace amounts, those alleles?

25 **A** Yes.



1 sandals. And there were also two bracelets, one of  
2 them was a black, yellow and white rubber bracelet,  
3 and the other one was a dark brown beaded bracelet.

4 **Q** Were you able to, I see where you have the  
5 buccal swab referenced for Officer Wilson and the  
6 blood referenced for Michael Brown. Were you able  
7 to find any profiles on those bracelets?

8 **A** I was able to obtain a mixture on each  
9 one. You want me to --

10 **Q** Yes, please.

11 **A** So on the black, yellow and white rubber  
12 band bracelet, the DNA typing results obtained from  
13 that item Q25-1, are consistent with being a mixture  
14 of two or more individuals. This profile can be  
15 separated into a major male component profile and  
16 one or more minor contributors. Due to the limited  
17 genetic information available from the minor  
18 component of the mixture, no inclusionary statements  
19 will be made regarding the minor component. Michael  
20 Brown and PO Wilson are excluded as contributors of  
21 the major male component profile, however, I  
22 couldn't determine if they were present as possible  
23 minor contributors.

24 **Q** There wasn't enough of a DNA profile to  
25 make the connection?

1           **A**     Yes.

2           **Q**     Okay.  That's for the yellow and black,  
3     yellow and white rubber bracelet.  And then the dark  
4     brown bracelet, did the same determination?

5           **A**     It was essentially the same.  On this  
6     particular item there was a mixture of three or four  
7     individuals instead of a mixture of two or more, but  
8     again, there was a major male component profile and  
9     then two or more minor contributors, but they were  
10    excluded as the major contributor.

11          **Q**     Then going to the first page, the  
12    Cardinals baseball cap.

13          **A**     That profile was single source.  Michael  
14    Brown was the source of that DNA profile.  And then  
15    Q24-1 was the reddish brown stain on the right Nike  
16    sandal, that was also Michael Brown.

17          **Q**     Okay.  When you say single source, you  
18    mean no mixture, just straight one source?

19          **A**     Correct.

20          **Q**     Does that pretty much conclude that second  
21    supplemental report?

22          **A**     The only other item would be swabs from,  
23    again, the second set of swabs from the left and  
24    right sandals and those results were inconclusive,  
25    so I wasn't able to do any conclusions on them.



1 and it was consistent with Michael Brown.

2 Q6 and Q8

3 backs of Michael Brown's hands, looks like there's  
4 no Officer Wilson's DNA on the backs of his hands?

5 **A** That's correct, it is a single source  
6 profile consistent with Michael Brown.

7 : We had heard that Michael  
8 Brown was punching the officer in the face. Would  
9 you say that's inconsistent with those reports?

10 **A** Well, on these particular items, it has  
11 RBS after it, reddish brown stain. So it is  
12 possible that PO Wilson isn't there, it's also  
13 possible he is not being detected due to the blood  
14 on the hand.

15 MS. ALIZADEH: Let me ask you this also.  
16 When it says that the backs of the hands were  
17 swabbed, and I guess we would have to talk to  
18 whoever swabbed them, we don't know if that includes  
19 the knuckles or back of the hand?

20 **A** Yes, I'm not aware.

21 MS. ALIZADEH: There is no indication in  
22 your notes to say where on the back of the hand it  
23 was swabbed, correct?

24 **A** Correct. I don't have that information.

25 MS. ALIZADEH: It could be, but they

1 didn't include that and we don't know?

2 **A** Yes.

3 MS. ALIZADEH: And also just to clarify,  
4 you did not have a known sample from a Dorian  
5 Johnson, did you?

6 **A** No, I did not.

7 . Back to Michael  
8 Brown. I guess is it safe to say that the areas  
9 that would have been in contact with PO Officer  
10 Darren Wilson, like neck, shoulders, was not swabbed  
11 due to the blood?

12 **A** I believe that's correct, yes.

13 I'm confused  
14 by that. But you did say you got DNA from his  
15 shirt, from Michael Brown, correct?

16 **A** On PO Wilson's shirt.

17 : He was talking about  
18 Michael Brown's shirt, which is my original  
19 question. You said that just because you weren't  
20 able to get Officer Wilson's DNA on his fist, on his  
21 hand, it could have been overwhelmed by the blood  
22 that was there?

23 **A** That's one possibility, yes.

24 : Or it could not have been  
25 there at all?





1 restrictive.

2                   So, for example, all the analyst  
3 profiles are in our local database. Any reference  
4 standard from the list of the suspect is entered  
5 locally.

6                   The Missouri State Attorney General  
7 has made a ruling at the state level we can maintain  
8 those suspect profiles. So we enter the suspect  
9 known at our level and it stays at the state level.  
10 It does not move to the national level.

11                   Any unknown sample, we call it a case  
12 work unknown sample. And this example of Q12, which  
13 was consistent with Michael Brown, and I believe  
14 that was from the vehicle. That was entered into  
15 CODIS and that would go to the national level.

16                   . I want to go  
17 back to Q1-1, Michael Brown's T-shirt again to make  
18 sure I'm clear. The last line says PO Wilson is  
19 excluded as a contributor to this mixture profile.  
20 So that tells he is not part of whatever stain is on  
21 that shirt.

22                   **A** He was not detected, that's correct.

23                   : And they also swabbed some  
24 of the non stained areas of that shirt and did not  
25 find any DNA in that area either?

1           **A**     I believe Q1-1 was from the non stained  
2 areas.

3                                 : Okay.

4           **A**     She did not swab the stained areas  
5 because, again, we would expect to find Michael  
6 Brown's blood.

7                         MS. WHIRLEY: And that's pretty much  
8 protocol or standard not to swab an area that is  
9 bloody like that, just too much and the person who  
10 bled?

11           **A**     Right, and DNA testing is expensive and  
12 time consuming so we try to restrict the number of  
13 samples to something that can provide information in  
14 the case.

15           **Q**     There's just no way to know until it was  
16 requested?

17           **A**     Right.

18           **Q**     So what do you do after you complete your  
19 analysis, what do you do with all this stuff?

20           **A**     All the samples, in this particular case  
21 for a time, I believe, the FBI were intentionally  
22 going to take it and place it in a vault in  
23 preparation for them to take. The particular items  
24 that I tested, I don't believe they ended up taking.  
25 So we boxed them up for long-term storage.

1           **Q**     You have custody of them?

2           **A**     They're in the laboratory, yes.

3           **Q**     Do you know what items the FBI did test  
4     and they took the items that you tested, is that  
5     what you said?

6           **A**     They informed me that they don't repeat  
7     something that has already been done, so they would  
8     do testing in addition to what our laboratory  
9     performs.

10          **Q**     So I don't know that.

11          **A**     I'm not aware that they retested anything  
12     that I tested.

13          **Q**     And you don't know what they did test?

14          **A**     No.

15          **Q**     Okay. Here is a question I guess you  
16     posed for me, do you keep items, why do you keep the  
17     items for?

18          **A**     The cuttings and all of the envelopes and  
19     things that            would have taken. We do retain it  
20     for possible defense retesting. So we try not to  
21     consume any samples. And if we do have to consume a  
22     sample, we have to obtain permission from the  
23     prosecutor's office or whoever maybe if there is a  
24     suspect in the case.

25          **Q**     I think you've already talked to us about

1 how you insure that your work is accurate, you said  
2 there is a technical review or someone reviews your  
3 work?

4 **A** Yes.

5 **Q** They don't retest, Kathi already asked,  
6 they just review what you have done?

7 **A** That's correct.

8 **Q** Steps that you have taken?

9 **A** Right, and they double check all the math  
10 and any calculations that were done.

11 MS. WHIRLEY: All right. Questions,  
12 Kathi?

13 MS. ALIZADEH: No.

14 MS. WHIRLEY: Anybody else? Okay. I  
15 guess you asked them along the way, that was good.  
16 Okay, thank you very much.

17 (End of the testimony of

18 .)

19 ,  
20 of lawful age, having been first duly sworn to  
21 testify the truth, the whole truth, and  
22 nothing but the truth in the case aforesaid,  
23 deposes and says in reply to oral  
24 interrogatories, propounded as follows, to-wit:

25 EXAMINATION

1 BY MS. ALIZADEH:

2 Q That's the part where you promise not to  
3 talk about this after you leave today.

4 A Got it.

5 Q All right. Could you state your name,  
6 please?

7 A .

8 Q , the microphone won't  
9 amplify your voice.

10 A Okay.

11 Q You don't need to lean into it to pick you  
12 up, just talk loud enough so that I can hear you  
13 back here, okay?

14 A Got it.

15 Q What do you do,

16 A My title, 911 services coordinator for St.  
17 Louis County. I make 911 work in the county.

18 Q All right. And how long have you had that  
19 position?

20 A Twenty years.

21 Q And so are you also, do you have access to  
22 all the records that 911, that the communication  
23 center keeps regarding 911 calls?

24 A Yes.

25 Q What about radio traffic, do you also have

1 anything to do with the monitoring of radio traffic  
2 in St. Louis County?

3 **A** I did, and I still have access because it  
4 helps me troubleshoot a lot of things.

5 **Q** Okay. And so we've already heard  
6 testimony so we're not going to need a detailed  
7 description, but you, of course, you are familiar  
8 with the RIOT channels that St. Louis County has?

9 **A** Yes.

10 **Q** And how many RIOT channels are there?

11 **A** I believe there's four.

12 **Q** And they are A, B, C and D then?

13 **A** Right.

14 **Q** And so we have already again heard talk  
15 about what they are and how they work and when  
16 they're in use.

17 But when transmissions are received  
18 on the RIOT channel in the communication center, are  
19 those transmissions recorded?

20 **A** Yes, if they're actually heard they would  
21 be recorded.

22 **Q** Okay. So there's an audio recording of  
23 transmissions, correct?

24 **A** Correct.

25 **Q** Is there also a record that's made that

1 that transmission is actually received so there  
2 would be a date stamp, a time stamp with each  
3 transmission that's heard?

4 **A** Yes.

5 **Q** Okay. And were you asked during the  
6 course of the investigation into the shooting of  
7 Michael Brown, were you aware that there was some  
8 issue about whether or not a call was made on a RIOT  
9 channel?

10 **A** Not until you had asked.

11 **Q** Okay. So, and let's go back on August 9th  
12 of 2014, were you, do you recall that and were you  
13 aware that there was an incident that occurred down  
14 in South County at the St. Anthony's Hospital in one  
15 of their hospice care facilities?

16 **A** Yes.

17 **Q** And were you aware that there were a  
18 number of officers and County TAC responded, they  
19 had a staging area and so forth; is that correct?

20 **A** Yes.

21 **Q** And were you aware that on that, for that  
22 incident that the County Police had switched over  
23 and were broadcasting on RIOT A?

24 **A** That's correct.

25 **Q** And now, just for clarity sake, RIOT A, B,

1 C and D, those are separate channels, correct?

2 **A** That's correct.

3 **Q** And so did I ask you to search your  
4 records for any calls that were received and  
5 recorded on the RIOT A channel during times that are  
6 relevant to the shooting of Michael Brown?

7 **A** Yes.

8 **Q** And now you told me, we talked about this  
9 briefly out here just now that when you pull a  
10 segment of calls or time segment, that has to be in  
11 ten-minute increments; is that correct?

12 **A** Correct.

13 **Q** And so did you pull all the calls for the  
14 times that I requested and burned those onto a disc?

15 **A** Yes.

16 **Q** I'm going to show you Grand Jury Exhibit  
17 Number 60.

18 (Grand Jury Exhibit Number 60  
19 marked for identification.)

20 **Q** (By Ms. Alizadeh) Is that your handwriting  
21 on there?

22 **A** Yes, it is.

23 **Q** Have you listened to the call on this  
24 disc?

25 **A** Yes.

1           **Q**     Are those the calls that you pulled that I  
2     asked for?

3           **A**     Yes.

4                                 (Grand Jury Exhibit Number 71  
5                                 marked for identification.)

6           **Q**     (By Ms. Alizadeh) And then did I, did you  
7     also provide for me a print-out that I've marked  
8     Grand Jury Exhibit Number 71, that shows the dates  
9     and times of those calls?

10          **A**     Yes.

11          **Q**     All right. So the first call that is  
12     recorded on Grand Jury 60 is a call from August 9th  
13     at 11:43, 11:00 a.m., I'm sorry, let me back up.

14                                 11:43 and 15 seconds in the a.m.?

15          **A**     Correct.

16          **Q**     All right. And then the record, which is  
17     Grand Jury Exhibit 71, date and time stamps it and  
18     says how long the call lasts; is that correct?

19          **A**     That's correct.

20          **Q**     And now the next column says caller  
21     number, but there is nothing in there?

22          **A**     Correct. That would show like if it was a  
23     911 call, would show the number that came in.

24          **Q**     Okay. And then for the column that says  
25     channel name, it is all of those are RIOT A calls?

1           **A**     Correct.

2           **Q**     Okay.  And then what is the, the next  
3     column says location, what does that mean?

4           **A**     That's the DVD that it's on.  For  
5     instance, 549, that's the 549th CD we have stuck in  
6     there to record.

7           **Q**     So these calls are not maintained on a  
8     hard drive someplace?

9           **A**     They are for about probably three weeks  
10    and then they are archived to this.

11          **Q**     So regardless of whether I ask for these,  
12    I could get calls from a year ago, correct?

13          **A**     We keep them that long, yeah.

14          **Q**     So when you got these calls for me it was  
15    more than three weeks past August 9th, is that fair  
16    to say?

17          **A**     Yes.

18          **Q**     And so that location means you were able  
19    to determine what DVD it was on?

20          **A**     Exactly.

21          **Q**     Okay.  And I'm going to pass out these  
22    records.

23                         So the first call that was reported,  
24    I already mentioned, is at 11:43 and 15 seconds in  
25    the a.m.  And then the last call recorded is at 2:06

1 and 31 minutes, I'm sorry, 2:06 and 31 seconds in  
2 the p.m., correct?

3 **A** Correct.

4 **Q** I mean, that's more than a ten-minute  
5 increment?

6 **A** Right.

7 **Q** You get these?

8 **A** What I was doing was trying to show when  
9 it ended and when it started and any traffic in  
10 between.

11 **Q** Okay. Now, are you aware that the  
12 incident at the St. Anthony's hospice facility, did  
13 that start before 11:43:15 a.m.?

14 **A** Way before it, yes.

15 **Q** So were you aware then that the county had  
16 already notified their officers to, that were  
17 involved in that incident, to switch over to RIOT A?

18 **A** Correct.

19 **Q** And so that transmission is not included  
20 in what you've gotten me, right?

21 **A** No.

22 **Q** And then down here you have a reference on  
23 August 9th, 2014 at 12:35:35 p.m., St. Anthony  
24 secure.

25 Is that reference, just that

1 particular phrase, St. Anthony secure, is that  
2 something that you came up with?

3 **A** I just came up with it because at that  
4 point on the tape or the CD is when they secured the  
5 channel. In other words, we're done.

6 **Q** So there is actually an audio recording of  
7 an officer's voice, we are clearing the RIOT A  
8 channel. In other words, the incident has ended,  
9 you can tune back to dispatch or whatever?

10 **A** Correct.

11 **Q** Okay. And then you also indicate at about  
12 2:00 p.m. and 26 seconds on the same day, it says  
13 RIOT A for Ferguson, and again, that was, you  
14 determined, that is your phrase?

15 **A** That is my phrase from what was said on  
16 the audio.

17 **Q** Okay. So there's an audio of an officer  
18 activating the RIOT A channel because of the  
19 Ferguson incident?

20 **A** Correct.

21 **Q** And that was at 2:00 p.m.?

22 **A** Yes.

23 **Q** And have you listened to all of these  
24 calls yourself?

25 **A** Yes.

1           **Q**     And have you heard in any of these calls,  
2     well, prior to the 2:00 and 26 second entry, so any  
3     time prior to that is there a call for shots fired  
4     on the RIOT A channel?

5           **A**     I don't believe so.

6           **Q**     Is there a call for officer in need of  
7     aid?

8           **A**     Not that I heard.

9           **Q**     Is there a call that says something like  
10    send every car you've got?

11          **A**     Never heard that.

12          **Q**     All right. And now I've listened to the  
13    calls also and I asked you out there, there's some  
14    of these calls actually is a series of tones and  
15    there's nobody speaking?

16          **A**     Right.

17          **Q**     Why are those calls, what is that?

18          **A**     That's an FCC regulation where each  
19    channel has a frequency and you have to either  
20    broadcast yourself, the call signal over it, and for  
21    instance, normal everyday traffic, you'd say KWA  
22    519, that's our call signal. On a channel that's  
23    not used very often, it is an automatic identifier  
24    that goes out, it is a tone.

25          **Q**     So that's an FCC requirement?

1           **A**     Yes.

2           **Q**     And that is a tone that's just generated  
3 automatically?

4           **A**     Correct.

5           **Q**     It doesn't have any kind of meaning as far  
6 as any incident happening, correct?

7           **A**     No, correct.

8           MS. ALIZADEH: I don't have any more  
9 questions. My questions for you, jurors, is do you  
10 want to hear these calls? They're not very long.  
11 Obviously, some of them are five seconds in  
12 duration, six seconds, 14 seconds. We could listen  
13 to all of them in a matter of less than ten minutes.  
14 Of course, this would be available if you all want  
15 to listen to it yourself at a later date, but that's  
16 up to you. Do you have an interest in hearing these  
17 calls?

18           MS. WHIRLEY: I had a question for

19           **Q**     (By Ms. Whirley) This RIOT A for Ferguson,  
20 these are not Ferguson's communications to their own  
21 communication system, this is them on county's  
22 communication system?

23           **A**     I'd have to hear it, but I believe it was  
24 county activating the RIOT channel. Normally most  
25 of your municipalities that are going to use it at

1 the very beginning you can hear a couple people just  
2 talking. They don't identify themselves. I can  
3 recognize one of the names. It was a guy in the St.  
4 Anthony's. They'll use it, they'll use that channel  
5 just, hey, meet me over at McDonald's or something,  
6 they will talk car to car kind of thing.

7 **Q** Okay.

8 **A** But usually an activation is done by the  
9 county.

10 **Q** And I'm sure it was said already, just to  
11 make sure I'm clear. A municipality like Ferguson  
12 can access that RIOT A channel and talk to other  
13 officers and other departments?

14 **A** Correct.

15 **Q** Okay. But it is really a channel that is  
16 maintained by County?

17 **A** Yes.

18 **Q** All right. On this channel, all of these  
19 other calls, like the St. Anthony's secure and the  
20 calls previous to that, all dealt with something  
21 that was happening at St. Anthony's?

22 **A** You can tell one of the cars, you could  
23 hear a guy say , he is on the SWAT team.

24 **Q** But they are not like communications where  
25 they are calling into dispatch and announcing their

1 location or their arrival, or asking for assistance  
2 or anything like that, it is just sort of an  
3 informal communication amongst officers on this  
4 channel?

5 **A** Yes.

6 MS. ALIZADEH: And just to clarify,  
7 because Sheila asked you, officers in municipalities  
8 can use this to talk to each other, but the other  
9 person has to be monitoring the RIOT A channel?

10 **A** Correct.

11 MS. ALIZADEH: So it is not like if  
12 someone transmits something on a RIOT A, it is not  
13 suddenly everybody switches over to RIOT A because  
14 there was transmission?

15 **A** No, you usually have a few, the smaller  
16 municipalities, they'll know. Let's say I'm  
17 Dellwood and you're something else, Bellefontaine.  
18 We know, hey, monitor this channel and I will call  
19 you when I need you, not call when I need you. I  
20 will just talk to you whenever I want you to  
21 monitor.

22 MS. ALIZADEH: We also heard some  
23 testimony, you know ; is that right?

24 **A** Yes.

25 MS. ALIZADEH: You are the one who hooked

1 me up with him so he could explain how radio traffic  
2 works, right?

3 **A** Yeah.

4 MS. ALIZADEH: And so we heard him testify  
5 about that emergency button or the orange button  
6 that was on the walkie-talkie. And he said that no  
7 matter what channel an officer is on, when that  
8 button is pressed, it automatically switches, it  
9 automatically goes to the dispatch channel for that  
10 officer's department.

11 Now my question to you is, if that button  
12 is pressed by an officer in a municipality who is  
13 not on RIOT A, but might be on another channel,  
14 would you hear it on RIOT A?

15 **A** No.

16 MS. ALIZADEH: If that button is pressed  
17 while the officer is on RIOT A, because  
18 testified about how that tone, the data bursts that  
19 are sent out when that button is pressed, are going  
20 to go through, they are going to override everything  
21 else?

22 **A** Uh-huh.

23 MS. ALIZADEH: So if that button is  
24 pressed when the radio is on the RIOT A channel,  
25 whatever channel that might be for the municipality,

1 would you hear it on the, would you be able to hear  
2 it on the RIOT A monitoring, when you are monitoring  
3 RIOT A?

4 **A** Well, County is different. I think the  
5 way described it is Ferguson does automatic, is  
6 programmed to automatically, no matter what channel  
7 I'm on, if I press it, it is going back to the  
8 Ferguson main. So, no, we never hear it.

9 MS. WHIRLEY: It is not going back to  
10 County, just Ferguson?

11 **A** Correct.

12 MS. WHIRLEY: Okay. I know you had a  
13 question.

14 GRAND JUROR 12: It shows the RIOT A for  
15 Ferguson started at 2:00. I know you were asking  
16 questions about you hear anybody asking for help,  
17 but this would have been, they would have secured  
18 this channel after the incident happened, correct?

19 **A** They didn't secure it, they started it up.  
20 : They started the RIOT  
21 channel after the initial incident --

22 **A** Yes.

23 MS. WHIRLEY: These are officers talking  
24 informally amongst each other?

25 : Right. This is not an

1 officer asking dispatcher for help, this is officers  
2 talking to each other about the aftermath of.

3 **A** No, when St. Anthony secured, we shut down  
4 the RIOT channel. There is nobody sitting there  
5 monitoring, listening, we shut it down. Ferguson  
6 happens, all of the phone calls made.

7 : You said Ferguson  
8 happened.

9 **A** The incident at Ferguson.

10 : The incident happened.

11 **A** That was around noon-ish. So that happens  
12 and all the phone calls are made and then the  
13 decision, commander decides let's move everything  
14 over to the RIOT channel.

15 : So my question, just so I  
16 get everything, this is not, this is not going to  
17 tell us whether Officer Wilson called in for help or  
18 anything, this is just going to tell us that after  
19 the fact they secured this channel for what they  
20 needed?

21 **A** Well, everything you see in here is on the  
22 RIOT channel.

23 : I know that.

24 **A** So if he called on the RIOT channel.

25 : If he called his own

1 dispatcher, it would not be on here?

2 **A** No, this is strictly St. Louis County.

3 : They started using this  
4 channel after the incident?

5 **A** After the incident, code 2000 they call  
6 it, and they activated the RIOT channel.

7 : They activated the RIOT  
8 channel to assist with the aftermath of what  
9 happened?

10 **A** Yeah.

11 MS. ALIZADEH: Again, just to be clear, if  
12 for the sake of assumption, if Officer Wilson had  
13 broadcast or had transmitted something on the RIOT  
14 channel, it may have been received and recorded,  
15 correct?

16 **A** Correct.

17 MS. ALIZADEH: But we've already heard  
18 from that there are these voting recorders  
19 or receivers and they selected a transmission that's  
20 best quality and so it might get, might not have  
21 been received?

22 **A** Correct.

23 MS. WHIRLEY: Okay. On your report,  
24 it says from August 9th, 2014, from 11:52:32 seconds  
25 a.m. to 12:04 and 01 seconds p.m. Does that

1 indicate that there was no transmission between that  
2 time period?

3 **A** No, say that again, though, you say --

4 MS. WHIRLEY: 11:52 and 12:04 on the RIOT  
5 channel, was there any transmission? Because it  
6 looks like the duration of 11:52, was that six  
7 seconds?

8 **A** Yeah, okay, it picked up something at  
9 11:52 for six seconds.

10 MS. WHIRLEY: Right. So after that six  
11 seconds was over, is there nothing else that was  
12 picked up until 12:04?

13 **A** Correct.

14 MS. WHIRLEY: So if someone was on the  
15 RIOT channel, that would have been recorded?

16 **A** Correct.

17 MS. WHIRLEY: Between that time period?

18 **A** Yeah.

19 MS. WHIRLEY: Between 11:52 and 12:04, if  
20 there was nobody else transmitting.

21 **A** Yeah, any kind of break in time in there,  
22 there's no audio to record it.

23 MS. ALIZADEH: Let me clarify. I believe  
24 talked about the fact that a lot depended  
25 upon where the transmission was made from?

1           **A**     Oh, yeah.

2                   MS. ALIZADEH:  The strength of the  
3 transmitter, whether there is buildings in the way.  
4 So when Sheila said if somebody made a transmission  
5 during that time period, it would have been  
6 recorded.  The answer has to be not necessarily,  
7 correct?

8           **A**     Yeah, this is what was heard, what was  
9 recorded.

10                  MS. ALIZADEH:  Whatever was heard was  
11 recorded?

12           **A**     Correct.

13                  MS. ALIZADEH:  We don't know if there was  
14 something transmitted that didn't get received or  
15 recorded?

16           **A**     There is dead spots throughout the whole  
17 county.

18                  MS. WHIRLEY:  And then for St. Louis, I  
19 mean, for Ferguson's communication, they actually  
20 have their own dispatch; is that correct?

21           **A**     Yes.

22                  MS. WHIRLEY:  You know that for a fact?

23           **A**     Yes.

24                  MS. WHIRLEY:  Is it Ferguson Police  
25 Department that dispatches for Ferguson Police

1 Department?

2 **A** Yes.

3 MS. WHIRLEY: And this is a question you  
4 may or may not be able to answer and someone else,  
5 maybe you ask it better, ?

6 . Do you  
7 know how far Ferguson's tower is from Canfield by  
8 any chance?

9 **A** For the RIOT channel?

10 : Just distance.

11 **A** There are different frequencies or  
12 different towers. So, for instance, I can speak for  
13 the county. The county's tower is at Seven Hills  
14 and Halls Ferry. So that's where our RIOT receiver  
15 would be.

16 : Okay.

17 **A** But as far as Ferguson and their local  
18 town their frequency, no clue.

19 : I think we were told it  
20 was in the back of the police?

21 **A** There is a tower back there, but I don't  
22 know if it's a cell tower or what's actually on it.

23 MS. WHIRLEY: If it's a cell tower, if it  
24 is a cell tower, go ahead.

25 : Do you know the distance

1 from that tower to Canfield by any chance?

2 **A** No.

3 MS. ALIZADEH: I had told you I was going  
4 to look that up, I'll try to. I'll try to find that  
5 out again.

6 MS. WHIRLEY: Was that all of your  
7 questions? Just the distance, or you wanted to  
8 know, was he able to transmit?

9 : If like the line of sight  
10 wasn't available, even if he would have been on  
11 Ferguson, which he may or may not have been, could  
12 it have still been picked up, for lack of a better  
13 term, a dead zone?

14 **A** We have a lot of those, believe it or not,  
15 throughout the whole county. That's part of the new  
16 radio system we're building.

17 MS. ALIZADEH: To correct those issue?

18 **A** Correct all of those issues.

19 . Earlier  
20 you said something about a 911 call, if there would  
21 have been one, caller's number would have showed up  
22 on this report. Does that indicate that there were  
23 no 911 calls?

24 **A** No, this is strictly RIOT A recordings.

25 You're the 911 coordinator

1 too, right?

2 **A** Uh-huh.

3 : Do you know if there were  
4 911 calls made?

5 **A** Oh, yeah.

6 : Like --

7 MS. ALIZADEH: I have those, yes. You  
8 didn't print out one of those 911 calls?

9 **A** I have made several different ones, I  
10 don't know if I made the 911 calls for you.

11 MS. ALIZADEH: Okay.

12 **A** To give you an idea, the traffic and our  
13 recorder is 120 channels. It is very tough just to  
14 say give me the calls pertaining to Ferguson. I  
15 couldn't sit there, it would take me two years to  
16 play every call and figure out what had to do with  
17 it. The ones that I made, here they are, you know,  
18 pick out what you want and let me know and I will  
19 try put them in order or go back and record just  
20 those incidents.

21 MS. ALIZADEH: I do have a disc that has  
22 911 calls on it and, you know, there are some that  
23 have to do with this. I don't want to characterize  
24 them as they don't really help you with anything  
25 because I don't want to be the person, I don't want

1 that to be my judgment, but if you want to hear  
2 that, I have them.

3       **A**       Just to give you an idea, they have their  
4 own 911 center. So if they call from landline, they  
5 are going to Ferguson.

6                       So what the county took could have  
7 been cell calls that hit a tower facing, that is  
8 pointed to the county as opposed to Ferguson?

9                               That's where I was going  
10 with that, I was just wondering if there were any  
11 911 callers that witnessed something that did not  
12 come forward to be interviewed by anybody, anybody's  
13 doing that crosscheck?

14                       MS. ALIZADEH: That would be a good  
15 question for Detective Wilson when he's going to  
16 come and testify close to the end. There are lots  
17 of leads that were followed up that went nowhere.  
18 He would be able to talk about those kind of things  
19 and so I don't want to characterize it and say, yea  
20 or nay. Any of those type of questions he would be  
21 the one to ask.

22                       Anyone else?

23                       MS. WHIRLEY:                       , did you have  
24 something?

25                               : I did, I wanted to make

1     sure when                     testified earlier this week,  
2     he mentioned there were like 16 or 19 channels,  
3     something like that, that the police officers could  
4     be on. There were a number of channels that the  
5     police officers could be on and in my notes I put  
6     that there are five RIOT channels, there is dispatch  
7     channel, mutual aid channel, the point-to-point  
8     channel and some other channels.

9                     So just because somebody may not be on  
10    here doesn't necessarily mean it might not be on  
11    another one of those channels?

12            **A**     Correct. Some are receive only, it all  
13    goes back to like --

14                                     : Point-to-point is receive  
15    only.

16            **A**     Hey, you're good.

17                                     : I know, thank you.

18                     MS. ALIZADEH: I'm going to quiz you about  
19    DNA. Any other questions for this witness?

20                                     (End of the testimony of                     )

21

22

23

24

25



1 down, okay?

2 **A** Yes.

3 **Q** All right. How old are you?

4 **A**

5 **Q** Okay. And are you familiar with the  
6 Canfield Green Apartment Complex?

7 **A** Kind of, not really.

8 **Q** Okay. Do you live in the apartment  
9 complex?

10 **A** Yes.

11 **Q** How long have you lived in Canfield?

12 **A**

13 **Q** Okay. There is a map here, Grand Jury  
14 Exhibit Number 25, and it is an aerial view of some  
15 streets and apartment buildings that make up the  
16 Canfield Apartment Complex, okay. And if you look  
17 here, the street that cuts through the complex is  
18 Canfield Drive, okay?

19 **A** (Nods head.)

20 **Q** And if you were to drive this way, that's  
21 going west and West Florissant is out here, okay.  
22 And if you are driving this way down Canfield Drive  
23 and you are driving that way you're going into the  
24 Northwinds Apartment Complex, okay?

25 **A** (Nods head.)

1           **Q**     Does that help kind of orient you to where  
2     you are?

3           **A**     Yes.

4           **Q**     Now, I don't want you to say your address  
5     because that's not necessary. But what I want you  
6     to do is use this laser pointer, do you see your  
7     building on there? Don't say it, but do you see it?

8           **A**     Yes.

9           **Q**     So this is a laser pointer. If you press  
10    this button, you know, it puts a red dot on the map.

11                    So you don't have to say it, but the  
12    grand jurors can see it, where is the apartment that  
13    you live in?

14           **A**     (Indicating.)

15           **Q**     This one right here?

16           **A**     (Nods head.)

17           **Q**     Are you putting it on this unit right  
18    there?

19           **A**     Right.

20           **Q**     Okay. And so were you living there on  
21    August 9th of this year?

22           **A**     Yes.

23           **Q**     And do you recall anything special about  
24    that morning?

25           **A**     No.

1           **Q**     And who do you live with?

2           **A**     My girlfriend and my daughter.

3           **Q**     Do you recall how old is your daughter?

4           **A**     She's

5           **Q**     She's                    Your girlfriend, was she  
6 home that morning?

7           **A**     Yes.

8           **Q**     Was there anybody else in your apartment  
9 that morning?

10          **A**     Her family.

11          **Q**     Other adults?

12          **A**     No.

13          **Q**     Are they children?

14          **A**     No, they are young adults.

15          **Q**     Young adults?

16          **A**     Right.

17          **Q**     And so we've heard people talk about these  
18 apartments, these units have three levels to them,  
19 correct?

20          **A**     Correct.

21          **Q**     And what level do you live on?

22          **A**     The second level.

23          **Q**     Okay. And so when you, and we've also  
24 know from pictures and other people telling us, that  
25 each of these units has a front door and a sliding

1 glass door. And when you walk out, there's like a  
2 wooden balcony or wooden area, correct?

3 **A** (Nods head.)

4 **Q** There is an outdoor staircase that leads  
5 you, the upper floor down to the ground; is that  
6 right?

7 **A** Correct.

8 **Q** All right. And so do you remember  
9 something happening around noon on the 9th?

10 **A** Yes.

11 **Q** Okay. Where were you when something  
12 started to happen?

13 **A** On the staircase.

14 **Q** And so were you on the staircase outside  
15 of your apartment unit?

16 **A** Yes.

17 **Q** And were you walking down the stairs like  
18 you were going someplace?

19 **A** No, I was sitting there.

20 **Q** You were sitting there?

21 **A** Yes.

22 **Q** Were you with anybody?

23 **A** No.

24 **Q** And we also know from pictures that each,  
25 this is an overhang that covers the staircase from

1 rain and snow, correct?

2 **A** Correct.

3 **Q** And we also know that there is like a wall  
4 that is in front of that?

5 **A** Correct.

6 **Q** All right. So when you were on the  
7 staircase, could you see Canfield Drive from where  
8 you were?

9 **A** Yes.

10 **Q** Were you sitting or standing, do you  
11 recall?

12 **A** Sitting.

13 **Q** Okay. And so if this is, I'm just going  
14 to do a line in this direction. If I bisect  
15 Canfield at this point, could you see from this  
16 point west?

17 **A** Yes.

18 **Q** Could you see from this point east?

19 **A** Only so far.

20 **Q** And is it because this building blocked  
21 your view of some things?

22 **A** Yes.

23 **Q** And so if you are sitting outside your  
24 unit, you can probably see beyond this intersection  
25 of Canfield Drive and Canfield, well, this is like a

1 little loop around Canfield Drive, correct?

2 **A** That's correct.

3 **Q** But, for example, where this white car is  
4 in the map on the picture, which wasn't there that  
5 day, this image was not taken that day, but, for  
6 example, you wouldn't be able to see that far from  
7 where you were; is that right?

8 **A** No.

9 **Q** So what did you see that drew your  
10 attention?

11 **A** Well, there were two guys walking down the  
12 street in the middle of street and, uh, police car  
13 passed them, it stopped where they were and they had  
14 conversation or whatever, and so they continued  
15 walking and then the police car backed up to where  
16 they were and I guess had another conversation that  
17 led to an altercation.

18 After they had an altercation, one of  
19 the guys ran off and the other guy was still there,  
20 and then once he ran from the car, I seen the  
21 officer get out of his car and shoot in his  
22 direction, but that's all I seen.

23 **Q** Okay. So use the laser pointer and show  
24 us where the two boys were when you first saw them  
25 walking on Canfield?

1           **A**     It was coming kind of going east.

2           **Q**     When you first saw them where were they?

3           **A**     Uh, when I first saw them?

4           **Q**     Uh-huh.

5           **A**     Approximately here. (indicating)

6           **Q**     Okay. And you said they were walking in  
7 the middle of street?

8           **A**     Yes.

9           **Q**     From where you were sitting, could you  
10 tell who they were?

11          **A**     No, I'm not familiar with anyone  
12 particularly.

13          **Q**     How is your eyesight?

14          **A**     Fair, fairly good. It is not excellent.

15          **Q**     Do you have contacts or glasses?

16          **A**     I'm supposed to wear glasses, but I don't.

17          **Q**     So do you, if you need glasses, are they  
18 for reading or they for seeing distance?

19          **A**     More reading, not distance.

20          **Q**     Your eyesight for distance okay?

21          **A**     Pretty good, but not too good.

22          **Q**     How is your hearing?

23          **A**     Fair to good.

24          **Q**     Never been told that you have a loss of  
25 hearing or anything have you?

1           **A**     No.

2           **Q**     Okay.  Um, so let me ask you this.  When  
3     you were on the staircase at your residence, if you  
4     were to look too far west on Canfield Drive, would  
5     this building block your view?

6           **A**     No.

7           **Q**     And why not?

8           **A**     Um, because the staircase is more out then  
9     the building.

10          **Q**     Okay.  So you said you saw them about this  
11     area and you can see them, this building didn't  
12     block your view from where you could see them from  
13     here?

14          **A**     Yes.

15          **Q**     Okay.  Which direction were they walking?  
16     Were they walking into the complex?

17          **A**     East.

18          **Q**     East?

19          **A**     Right.

20          **Q**     So you said a police car came?

21          **A**     Right.

22          **Q**     A truck I think you said?

23          **A**     Yeah, it was a truck, yes.

24          **Q**     Was it like a pickup truck or SUV truck?

25          **A**     SUV.

1           **Q**     What color was it?

2           **A**     White.

3           **Q**     Did it have police markings on it?

4           **A**     Yes.

5           **Q**     Was it a Ferguson police truck?

6           **A**     Yes.

7           **Q**     And when it came down Canfield, what  
8     direction was it traveling?

9           **A**     It was going west.

10          **Q**     Was it going fast like it was going to a  
11     call or anything?

12          **A**     No.

13          **Q**     And how about lights and sirens?

14          **A**     No.

15          **Q**     And so you saw the officer's truck, could  
16     you see the officer inside the truck at this point?

17          **A**     No, because he was driving west, it was  
18     the driver's side on the west.

19          **Q**     So you are looking at the passenger side  
20     of the truck as it is going west?

21          **A**     Correct.

22          **Q**     And so when the truck stopped and you said  
23     there was a conversation between the boys and  
24     presumably an officer inside the truck, correct?

25          **A**     Correct.

1           **Q**     Could you hear what was being said?

2           **A**     No.

3           **Q**     All right.  So are you saying there was a  
4 conversation just based upon what you saw?

5           **A**     Right.

6           **Q**     And then you said at some point the boys  
7 kept walking and the officer backed up.  Did the  
8 officer proceed to move after?

9           **A**     No.

10          **Q**     He stayed there?

11          **A**     Yes.

12          **Q**     So the boys kept walking, were they still  
13 walking east?

14          **A**     Yes.

15          **Q**     And then you said the officer backed up?

16          **A**     Right.

17          **Q**     Was there anything unusual about the way  
18 he backed up?

19          **A**     Kind of, because it was diagonal like to  
20 cut them off and at the same time still be, here he  
21 was in the middle of the road.

22          **Q**     And you saw that, you saw him back up?

23          **A**     Yes.

24          **Q**     And did you tell, did he hit one of the  
25 boys?

1           **A**     No, I don't think.

2           **Q**     It didn't look like anybody got hit?

3           **A**     No, it didn't look like it.

4           **Q**     Did it appear like maybe somebody got  
5 their foot run over or anything?

6           **A**     It could have been possible, but they was  
7 on the opposite side of me from the street from  
8 where I was.

9           **Q**     Okay. So then you said at that point the  
10 officer is continuing to talk to the boys?

11          **A**     Correct.

12          **Q**     And you said there was an altercation?

13          **A**     Yes, after backing up, the conversation  
14 could have lead to an altercation, or it could have  
15 been an altercation from when he backed up, I don't  
16 know.

17          **Q**     So describe for us when you say that there  
18 was an altercation and you couldn't hear anything  
19 being said; is that right?

20          **A**     No.

21          **Q**     Could you hear voices?

22          **A**     No, I seen the truck moving like they were  
23 having some type of altercation.

24          **Q**     So from your vantage point, are you still  
25 looking at the passenger side of the truck?

1           **A**     Yes.

2           **Q**     Now, we know that the boy that was shot is  
3 Mike Brown, we know that now, correct?

4           **A**     Correct.

5           **Q**     You didn't know Mike Brown before that?

6           **A**     No.

7           **Q**     We know he was like 6'5", he is a tall  
8 guy. When he was standing on the other side, was he  
9 on the driver's side of the truck?

10          **A**     Yes.

11          **Q**     Could you see his head above the roof of  
12 the truck?

13          **A**     No.

14          **Q**     Okay. Could you tell what was going on at  
15 the truck?

16          **A**     Not as good as I could see that the truck  
17 was rocking, but no, not inside of the truck, I  
18 couldn't see.

19          **Q**     You couldn't see if anybody's hands were  
20 in or out of the truck or if somebody had ahold of  
21 somebody, could you see any of that?

22          **A**     No.

23          **Q**     Okay. And then so which one of those two,  
24 Michael Brown, let's just call him the bigger guy,  
25 and then there's another guy with him, was he

1 smaller?

2 **A** Yes.

3 **Q** Did you know that guy from before?

4 **A** No.

5 **Q** And so when the officer backed up and were  
6 both boys on the driver's side of the vehicle on the  
7 police car?

8 **A** Yes.

9 **Q** Could you see what the smaller boy was  
10 doing?

11 **A** He was like going forward still, he was  
12 like trying to get away from the altercation or what  
13 was going on with them. So he was walking forward a  
14 little bit.

15 **Q** When you say forward, was he walking east  
16 a little bit?

17 **A** East, yes.

18 **Q** Okay. And how about anybody else, did you  
19 see any other car, other people down there?

20 **A** Um, like initially when the police truck  
21 stopped, it wasn't a car, but then after the traffic  
22 started coming through, I remember seeing a white  
23 car because the second guy, when the first shot was  
24 fired, he ran and got behind the car. The  
25 altercation is still going on because Mike Brown

1 never left the truck.

2 So after that, I see Mike Brown run  
3 east and his flip flops fall off and then he keeps  
4 going past the building where I couldn't see him any  
5 more. So that's when I seen the officer get out of  
6 the truck and fire more shots.

7 **Q** So let's go back now to where Mike Brown  
8 is standing next to the truck. You said the shorter  
9 guy was kind of walking away from the ordeal?

10 **A** Right.

11 **Q** And then you said you heard a gunshot?

12 **A** Correct.

13 **Q** How many gunshots did you hear?

14 **A** It was maybe one, maybe two, I don't know.

15 **Q** And was this before the officer got out of  
16 truck or after?

17 **A** It was before he got out.

18 **Q** Okay. And so when you hear that gunshot,  
19 have you heard gunshots before?

20 **A** Yes.

21 **Q** Were you confused about what it was, did  
22 you ever think it was like fireworks or anything?

23 **A** No.

24 **Q** You recognized it as gunshots?

25 **A** Yes.

1           **Q**     Or two gunshots?

2           **A**     Yes.

3           **Q**     Did you see Mike Brown do anything when  
4 those gunshots happened?

5           **A**     The altercation was still going on, so he  
6 was still near the truck. After the shots go off,  
7 that's when I see him run, but other than that, no.

8           **Q**     Okay. So when you see him run, what  
9 direction does he run?

10          **A**     East.

11          **Q**     And does he run in the street or does he  
12 go into the sidewalk or grass?

13          **A**     In the street.

14          **Q**     He stays in the street?

15          **A**     Yes.

16          **Q**     All right. And now you had mentioned that  
17 you saw his flip flops come off?

18          **A**     Right.

19          **Q**     And when you saw him run, could you tell  
20 at that point if he had been injured?

21          **A**     No, because he was running like he was  
22 kind of skipping with his run. I didn't, I couldn't  
23 say that he was injured, no.

24          **Q**     You didn't see any blood or anything on  
25 him?

1           **A**     No.

2           **Q**     Okay.  And you said that he ran out of his  
3 flip flops?

4           **A**     Correct.

5           **Q**     It is hard to run in slide flip flops,  
6 right?

7           **A**     Correct.

8           **Q**     And so, obviously, he gets to a point  
9 where you can't see him any more?

10          **A**     Correct.

11          **Q**     And you said you see the officer get out  
12 of the vehicle, right?

13          **A**     Correct.

14          **Q**     Is it a man or a woman?

15          **A**     It is a man.

16          **Q**     Is he white, black, Hispanic?

17          **A**     White.

18          **Q**     And were there any other officers in the  
19 vehicle that got out?

20          **A**     No.

21          **Q**     Did you see any other police trucks at  
22 that point?

23          **A**     No.

24          **Q**     So he's by himself?

25          **A**     Yes.

1           **Q**     Is he in uniform?

2           **A**     Yes.

3           **Q**     Does he get out of the driver's side?

4           **A**     Yes.

5           **Q**     So when he first gets out, are you  
6 partially blocked because the car is between you and  
7 him?

8           **A**     Yes.

9           **Q**     All right. When he first gets out of the  
10 car, do you see the gun?

11          **A**     No.

12          **Q**     Prior to, when you heard the gunshots, did  
13 you ever see a gun?

14          **A**     No.

15          **Q**     And then you said the officer, I don't  
16 want to put words in your mouth, I can't remember  
17 what you said, he moves in the direction that  
18 Michael Brown ran, correct?

19          **A**     He didn't move, once he hopped out of the  
20 vehicle, he looked in his direction, but he didn't  
21 go towards him. Like he shot, he came from behind  
22 the car and then he shot more.

23          **Q**     Okay. So when the officer gets out of the  
24 car, you said that he looks in his direction. When  
25 you say his, are you talking --

1           **A**     Mike Brown.

2           **Q**     Okay.  And at this point, had the littler  
3     guy already run behind the white car?

4           **A**     Yes.

5           **Q**     So he looks in his direction, and then  
6     does he fire before he starts moving or as he starts  
7     moving?

8           **A**     Maybe as, but it was definitely he got out  
9     of the vehicle, it could have been as, or before he  
10    starts.

11          **Q**     Okay.  Now, at this point do you see a  
12    gun?

13          **A**     Yes.

14          **Q**     All right.  So is it because he's got the  
15    gun held high or is it he's away from the vehicle so  
16    you can see his full body?

17          **A**     He's not away as far as, he wasn't against  
18    it.  It was like he was out from it because I was on  
19    the second level.  So I could see the top of the  
20    vehicle, but I can't see like closer to the ground.

21          **Q**     If you were closer to the car, the car  
22    would be blocking?

23          **A**     Yeah.

24          **Q**     He was away from the car a bit?

25          **A**     Yes.

1           **Q**     So did you see how he was holding the gun?

2           **A**     He had it like police, you know.

3           **Q**     With both hands?

4           **A**     Yeah.

5           **Q**     Were his arms out in front of him?

6           **A**     Yeah.

7           **Q**     Extended like that? (indicating)

8           **A**     Yeah.

9           **Q**     And you said that he fired a shot and at  
10    the time that he fired that shot, could you still  
11    see Mike Brown or had Mike Brown disappeared beyond?

12          **A**     No, I can't see him any more.

13          **Q**     So at that point you don't know what Mike  
14    Brown's doing?

15          **A**     Right, correct.

16          **Q**     And so you said how many shots did he fire  
17    at that point?

18          **A**     Maybe four or five, I don't know.

19          **Q**     So there's a series of shots?

20          **A**     Yeah.

21          **Q**     Is he moving while he's shooting?

22          **A**     It is like he took a couple then moved and  
23    then he shot more.

24          **Q**     So there is two series of shots?

25          **A**     Correct.

1           **Q**     And is there, if you can guesstimate, how  
2     long of a pause between the two series of shots?

3           **A**     Maybe a second or two, I don't know.

4           **Q**     And so you said there were four or five  
5     shots in that first series, I can't remember what  
6     you said.

7           **A**     In the vehicle it was maybe one or two  
8     shots.

9           **Q**     Okay.

10          **A**     After the vehicle, he got out and maybe  
11     took two or three shots. I didn't expect the whole  
12     situation, so I wasn't counting on the bullets, so.

13          **Q**     Sure.

14          **A**     I was just listening and watching.

15          **Q**     And I understand, and so I'm only asking  
16     you to give us your best guess, okay?

17          **A**     Okay.

18          **Q**     There's one or two shots while he's in the  
19     car, then he gets out, then you say he shoots again,  
20     but is it one shot out of the car or is it, is that  
21     the series of shots?

22          **A**     Correct, that was the first of the series.

23          **Q**     Okay. And so in that first series of  
24     shots, how many do you think?

25          **A**     Maybe two or three.

1           **Q**     Okay.  And then there's like just a couple  
2 seconds pause?

3           **A**     Yes.

4           **Q**     And then there's another series of shots?

5           **A**     Correct.

6           **Q**     Can you see the officer the whole time  
7 he's shooting?

8           **A**     Not the whole time, because after he does  
9 the first set of shots and then he runs in this  
10 direction east and then he fires more shots.  And  
11 then I see him walking back towards my vision.

12          **Q**     So at some point he disappears from your  
13 sight because of the building that's between the two  
14 of you?

15          **A**     Correct.

16          **Q**     And you hear more gunshots after that?

17          **A**     Yes.

18          **Q**     Okay.  And then about how much time, if  
19 you can guesstimate, from when the shooting all  
20 stops until you see the officer again?

21          **A**     Uh, maybe three seconds, four seconds.

22          **Q**     And you said he's walking back towards his  
23 vehicle?

24          **A**     Yes.

25          **Q**     What does he look like?

1           **A**     I can't say he's looking like he's  
2 walking.

3           **Q**     Did you notice was there any blood on him?

4           **A**     No. I think that he was like stumbling  
5 with his hand or something. I don't know. At the  
6 moment I had thought maybe he got hit or whatever  
7 altercation was or something, looking at his hand.  
8 I seen him do something with his hands.

9           **Q**     Now, you've described that when you saw  
10 the officer holding the gun he was holding it with  
11 both hands, right?

12          **A**     Yes.

13          **Q**     So when he's walking back, do you see the  
14 gun when you see him walk back?

15          **A**     Yes.

16          **Q**     How is he holding it then?

17          **A**     Uh, with one hand, I think he was, I don't  
18 know.

19          **Q**     Was it in his hand or in his holster?

20          **A**     I think it was in his hand.

21          **Q**     In his hand. Do you remember if it was  
22 pointed at anybody?

23          **A**     No, it wasn't.

24          **Q**     Okay. And so do you remember which hand  
25 he was holding the gun in?

1           **A**     No.

2           **Q**     But you recall that he was doing something  
3 with his hand, was it the hand that didn't have the  
4 gun in?

5           **A**     It didn't have the gun, right.

6           **Q**     So you just made a motion with your hand  
7 like you would be shaking something off on your hand  
8 or shaking your hand, is that what you just kind of  
9 did?

10          **A**     Right, yes.

11          **Q**     But you didn't see any blood on his hand?

12          **A**     No.

13          **Q**     Or any blood on his uniform?

14          **A**     No.

15          **Q**     And to your knowledge, did anybody that  
16 was in your apartment that day see this?

17          **A**     No.

18          **Q**     Okay. So nobody else was out on the  
19 stairs with you the whole time that happened?

20          **A**     No.

21          **Q**     Did you ever go down, did you ever go down  
22 towards the street?

23          **A**     Yes, after the incident took place.

24          **Q**     Okay. After it happened, did you go down  
25 at that point or did you go back into your

1 apartment, or what did you do?

2           **A**     See, while it was going on, some people in  
3 my house heard the shots. So my girlfriend came out  
4 and was like, what's somebody shooting for. And she  
5 was like, um, somebody shooting? I was telling her  
6 the situation and so she was like, is he dead? I  
7 was like, I don't know. Then she was looking at  
8 other people that was around, I guess they thought  
9 that he was dead. So we then walked down there and  
10 was like, and he was laying in the middle of the  
11 street.

12           **Q**     Did you ever see the officer who shot him,  
13 did you ever see that officer go down by the body?

14           **A**     Uh, no, I didn't see that.

15           **Q**     How about did you ever see the officer's  
16 truck, did it ever move?

17           **A**     No.

18           **Q**     So after this happened and the police  
19 came, the truck stayed there?

20           **A**     Yes.

21           **Q**     What about the body, other than when  
22 eventually, which I know was a long time, but  
23 eventually it was removed, but did you ever see  
24 anybody try to move the body?

25           **A**     No.

1           **Q**     Okay. Did you ever hear the officer  
2 saying anything or yelling or anything like that?

3           **A**     No.

4           **Q**     How about did you ever hear anybody else,  
5 whether it was Mike Brown or the littler guy that  
6 was with him, did you hear anybody saying anything?

7           **A**     No.

8           **Q**     And when I ask that, I don't necessarily  
9 mean if you understood what was being said?

10          **A**     I didn't hear anything.

11          **Q**     You just didn't hear any voices or  
12 screaming or anything?

13          **A**     No.

14          **Q**     Okay. And so, obviously, a lot of police  
15 arrived after that; is that right?

16          **A**     Yes.

17          **Q**     And did you stay at the scene while the  
18 police were investigating?

19          **A**     Yes.

20          **Q**     You didn't go up to the police on that day  
21 and tell them that you saw part of that; is that  
22 right?

23          **A**     No.

24          **Q**     And eventually some FBI agents knocked on  
25 your door and asked if you had seen something and

1 you told them you did?

2 **A** Right.

3 **Q** And you made a statement to them; is that  
4 right?

5 **A** Yes.

6 **Q** Is there anything else that you saw that  
7 you think is important or that maybe I haven't asked  
8 you that, let me ask you this, did you ever see  
9 anything in Michael Brown's hands?

10 **A** No.

11 **Q** How about the littler guy, did you ever  
12 see him hold anything?

13 **A** No.

14 **Q** Did you ever see anything fall or drop,  
15 being dropped from somebody?

16 **A** No.

17 **Q** Um, did you ever see what became of the  
18 littler guy?

19 **A** Um, as the shooting is going on, like he  
20 hid behind the white car and then he tried to get in  
21 the white car, but then I guess they denied him. So  
22 he ran, I think, by then the officer was going  
23 towards Mike Brown. So he ran back behind the  
24 police car and ran behind right here and ran behind  
25 this building.

1           **Q**     When you say he ran behind the police car,  
2     you said was facing west. Did he run in front of  
3     the car?

4           **A**     I don't remember. I just know he ran  
5     behind the building.

6           **Q**     Okay. And did you ever see him down at  
7     the scene later that day?

8           **A**     Uh, no, I don't remember, no.

9           **Q**     Have you ever talked to that skinnier or  
10    the littler boy about what you saw?

11          **A**     No.

12          **Q**     Do you remember when you were talking to  
13    the FBI agents, strike that, I misunderstood  
14    something, okay.

15                   MS. ALIZADEH: Sheila, you have any  
16    questions?

17                   MS. WHIRLEY: Just a few.

18          **Q**     (By Ms. Whirley) I couldn't hear you as  
19    well, so if I ask you the same question again,  
20    forgive me, okay.

21                                There was a scuffle, you said, at the  
22    car, correct?

23          **A**     Correct.

24          **Q**     And what could you see of the scuffle?

25          **A**     Nothing but the vehicle rock.

1           **Q**     But what now?

2           **A**     Nothing but the vehicle rocking.

3           **Q**     Okay. The vehicle, you couldn't see the  
4 hands of either Mike Brown or the officer?

5           **A**     No.

6           **Q**     Was the officer in the car alone?

7           **A**     Yes.

8           **Q**     You're sure of that?

9           **A**     Yes.

10          **Q**     Did you see any other police cars around?

11          **A**     After the situation.

12          **Q**     During the scuffle?

13          **A**     No.

14          **Q**     And from your viewpoint, were you looking  
15 at the passenger side or the driver's side of the  
16 police car?

17          **A**     The passenger side.

18          **Q**     So you were looking through the passenger  
19 side through?

20          **A**     Correct.

21          **Q**     You couldn't see hands or anything?

22          **A**     No.

23          **Q**     All right. You said that you heard a shot  
24 while they were scuffling, right?

25          **A**     Correct.

1           **Q**     And then did the scuffle continue after  
2     you heard the shot?

3           **A**     Momentarily, yes.

4           **Q**     Like how long?

5           **A**     Um, maybe three to four, five seconds.

6           **Q**     Okay. So when the shot first rang out,  
7     Michael Brown did not immediately run from the car?

8           **A**     I don't think so, no.

9           **Q**     I'm sorry?

10          **A**     No, I don't think so.

11          **Q**     Okay. Did you hear just one shot at the  
12     car?

13          **A**     It was one or maybe two.

14          **Q**     One or two, okay. So when Michael Brown  
15     ran from the car, he ran, show us with the pen  
16     again, or the pointer.

17          **A**     East.

18          **Q**     He ran east on Canfield?

19          **A**     (Nods head.)

20          **Q**     All right. And did the officer shoot at  
21     him while he was running?

22          **A**     Correct. Well, I don't know if he shot at  
23     him while he was running. He ran enough past the  
24     building so I couldn't see whether or not he kept  
25     running or not.

1           **Q**     Let me break it down a little bit.  So  
2     when he ran from the car you could see him running  
3     from the car?

4           **A**     (Nods head.)

5           **Q**     What did the officer do?

6           **A**     He was still in the truck getting out of  
7     the truck.

8           **Q**     Did you see the officer get out of the  
9     truck?

10          **A**     Yes.

11          **Q**     When he got out of the truck, what was he  
12     doing?

13          **A**     He faced his direction.

14          **Q**     Faced the direction that Mike Brown was  
15     running?

16          **A**     Yes.

17          **Q**     Was Mike Brown's back to the officer?

18          **A**     Yes.

19          **Q**     Did he have his weapon or did you see a  
20     weapon at that time?

21          **A**     As he was getting out of the truck, yeah.

22          **Q**     Could you show us what it looked like when  
23     he was getting out of the truck?  Pretend like  
24     that's a weapon.

25          **A**     So Mike Brown is running this way, I guess

1 he was getting ready to run towards him, or  
2 whatever, I can't say the motions about.

3 **Q** But he had his weapon up?

4 **A** Not to say he got up pointing, I just know  
5 he got up and he was facing his direction. So I  
6 guess if he didn't get out like this, he got out,  
7 took a couple steps and then faced him.

8 **Q** Well, did you see the officer facing  
9 Mike's back with his weapon drawn?

10 **A** No, the officer was getting out of the car  
11 as Mike Brown was running. So once he got past the  
12 building where I couldn't see him no more, the  
13 officer is out of the car and then pointed in his  
14 direction.

15 **Q** When were you able to see the officer?

16 **A** Say that again?

17 . I do have a  
18 quick question. Right after the altercation, maybe  
19 during the altercation at the car, did you see a  
20 minivan pull into that parking lot right directly in  
21 front of where you had been sitting and someone get  
22 out of that minivan, or you see anybody pulling out  
23 of that lot during this time?

24 **A** I think somebody tried to come that way  
25 and turned around. I remember seeing the white car

1 turn around in the street, but.

2 : Someone coming from that  
3 direction, coming from West Florissant that pulled  
4 into that lot?

5 **A** I really can't say. I think it was a  
6 vehicle, I won't say that I know it was.

7 : This is . I have a  
8 question about what Sheila was asking. I want to  
9 make sure the first time after the police officer  
10 got out of the car, the first shots that were fired,  
11 you could not see Mike Brown at that time?

12 **A** Correct.

13 : So you don't know if his  
14 back was to the officer, you assume he was, he was  
15 running away?

16 **A** Right.

17 : You don't know for sure?

18 **A** Correct.

19 MS. ALIZADEH: Anyone else?

20 (End of the testimony of .)

21

22 of lawful age, having been first duly sworn to  
23 testify the truth, the whole truth, and  
24 nothing but the truth in the case aforesaid,  
25 deposes and says in reply to oral

1 interrogatories, propounded as follows, to-wit:

2 EXAMINATION

3 BY MS. ALIZADEH:

4 Q Sir, could you state your name and spell  
5 it for the court reporter?

6 A ,

7 .

8 Q And, sir, back in August of this year,  
9 were you living in the Canfield Green Apartment  
10 Complex?

11 A Yes.

12 Q And I am going to direct you to look at  
13 Grand Jury Exhibit Number 25, which is a map of the  
14 streets of the buildings that make up the Canfield  
15 Apartment Complex. Do you see your building that  
16 you lived in back then?

17 A Yes.

18 Q Can you use that laser pointer and point  
19 to where your building was?

20 A (Indicating.)

21 Q Okay. And so we heard some testimony that  
22 these buildings have three floors?

23 A Yes.

24 Q What floor were you on?

25 A The third floor.

1           **Q**     Okay.  And back on August 9th of this  
2     year, around the noon hour, do you recall what you  
3     were doing?

4           **A**     I was in my room.  I was, at the time,  
5     video texting.

6           **Q**     Okay.  So at the time were you living with  
7     anybody?

8           **A**     Yes.

9           **Q**     Was there anybody else home at the time?

10          **A**     Yes.

11          **Q**     When you were in your room, were you  
12     alone?

13          **A**     Yes.

14          **Q**     Okay.  So now you said you are video  
15     texting, what program or what app are you using to  
16     do the video texting?

17          **A**     Glide.

18          **Q**     So for those of us who don't do that, were  
19     you doing it on your phone?

20          **A**     On my phone, yes.

21          **Q**     So you have like a smart phone?

22          **A**     Yes.

23          **Q**     That has a camera?

24          **A**     Yes.

25          **Q**     And so when you video text somebody, I

1 guess you can see their face and they can see your  
2 face while you are talking to them?

3 **A** Yes, it is delayed, I guess, it is delayed  
4 for the person receiving or sending, but it is  
5 almost like maybe a little bit delayed.

6 **Q** So when you are doing this, this video  
7 texting on Glide, is your phone recording what's  
8 being done?

9 **A** Yes.

10 **Q** Okay. And so right around noon of  
11 August 9th, you said you were video texting a friend  
12 and did you hear something?

13 **A** Yes.

14 **Q** And something unusual or something that  
15 was different?

16 **A** Yes.

17 **Q** What did you hear?

18 **A** I heard gunshots.

19 **Q** And so have you heard gunshots before?

20 **A** Yes.

21 **Q** So did you know that these were gunshots  
22 initially, or did you think it might have been  
23 something else?

24 **A** Um, living in Canfield, what I notice that  
25 these gunshots were a little bit louder than what

1 I'm used to hearing. It alerted me because I had a  
2 conversation with my roommate and she said, you  
3 know, she said , what was that. She called me  
4 , what's that, and then I said those sound like  
5 gunshots.

6 **Q** Okay. Now, did you later discover that  
7 you had actually recorded the gunshots while you  
8 were video texting your friend?

9 **A** I -- it did not, it did not. I wasn't  
10 thinking that I did, I was concentrating on sending  
11 my video, but I heard it in the background, but I  
12 was focused on talking to who I was talking to.

13 **Q** Okay. Now, you've seen that video again;  
14 is that right?

15 **A** Yes.

16 **Q** And can you, that's you in the video and  
17 your voice is heard in the video talking to  
18 somebody, right?

19 **A** Yes.

20 **Q** And you can hear some shots in the  
21 background?

22 **A** Yes.

23 **Q** Did you video, does your video capture all  
24 of the shots that you heard?

25 **A** No.

1           **Q**     And were the shots that you didn't  
2     capture, were they before you started the video or  
3     after the video ends?

4           **A**     Before.

5           **Q**     Do you recall how many shots you heard  
6     before your video begins?

7           **A**     Approximately two.

8           **Q**     Okay. And then the recording starts and  
9     you hear more gunshots, correct?

10          **A**     Yes.

11          **Q**     And we'll play this now, but did the  
12     recording accurately record what you remember  
13     hearing?

14          **A**     Yes.

15          **Q**     Okay. Can you give the jurors an estimate  
16     as to the two that you heard before the ones  
17     happened that you recorded, was there a pause  
18     between those?

19          **A**     There was a pause. There was a pause  
20     before when I started the video, the conversation I  
21     had was very short. I was just focusing, you know,  
22     video chat, I didn't have a long conversation. The  
23     other was just recorded as I was sending a video.

24          **Q**     At some point you realized that you had  
25     this video; is that right?

1           **A**     Yes.

2           **Q**     And I believe you contacted attorneys  
3 first?

4           **A**     Um, well, they contacted me.

5           **Q**     Okay. And did they then contact law  
6 enforcement and you tell them that you had recorded  
7 these shots?

8           **A**     Yes.

9           **Q**     And you made, you talked to law  
10 enforcement and let them examine your phone and take  
11 the recording off your phone, correct?

12          **A**     Correct.

13          **Q**     Um, and this clip, this clip is just a  
14 matter of a few seconds long, is that fair to say?

15          **A**     Yes.

16          **Q**     Do you mind if we play it so that you can  
17 tell the grand jurors, yeah, that's me and that's my  
18 voice on the clip?

19          **A**     Yeah, go ahead.

20                   MS. WHIRLEY: What's that exhibit number?

21                                   (Grand Jury Exhibit Number 59  
22                                   marked for identification.)

23                   MS. ALIZADEH: This is Grand Jury Exhibit  
24 Number 59. Can you see okay?

25          **A**     Yeah.

1 MS. ALIZADEH: We can listen to this as  
2 many times as you want.

3 (Playing the audio recording.)

4 MS. ALIZADEH: Just before we do that  
5 again, that was you on the video?

6 **A** Yes.

7 MS. ALIZADEH: And you can hear some  
8 gunshots in the background?

9 **A** Yes.

10 MS. ALIZADEH: You want to hear it again?  
11 Play that play again, turn it up a little bit.

12 (Playing of the video.)

13 MS. ALIZADEH: This video, you can play it  
14 as many times as you want, but in light of maybe  
15 letting him go and you all getting out of here  
16 today, I don't have any other questions for this  
17 witness. Sheila, do you have any questions for him?

18 MS. WHIRLEY: Just to make it clear that  
19 you did not tape or record the actual shooting of  
20 Mike Brown, did you?

21 **A** No.

22 MS. WHIRLEY: This recording that you  
23 made, it was unintentional; is that correct?

24 **A** Right.

25 MS. WHIRLEY: And the actual shooting of

1 him being shot and falling, you do not have that on  
2 videotape anywhere?

3 **A** No.

4 MS. WHIRLEY: Okay. That's all I have.  
5 Any questions?

6 (End of the testimony and  
7 end of Grand Jury Hearing Volume XIX.)

8

9 State of Missouri

10 SS.

11 County of St. Louis

12 I, , a Licensed Certified Court  
13 Reporter by the Supreme Court in and for the State  
14 of Missouri, duly commissioned, qualified and  
15 authorized to administer oaths and to certify to  
16 depositions, do hereby certify that pursuant to  
17 Notice in the civil cause now pending and  
18 undetermined in the County of St. Louis, State of  
19 Missouri.

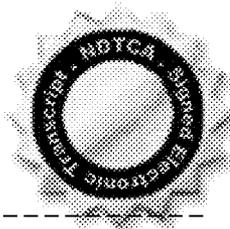
20 The said witness, being of sound mind and being  
21 by the grand jury first carefully examined and duly  
22 cautioned and sworn to testify to the truth, the  
23 whole truth, and nothing but the truth in the case  
24 aforesaid, thereupon testified as is shown in the  
25 foregoing transcript, said testimony being by me

1 reported in shorthand and caused to be transcribed  
2 into typewriting, and that the foregoing page  
3 correctly sets forth the testimony of the  
4 aforementioned witness, together with the questions  
5 propounded by counsel and grand jurors thereto, and  
6 is in all respects a full, true, correct and  
7 complete transcript of the questions propounded to  
8 and the answers given by said witness.

9 I further certify that the foregoing pages  
10 contain a true and accurate reproduction of the  
11 proceedings.

12 I further certify that I am not of counsel or  
13 attorney for either of the parties to said suit, not  
14 related to nor interested in any of the parties or  
15 their attorneys.

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1 COURT MEMO  
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5 State of Missouri v. Darren Wilson  
6  
7  
8 CERTIFICATE OF OFFICER AND  
9 STATEMENT OF DEPOSITION CHARGES  
10  
11 DEPOSITION OF Grand Jury Volume XIX  
12  
13 11/4/2014  
14 Name and address of person or firm having custody of  
15 the original transcript:  
16  
17 St. Louis County Prosecuting Office  
18 100 South Central, 2nd floor  
19 Clayton, MO 63105  
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4 100 South Central, 2nd floor

5 Clayton, MO 63105

6 Total:

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1 Upon delivery of transcripts, the above  
 2 charges had not been paid. It is anticipated  
 3 that all charges will be paid in the normal course  
 4 of business.

5 GORE PERRY GATEWAY & LIPA REPORTING COMPANY  
 6 515 Olive Street, Suite 700  
 7 St. Louis, Missouri 63101

8 IN WITNESS WHEREOF, I have hereunto set  
 9 STATEMENT OF DEPOSITION CHARGES

10 my hand and seal on this \_\_\_\_\_ day of \_\_\_\_\_  
 11 Commission expires  
 12 \_\_\_\_\_

13 Notary Public

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