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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Page 2
           IN THE CIRCUIT COURT OF ST. LOUIS COUNTY
 1
 2
                       STATE OF MISSOURI
 3
 4
     STATE OF MISSOURI
 5
 6
 7
     VS.
 8
 9
     DARREN WILSON
10
11
          The following is a hearing before the Grand
12
     Jury of St. Louis County, at the offices of St.
13
     Louis County Prosecuting Attorney's Office, 100
14
     South Central Avenue, in the City of Clayton, State
15
     of Missouri, on the 4th day of November, 2014,
16
17
     before
18
19
20
21
22
23
24
25
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Page 3
 1
     APPEARANCES OF COUNSEL:
 2
 3
      FOR THE STATE:
         Ms. Kathi Alizadeh & Ms. Sheila Whirley
 4
         Assistant Prosecuting Attorneys for St. Louis
 5
 6
     County
         100 South Central Avenue, 2nd Floor
 7
         Clayton, MO 63105
 8
 9
         (314) 615-2600
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
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	Page 5
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

```
Page 6
    that he made last week. I'm not sure of the date,
1
 2
    but it was done after he came from the State of
 3
          to come up here and testify. It was recently
    done, we don't have a transcript for that.
 4
 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
     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
    recording interview of
                                        . I am also
12
13
    transcribing it.)
14
                           This is special agent
             We're at the FBI field office 2222 Market
15
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
```

```
Page 7
1
                          : Yes, ma'am.
 2
                         : It is
                                                    ?
 3
                             Yes, ma'am.
                           You go by , okay. What
 4
 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
         Α
16
                                  Okay. Do you know
17
    your social security number?
                           : Yes, ma'am.
18
19
                           Okay. And where were you,
    what was your address on August 9th, 2014.
20
21
                           :
22
23
                         : Okay.
24
              MS. : So you guy by is it okay
25
    with you if we call you
                                ?
```

		Page 8
	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		

```
Page 9
                          Okay. If at any point you
 1
               MS.
 2
     don't understand a question that we're asking you,
     let us know because we are not trying to trick you,
 3
     we are just trying to figure out what happened.
 4
 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
     we go back and ask you some questions to clarify to
12
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
     friend.
24
25
               MS.
                          Okay. Which friend is he a
```

	Page 10
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 for 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

```
Page 11
     or something like that.
1
 2
               And I guess they got into a scuffle, but I
 3
     went in the house to get my phone because I was
     going to go record it. But I heard a gunshot, so I
 4
 5
     raced outside. I went to the other side of the
 6
     balcony and then I seen Mike Brown holding himself.
7
                       : (inaudible) You saw that he had
               MS.
8
     his hand down around his stomach?
 9
                              Yes, he had his hand like
     around his torso area.
10
11
               MS.
                   : Okay. Which hand, do you
     remember?
12
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
     don't know if he stepped forward or if he was
19
     falling forward, but as he was falling forward, the
20
     officer was still firing.
21
22
                       : Okay. So you're saying and
               MS.
23
     that is in total what you saw.
24
                              Yes, ma'am.
25
                          You said the officer was still
               MS.
```

```
Page 12
     firing, what did the officer do at some point, did
 1
 2
     the officer stop firing?
               Yes, ma'am afterwards.
 3
          Α
                          After what?
               MS.
 4
 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
     little bit, okay. So you were sitting on your porch
12
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
                       : West Florissant?
               MS.
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
     officer, where was he?
24
25
                              Um, he wasn't around until
```

```
Page 13
     they got towards like the other, there was another
1
     apartment complex across the street from where I
 2
     was. So he didn't pull up until they got to that
 3
 4
    part.
                          Okay. Which direction is the
 5
               MS.
 6
     police officer going?
7
                              Um, he was coming towards,
8
     coming down.
9
                          The opposite direction?
               MS. :
                           : He was coming the same way
10
11
     they were coming.
12
                    : So the police officer is coming
               MS.
13
     from West Florissant also?
14
         Α
               I believe so.
15
                       : Okay. And then what happened?
               MS.
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
    the street. I'm not sure if that's what happened
21
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?
```

```
Page 14
     Everyone has a little piece of this, nobody is going
 1
 2
     to make or break the case in one fell swoop, right?
 3
     Everyone has to say what they know. If you know
     something, great. If you don't know, that's fine
 4
 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
     they're going?
10
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
                          Okay. Before you went in the
               MS.
     house to grab the phone, was there any sort of
21
     interaction with the police officer and Mike and his
22
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
```

```
Page 15
     escalate that far.
1
 2
                   : All right. So you went inside
               MS.
 3
     to get your phone. I think what you told the FBI
                     , you went to get your phone
 4
     agents in
 5
     separate and apart from anything that was going on.
 6
     You just happen to want your phone at that time?
7
                              Yes.
8
                          So when you're sitting on your
 9
    porch, you see Mike and his friend and you see, when
     you run in, do you actually see the police officer
10
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
     anything about the interaction between Michael Brown
20
     and the police officer?
21
22
               No, ma'am. I just seen him at the car I
          Α
23
     just seen him like he was sort of kind of by the
     car, but then again, he was not inside of the car at
24
25
     the time when I saw.
```

```
Page 16
               MS.
                          Is this before or after you get
 1
 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
                       : You see the police officer
               MS.
     driving in the same direction that they are walking?
10
11
                            : Yes, ma'am.
12
                       : Okay. What do you remember the
               MS.
13
     police vehicle doing?
14
                              Just pulled up towards them
15
     and that's it, that's all I can remember seeing.
                       : Pulled up toward them how?
16
               MS.
17
                              Um, I wouldn't say that he
18
     pulled up cautiously, but he pulled up as if he
     noticed that they did something wrong or something.
19
20
                       : Okay. And so what, when the
               MS.
     police officer pulled up to them, where was the
21
22
     police officer's vehicle in relation to the boys?
23
                              Probably, I mean, they
     turned around so they was probably in front, they
24
     was in front of each other.
25
```

```
Page 17
               MS.
                   : What kind of car was it?
 1
 2
                              It was a police cruiser, I
 3
     don't know.
 4
                       : Was it a car, a SUV?
               MS.
 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
     when he pulled up.
10
11
               MS.
                   : Okay.
12
                             were they in relation to the
13
     car, does that make it easier?
14
                              I quess 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
     kind of --
19
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.
```

```
Page 18
              MS. : And then is that when you go
1
    and get your phone?
 2
                           : Yes, ma'am.
 3
              MS.
                  : You don't see any sort of
 4
 5
    interaction between them?
 6
                           : No, ma'am.
7
                       : When you went to go get your
              MS.
    phone, while you were getting your phone, did you
9
    hear anything?
10
                           : Yes, ma'am, I heard a
11
    gunshot.
12
                      : Okay. So what did you hear?
              MS.
13
                              I went immediately outside.
                       : Okay. Describe for us what you
14
              MS.
15
    saw?
16
                             When I went outside, they
    were, the police cruiser was still like by the
17
18
    apartment complex.
19
              MS. : Okay.
20
                              But they were up towards
    the street.
21
22
              MS. : When you say they, who do you
23
    mean?
24
                           : Police officer Mike Brown,
25
    the friend was nowhere in sight.
```

```
Page 19
               MS.
                       : You didn't see the friend after
1
 2
     that?
 3
                              No, ma'am.
               MS.
                          The only time you saw the
 4
     friend was before you went and got your cell phone?
 5
 6
                              Yes.
7
                          You come back out and you see
               MS.
8
    Mike Brown and the police officer and you say where
9
    were they?
                              They were up the street
10
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
     walking?
14
15
                           : Actually, he was standing
16
     there.
                          Who is he?
17
               MS.
18
                              Mike Brown and the police
               The officer had his gun drawn at him.
19
     officer.
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?
```

	Page 20
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	

```
Page 21
     officer and he was holding his front, his torso,
 1
     right front of his stomach area?
 2
 3
                              Yes, ma'am.
               MS.
                          Lower stomach?
 4
 5
                              Yes, ma'am, lower stomach,
 6
     I believe.
 7
                       You couldn't hear what he was
               MS.
 8
     saying?
 9
                              No, ma'am.
10
                       : Did it look like they were
               MS.
11
     saying anything or you too far away to see?
12
                              To me it didn't look like
     they were saying anything.
13
14
                       : Okay. You say you saw the
               MS.
     police officer with his gun drawn?
15
16
                           : Yes, ma'am.
17
                       : Did you see any shots fired?
               MS.
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
```

```
Page 22
     standing there with his arm around his torso and the
 1
 2
     police officer is standing in front of him, so
 3
     describe what you see?
                               The officer starts to fire
 4
 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.
     He starts to fall forward, Michael Brown starts to
10
11
     fall forward and the police officer, I think, fires
     two more times as he's falling forward and then
12
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
     last four or five shots I believe you said?
20
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
     when the boys were first walking in the street,
24
25
     correct?
```

	Page 23
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

```
Page 24
     last shots were fired?
1
 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.
                          : Okay.
9
               MR.
                       : So let's go back for a second.
10
               MS.
11
    You first met Michael Brown when you were going to
     the store. What's your friend's name again?
12
13
                         What's his last name?
14
              MS.
15
                                   still live in the
16
               MS.
                         Does
17
    Canfield area?
                              I'm not sure. I moved so.
18
19
               MS.
                          I know you moved in August.
                              But he moved before I
20
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
```

	D 05
1	Page 25
1 2	MS. : How long did you live in 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.

	Page 26
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

```
Page 27
     interaction with the friend?
 1
 2
                           : No, ma'am. I have no idea
     who he is.
 3
                    : Where did you see him when you
 4
               MS.
 5
     saw him the next day?
 6
                           : He was in Canfield.
 7
               MS.
                       : Was he just like hanging out,
     what was he doing?
 9
                           : He was walking.
                       : Okay. Did you talk to anyone
10
               MS.
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
     and you didn't know if he was inside the car or not,
20
     but other people were talking about that, remember
21
22
     that?
23
                              Yes, sir.
24
               MR.
                             Who were those people, were
25
     those people up there?
```

```
Page 28
                              Just neighbors, everybody
 1
     in the neighborhood was talking about it.
 2
 3
               MR.
                             When was that?
                               This was the same day.
 4
 5
                              People coming out and
               MR.
 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,
     you took that on your phone; is that right?
10
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
     referring to there, what was going on?
21
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.
```

	Page 29
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

```
Page 30
     officer did that very unjustly, he overkilled
 1
 2
     basically. After the first shot, I mean, he didn't
 3
     really have to shoot the young man in the first
     place. They have other means of, you know,
 4
 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,
     he didn't have to kill him because he was unarmed.
 9
                          : From what you saw that day,
10
               MR.
11
     could you tell why the police officer shot at Mike
12
     Brown?
13
                               I'm not sure why.
14
               MR.
                             Okay.
15
                         And you don't know what
               MS.
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,
     you said he shot him like six times. And you said
24
25
     for no reason, do you recall that?
```

```
Page 31
                            : Yes, sir.
 1
 2
                           : Is it fair to say you didn't
               MR.
 3
     see what happened before those last four or five
     shots; is that right?
 4
 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
                             Okay. That's fair enough.
               MR.
10
               MS.
                       :
                          I think when you originally
11
     spoke to the FBI in
                               you heard like two shots
     when you were inside, did you hear two or one or not
12
13
     sure?
14
                               I'm not sure. I heard one
     for sure, I know that for sure.
15
                          And just so you know what I'm
16
               MS.
17
     looking at, when you are interviewed by the FBI
18
     though and what you said, that's all I'm looking at.
     So it is a summary of what you told them.
19
20
               MR.
                           : After that one shot that
     you're sure you heard while you were inside, you
21
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.
```

```
Page 32
               MR.
 1
                          : Okay.
 2
                              But other than that --
 3
               MR.
                           : I'm not suggesting that
     should or shouldn't of, I'm just trying to be sure
 4
 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
     remember one for sure, maybe two, and then is it
10
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
     if you want. We're just going to go in the other
19
     room here. We'll be back in just a minute. Thank
20
21
     you.
22
               (Pause in the interview.)
23
               MR.
                                  , come back in and we'll
     finish up. Just a couple minutes. Thank you,
24
25
     ma'am.
```

```
Page 33
               All right. Just to be clear, we took a
1
    break, obviously, we left the recorder running here
 2
     just so we don't have to start it over again, but
 3
     when we're on the break you went out to the lobby
 4
 5
     and sat with your mom for a little while?
 6
                              Yes.
7
                         : She's out there waiting for
               MR.
8
     you.
9
                           : Yes.
10
                          : We weren't out there, right?
               MR.
11
                           : You weren't.
12
                          : Okay. We just went to a
               MR.
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?
                              Yes. Just didn't want to
20
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
```

```
Page 34
     got your cell phone, you had mentioned on your
 1
 2
     actual video that you gave to the FBI that you wish
 3
     you would have recorded it. So you ran and got your
     cell phone, how come you didn't record what you saw?
 4
 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
     all that, I didn't have no time to do none of that.
10
11
                    : It was like right when you
               MS.
     walked outside it was happening?
12
13
                           : Yes, ma'am.
14
               MS.
                          Okay.
15
                          : All right. You talked a
               MR.
     little bit about some of the talk that kind of went
16
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
```

```
Page 35
     car and I guess he was reaching for his gun or
 1
 2
     something, and the officer shot him in his hand or
     shot at him or something and then he ran away.
 3
     That's all I know.
 4
 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.
                       : You really only had that first
10
               MS.
11
     day on Canfield. What was it like around there,
     like the people around?
12
13
                               Terrible.
14
               MS.
                       : Could you describe it?
15
                              It was very chaotic, I will
     tell you that. And the police officers really
16
17
     didn't make anything better than what it was,
18
     especially when they brought the dogs out. That was
19
     very unnecessary.
20
                          How were the people in the
               MS.
                       :
     community acting?
21
22
                              They were all riled up for
23
     the incident. They all just doing crazy things,
     yelling all over the place, some were praying, some
24
25
     were like, I wouldn't say intimidating the officers,
```

```
Page 36
     but they were just standing in front of them with
 1
 2
     their hands up saying don't shoot and things like
 3
     that.
               MR.
                          : At the time that you saw
 4
 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.
               MS.
10
                       : 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
     anything else you want to tell us?
16
17
                            : No, ma'am.
                       : Do you think that we treated
18
               MS.
19
     you fairly?
20
                            : Yes.
21
               MS.
                          Did we put any words in your
22
    mouth?
23
                              No, ma'am.
24
                       : Everything you told us is what
               MS.
25
     you wanted to tell us and the truth?
```

	Page 37
1 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	

- 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.
- 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
- 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.
- 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.
- 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

```
Page 39
     testifying. Anyone? All right. I will go get
 1
 2
     him.
 3
     of lawful age, having been first duly sworn to
 4
 5
     testify the truth, the whole truth, and
 6
     nothing but the truth in the case aforesaid,
 7
     deposes and says in reply to oral
 8
     interrogatories, propounded as follows, to-wit:
 9
                         EXAMINATION
     BY MS. ALIZADEH:
10
11
               Would you state your name, please?
          Q
12
          Α
13
               And can you tell me what is your
          Q
14
     occupation?
15
               I'm a toxicologist, more specifically a
          Α
16
     forensic toxicologist. Toxicology is the study of
17
     harmful effects of drugs and chemicals on living
18
     systems. We study these materials in a manner that
19
     the data may be admitted into a court of law.
20
               And so the toxicology is the study of the
          Q
     harm of toxic effects and the forensic part of it is
21
     the legal application and conclusions?
22
23
          Α
               Yes. We have to cross some T's and dot
     some I's to make sure everything is fine.
24
25
               Okay. And so can you tell the grand
          Q
```

Page 40 jurors a little bit about your educational 1 2 background? Well, I have a bachelor's degree in 3 Α chemistry from Marist College, which is in New York. 4 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 that's from St. John's and I have been working in 10 11 the field of toxicology now about 35 years. Where are you employed? 12 Q 13 I work for St. Louis University Med School 14 and I'm the chief toxicologist for St. Louis County. 15 And so do you work with the Medical Q 16 Examiner as the chief toxicologist for St. Louis 17 County? 18 Yes, ma'am. Α 19 Q And so are there times when you are asked to do testing or perform test on samples that are 20 21 received or obtained from deceased persons? 22 Α 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

```
Page 41
     Illinois. We do a lot of work for a lot of
 1
 2
     different municipalities.
               Did I ask you or did you bring with you
 3
     today your curriculum vitae?
 4
               Yes, ma'am.
 5
          Α
 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.
     Is that your CV that you brought with you today?
10
11
               Yes, ma'am.
          Α
               I made a copy for each of the grand
12
          Q
13
     jurors, so I will pass that around.
                    And you have your doctorate; is that
14
15
     correct?
16
          Α
               Yes, ma'am.
               And so I will call you
17
                                                  Now,
18
     just for clarification sake, you are not a
     physician, correct?
19
20
               No, ma'am, I'm not a physician.
               Okay. And so you didn't go to med school?
21
          Q
22
          Α
               That is correct. My area is toxicology,
23
     affects of drugs.
24
               All right. And in the course of your
25
     employment as the chief toxicologist for St. Louis
```

		Page 42
1	County, ba	ck in August of 2014, did you receive some
2	samples fr	om 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 w	here the medical examiner performs
14	autopsies?	
15	A	Yes.
16	Q	So this is not like the sample had to be
17	shipped an	ywhere?
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

```
Page 43
                         marked for identification.)
 1
 2
               (By Ms. Alizadeh) I'm going to hand you a
          Q
     copy of Grand Jury Exhibit Number 66. Is that the
 3
     report that you made or a copy of the report that
 4
 5
     you did after testing samples that you received from
     the deceased, Michael Brown?
 6
               Yes, ma'am.
 7
          Α
 8
          Q
               All right. And I've made a copy of these
     as well for the grand jurors. And actually, I'm
 9
     going to give one to the court reporter so he can
10
     have, some of the words are difficult for me to
11
     pronounce and spell.
12
13
                    So,
                                , first off, let me ask
14
     you, when the human body ingest a chemical or a
15
     substance, does the body process that over time?
16
               Oh, absolutely.
17
               Okay. So if someone ingest a chemical or
18
     substance and then that person dies, does the body
19
     continue to process that chemical after death?
               Well, when you are referring to
20
          Α
     processing, that is an energy requiring step, like
21
22
     the liver metabolism. When a person expires, the
23
     energy stops so there is no more metabolism.
24
     However, there are further reactions that go on just
25
     because there is certain enzymes, decomposition, PH,
```

Page 44 things of that nature that can alter the drug 1 2 concentration. 3 Q Okay. So let me ask you from the time that the sample is retrieved from the deceased and 4 then if it is properly preserved or maintained, is 5 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 There can be some degradation, but as soon as the sample is drawn, it is refrigerated and then 10 11 we start performing the test on it right away. anything along those lines is minimal. 12 13 Do you recall when it was that you Q 14 obtained these samples or got them out again, your 15 process or testing them? Yeah, we received them August 11th of 16 2014. 17 18 And so if Michael Brown passed on 19 August 9th and the autopsy was conducted on August 10th, Sunday, and then you received those 20 samples on that Monday? 21 22 Α That's correct. 23 And when you receive the samples, did it appear to you that they had been properly packaged 24 25 and that they had been refrigerated properly?

Page 45 1 Α Yes, ma'am. 2 Okay. So now you mentioned that you had received urine and blood and you said vitreous 3 fluid, what is vitreous fluid? 4 5 Α Vitreous fluid is the fluid in your eye 6 that keeps it round, okay. It is the fluid in the eyeball. 7 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 Α Well, see there is several things that can go on with your chest cavity, even motor vehicle 12 13 accidents, trauma to the chest, you can get 14 contamination of everything in here, okay. 15 The eyeball, because it is so protected in the skull, if something happens to it, 16 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 the brain concentration, okay. So it is very close 20 to whatever is in the brain to give you a handle on 21 22 that. 23 Now, in this particular case, did you test the vitreous fluid from Michael Brown? 24 25 Α No, ma'am.

Page	46
1 <b>Q</b> And why didn't you do that?	
2 <b>A</b> 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	n
8 the blood and then it declines and the vitreous lag	S
9 on some drugs. On these drugs the vitreous stays	
10 very low, the drugs do not penetrate into the	
11 vitreous.	
12 <b>Q</b> So you tested blood and urine that you had	d
13 received from Michael Brown, correct?	
14 A Yes, ma'am.	
15 $\mathbf{Q}$ And we'll talk about the actual process o	f
16 testing those, but did you first do a test on the	
17 blood for alcohol?	
18 A Yes.	
19 <b>Q</b> 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	d
22 methanol were all negative, correct?	
23 <b>A</b> Well, we list those, but we test for	
24 others, like toluylenes, Xylene, and so forth.	
$\mathbf{Q}$ And so you had, is it true then that all	

Page 47 of the tests for alcohol were negative on -- in your 1 2 test of the blood of Michael Brown? 3 Α Yes. Now, let me ask you this. If there was a 4 Q 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, another test done later? 10 11 Sure. The reason for that is Α decomposition. As I said, the longer a sample sits 12 13 and then transport and everything else that goes along with it, you can get a little bit of alcohol 14 15 generated. And .02 is nothing, so it would just be decomposition. 16 17 So that could possibly be explained by the

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

	Page 48
1 .	A Yes.
2	<b>Q</b> And every one of those tests was negative
3	except for the test for cannabinoids, correct?
4	A Correct.
5	${f Q}$ 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	<b>Q</b> 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	<b>Q</b> 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	${f Q}$ 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

	Page 49
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 quantitive, telling us
24	how much is present. So that's the one part.
25	The other part is we run a gas

Page 50 chromatography for the other drugs and this will 1 2 pick up everything from strychnine to ectasy, and 3 pick all of those up on one screen. And unfortunately, we have even seen strychnine cases. 4 5 If I didn't like you, that's what I'd use. That's a 6 nasty poison. 7 Good to know. 8 If I can, what it does it causes 9 constriction of all the muscles in your body. And your back can actually constrict to a point where 10 you break your own back. Yeah, so it is nasty. But 11 that screen will pick up everything. And again, all 12 13 of that would have to go on for further confirmation. 14 15 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 That's correct. 19 Q Now, did you, now, the gas chromatography --20 21 Α GCMS. 22 GCMS is shorthand for that. Is that an Q 23 instrument that is used in the lab? 24 Yes. Α 25 And this is an instrument that is used in Q

	Page 51
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	${f Q}$ 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	<b>Q</b> 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

Page 52 periodically. 1 2 And so out of the 40 that are not control 3 samples, are these all 40 samples from the same subject? 4 5 Α No. You might have John Doe's blood, you might 6 7 have Michael Brown's blood, you might have Suzie Q's 8 blood? 9 That's correct, there is no identification as to the person when it is going through the 10 11 instrument. All we have is a number that's associated with a particular person. 12 13 Q So how is it that you insure that these 14 samples don't get mixed up? Well, it is all done under chain of 15 Α custody and everything is sequenced and when we load 16 it into the instrument to check it and then the 17 18 person who takes the data off checks the same 19 sequence to make sure it's correct. And we also run the samples, well, not on marijuana. We only do the 20 21 blood and urine ones. The other drugs are run 22 differently. 23 Okay. And so let's talk about the positive test that, positive result that you got for 24 25 the cannabinoids, what is a cannabinoid?

	Page 53
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	${f Q}$ 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

```
Page 54
     sample of Michael Brown through the GCMS, did you
 1
 2
     get any quantitative information about, you had
     talked about Delta-9, hydroxy and the carboxy
 3
     levels, did you get quantitive information about
 4
 5
     those?
 6
          Α
               Yes.
               Okay. And so let's talk about what is the
 7
 8
     difference between the Delta-9, hydroxy and carboxy.
 9
     And for everybody's clarification, the Delta-9, is
     Delta-9-THC on your report, correct, and the hydroxy
10
11
     is 11-Hydroxy-THC. And then the carboxy, which is
     what we are calling it, is actually
12
13
     11-NOR-Delta-9-COOH, correct?
14
               Yes.
          Α
15
               And so is that COOH the carboxy?
          Q
16
          Α
               Yes.
17
               Okay. So it doesn't say carboxy, that is
     what we are referring to, correct?
18
19
          Α
               Yes.
               When we talk about carboxy. So can you
20
          Q
     explain to the grand jurors, what are these
21
     compounds and how are they different?
22
23
          Α
               Okay. The first compound, the Delta-9, is
     the reason you smoke marijuana. That produces the
24
     desired affects, the euphoria.
25
```

	Page 55
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	<b>Q</b> Psychoactive. So that's what makes people
24	feel differently when they smoke marijuana?
25	A Yes, euphoria and so forth.
l	

Page 56 And then the Hydroxy-THC, does that have a 1 Q 2 psychoactive effect on the human body? Yes, it does. But as I said, we rarely 3 Only in a very, very acute use with death 4 find it. 5 following. 6 And then on the 11-Hydroxy molecule. Q 7 Α Yes. 8 Q Is there a psychoactive effect on the body 9 for that? No, you could eat a pound of it, it 10 Α 11 wouldn't do anything. Okay. So why is it that these, why is it 12 Q 13 that it is important to test for all three of these compounds when you are testing the cannabinoids? 14 15 Well, for example, suppose you only had Α the Delta-9 and nothing else, that would raise 16 severe questions about the sample. You want to see 17 18 the parent drug, the 11-Hydroxy right off, you know it is not going to be there, and you want to see the 19 20 Carboxy-THC. That tells you the drug was consumed by the individual and it was being metabolized. 21 22 So you have a good handle on its use 23 and one verifies the other. Much the same as we do in a tube biologicals like blood and urine. The 24 25 reason for that is it avoids any question was it

Page 57 contaminated or mixed up. 1 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 what you said there, you ran the sample of urine 6 7 that you had received from Michael Brown that was received from Michael Brown. You ran those same 8 three for those three compounds. Delta-9, hydroxy 9 and the carboxy, correct? 10 11 Α Yes. So let me ask you because we can see from 12 Q 13 your report that you, when you ran this through the GCMS you got for the Delta-9-THC, you got 12 14 15 nanograms per milliliter. Yet when you ran the 16 urine you got negative for the Delta-9-THC? 17 Α Yes. 18 Isn't that inconsistent, why would that be 19 different? No, well, the Delta-9-THC is subject to 20 other things particularly in the urine. It can even 21 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.

Page 58 If it was negative for the carboxy, 1 2 that would be a real concern, but not for the 3 Delta-9. Is the fact that the blood was 12 4 Q 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? The urine serves to get rid of chemicals 10 11 in your body, okay. That's probably the main group. What you are looking at, the urine really doesn't 12 13 count as far as the interpreting it. The Delta-9 in the blood tells you because Delta-9 in the blood 14 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 within a couple of hours. 20 Okay. So, and you also had mentioned that 21 Q 22 depending upon the sample that in the urine, the 23 urine sample could be diluted? In other words, there could be more water in the urine or other 24 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.
- 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

Page 60 it wouldn't narrow it down very much. The Delta-9 1 2 in the blood is the key. 3 And then your, the levels that you detected in the urine for the hydroxy, as well as 4 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 Α In our quantitation, we run a series of standards going up the long. Okay. If it exceeds 9 our upper limit, we just report it as greater than 10 because it is an academic number. 11 Okay. So there's no conclusion that you 12 Q 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? You can't say anything based on a urine 17 18 concentration for THC. 19 Q Okay. And so then let's talk about then the testing, you mention the carboxy level in the 20 blood that you found. And you also said that you 21 22 would be concerned if you did not have carboxy if

Yes, that would be inconsistent.

you had a positive for the Delta-9-THC, but no

carboxy that would be problematic?

Α

23

24

25

- 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 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.
- 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.

Page 63 You can argue, well, more effect, 1 2 less effect, you can argue that yes, but it is definitely having an affect on you. When you start 3 looking at it in terms of the overall, well, 4 marijuana generally, you know, you smoke a joint and 5 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 that depends on your basic chemistry, your basic who 9 10 you are as it were. 11 So that it can have somewhat different affects. Add to that the question of 12 13 If you take, take alcohol. You have a glass of wine with dinner, okay, or whatever with dinner, 14 that's one way of doing it. 15 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 different effect. It is a function of the 20 concentration, how much goes in you. 21 22 Same thing is true with marijuana. 23 You can get desirable affects one level, but if you get a massive dose, and you have to remember 24 25 marijuana is not regulated. So you don't know the

Page 64 purity you are getting. You don't know if you are 1 2 getting Illinois ditch-weed or Acapulco Gold, for 3 lack of a better example, okay. So it could be very low purity or very high purity. 4 5 Again, the same thing can happen. 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 Is there also a variable that would perhaps effect how it was felt by the person 10 11 depending on their body mass or their weight? So, in other words, if a smaller, we know this to be 12 13 true with alcohol, a smaller person can have a glass of alcohol and a larger person maybe twice or three 14 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 Yes. See, marijuana is technically classified as a hallucinogen. Cause what it does is 19 it alters your perception of your surroundings. How 20 you see things, okay. What information comes into 21 22 your mind. It slows it down and distorts it. That 23 is why it is classified as hallucinogen. Technically speaking, I mean, you are 24 25 not look at pretty birds and flying snakes and so

Page 65 forth, but you are altering your perception of 1 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. Some people, for example, with 4 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 it is not hitting your brain, it is not giving you 9 the effect. 10 11 After a couple of times these nonspecific sites are filled. So the drug is now 12 13 free, it gets to your brain and produces, gets to the threshold and starts producing the effect. 14 The more you have, the greater the 15 16 effect, and it becomes variable at high end. 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 studies they have even done with injections. They 20 can't really, with alcohol it is straight line 21 22 depressant. That just means the more you drink, the 23 more it depresses you. I don't mean sad, I mean your nervous system. It slows it down, stops it 24 25 from working, makes you goofy, okay.

	Page 66
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	<b>A</b> Yes.
17	<b>Q</b> And then the next one perhaps could be
18	lethargy?
19	A Yeah.
20	<b>Q</b> 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	<b>Q</b> After that would be a possible paranoia?
25	A Yes.

	Page 67
1 .	<b>Q</b> 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	${f Q}$ 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

Page 68 think he was about 300 pounds. So for concentration 1 2 of 12 nanograms in a large person, that shows it was 3 a large dose. In a small person, say like 4 100 pounds to get to 12 nanograms wouldn't take a 5 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. Now, let's compare, because I think most 10 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 affects than I might because I have experienced 19 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 levels in their system but experience different 24 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 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 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

```
Page 70
     level of impairment that Michael Brown may have
 1
     experienced if, before he passed?
 2
               I can't tell you how he was impaired.
 3
     is like predicting what somebody would do. I can't
 4
 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
     was having an affect and was impairing his nervous
10
     system.
11
               You would consider he was impaired in some
12
          Q.
13
     way?
14
          Α
               Yes.
15
               But you cannot draw any conclusions that
16
     he was suffering or that he was experiencing
17
     hallucinations or having a psychotic break?
18
               That is correct.
19
          Q
               Um, we discussed when we came out to talk
     to you last week, we also discussed with you, we
20
     asked you if you were familiar with the process
21
22
     called waxing?
23
          Α
               Yes.
               And you indicated that you were familiar
24
25
     with what that is?
```

Page 71 Α Yes. 1 Can you describe for the grand jurors what 2 3 you understand waxing to be and what happens? Waxing is a process of concentrating the 4 Α Delta-9 present in marijuana. It uses gases like 5 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. So you can ingest a smaller piece or 10 11 smaller physical quantity and get a more concentrated level of THC? 12 13 A much greater effect, yes. Α 14 Okay. And is there any difference if you Q 15 ingest a much higher concentration of THC, is there a difference in how quickly you would feel those 16 affects or how long it would last? 17 18 Well, it would depend at that point if you 19 were inhaling it, putting it under your tongue, smoking it, however you were doing it. But 20 generally speaking, it is less than ten minutes. 21 22 Q And less than ten minutes for you to feel 23 the affects or it would last less than ten minutes? No, for you to feel the affects. 24 affects would come within ten minutes. 25

Page 72 If you ingested a highly concentrated 1 Q amount of THC, do you have any opinion as to how 2 long those affects would last that you would 3 experience some type of effect? 4 5 Probably four to five hours. Α Now, this morning we talked about, and we 6 7 did also briefly last week talk about levels of THC 8 that would indicate or that legally would indicate someone is presumed impaired. 9 10 Α Yes. 11 Now, states such as Colorado and Q California, are you familiar, are you aware that 12 13 those states have legalized marijuana either 14 medically or in the case of California 15 recreationally or Colorado, correct? 16 Α Yes. And we discussed the fact that those 17 18 states have made determinations as to the level that 19 they would if they detect in the person's blood that would indicate impairment much in the same way that 20 alcohol level of .08 is presumptively in most 21 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

```
Page 73
     someone is impaired?
 1
 2
          Α
               Yes.
 3
          Q
               What is that?
               5 nanograms per mil.
 4
          Α
 5
               So in this case, Michael Brown's level was
          Q
     over twice that; is that correct?
 6
 7
          Α
               Yes.
 8
               But again, you're not, and the same thing
 9
     with actually the consumption of alcohol, it impairs
     people, but their affects might be different
10
11
     depending on some of the factors that we've talked
     about?
12
13
          Α
               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
     that you discussed, would the butane appear in his
20
     body?
21
22
               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
```

	Page 74
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
l	

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Page 75
     question about a person's hydration level, how that
 1
 2
     affects the test. Either prior to or even in this
 3
     incident the individual on the street in August for
     four plus hours, do you know how that may effect the
 4
 5
     result in any way, if it would?
 6
               Okay. What you are looking at there is an
          Α
 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
     because we lose too much water, you have electrolyte
10
11
     imbalance, you have a heart attack and die.
     there is a difference on that.
12
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
                                      Thank you.
                               Okay.
19
          Α
               Yes.
20
                                                  , with
                                          Dr.
     reference to the psychotic affects of certain types
21
22
     of drugs, specifically THC. Can you explain to me,
23
     trying to think how to phrase this. For someone who
     is at a certain level, you mention that if they
24
25
     smoked for a month at a time or two weeks at a time,
```

Page 76

- 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.
- : 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.

```
Page 77
 1
                               Thank you.
 2
               MS. WHIRLEY: Could this amount of THC
 3
     that was found in the blood be, is it possible that
     someone who is ingesting that amount on a regular
 4
 5
     basis and not be dead?
 6
               Well, marijuana really isn't lethal.
          Α
 7
               MS. WHIRLEY:
                            Okav.
               So it couldn't kill him. As far as the
 8
 9
     affects, it would take a lot of marijuana on a
     regular basis to stay at this kind of level. So I
10
11
     would say that's less likely.
12
               MS. WHIRLEY: That's less likely.
13
          Α
               Yeah.
14
               MS. WHIRLEY: That you are consuming this
15
     amount of marijuana?
16
          Α
               On a daily basis.
17
               MS. WHIRLEY: On a daily basis or regular
18
     basis?
19
          Α
               Yes.
20
                                                 Would a
     cigar size, I guess, you know how they take the
21
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?
```

```
Page 78
               Is that possible? Yes. See again, purity
1
          Α
     like low end purity is like 3 percent Delta-9, high
 2
 3
     end is like 20 percent. So that's a huge range,
     okay. Is it possible that the cigar got stuck with
 4
 5
     the higher end stuff? Yes, it is.
 6
                               You can reach this without
7
     waxing, I guess regular marijuana in the cigar?
8
          Α
               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
     about the affects of --
12
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
     size of the person, but the content in the blood
20
21
     would be.
22
               That is correct. It is a dose response.
         Α
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
```

```
Page 79
                question. When you smoke marijuana and
 1
 2
     he's talking about a blunt, through the cigar
 3
     wrapper versus the cigarette papers, are you -- you
     are likely ingesting more of the marijuana when you
 4
 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
               Yeah, if it burns much quicker, yes.
 9
               MS. WHIRLEY: Not that we are marijuana
     smokers, you know, but it appears if you watch it on
10
11
     TV, that the cigarette is burning much faster than
     when they smoke with a blunt. I think that's why a
12
13
     lot of people do the blunt?
14
               Yes, because it is the dose and it's the
          Α
     destruction of the drug while you are not inhaling,
15
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
               Yeah, it could be. It could be put in a
          Α
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
```

Page 80 can be eaten, it can be smoked, apparently it can be 1 2 injected, the THC at least. Is there a difference 3 in how quickly it would impair you or how quickly it would be in your system depending on how it is 4 5 ingested. 6 Sure, oral is the worst. Anything that Α 7 goes in your mouth goes to your stomach. 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 blood, it goes into the liver. The liver chews it 10 11 up as metabolism. So the oral would give you the least bang for the buck and probably take the 12 13 longest because it has to be absorbed and 14 metabolized and so son. 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 carotid arteries here in the aortic arch. 19 anything that goes in by inhalation gets up to the 20 brain within like two, maybe three heartbeats. 21 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

```
Page 81
    more hands on with this specific, in your experience
1
 2
     then would you assume that an autopsy or examination
     would show in the internal organs would be able to
 3
     tell if something was smoked or ingested orally?
 4
 5
               No, reasonably, no. Not unless there was
          Α
 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.
               Leafy green material in the stomach
10
11
     contents.
12
               MS. ALIZADEH: Right. Any other
13
     questions?
14
                                              . You said
15
     this THC stuff, if I heard you correctly, it binds
     with the fat cells; is that right?
16
               Yeah, it does.
17
          Α
18
                            : Is that why you get hungry
19
     after you smoke a joint? Seriously, I'm just
     saying.
20
21
         Α
               No.
22
               MS. ALIZADEH: I don't know what you are
23
    talking about?
24
                               I don't either apparently.
25
               No, that has nothing to do with it.
         Α
```

```
Page 82
     it is, reasonably that is lowering the blood sugar.
 1
 2
     So you start feeling hungry and get the munchies.
               MS. WHIRLEY: You said marijuana lowers
 3
 4
     the blood sugar?
 5
          Α
               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
     get, I'm just going to say it he would get volatile,
10
11
     he would get agitated very easily. So would that be
     a possibility?
12
13
          Α
               That would be a possibility, yes. If the
14
     blood sugar got down low enough, that would take,
15
     that would be work.
                                And would the Delta-9-THC
16
     levels have an affect on the blood sugar level?
17
18
          Α
               No.
19
                                 So the higher the
     Delta-THC would not necessarily constitute a lower
20
     blood sugar level?
21
22
               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
```

	Page 83		
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?		

```
Page 84
               That's correct.
 1
          Α
 2
                                             I have one
     more thing I want to ask you. You said earlier the
 3
     person who is naive to the drug may not feel its
 4
 5
     affects, but somebody who is more experienced with
 6
     the drugs would have a greater effect on them?
 7
          Α
               Yes.
 8
                                Okay.
                                        Thank you.
 9
               That's just through the non specificity of
          Α
10
     the drug.
11
               MS. WHIRLEY: Again, when you talk about
     the greater affect coming up, going from what
12
13
               talked about, that does not necessarily
14
     mean that they are going to act impaired to someone
     who is sitting there talking to them?
15
               No, I can't predict what they will or will
16
          Α
17
     not do.
18
               MS. WHIRLEY: Right, okay.
19
               MS. ALIZADEH: Anyone else?
20
                               One more question from me,
21
                      I know you say you are not a
22
     medical doctor, but was there any reports or any
23
     notes stating the fact that when he was younger,
     while he was in high school or anything that he was
24
25
     taking any hypertension medicine or any mental --
```

	Page 85
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?

```
Page 86
          Α
               Yes.
 1
 2
                              : One more question, it is
 3
     my last.
                                  There is no way with
     these levels would it be possible for him to have
 4
     been around somebody smoking?
 5
 6
               Passive, no.
          Α
 7
                              : So these levels do not
 8
     show passive intake of this drug?
 9
               No, this is active.
10
                                 Okay.
11
               MS. ALIZADEH: Anyone else? All right
12
     this concludes this witness' testimony.
13
               (End of the testimony of Dr.
14
         .)
15
     of lawful age, having been first duly sworn to
16
     testify the truth, the whole truth, and
17
18
     nothing but the truth in the case aforesaid,
     deposes and says in reply to oral
19
     interrogatories, propounded as follows, to-wit:
20
21
                          EXAMINATION
22
     BY MS. WHIRLEY:
23
          Q
               Good morning.
24
          Α
               Hello.
25
               Introduce yourself to the grand jurors and
          Q
```

Page 87  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
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
3 4 <b>Q</b> I'm going to ask that you keep your voice 5 up because there are quite a few fans on, we can't
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 <b>Q</b> So, , what is your occupation?
10 <b>A</b> I'm a forensic scientist for St. Louis
11 County Police department.
12 <b>Q</b> What does that mean, forensic scientist?
13 <b>A</b> Uh, I analyze evidence collected from
14 crime scenes for bodily fluid. I write reports and
15 when needed, testify in court.
16 <b>Q</b> How long have you been doing that, been in
17 that capacity as forensic scientist?
18 A Almost nine years.
19 <b>Q</b> Nine years. Always with St. Louis County?
20 <b>A</b> Yes.
21 <b>Q</b> And what type of education is required to
22 do what you do?
23 <b>A</b> 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

```
Page 88
     master's of business administration from Miami
 1
 2
     University of Ohio.
 3
          Q
               We have your CV and we are going to pass
     that out. It is marked as Grand Jury Exhibit Number
 4
 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
         Α
               Yes.
               Okay. Now, what is, you told us what a
12
          Q
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.
               Well, I test evidence that comes in for
16
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
          Α
               Yes.
                     In our lab we have two separate
25
     sections. So I would, I'm in the biology section, I
```

```
Page 89
     would do the screening and then if there is anything
 1
 2
     that needed to be forwarded or retained for DNA,
 3
     that would be packaged and retained and that would
     go to the DNA unit and they would do their analysis.
 4
 5
               Do you know who did the DNA analysis in
 6
     this case?
 7
               Yes.
          Α
 8
          Q
               Who was that?
 9
          Α
               Okay. Did you work alone doing the
10
          Q
11
     biology on this case or did someone else work with
12
     you?
13
               I worked alone, I did the case. We did
          Α
14
     have a, we are training a new biologist, so she was
15
     actually with me for part of it.
               Okay. So I don't know if you actually
16
17
     told us what type of analysis you performed. You
     said you check body fluids and that kind of thing.
18
     What kind of items could have possible DNA on them?
19
20
               In general?
          Α
               Yeah, in general.
21
          Q
22
               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
```

Page 90 about trace DNA. 1 2 Tell us what that means. 3 Α Okay. Trace evidence is what is left behind when a material or a person made contact, so 4 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, but I would save samples to be tested for DNA. 9 Some examples of this are, um, like a 10 11 swab taken from the steering wheel of a recovered stolen vehicle where it isn't blood, you are trying 12 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 we consider trace. Where it is not actually a body 21 22 fluid that we are testing for, but we think that 23 there might be DNA left behind. And usually what this is is from allele cells or skin cells. 24 25 Now, at the crime scene the officer or Q

Page 91

- 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.
- 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.
- 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

Page 92 likely touch the skin. So like cuffs or the 1 2 neckline, things like that. 3 Can you tell us how you began a case, I mean, it comes to the lab, I guess, and then how do 4 5 you get ahold of it? 6 Α When evidence is submitted to the lab, it is submitted to the front counter where evidence 7 8 technicians take it in, make sure that it is 9 properly packaged and sealed. We do not except improperly packaged evidence. 10 11 So you would get evidence, either in a box or a package, it would also have a receipt 12 13 with it. And the evidence receipt just details all 14 of the pertinent information as when the incident happened, the location, what kind of offense it is, 15 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 in our vaults, a secure location, until it is 20 actually worked and the receipts would, they're 21 22 stored back in biology and then we work them. Ιt 23 depends, but usually first end, first out. We do the crimes against persons cases first, they are 24 25 more of a priority.

Pa	ge 93
1 Q And you go to the vault and get the	
2 evidence when it is your case?	
3 A Yes.	
4 <b>Q</b> 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 <b>Q</b> And that it is sealed, you verify it	
9 hasn't been tampered with?	
10 <b>A</b> Well, it comes, when it comes into the	
11 lab, we don't accept improperly packaged evidence	•
12 <b>Q</b> And that's your way of verifying that i	t
13 is not tampered with?	
14 <b>A</b> Right.	
15 (Grand Jury Exhibit Number 68	
16 marked for identification.)	
17 $\mathbf{Q}$ (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	

Page 94 along? 1 2 MS. WHIRLEY: Why don't we pass both of 3 them, if you don't mind, both Grand Jury Exhibit 68, which starts with specimen Q22. And then 69 is 4 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? I do. 8 Α 9 (By Ms. Whirley) We are going to talk a little bit more specifically about the Michael Brown 10 case or the Michael Brown shooting. You took some 11 photographs also, is that right, associated with 12 13 this case? 14 I did. Α 15 We will look at those. And tell me why Q 16 did you take photographs? I can't, when I write my report, I can 17 18 describe the items with words, but a picture is 19 always better. Okay. All right. And you take those 20 pictures for yourself as you are writing your 21 22 report, is that what you told us? 23 Α What was that? You take those pictures for your purposes 24 25 to complete your report?

Page 95 No, we are not required to take pictures. 1 Α 2 In specific cases we do take pictures. In this case, I decided to take pictures of certain items. 3 Okay. Now, in this specific case, we see 4 a Q and then numbers. Can you tell us what that 5 6 represents? 7 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 the K stands for a known, which is just a known 10 11 reference standard taken from a person to be used for elimination or comparison purposes in DNA. 12 13 it is a known reference standard which means it came from that person in the forms of blood or saliva. 14 15 So you know whose blood or saliva you Q 16 have? 17 Α Yes. 18 And you had a known reference sample from 19 Michael Brown; is that correct? 20 Α Yes. Is that in the form of blood? 21 Q 22 Α His blood. 23 Q Okay. Did you have a known sample of the 24 officer, Darren Wilson? 25 Α Yes.

	Page 96
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	${f Q}$ So that was your way of having a DNA
11	sample from both the officer and Michael Brown; is
12	that correct?
13	<b>A</b> 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	${f Q}$ Now Q1 through Q21 are items that you, I
24	guess, that are questionable, is that what you said?
25	<b>A</b> Yes.
1	

Page 97 Are these items that you took photographs 1 Q. of also? 2 3 Α 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 Α Yes. 11 All right. So you did, just go ahead and Q 12 tell us what you did. Well, you are looking at the first report. 13 Α 14 I started with Michael Brown's clothing. So do you want me to go through Q1 or say everything I did? 15 Tell us what you did. You can go through 16 17 by Q1, whatever works for you, as long as you tell 18 us, you know, what you did. 19 Α Sure. Q1 was Michael Brown's T-shirt, I just, we first do a visual examination so I would 20 describe it, what it looked like. 21 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

Page 98 alleged that there was contact between Officer 1 2 Wilson and Michael Brown. It was hard to do this because the 3 shirt was extremely bloody. So I just swabbed the 4 areas that were not blood stained. 5 6 You, of course, always wear gloves when Q you are handling any items; is that correct? 7 8 Α Yes, we wear personal protective 9 equipment, which includes a lab coat, a mask, gloves, we use sterile equipment, we open one 10 package of evidence at a time, we clean our work 11 12 area. 13 And these are things you do to prevent Q 14 contamination or cross-contamination; is that 15 correct? Yes. 16 Α 17 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 test all of these items? 20 I have to go through --21 Α 22 Yeah, go ahead and look at it. Q 23 Α All of the clothing I tested, I tested for As well as there was swabs taken from 24 blood. 25 Michael Brown's hands, those were all tested for

```
Page 99
     blood as well. And then there were fingernail
 1
 2
     scrapings that were submitted, and I tested those
     and also swabbed those again for trace in case there
 3
     was contact, such as scratching, things like that.
 4
 5
               MS. ALIZADEH: Can I ask you what did you
 6
     swab for trace, the fingernail scrapings?
 7
          Α
               Yes.
 8
               MS. ALIZADEH: So these fingernail
 9
     scrapings were done by someone else, correct, like
10
     at the morque?
11
          Α
               Yeah. They labeled it fingernail
     scrapings, clippings, but they actually, I looked
12
13
     back, they were actually clippings.
14
               MS. ALIZADEH: Nail clippings.
15
          Α
               They take nail clippings.
16
               MS. ALIZADEH: Okay.
17
               MS. WHIRLEY: That was forwarded to the
18
     lab, the nail clippings?
19
               Yes. So what we do we swab the underside
     that you can tell for possible trace in case, again,
20
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
               No, I swab them.
          Α
```

	Page 100
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	${f Q}$ And also the right palm, the right palm of
7	hand?
8	<b>A</b> Yes.
9	Q And right back of hand?
10	A Yes. Those were all tested for blood.
11	${f Q}$ 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	<b>Q</b> Like from the front exterior door of the
25	Ferguson Police Department Vehicle 108 for that one?

	Page	101
1	A Yes.	
2	Q Then there's also a swab of the rear	
3	passenger exterior door of that same vehicle, which	ch
4	is Q12?	
5	<b>A</b> Yes.	
6	${f Q}$ All right. And then blood stains from t	the
7	area on Canfield. And then Q15, actually, the oth	ner
8	items that I talk about when I mention swabs taker	J
9	from Brown's hands, it says suspect Brown, and now	J
10	on Q15 it says victim's uniform pants, and that is	3
11	the officer; is that correct?	
12	A Yes.	
13	Q The officer's uniform pants when you lab	pel
14	as suspect and victim, what does that mean for you	1?
15	<b>A</b> When we receive the evidence receipts th	nat
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 ca	ame
19	to the lab.	
20	<b>Q</b> From the police?	
21	A Right.	
22	${f Q}$ So it is not that you are determining wh	10
23	the victim is or who is the suspect is in this cas	se?
24	A No.	
25	Q So you have the officer's uniform pants	

Page 102 and you swab the left thigh, why did you do that? 1 Well, those swabs were actually taken by 2 3 crime scene. I'm sorry, that's true, you didn't swab, 4 Q they swabbed it. And did you have any information 5 about why that was swabbed or you just tested it? 6 7 Well, all I knew was that there was Α 8 possible blood on the officer's pants. So they did 9 swab that to find out whose blood that was. 10 Okay. And then there was swabs from the 11 interior left front door of vehicle number 108, which is Q18? 12 13 Α Yes. 14 Okay. And then you also received swabs of Q 15 the officer's weapon; is that correct? 16 Α Yes. 17 Now, in Q19, which is the weapon, it says 18 blood was presumptively detected. Quantity was not sufficient for confirmatory testing. What does that 19 20 mean? Well, I was able to do a presumptive test 21 Α 22 for blood, which is just the first step in our 23 process of testing blood. Presumptive test, it is a sensitive test, but it is not specific. So it 24 25 indicates that the substance you are testing for is

```
Page 103
     possibly there. In this case, blood, so that was
 1
 2
     positive.
 3
                    To do a confirmatory test, you need
     to actually take more of that sample. Since there
 4
 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.
               So in this case the DNA section could test
12
          Q
13
     further?
14
          Α
               Yes.
15
               Okay. And you do say that the swabs were
          Q
16
     retained. You also tested Q20, is Wilson's blue
17
     uniform shirt, a swab was submitted?
18
               No, I actually swabbed.
19
          Q
               You swabbed it, okay. So you swabbed the
     left side of his shirt and collar area. So you
20
     just, the whole shirt was submitted and you
21
22
     determined what to swab?
23
          Α
               Yes.
               Okay. And the uniform pants, is that the
24
25
     same thing in Q21 with the swabbing?
```

Page 104

- 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.

Page 105
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 <b>A</b> It was.
6 <b>Q</b> Because of the significance?
7 <b>A</b> 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 <b>A</b> I did.
$\mathbf{Q}$ 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 <b>A</b> 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 <b>Q</b> And then it looks like you did in Q24,
21 that was another flip flop, and in Q25 is the
22 bracelet?
23 <b>A</b> Yes.
24 <b>Q</b> And did you swab the bracelet?
25 <b>A</b> Yes, I swabbed the bracelet for a wear

```
Page 106
     profile.
 1
 2
               And Q26 was another bracelet, correct?
 3
          Α
               Yes.
               Okay. I want you to look at these
 4
          Q
     photographs. And this is Grand Jury Exhibit Number
 5
 6
     70.
 7
                          (Deposition Exhibit Number 70
 8
                         marked for identification.)
 9
               (By Ms. Whirley) I think you looked at
          Q
     those already, but I want you to confirm that you
10
11
     are familiar with those photographs and tell us how?
12
               Yes. Do you want me to hold them up?
          Α
13
          Q
               We are going to put them on --
               MS. ALIZADEH: I will assist in that.
14
15
               MS. WHIRLEY: Okay, thank you.
               Yes, I can identify them. You will see
16
          Α
17
     when it gets up there, but on pictures that I take,
18
     I write the complaint number, which is just the
     number assigned by the county for which case it is,
19
20
     and the Q number and my initials and DSN, which is
     my department serial number, and then the date.
21
22
               And so this is on the back, there's a
23
     number of the photograph, what number is that one?
24
               26.
          Α
25
               26.
                    I believe these photographs are
          Q
```

```
Page 107
    Numbers 26 through 44. We will make sure as Kathi
1
 2
     is assisting.
 3
               MS. ALIZADEH: Oh, I need my glasses for
 4
     that.
               MS. WHIRLEY: I'll call out the number.
 5
 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
     just identifying the photograph by a number.
10
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
     we looking at now that everybody can see it.
16
               That is what, again, because I didn't know
17
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
               You can see it's small, the measurement is
23
     in centimeters.
               I see. And those numbers at the top, that
24
25
     99 represents what?
```

		Page 108
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 consid	ered County, which is 99. 14 is the year,
6	and the 4	3984 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 h	ardened 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 meas	ure is centimeters?
25	A	Yes.

```
Page 109
               MS. ALIZADEH: How do you know that? Did
 1
 2
     you notate that or do you just know by looking at it
 3
     or do you remember it?
          Α
               Those are our rulers that we use, they're
 4
 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
               Yes.
          Α
               MS. ALIZADEH: Okay. We're done with that
10
11
     one.
12
               MS. WHIRLEY: Yeah.
13
               MS. ALIZADEH: Moving on.
14
               (By Ms. Whirley) And then this is Number
          Q
15
     27 and tell us what we are looking at on that one.
               That is Officer Wilson's shirt.
16
          Α
17
               Now, I want you to speak up a little bit
18
     if you can.
               Sorry. Officer's Wilson uniform shirt.
19
          Α
20
               Okay. And that Q20 would correspond with
          Q
     Q20 on our report, right, that we looked at?
21
22
          Α
               Yes.
23
               Okay. And as you are talking, would you
     let us know which items, I'm not going to assume
24
25
     that they all were, which items were forwarded to
```

	Page 110
1 .	DNA for further analysis? We know that first one,
2	Number 26 photo was, correct?
3	A Yes.
4	$\mathbf{Q}$ 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 contacted 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	<b>Q</b> 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

```
Page 111
     with trace evidence, there is not going to be as
 1
 2
     much DNA left behind as if someone is bleeding.
 3
               MS. ALIZADEH: Okay.
               So to try to maximize that rather than
 4
          Α
     take a cutting of a small area. Plus, you don't
 5
 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
          Α
               No.
11
               MS. ALIZADEH: And had you seen something
     that looked like apparent blood, would you have
12
13
     actually swabbed that spot?
14
          Α
               Yes.
15
               MS. ALIZADEH: But in this case, because
     you didn't see anything, you just kind of doing a
16
     broad brush on the shirt?
17
18
          Α
               Yes.
19
               MS. ALIZADEH: And that's cause you have
     had information from a case officer that perhaps
20
    Michael Brown touched the shirt of the officer on
21
22
     the left side?
23
          Α
               Yes.
24
               MS. ALIZADEH: Okay. And so when you said
25
     this was forwarded to the DNA section, you forwarded
```

```
Page 112
     the swabs, correct?
 1
 2
          Α
               Yes.
 3
               MS. ALIZADEH: The shirts repackaged?
               The shirt was, yes, kept in. Would have
 4
          Α
 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
     DNA?
 9
10
          Α
               Yes.
11
               (By Ms. Whirley) And repackage?
          Q
               The actual clothing items, they weren't
12
          Α
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
          Α
               Yes.
19
               MS. ALIZADEH: When you say the collar
     area because this collar goes all away the around
20
     the shirt, was it what area?
21
22
               I just swabbed anything on the left front
23
     side. Nothing around the back. So I think in the
     other picture is better.
24
25
               MS. ALIZADEH: This is 28, Sheila already
```

Page 113

- 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.
- 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.
- MS. ALIZADEH: Okay. Both of those were
- 18 forwarded to DNA?
- 19 **A** Yes.
- 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.
- MS. ALIZADEH: So you didn't swab the
- 25 collar and the left side separately?

```
Page 114
                    So I basically, pretend my laser
 1
          Α
               No.
     pointer is two swabs. So I swabbed here, swabbed
 2
     here, swabbed here, swabbed here. (indicating)
 3
               MS. ALIZADEH: Okav.
 4
 5
          Α
               Altogether.
               MS. ALIZADEH: So, for example, if swab
 6
 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
          Α
               No.
11
               MS. ALIZADEH: Okay. That's what I wanted
12
     to know.
               (By Ms. Whirley) What is your next photo?
13
          Q
               That is Officer Wilson's pants.
14
          A
15
               This is Number 29.
          Q
16
          Α
               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
     its entirety.
20
21
               What did you do with this piece of, this
          Q
22
     item?
23
               MS. ALIZADEH: I'm showing Photo 30.
24
               So the left, I swabbed the left, again,
25
     the left side. So just swab the areas.
```

```
Page 115
               MS. WHIRLEY: Can you see it okay?
 1
 2
               Yeah, I can see it. I swabbed, again,
          Α
 3
     take two swabs, swabbed this area. There was an
     area, I think it was in this location. This picture
 4
     isn't perfect to see the blood stain, but I did not
 5
 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
     blood stained areas.
10
11
               (By Ms. Whirley) So there was blood stain
          Q
12
     on the pants?
13
          Α
               Yes.
14
               MS. ALIZADEH: And you tested that for
15
    blood?
               I tested that in the swabs that were
16
          Α
17
     submitted.
18
               MS. ALIZADEH: Okay. So the blood stain
19
     was swabbed by the crime scene?
20
          Α
               Yes.
21
               MS. ALIZADEH: All right.
22
               (By Ms. Whirley) This is marked as photo
          Q
23
     number, these should be sequential, this one is 31.
24
     What is that?
               That is Michael Brown's T-shirt.
25
          Α
```

	Page 116
1 1	Q Okay.
2	A And that is the back side.
3	Q That's the back of the shirt?
4	A The back of the shirt.
5	Q Now, you mention swabbing non stained
6	areas?
7	A For possible trace.
8	${f Q}$ For possible trace. Why would you not
9	swab the blood stain areas for trace?
10	A Well, blood is contains a lot of DNA.
11	And then also it was Michael Brown's shirt, which
12	would have DNA from him wearing it too. So for me
13	to try to swab bloody areas, it is just unlikely to
14	actually get a trace profile from that because the
15	blood would overwhelm everything.
16	MS. WHIRLEY: Did you have a question?
17	. I know
18	you may not have known this, but I don't know at the
19	time if Michael Brown was supposedly been in the
20	vehicle, you testing for prints on the shirt when he
21	did that, testing of that?
22	MS. ALIZADEH: Fingerprints you mean?
23	: Well, like maybe
24	holding
25	MS. WHIRLEY: Trace DNA?

	Page 117
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	${f Q}$ (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

	Page 118
1 .	32?
2	A Yes.
3	Q This is the front of the shirt?
4	A It is the front of the shirt.
5	<b>Q</b> 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	<b>Q</b> Okay.
12	A Whether or not there was contact at these
13	places, I don't know. It was just
14	<b>Q</b> Okay.
15	MS. ALIZADEH: You are just looking for an
16	unbloody place?
17	<b>A</b> 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	<b>A</b> 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

	Page 119
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	<b>Q</b> 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

```
Page 120
     farther away so you can see the whole item.
1
 2
               MS. ALIZADEH: Can I just go back really
 3
     quickly.
               The apparent skin, or hardened nasal mucus
 4
 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
               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
     would actually test. And the remainder of that
12
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
     sampled half of each swab, put that in a tube and
20
     that's what DNA you would be testing. And then the
21
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
```

```
Page 121
     apparent skin or hardened nasal mucus, did you do
 1
 2
     any testing on that yourself other than to take a
     swab, take the piece out of it?
 3
               I tested it for blood, and then I did a
 4
          Α
 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,
     oh, it is human blood for sure is that there are
10
11
     some other primates and ferrets blood that will --
               MS. ALIZADEH: Ferrets?
12
13
               Ferrets, yeah. I don't know why.
          Α
14
     have reported given positive results. So in that
15
     case, the way we report it on my report is that for
     Q11, that examination discloses presence of blood as
16
17
     probably human organ.
18
               (By Ms. Whirley) Okay. For this item as
19
     Q7; is that correct?
20
               It's 01.
          Α
                    That's what threw me off because I'm
21
               01.
          Q
22
     looking at the report, still looks like a seven to
23
     me, I don't know if anybody else thought that or
     that's just me. But that's actually Q1?
24
25
               Yeah, I think what maybe you are seeing is
          Α
```

```
Page 122
     the bracket that I put after that.
 1
 2
               I'm glad you clarified that. So Q1 is
 3
     the, because it was not corresponding with the
     report, that's why I was a little confused, but now
 4
 5
     it does. It is the gray T-shirt. Okay, all right.
 6
     This should be 34.
 7
                    And these are?
 8
          Α
               These are Michael Brown's shorts.
 9
          Q
               Okay.
               It's the front, no, the back.
10
          Α
11
               That's the back of the shorts. Just
          Q
     zooming in and focusing, but these are the back of
12
13
     the shorts. Do you know what kind of stain that is
14
     on the back, did you test that?
               I tested overall for blood. I confirmed
15
          Α
16
     blood.
             I don't confirm each stain.
               Do you know which stain you confirmed?
17
               Um, the one that I tested was on the lower
18
          Α
19
     left leg.
20
               Show us with the laser pointer.
          Q
               Um, it would be on the front in the next
21
          Α
22
     photo.
23
               So you didn't confirm any blood on the
          O.
     back?
24
25
          Α
               No.
```

```
Page 123
          Q
 1
               Okay.
 2
               MS. WHIRLEY: Was there a question?
 3
                                           That is what,
     the back of the shorts?
 4
 5
          Α
               The back of the shorts.
 6
               MS. WHIRLEY: This is 35, this should be
     35.
 7
 8
          Q
               (By Ms. Whirley) So tell us about that.
 9
               That is the front of the shorts, and if
     you look in this area that I've marked off, this is
10
11
     the area that I actually tested for blood. Again,
     we don't test every single stain. And then this
12
13
     little plus-plus is just my personal markings for, I
     did a presumptive testing and confirmatory test.
14
15
               You just arbitrarily decide where on the
          Q
16
     pants you are going to test?
17
               Yes.
          Α
18
               Based on amount there?
          Q
19
          Α
               Just usually an area that has a good
20
     amount.
21
          Q
               Okay.
22
               MS. ALIZADEH: If you had information that
23
     there was another person who was bleeding at that
     crime scene, and that maybe there was contact
24
25
     between the wearer of these pants and another
```

Page 124

- 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.
- 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.

```
Page 125
               (By Ms. Whirley) But did you check the
 1
          Q
 2
     pockets?
 3
          Α
               Oh, actually, I think it is the velcro,
     there's velcro.
 4
 5
               MS. ALIZADEH: For the pocket?
               (By Ms. Whirley) And then here --
 6
          Q
 7
               That's the inside of the pocket.
          Α
 8
          Q
               Okay. And you checked, there was nothing
 9
     in the pockets?
10
          Α
               Right.
11
               Correct, okay. So --
          Q
12
               MS. ALIZADEH: You want this still up
13
     here? You were done with that.
               MS. WHIRLEY: I think I'm done with that.
14
15
               (By Ms. Whirley) So Number 36. What are
          Q
     we looking at there?
16
               This is, these were kind of backwards. So
17
18
     this, again, was the first picture that I took of
     the shorts just to show the complaint number, my
19
     initials, DSN, date.
20
               So what is that Q number?
21
22
               Q2.
          Α
23
          Q
               Q2. What's that other number next to it,
24
     or symbol?
25
          Α
               A bracket.
```

	Page 126
1 ,	$oldsymbol{Q}$ 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	${f Q}$ 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	<b>Q</b> 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

	Page 127
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	<b>A</b> Yes.
6	$oldsymbol{Q}$ Okay. And this was submitted another day.
7	What did you do with this item?
8	<b>A</b> 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	$\mathbf{Q}$ This is number 38, also a photograph of
15	the Cardinal baseball cab, correct?
16	<b>A</b> Yes.
17	<b>Q</b> You just gave us another view of it I see?
18	<b>A</b> Yes.
19	<b>Q</b> 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?

Page 128 Α Yes. 1 2 MS. WHIRLEY: We had an interruption for 3 the alarm sounding. We are good now. So we were on Number 39, Photograph Number 39 and Number 40, which 4 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? Well, I tested orange brown stain for 10 11 possible blood. 12 Is that what we are looking at here? Q 13 For Q23, I tested reddish brown stain on Α 14 the outside left side, so yes. 15 (By Ms. Whirley) Everybody see that stain? Q And then I also, let me see. I also 16 17 swabbed the top of the sole area and the under side 18 of the strap, the white strap, for trace for who was wearing. Again, like the hat, I didn't know who it 19 belonged to. 20 Okay. And this is Number 40. We see a 21 Q 22 little speck on 40 too, did you test that also? 23 I did. I tested, my notes one of four 24 small reddish brown stains. 25 Okay. And did you confirm it to be blood? Q

Page 129 The quantity was not sufficient so I 1 Α 2 didn't confirm it. And then I also, like the other flip flop I swabbed, I will show you, I swabbed the 3 sole area and then underneath the strap for trace. 4 5 And this is 41. This was submitted to Q 6 you, correct? 7 Α Yes. 8 Q What did you do with this? 9 Again, there was no one code as to who it belonged to. To get a wear DNA, I just swabbed the 10 11 entire bracelet for trace DNA. So that's a bracelet? 12 Q 13 Α Yes. 14 MS. ALIZADEH: And just to be clear 15 because we have two bracelets, this is the bracelet that is rubber with yellow, white and black 16 17 coloring? 18 Α I described it as black, yellow and white 19 rubber rainbow type. 20 (By Ms. Whirley) I'm sorry, go ahead. Q 21 Type bracelet. Per the receipt, it was Α 22 recovered in front of 2964 Canfield. 23 It is identified as Q25, which is also in your report identifying it, correct? 24 25 Α Yes.

	Page 130
1 ,	Q And on this one, which is Number 42,
2	that's this one is Q26, how do you describe that
3	one?
4	A I described it as a dark brown beaded
5	bracelet recovered from the front of 2964 Canfield.
6	Q Okay. Do you know what material that's
7	made of?
8	A Well, on my notes I put apparent wood.
9	Q Wood.
10	A I don't know for certain.
11	Q That is what it felt like, or looked like
12	to you?
13	A It looked like wooden beads.
14	Q Okay. And that was swabbed also?
15	A Yes.
16	MS. ALIZADEH: For trace?
17	A For trace.
18	MS. ALIZADEH: Neither bracelet had any
19	stains that were of apparent blood or anything that
20	you thought might be blood, right?
21	A They did not have any reddish brown stains
22	on them.
23	: Was this considered the
24	gold bracelet?
25	MS. WHIRLEY: Don't know.

```
Page 131
 1
                             : 0 kay.
 2
                                          Were these his
 3
    bracelets, do we know that?
               MS. WHIRLEY: We'll talk to the DNA person
 4
 5
     to see if anything of evidentiary value came from
 6
     the swabbing because you really can't talk about
 7
     that, correct?
 8
               No, I just swab and prepared all the
 9
     samples for DNA. The DNA analyst will be able to
     answer those questions.
10
11
               MS. WHIRLEY: The skin cells or anything
12
     on it, yes.
               (By Ms. Whirley) The last two photos are
13
          Q
14
     43 and 44, and they are socks, correct?
               Yes.
15
          Α
               We'll do 43 first.
16
17
               They are from the first report.
18
               Okay. And from the first report, and
          Q
19
     that's Q?
20
               It is Q3.
          Α
21
               Q3.
          Q
22
               So those were Michael Brown's socks.
          Α
23
          Q
               You were told they were his socks,
24
     correct?
25
          Α
               Yes, it was indicated on the receipt that
```

```
Page 132
     they were his socks.
1
 2
               Okay. And you indicate that they had
 3
     reddish brown stains throughout, at least Q3 did?
         Α
               Right.
 4
 5
          Q
               You have both of them as Q3, pair of
     socks, got it. I see now. I just had to look. So
 6
7
     reddish brown stains, did you swab that for, or was
8
     it --
9
               No, I just tested for blood.
         Α
               Okay. And you confirmed blood?
10
          Q
11
         Α
               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
         Α
               Yes.
               MS. ALIZADEH: Like with a Sharpie or
17
18
     something?
19
         Α
               With a Sharpie. That's the area that I
20
     tested.
21
               MS. ALIZADEH: For blood?
22
         Α
               For blood.
23
               MS. WHIRLEY: That's really all I have,
24
     Kathi.
25
             (By Ms. Alizadeh) So just in summary, can
          Q
```

```
Page 133
     you tell me of the items, of the items you tested,
 1
     you found apparent blood on the officer's pant leg,
 2
 3
     correct?
               Did you test that stain on the officer's
 4
     pant leg?
 5
               I tested the swabs, I didn't doubly test
          Α
     it, so I tested the swabs that came from the crime
 6
     scene from the pant.
 7
 8
          Q
               Okay. And did you determine that was
 9
     blood?
10
               Yes, they were blood.
11
               And you didn't see any apparent blood on
          Q
     the shirt of the officer, correct?
12
13
          Α
               Correct.
14
               And then, you know, we've talked about the
          Q
15
     shirt of Michael Brown, the pant and the socks all
     had apparent blood on them, correct?
16
17
               Or confirmed blood, yes.
18
               Or confirmed. I'm mixing my terms.
19
     Apparent is when you're not you sure what it is, but
     it looks like it?
20
21
               Right.
          Α
22
               And then on the sandals, you didn't have
          Q
23
     enough to confirm that it was blood; is that right?
24
               Yes.
          Α
25
               And then what about the swab from the gun,
          Q
```

```
Page 134
     there were two swabs submitted from the gun.
 1
                                                    Did
 2
     you test those swabs?
               I tested that for blood. Yes, the swabs,
 3
          Α
     they were, they had reddish brown stains and black
 4
 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 --
               Destroy the sample?
10
          Q
11
               Yes.
          Α
12
               Consume the sample?
          Q
13
          Α
               Yes.
14
               That was presumptive positive for blood,
          Q
15
     but you didn't do a confirmatory test and you
     forwarded that to the DNA section, would that be
16
17
     right?
18
               Yes.
          Α
19
          Q
               And then what about the swabs from the
     interior of the door of the police vehicle, did you
20
     test those swabs?
21
22
               I tested, well, there were, there were
          Α
23
     several. So you're saying that interior, I received
     numerous swabs from the car. Do you mean in
24
25
     general, or you want me to go through each one?
```

	Page 135
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	${f Q}$ 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

<pre>1 that is the swab that you tested, what did you 2 determine about that? 3</pre>
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?
4 human origin. 5 <b>Q</b> Is that a presumptive test or is that a 6 confirmatory test?
5 <b>Q</b> Is that a presumptive test or is that a 6 confirmatory test?
6 confirmatory test?
7 <b>A</b> 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 <b>Q</b> 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 <b>A</b> Yes.
21 <b>Q</b> 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 <b>A</b> Yes.
25 <b>Q</b> And then Mike Brown's clothes you have

Page 137 already testified about that. 1 2 Did you do any blood, did you test 3 for blood on the apparent skin or hardened nasal mucus? I know you said you took a sample from that 4 to forward to the DNA section, did you test it for 5 6 blood? 7 I did. I confirmed it for blood and also Α 8 for presumptive species for that was positive. 9 And that was on the outside of the car as Q well? 10 11 Yes. Α And all of these things that tested 12 Q 13 positive for blood were forwarded to the DNA lab, 14 the DNA section, correct? 15 Not every item, but the probative items I Α 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. Well, if I asked you the skin/nasal mucus, 20 Q that actually a sample got forwarded to the DNA 21 22 section, correct? 23 Α Yes. And then what about the reddish, the blood 24 25 that you determined on the outside of the driver's

	Page 138
1 ,	door, did that go to DNA?
2	A Yes.
3	${f Q}$ 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	${f Q}$ 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	

```
Page 139
         Α
               Yes.
 1
 2
               MS. ALIZADEH: All right. Checking my
 3
     bases. All right, thanks, nothing else.
               MS. WHIRLEY:
                                      , did you have a
 4
 5
     question?
 6
                                                 When you
 7
     get through swabbing, does it automatically go
 8
     directly to the DNA or someone comes behind you, is
     there another step between you and the DNA testing?
 9
               No. Once I would do any testing that I
10
11
     need to do, then I also sample it and prepare the
12
     sample for DNA, and then it will be put into a
13
     refrigerator until the DNA analyst takes it.
               MS. WHIRLEY: Anyone else, questions?
14
             ? No?
15
               MS. ALIZADEH: Thank you. That concludes
16
17
     the testimony.
18
               (End of the testimony of
19
20
21
22
23
24
25
```

```
Page 140
 1
 2
     of lawful age, having been first duly sworn to
     testify the truth, the whole truth, and
 3
     nothing but the truth in the case aforesaid,
 4
 5
     deposes and says in reply to oral
 6
     interrogatories, propounded as follows, to-wit:
 7
                         EXAMINATION
 8
     BY MS. WHIRLEY:
 9
               Good afternoon. If you could introduce
     yourself to the grand jurors and spell your name for
10
     the court reporter, please?
11
               My name is
                                                That's
12
          Α
13
14
               What's your occupation?
          Q
15
          Α
               DNA technical leader with the St. Louis
16
     County Police Department Crime Laboratory.
17
               What do you do generally?
18
               Generally, I perform the duties of a DNA
19
     analyst. So that involves processing evidence
     submitted to the lab for DNA testing. As the DNA
20
     technical leader, I have additional
21
22
     responsibilities, primarily to insure that our DNA
23
     section maintains compliance with the FBI quality
24
     assurance standards that are required for DNA
25
     testing laboratories.
```

	Page 141
1 .	<b>Q</b> Are employed with the St. Louis County
2	Police Department; is that correct?
3	A That's correct.
4	<b>Q</b> 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	${f Q}$ You have a total of what, is it ten years
14	or more?
15	A Approximately, yes.
16	${f Q}$ 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	${f Q}$ 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	

```
Page 142
     Number 72.
 1
 2
                          (Grand Jury Exhibit Number 72
                         marked for identification.)
 3
               (By Ms. Whirley) That kind of outlines all
 4
          Q
     of your credits and education and training. So we
 5
 6
     don't have to spend a lot of time talking about
 7
     that.
 8
          Α
               Okay.
 9
               At least at this stage. Now,
10
     approximately how many DNA cases have you worked?
11
               Approximately 1,400.
          Α
               Okay. Can you tell us, a case comes to
12
          Q
13
     you, how does it start for you, a case?
                      Generally evidence is collected
14
          Α
               Sure.
15
     from a scene or from a hospital or from other
     medical examiner's office, et cetera. That evidence
16
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
     potential DNA may be there.
20
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
               They forward that to you?
          Q
```

	Page 143
1 ,	A Correct.
2	Q You are one of the DNA analyst.
3	A Correct.
4	${f Q}$ 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	${f Q}$ 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?

	Page 144
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 resp	onsibilities at the crime lab are, correct? Is
6 ther	e anything else you wanted to add to that?
7	A Not that I can think of.
8	${f Q}$ 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
l 14 a li <sup>.</sup>	ttle 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 w	nat DNA is and how it works. So that might be
21 help:	ful and kind of break up the afternoon. So let
22 me g	et it started here. Can you see all right from
23 where	e you are or do you want to stand up?
24	A I think I can see all right. I can stand
25 up i:	need be.

Page 145 Q All right. 1 2 MS. ALIZADEH: You might be able to 3 advance by doing that. (By Ms. Whirley) Tell us that first slide. 4 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 Sure. So if at any point you all have 9 questions, feel free to interrupt me. If I start talking too fast or anything. 10 11 So this first slide is giving a little bit of background information on what 12 13 forensic DNA testing is and the type we perform in our laboratory. We do what is called nuclear DNA 14 15 testing. That just means that we're looking at DNA that's in the nucleus of a cell. 16 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. Basically the thing to take away is that we are not 21 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

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Page 146
     the DNA that are, what we call junk DNA. So they're
1
 2
     just sequences that are scattered throughout the
 3
     genome that differ from person to person, but they
     don't have any known function, so they are not
 4
 5
     genes.
 6
               All right. So next slide?
 7
               So here is a little graphic of DNA.
          Α
8
    basically a chemical blueprint of your body.
 9
    half of our DNA from our mother and half from our
     father. It varies from person to person and it is
10
11
     found in almost all cells in the human body. So
     again, I mention the nucleus. Any cell that has a
12
13
     nucleus is going to contain nuclear DNA. Next.
14
                    This is just a little slide on what
     exactly I mean by short tandem repeat. Essentially,
15
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
     illustration of that. You can see there is seven
21
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
```

Page 147 pair of each chromosome, so one from mom and one 1 2 from dad. So in this illustration, perhaps the 3 seven repeats came from mom and the eight repeats came from dad. So that's essentially what STR 4 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 able to target specific areas on the DNA and amplify 10 11 millions of copies of those so that it can be detected by an instrument. So again, we are not 12 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 fingerprints where you have to have reference DNA 19 from an individual to obtain what their profile is 20 to compare it to the case. 21 22 (By Ms. Whirley) So when you say Q 23 reference, you are talking about some known sample?

So if you take my blood or my buccal swab

Yes.

Α

Q

24

25

	Page 148
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	<b>Q</b> And then when you talked about the
6	copying.
7	A Yes.
8	${f Q}$ 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	<b>Q</b> Or DNA sample or profile, rather, of
23	someone?
24	A Yes.
25	<b>Q</b> 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.
- 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.
- 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

	Page 150
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

Page 151 technical here. This just goes through the various 1 2 steps. You can see the first step shows a biologist 3 with an alternate light source. Typically that's used to look for semen or potentially saliva stains. 4 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 the DNA. The cells have a lot of proteins and other 10 11 debris that we're not interested in. So the extraction part gives us a clean DNA sample. 12 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 stain that has a lot of DNA in it, we might, 20 basically, we need to use less of that to get to 21 22 that target amount. Whereas if we have a swab of a 23 steering wheel where maybe there is just skin cells, we probably need to amp a little bit more of that. 24 25 So that step just lets us know how much to load into

	Page 152
1	our amplification.
2	${f Q}$ (By Ms. Whirley) What is this target, did
3	you say target number?
4	A Yes.
5	<b>Q</b> 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.
- 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.
- 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.
- The other thing to note here, there
- 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

	Page 154
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	${f Q}$ 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	<b>Q</b> 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 stay 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
- 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

```
Page 156
     what that bodily item is or not?
 1
 2
               No. Forensic DNA profile is going to be
     the same throughout your body. So whether it's from
 3
     blood or semen or skin cells, the DNA profile that I
 4
 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
     not indicate that.
10
11
               You can say this is the profile?
          Q
12
          Α
               Yes.
13
               But you can't say what the actual bodily
          Q
     fluid was?
14
15
               Correct.
          Α
16
               Okay.
          Q
17
               We'll have to kind of press through these.
          Α
18
               These are just like pictures for us?
          Q
19
          Α
               These are just some limitations, we just
     talked about one, but DNA, again, that profile is
20
     not going to tell us when it was deposited. The
21
22
     next one.
23
               MS. ALIZADEH: Let me back up, I have a
24
     question.
25
          Α
               Sure.
```

Page 157 MS. ALIZADEH: And it probably is not 1 2 particularly relevant in this case. The DNA degrades, so like you said, you can't tell when it 3 was deposited, you know, we see on TV where they 4 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? Well, there's certain things in the 10 11 profile where you can tell if the sample has been degraded, but there is nothing to indicate 12 13 specifically how long something has been degrading for or how long it has been in the ground or 14 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 her DNA on the handle, that's great, but since she 19 20 lives in the house and handles the knife all the time, maybe she just ate a steak the hour before. 21 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

Page 158 or whether it was a rape. We simply obtain a 1 2 profile or we don't, that's all. 3 We just talked about this a little bit. We can't determine what fluid the DNA profile 4 is from definitively. 5 6 MS. ALIZADEH: You use the word fluid, you 7 can get DNA from skin cells, correct? 8 Α Correct. And then as we mentioned 9 earlier, identical twins will have the same profile. MS. ALIZADEH: What are those little 10 11 things in the middle there? 12 Α Those are angry sperm. That has to do with the consensual sex or not. I always say it 13 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 mixture obtained. I just wanted to touch briefly on 20 what that is exactly. You can go ahead and hit the 21 22 forward. 23 Mixture is just where we have DNA from more than one individual on an item. Sometimes 24 25 we have so many people on an item that we are not

	Page 159
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	${f Q}$ (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

Page 160 the comparison. 1 2 So if we ran into a situation where 3 a, let's say there's a minor contributor, but there is just not a lot of DNA from them, but the peaks 4 that are there perhaps are consistent with a 5 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. If those peaks simply don't match 10 11 that person, then we would do what's called an exclusion, and we would indicate that they're 12 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 Α No, we actually don't have access to that kind of materials. 20 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

	Page 161
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.
- 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.
- 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.
- 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
- 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?

	Page 163
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	${f Q}$ (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

Page 164 were used in this case. The first is called the 1 2 RMP, random match probability. Essentially, what that's saying is it's looking at a single source 3 profile, so from one individual, and it is saying 4 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 the case if they match. So we can say this profile 10 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 model when you are dealing with a mixture versus a 14 15 single source sample. So the particular statistic that was used is called a likelihood ratio. 16 17 Again, this is used when you can 18 determine the number of contributors. So earlier I said a major mixture of two individuals. That would 19 be a case where you could use the likelihood ratio. 20 You can go ahead and forward it. I'll get a little 21 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

Page 165 the population, we do what are called population 1 2 studies. 3 So, essentially, a sample is taken from the population of the United States in our 4 case, and they look to see how often are certain 5 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 car is. So if you have a parking lot, it is your 10 driveway, you have only two cars in there, it is 11 probably not enough, not a large enough sample size 12 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 parking lot at Busch Stadium, where you have 15 hundreds of thousands of cars, you can probably 16 17 determine, okay, I see 50 Toyota Camrys and et 18 cetera. 19 So you can determine approximately how rare or common a particular allele is. 20 that's what the statistics are based on are these 21 22 population data basis. 23 The more locations that we use, the more discrimination the profile is, that is the 24 25 better able we are to differentiate one profile from

Page 166 another. 1 2 So this is just a little bit more This is what I was saying about when 3 information. it reaches a certain threshold of rarity, then we 4 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 quote the statistic as being the chance someone else 10 11 committed the crime. That's called the prosecutors' policy, there is actually a name for it because it 12 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 profile. It has nothing to do with the context of 16 17 the case or, you know, anything to do with innocence 18 or guilt. 19 And there's also a defense attorney fallacy, and that assumption is everybody else with 20 the same profile has an equal chance committing the 21 22 crime. DNA statistics have nothing to do with 23 access to the scene or any of those factors. Go ahead. We pointed this out 24 25 earlier, but DNA testing and testimony will not

	Page 167
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

Page 168 strong evidence is to support that hypothesis. 1 2 This is just a real quick summary of 3 what we do. Obviously, we interpret the profiles first, then we compare it to any reference 4 5 standards. If there's a probative inclusion, we give statistical weight. We complete the report and 6 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. All the processing documentation, just to make sure 11 that they agree with the assumptions and everything 12 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? They look at my work to make sure that it 20 Α was done correctly. 21 22 MS. ALIZADEH: Okay. 23 Α I don't know, we can leave this up while we're talking. This is just a summary of the 24 25 evidence that I tested from the first report and

```
Page 169
     then the next slide is the second report. I don't
 1
 2
     know if you can even read that, but it is a summary.
 3
               MS. ALIZADEH: I can pass out --
               MS. WHIRLEY: That report is Grand Jury
 4
 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
          Α
               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
                         marked for identification.)
14
15
               (By Ms. Whirley) So basically you get the
          Q
16
     items, for example, the person that was here earlier
     who did the screening for DNA, she didn't do any
17
18
     analysis, she just checked the swabs, did a report,
     forwarded it to your DNA section?
19
20
          Α
               Yes.
               And then what do you do?
21
          Q
22
               Um, so I go through the process that we
          Α
23
     outlined earlier where I process the sample, I
     obtain a DNA profile, I perform my interpretations
24
25
     and then I perform my comparisons.
```

Page 170 Okay. So we're passing out the reports 1 Q 2 that you prepared, these are reports that you 3 prepared, correct? Α 4 Yes. 5 Q And tell us what the Q1 and the K1 and 2, what does that mean? 6 7 Sure. That's the item designation that's Α 8 given in the laboratory. So that would be what 9 designated it as. If you look on the first page of my 10 11 report, there's in parentheses after each item, it says Item Number, for example, Q1-1. At the end it 12 13 says Item Number 3 and that's referencing crime 14 scene designation. 15 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 us about that, what's the difference? 19 20 Yes. So any time an item is separated or Α a sample is taken from an item, it gets a new item 21 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 Okay. And what is the K1 and K2? Q

		Page 171
	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	<b>Q</b> You actually have their DNA sample?
	5	A Yes.
	6	${f Q}$ Buccal swab for the officer and blood for
	7	Michael Brown?
	8	A Correct.
	9	${f Q}$ 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	${f Q}$ 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
ı		

	Page 172
1	evidentiary value, do you know what I mean?
2	A Yes.
3	<b>Q</b> 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	$oldsymbol{Q}$ 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	$\mathbf{Q}$ Marked Grand Jury 73, and it is the palm
20	of Michael Brown's left hand?
21	A Yes.
22	<b>Q</b> And RBS means what?
23	A Red brown stain, something that would have
24	tested either presumptively or confirmatory in
25	biology for blood.
l	

	Page 173
1 .	<b>Q</b> 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

	Page 174
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	<b>Q</b> 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

```
Page 175
     vehicle. Q12 was the driver rear passenger exterior
 1
 2
     door of vehicle 108, that would have been PO
     Wilson's vehicle.
 3
                    Q13 and Q14 are reddish brown stains
 4
 5
     from the roadway in front of 2943 Canfield.
 6
               Okay.
          Q
 7
               So all of those items Michael Brown is the
 8
     source of those, of the profile obtained from those
 9
     items.
               Did you do any numbers on that one?
10
          Q
11
               Yes, I have the actual statistic is listed
     farther back in the DNA report. Would you like me
12
13
     to read that?
14
               Yeah, if you would.
          Q
15
          Α
               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
               That's an informational statement that
          Α
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
                              All right.
               MS. ALIZADEH:
```

	Page 176
1 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	

	Page 177
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	<b>Q</b> 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	<b>Q</b> 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

```
Page 178
     you talked about there could be more than two that
 1
 2
     trace, you can't say what that is, but it is not
     either of these two individuals?
 3
               That's correct.
 4
          Α
 5
          Q
               Okay. And then on Q16, since we are in
 6
     that area.
 7
               Um, Q16 was a swab from the top exterior
          Α
 8
     left front door of the vehicle.
                                      The DNA typing
 9
     results obtained from O16 are consistent with the
     mixture of three or more individuals. This profile
10
11
     can be separated into a major mixture of two
     individuals, with a trace contributor, and the trace
12
13
     contributor is inconclusive.
14
          Q
               Okay.
               And then this is the likelihood ratio
15
          Α
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
     million times more likely if it originated from
19
20
     Michael Brown and PO Wilson than if it originated
     from PO Wilson and an unknown individual in the
21
22
     general unrelated population.
23
          Q
               Okay. And you kind of explained that to
24
     us already.
25
          Α
               Yes.
```

	Page 179
1 ,	$\mathbf{Q}$ 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.

	Page 180
1 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	${f Q}$ 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.
- 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
- originated from PO Wilson and an unknown individual
- in the general unrelated population.
- 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

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Page 182
     need to know, the DNA on the gun. So what can you
 1
 2
     tell us about the DNA on the gun again?
               The hypothesis that it's these two
 3
     individuals, PO Wilson and Michael Brown, is 2.1
 4
 5
     octillion times more likely than it was PO Wilson
 6
     and some unknown.
 7
               When you say hypothesis, what do you mean?
          Q
 8
          Α
               Basically it's just how well that
 9
     hypothesis explains the data.
               What does hypothesis mean?
10
11
               Hypothesis would be that supposing that
     these two particular individuals contributed it
12
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
          Α
               That statement is supported by the data,
20
     yes.
21
                                        . You can't
22
     determine if it was from skin cells or fluid?
23
          Α
               Correct. The DNA profile would be the
     same throughout your body, so we're not able to
24
25
     determine if the DNA profile originated from blood
```

```
Page 183
     or skin cells.
 1
 2
                    Yes.
 3
                                             You talked
     about the door, the front door handle?
 4
 5
          Α
               Yes.
 6
                              : You could tell it was
 7
    Michael Brown?
 8
          Α
               Yes.
 9
                              : He was the more major
     contributor. So if he was the last person to touch
10
11
     it, would his DNA, would it have overrode whoever
     touched it prior?
12
13
               It's possible, yes.
14
               (By Ms. Whirley) There's evidence that, or
          Q
     information that, and you probably know this
15
     already, you get some information from the police
16
     when you are doing this testing, correct?
17
18
          Α
               Some.
19
          Q
               There was a shooting involved in the car?
20
          Α
               Yes.
21
               And then there was blood and actually some
          Q
22
    blood swabs were submitted, correct?
23
               Yes, and I believe at the time of the
24
     testing, I don't know that I actually knew of a
25
     shooting.
```

	Page 184
1 .	<b>Q</b> But you know now before I told you?
2	A I do know now.
3	${f Q}$ 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.

```
Page 185
               MS. ALIZADEH: But there are swabs taken
 1
 2
     from the inside of the door that she's testified
 3
     about from the door handle, and that's the interior
     door handle.
 4
 5
                                 Interior door handle.
 6
               MS. ALIZADEH: I believe so.
 7
               Yes, Q18, interior left front door handle.
          Α
 8
                                 So interior left front
 9
     door handle has DNA from Michael Brown inside the
10
     car?
11
               Yes.
          Α
12
               (By Ms. Whirley) Again, we don't know how
          Q
13
     the DNA got there?
14
               Correct.
          Α
15
          Q
               Okay. Let's go onto, were we done with
     Q19?
16
17
                                          What my question
18
     is, Q11, they introduced that to us a long time ago.
     We don't know what it is. If you can answer any
19
     more, was the suggestion that it was a hardened
20
     nasal mucus just an assumption because it looked
21
22
     that way?
23
          Α
               That's correct, but the biologist, she
     actually called me in to kind of look at it and just
24
25
     see what I thought. We didn't know what it was,
```

	Page 186
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

```
Page 187
     individuals. This profile can be separated into a
 1
 2
     major mixture of two individuals with a trace
 3
     component. And again, the trace component is
     inconclusive.
 4
 5
               MS. ALIZADEH: Again, what?
               The trace component is inconclusive.
 6
          Α
 7
               (By Ms. Whirley) So that's that person
          Q
 8
     other than Michael Brown and PO Wilson?
 9
               Yes.
          Α
10
          Q
               Okay, go ahead.
11
               Michael Brown and PO Wilson are included
     as contributors to this major mixture profile.
12
13
     observed major mixture profile is 2.1 trillion times
     more like that it originated from Michael Brown and
14
     PO Wilson, than if it originated from PO Wilson and
15
16
     an unknown individual in the general unrelated
17
     population.
18
               Okay. So again, we don't know how his DNA
19
     got on his shirt?
20
          Α
               Correct.
21
               Okay. Questions on that one?
          Q
22
                    Q21-1.
23
          Α
               This was PO Wilson's uniform pants on the
                 The DNA typing results are consistent
24
     left side.
25
     with being a mixture of three or more individuals.
```

Page 188 This profile can be separated into a major mixture 1 2 of two individuals with a trace component, and the 3 trace component is inconclusive. Michael Brown and PO Wilson are 4 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 So those are on the pants? Q 12 Α Yes. 13 Now, we started with Q5 and we talked about things of evidentiary value. K1-1 is Michael 14 15 Brown's shirt, and you did not consider that to be of evidentiary value because it said that Wilson is 16 17 excluded as a contributor to this mixture profile? 18 Well, I started with samples that I 19 performed statistical measures on and when we do exclusions, there is no statistical measure. So I 20 can certainly get those results now. 21 22 Okay. Go ahead. Q 23 So Q1-1 was Michael Brown's T-shirt. Ι 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.
- 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.
- 2 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

```
Page 190
     excluded as a contributor to this mixture profile.
 1
 2
               So to say the thing that we said earlier,
 3
     none of those little points or the alleles match
     Officer Wilson?
 4
 5
          Α
               Yes.
 6
               If one of two would have matched, you
 7
     would have said what?
 8
               It is possible that maybe one or two did,
 9
     but overall he was excluded. So if you have one or
     two, it's possible you just might have adventitious
10
11
     inclusion, I guess, because people do share alleles,
     they share peaks, but when you look across an entire
12
     profile, that's how when you are able to determine
13
     if they are excluded or not.
14
15
               Do you use a certain number of peaks or
     alleles to make an exclusion?
16
17
               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
     then they're excluded.
20
               So in this case, is that what we are
21
          Q
22
     seeing is that they were foreign to Officer Wilson?
23
          Α
               Yes.
24
               The trace amounts, those alleles?
          Q
25
          Α
               Yes.
```

Page 191 Anything else of evidentiary value that we 1 Q. 2 missed? I think the only other items that we have 3 Α discussed would be the swabs from Michael Brown's 4 5 other portions of his body, his hands. 6 Okay. We'll talk about that. Is there a 7 question? 8 So on Q1-1, the 9 report talks about possible Police Officer Wilson grabbed the shirt of Michael Brown, from what you 10 11 seen from the area that was tested, you didn't get enough markers to verify that that's true. From 12 13 what you've seen you didn't get any police officer's DNA off of that shirt? 14 15 Α Correct. 16 (By Ms. Whirley) Anyone else? Okay. 17 On that other report, which is Grand 18 Jury Exhibit Number 74, was there, tell us about 19 that, what you concluded in that analysis. 20 The second report consisted of additional Α items that I was requested to process. There was 21 22 Cardinals baseball hat, two Nike sandals, the right 23 and the left. Actually, there was, yes, there was two sandals and there were two swabs taken from each 24 of those sandals. So there's four swabs from the 25

Page 192 sandals. And there were also two bracelets, one of 1 them was a black, yellow and white rubber bracelet, 2 and the other one was a dark brown beaded bracelet. 3 Were you able to, I see where you have the 4 5 buccal swab referenced for Officer Wilson and the 6 blood referenced for Michael Brown. Were you able to find any profiles on those bracelets? 7 8 Α I was able to obtain a mixture on each one. You want me to --9 10 Q Yes, please. 11 So on the black, yellow and white rubber band bracelet, the DNA typing results obtained from 12 13 that item Q25-1, are consistent with being a mixture 14 of two or more individuals. This profile can be separated into a major male component profile and 15 one or more minor contributors. Due to the limited 16 17 genetic information available from the minor 18 component of the mixture, no inclusionary statements 19 will be made regarding the minor component. Michael Brown and PO Wilson are excluded as contributors of 20 the major male component profile, however, I 21 22 couldn't determine if they were present as possible 23 minor contributors. There wasn't enough of a DNA profile to 24 25 make the connection?

- 1 A Yes.
- 2 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.
- Okay. When you say single source, you
- 18 mean no mixture, just straight one source?
- 19 A Correct.
- 20 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.

```
Page 194
               You didn't do anything with the socks,
 1
          Q
 2
     correct?
 3
          Α
               No.
               All right.
 4
          Q
 5
                                                 Did you
 6
     do anything with the clippings of the fingernails?
 7
                     That was in the first report and
          Α
               Yes.
     those were consistent with Michael Brown. Let me
 8
 9
     see where that is.
10
               MS. WHIRLEY: Is that Q10?
11
               Yes.
         Α
12
               MS. WHIRLEY: Q9, Q10?
13
          Α
               Let's see, Q9-1, Michael Brown's left hand
14
     fingernail scrapings. This was a mixture, so again,
15
     this is Q9-1. It was consistent with being a
     mixture of three or more individuals. This profile
16
17
     can be separated into a major component profile
18
     consistent with Michael Brown and two or more trace
19
     contributors. Due to the limited genetic
20
     information available from the trace component of
     the mixture, no inclusionary statements will be made
21
22
     regarding the trace component PO Wilson is excluded
23
     as a contributor to this mixture profile.
24
               MS. WHIRLEY: Q10?
25
               And then Q10 was a single source profile
          Α
```

	Page 195
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

```
Page 196
     didn't include that and we don't know?
 1
 2
          Α
               Yes.
 3
               MS. ALIZADEH: And also just to clarify,
     you did not have a known sample from a Dorian
 4
 5
     Johnson, did you?
 6
               No, I did not.
          Α
 7
                                           Back to Michael
 8
             I guess is it safe to say that the areas
     that would have been in contact with PO Officer
 9
     Darren Wilson, like neck, shoulders, was not swabbed
10
11
     due to the blood?
12
               I believe that's correct, yes.
          Α
13
                                              I'm confused
14
     by that. But you did say you got DNA from his
15
     shirt, from Michael Brown, correct?
               On PO Wilson's shirt.
16
17
                              : He was talking about
18
    Michael Brown's shirt, which is my original
     question. You said that just because you weren't
19
     able to get Officer Wilson's DNA on his fist, on his
20
     hand, it could have been overwhelmed by the blood
21
22
     that was there?
23
               That's one possibility, yes.
24
                              : Or it could not have been
25
     there at all?
```

	Page 197
1	A Correct.
2	MS. WHIRLEY: Did he have blood on his
3	hands, is that what you are talking about?
4	A Yes, the swabs, it looks like Q5, I have
5	RBS listed. So there was blood detected there as
6	well, Q6, Q7 and Q8.
7	. He had
8	blood on both left and right hand?
9	A Yes, that's how it appears in my report,
10	yes.
11	. (sic)
12	Back to Q25 and 26, something the prosecutor brought
13	up. If you had DNA samples, would you have enough
14	markers to compare it to known DNA?
15	A From the major component, yes.
16	. The
17	fingernail clippings and scrapings, were they
18	separate, did they scrape them and also clip them,
19	or was it just the clippings? And if it was just
20	the clippings, could that have been, have
21	deteriorated DNA?
22	A Um, I'm not aware of how they're
23	collected. I think the medical examiner would have
24	to speak to that.
25	MS. ALIZADEH: I think testified.

- 1 A That they were clippings.
- MS. ALIZADEH: And that she swabbed the
- 3 clippings.
- A Right, because what I received is just a
- 5 portion of the original item. So I just get a
- 6 little tube with something inside, so I don't know.
- 7 In the
- 8 report it says here that the contributors not
- 9 identify, were unable to identify that, the example
- 10 is put it in CODIS; is that correct, is that my
- 11 understanding?
- 12 **A** Yes, at the very end there are two samples
- 13 that were entered into CODIS.
- : Do they stay in CODIS for
- a specific amount of time or just in case somebody
- 16 might pop up?
- 17 A So just a little bit of background on
- 18 CODIS. There is actually three levels of CODIS.
- 19 There's a local level, state level and national
- 20 level. So the national level is the most
- 21 restrictive. There's a number of rules about what
- 22 can go in. It has to be something from the scene of
- 23 a crime. It cannot be from the victim, it cannot be
- 24 from a witness in the crime, for example. But as
- 25 you move down to the local levels it gets less

Page 199 restrictive. 1 2 So, for example, all the analyst 3 profiles are in our local database. Any reference standard from the list of the suspect is entered 4 5 locally. 6 The Missouri State Attorney General has made a ruling at the state level we can maintain 7 8 those suspect profiles. So we enter the suspect 9 known at our level and it stays at the state level. It does not move to the national level. 10 11 Any unknown sample, we call it a case work unknown sample. And this example of Q12, which 12 13 was consistent with Michael Brown, and I believe 14 that was from the vehicle. That was entered into CODIS and that would go to the national level. 15 16 I want to go back to Q1-1, Michael Brown's T-shirt again to make 17 18 sure I'm clear. The last line says PO Wilson is 19 excluded as a contributor to this mixture profile. So that tells he is not part of whatever stain is on 20 that shirt. 21 22 He was not detected, that's correct. Α 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?

Page 200 I believe Q1-1 was from the non stained 1 Α 2 areas. 3 Okay. She did not swab the stained areas 4 Α 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 Right, and DNA testing is expensive and time consuming so we try to restrict the number of 12 13 samples to something that can provide information in 14 the case. 15 There's just no way to know until it was Q 16 requested? 17 Α Right. 18 So what do you do after you complete your 19 analysis, what do you do with all this stuff? 20 All the samples, in this particular case for a time, I believe, the FBI were intentionally 21 22 going to take it and place it in a vault in 23 preparation for them to take. The particular items that I tested, I don't believe they ended up taking. 24 25 So we boxed them up for long-term storage.

	Page 201
1 .	Q You have custody of them?
2	A They're in the laboratory, yes.
3	$oldsymbol{Q}$ 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	<b>Q</b> 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

```
Page 202
     how you insure that your work is accurate, you said
 1
 2
     there is a technical review or someone reviews your
 3
     work?
 4
          Α
               Yes.
 5
               They don't retest, Kathi already asked,
          Q
     they just review what you have done?
 6
 7
               That's correct.
          Α
 8
          Q
               Steps that you have taken?
 9
               Right, and they double check all the math
          Α
     and any calculations that were done.
10
11
               MS. WHIRLEY: All right. Questions,
12
     Kathi?
13
               MS. ALIZADEH: No.
14
               MS. WHIRLEY: Anybody else? Okay.
                                                    Ι
     quess you asked them along the way, that was good.
15
16
     Okay, thank you very much.
17
               (End of the testimony of
18
                  .)
19
     of lawful age, having been first duly sworn to
20
     testify the truth, the whole truth, and
21
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
```

```
Page 203
     BY MS. ALIZADEH:
 1
 2
               That's the part where you promise not to
 3
     talk about this after you leave today.
               Got it.
          Α
 4
 5
          Q
               All right. Could you state your name,
 6
     please?
 7
          Α
 8
          Q
                             , the microphone won't
     amplify your voice.
 9
10
          Α
               Okay.
11
               You don't need to lean into it to pick you
     up, just talk loud enough so that I can hear you
12
13
     back here, okay?
               Got it.
14
          Α
15
               What do you do,
          Q
               My title, 911 services coordinator for St.
16
          Α
17
     Louis County. I make 911 work in the county.
18
               All right. And how long have you had that
          Q
     position?
19
20
               Twenty years.
          Α
               And so are you also, do you have access to
21
22
     all the records that 911, that the communication
23
     center keeps regarding 911 calls?
24
               Yes.
          Α
25
               What about radio traffic, do you also have
          Q
```

	Page 204
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	<b>Q</b> 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	<b>Q</b> 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
ĺ	

Page 205 that transmission is actually received so there 1 would be a date stamp, a time stamp with each 2 transmission that's heard? 3 Α 4 Yes. 5 Q Okay. And were you asked during the course of the investigation into the shooting of 6 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? Not until you had asked. 10 Α 11 Okay. So, and let's go back on August 9th of 2014, were you, do you recall that and were you 12 13 aware that there was an incident that occurred down 14 in South County at the St. Anthony's Hospital in one of their hospice care facilities? 15 16 Α Yes. 17 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 Α Yes. 21 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? That's correct. 24 Α 25 And now, just for clarity sake, RIOT A, B, Q

```
Page 206
     C and D, those are separate channels, correct?
 1
 2
               That's correct.
          Α
 3
               And so did I ask you to search your
     records for any calls that were received and
 4
 5
     recorded on the RIOT A channel during times that are
 6
     relevant to the shooting of Michael Brown?
 7
          Α
               Yes.
 8
               And now you told me, we talked about this
 9
     briefly out here just now that when you pull a
     segment of calls or time segment, that has to be in
10
11
     ten-minute increments; is that correct?
12
               Correct.
          Α
13
               And so did you pull all the calls for the
14
     times that I requested and burned those onto a disc?
15
          Α
               Yes.
               I'm going to show you Grand Jury Exhibit
16
17
     Number 60.
18
                          (Grand Jury Exhibit Number 60
19
                         marked for identification.)
20
               (By Ms. Alizadeh) Is that your handwriting
          Q
21
     on there?
22
          Α
               Yes, it is.
23
          Q
               Have you listened to the call on this
24
     disc?
25
          Α
               Yes.
```

	Page 207
1	<b>Q</b> Are those the calls that you pulled that I
2 a	sked 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 a	also provide for me a print-out that I've marked
8 G	rand Jury Exhibit Number 71, that shows the dates
9 a	and times of those calls?
10	A Yes.
11	$oldsymbol{Q}$ All right. So the first call that is
12 r	recorded on Grand Jury 60 is a call from August 9th
13 a	t 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 G	rand Jury Exhibit 71, date and time stamps it and
18 s	says how long the call lasts; is that correct?
19	A That's correct.
20	<b>Q</b> And now the next column says caller
21 n	number, but there is nothing in there?
22	A Correct. That would show like if it was a
23 9	11 call, would show the number that came in.
24	<b>Q</b> Okay. And then for the column that says
25 c	channel name, it is all of those are RIOT A calls?

Page 208 Α 1 Correct. 2 Okay. And then what is the, the next 3 column says location, what does that mean? That's the DVD that it's on. For Α 4 5 instance, 549, that's the 549th CD we have stuck in 6 there to record. 7 So these calls are not maintained on a hard drive someplace? They are for about probably three weeks 9 and then they are archived to this. 10 11 So regardless of whether I ask for these, Q I could get calls from a year ago, correct? 12 13 Α We keep them that long, yeah. 14 So when you got these calls for me it was Q 15 more than three weeks past August 9th, is that fair 16 to say? 17 Α Yes. 18 And so that location means you were able to determine what DVD it was on? 19 Exactly. 20 Α 21 Okay. And I'm going to pass out these Q 22 records. 23 So the first call that was reported, I already mentioned, is at 11:43 and 15 seconds in 24 the a.m. And then the last call recorded is at 2:06 25

```
Page 209
     and 31 minutes, I'm sorry, 2:06 and 31 seconds in
 1
 2
     the p.m., correct?
 3
          Α
               Correct.
               I mean, that's more than a ten-minute
 4
          Q
 5
     increment?
 6
               Right.
          Α
 7
               You get these?
          Q
 8
               What I was doing was trying to show when
 9
     it ended and when it started and any traffic in
10
     between.
11
               Okay. Now, are you aware that the
          Q
     incident at the St. Anthony's hospice facility, did
12
13
     that start before 11:43:15 a.m.?
14
               Way before it, yes.
          Α
15
               So were you aware then that the county had
          Q
     already notified their officers to, that were
16
     involved in that incident, to switch over to RIOT A?
17
18
          Α
               Correct.
               And so that transmission is not included
19
          Q
     in what you've gotten me, right?
20
21
               No.
          Α
22
               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
```

	Page 210
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	${f Q}$ 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	${f Q}$ 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	<b>A</b> Yes.
23	<b>Q</b> And have you listened to all of these
24	calls yourself?
25	<b>A</b> Yes.
I	

	Page 211
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	${f Q}$ 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?

	Page 212
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

```
Page 213
     the very beginning you can hear a couple people just
1
 2
     talking. They don't identify themselves. I can
     recognize one of the names. It was a guy in the St.
 3
    Anthony's. They'll use it, they'll use that channel
 4
 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
          Α
               But usually an activation is done by the
9
     county.
               And I'm sure it was said already, just to
10
          Q
11
    make sure I'm clear. A municipality like Ferguson
     can access that RIOT A channel and talk to other
12
13
     officers and other departments?
14
         Α
               Correct.
15
               Okay. But it is really a channel that is
          Q
    maintained by County?
16
17
               Yes.
          Α
18
               All right. On this channel, all of these
19
     other calls, like the St. Anthony's secure and the
     calls previous to that, all dealt with something
20
     that was happening at St. Anthony's?
21
22
         Α
               You can tell one of the cars, you could
23
    hear a guy say
                                , he is on the SWAT team.
               But they are not like communications where
24
25
     they are calling into dispatch and announcing their
```

```
Page 214
     location or their arrival, or asking for assistance
1
 2
     or anything like that, it is just sort of an
 3
     informal communication amongst officers on this
     channel?
 4
 5
         Α
               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
          Α
               Correct.
11
               MS. ALIZADEH: So it is not like if
     someone transmits something on a RIOT A, it is not
12
     suddenly everybody switches over to RIOT A because
13
     there was transmission?
14
15
               No, you usually have a few, the smaller
          Α
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.
     will just talk to you whenever I want you to
20
21
    monitor.
22
               MS. ALIZADEH: We also heard some
23
     testimony, you know
                              ; is that right?
24
               Yes.
          Α
25
               MS. ALIZADEH: You are the one who hooked
```

```
Page 215
     me up with him so he could explain how radio traffic
 1
 2
     works, right?
 3
          Α
               Yeah.
               MS. ALIZADEH: And so we heard him testify
 4
 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
     officer's department.
10
11
               Now my question to you is, if that button
     is pressed by an officer in a municipality who is
12
     not on RIOT A, but might be on another channel,
13
     would you hear it on RIOT A?
14
15
          Α
               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
     are sent out when that button is pressed, are going
19
     to go through, they are going to override everything
20
21
     else?
22
          Α
               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,
```

```
Page 216
     would you hear it on the, would you be able to hear
 1
 2
     it on the RIOT A monitoring, when you are monitoring
 3
     RIOT A?
          Α
               Well, County is different. I think the
 4
 5
             described it is Ferguson does automatic, is
     wav
 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
          Α
               Correct.
12
               MS. WHIRLEY: Okay. I know you had a
13
     question.
               GRAND JUROR 12: It shows the RIOT A for
14
15
     Ferguson started at 2:00. I know you were asking
     questions about you hear anybody asking for help,
16
     but this would have been, they would have secured
17
18
     this channel after the incident happened, correct?
19
          Α
               They didn't secure it, they started it up.
20
                                They started the RIOT
21
     channel after the initial incident --
22
          Α
               Yes.
23
               MS. WHIRLEY: These are officers talking
24
     informally amongst each other?
25
                                Right. This is not an
```

officer asking dispatcher for help, this is officers talking to each other about the aftermath of.  No, when St. Anthony secured, we shut down
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 <b>A</b> The incident at Ferguson.
10 : The incident happened.
11 <b>A</b> 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 <b>A</b> Well, everything you see in here is on the
22 RIOT channel.
23 : I know that.
24 <b>A</b> So if he called on the RIOT channel.
25 : If he called his own

```
Page 218
     dispatcher, it would not be on here?
 1
               No, this is strictly St. Louis County.
 2
                              : They started using this
 3
     channel after the incident?
 4
 5
               After the incident, code 2000 they call
          Α
     it, and they activated the RIOT channel.
 6
 7
                                They activated the RIOT
                              :
 8
     channel to assist with the aftermath of what
 9
     happened?
10
          Α
               Yeah.
11
               MS. ALIZADEH: Again, just to be clear, if
     for the sake of assumption, if Officer Wilson had
12
13
     broadcast or had transmitted something on the RIOT
14
     channel, it may have been received and recorded,
15
     correct?
16
          Α
               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
     best quality and so it might get, might not have
20
21
     been received?
22
          Α
               Correct.
23
               MS. WHIRLEY: Okay. On your report,
     it says from August 9th, 2014, from 11:52:32 seconds
24
25
     a.m. to 12:04 and 01 seconds p.m. Does that
```

```
Page 219
     indicate that there was no transmission between that
 1
 2
     time period?
 3
          Α
               No, say that again, though, you say --
               MS. WHIRLEY: 11:52 and 12:04 on the RIOT
 4
 5
     channel, was there any transmission? Because it
 6
     looks like the duration of 11:52, was that six
 7
     seconds?
 8
               Yeah, okay, it picked up something at
     11:52 for six seconds.
 9
               MS. WHIRLEY: Right. So after that six
10
11
     seconds was over, is there nothing else that was
     picked up until 12:04?
12
13
          Α
               Correct.
14
               MS. WHIRLEY: So if someone was on the
     RIOT channel, that would have been recorded?
15
16
          Α
               Correct.
               MS. WHIRLEY: Between that time period?
17
18
          Α
               Yeah.
               MS. WHIRLEY: Between 11:52 and 12:04, if
19
     there was nobody else transmitting.
20
21
               Yeah, any kind of break in time in there,
          Α
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?
```

```
Page 220
 1
          Α
               Oh, yeah.
 2
               MS. ALIZADEH: The strength of the
 3
     transmitter, whether there is buildings in the way.
     So when Sheila said if somebody made a transmission
 4
 5
     during that time period, it would have been
 6
     recorded. The answer has to be not necessarily,
 7
     correct?
 8
          Α
               Yeah, this is what was heard, what was
 9
     recorded.
10
               MS. ALIZADEH: Whatever was heard was
11
     recorded?
12
          Α
               Correct.
               MS. ALIZADEH: We don't know if there was
13
14
     something transmitted that didn't get received or
15
     recorded?
               There is dead spots throughout the whole
16
          Α
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
          Α
               Yes.
22
               MS. WHIRLEY: You know that for a fact?
23
          Α
               Yes.
               MS. WHIRLEY: Is it Ferguson Police
24
25
     Department that dispatches for Ferguson Police
```

	Page 221
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

	Page 222
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

```
Page 223
     too, right?
 1
 2
               Uh-huh.
          Α
 3
                            : Do you know if there were
     911 calls made?
 4
 5
          Α
               Oh, yeah.
 6
                            : Like --
 7
               MS. ALIZADEH: I have those, yes.
     didn't print out one of those 911 calls?
 9
               I have made several different ones, I
     don't know if I made the 911 calls for you.
10
11
               MS. ALIZADEH: Okay.
               To give you an idea, the traffic and our
12
          Α
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
     play every call and figure out what had to do with
16
17
          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
     those incidents.
20
               MS. ALIZADEH: I do have a disc that has
21
22
     911 calls on it and, you know, there are some that
23
     have to do with this. I don't want to characterize
     them as they don't really help you with anything
24
25
     because I don't want to be the person, I don't want
```

```
Page 224
     that to be my judgment, but if you want to hear
 1
 2
     that, I have them.
               Just to give you an idea, they have their
 3
          Α
     own 911 center. So if they call from landline, they
 4
 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
     with that, I was just wondering if there were any
10
11
     911 callers that witnessed something that did not
     come forward to be interviewed by anybody, anybody's
12
13
     doing that crosscheck?
14
               MS. ALIZADEH: That would be a good
15
     question for Detective Wilson when he's going to
     come and testify close to the end. There are lots
16
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
     or nay. Any of those type of questions he would be
20
21
     the one to ask.
22
               Anyone else?
23
               MS. WHIRLEY:
                                       , did you have
24
     something?
25
                                I did, I wanted to make
```

```
Page 225
     sure when
                            testified earlier this week,
 1
 2
     he mentioned there were like 16 or 19 channels,
     something like that, that the police officers could
 3
             There were a number of channels that the
 4
     be on.
 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
     here doesn't necessarily mean it might not be on
10
11
     another one of those channels?
               Correct. Some are receive only, it all
12
          Α
13
     goes back to like --
14
                                Point-to-point is receive
15
     only.
16
          Α
               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
```

```
Page 226
 1
 2
     of lawful age, having been first duly sworn to
     testify the truth, the whole truth, and
 3
     nothing but the truth in the case aforesaid,
 4
 5
     deposes and says in reply to oral
 6
     interrogatories, propounded as follows, to-wit:
 7
                         EXAMINATION
 8
     BY MS. ALIZADEH:
               Can you state your name, please, and spell
 9
10
     it for the court reporter.
11
          Α
                                            I'm going to
               All right. And,
12
          Q
13
     stand back here because the microphone that's in
     front of you does not amplify your voice. So you're
14
     going to have to speak loud enough that I can hear
15
16
     you back here, then I know they can all hear you,
17
     okav?
18
               (Nods head.)
19
          Q
               When I ask you questions, and you shook
     your head yes, because we're recording and the court
20
     reporter is taking it down, there is no way that
21
22
     gets recorded. So I might remind you if I ask you a
23
     question and you shake your head, I might say is
     that a yes, but if you can remember, try to say yes
24
25
     or no to answer the question so that he can take it
```

```
Page 227
     down, okay?
 1
 2
          Α
               Yes.
 3
          Q
               All right. How old are you?
          Α
 4
               Okay. And are you familiar with the
 5
          Q
 6
     Canfield Green Apartment Complex?
 7
               Kind of, not really.
          Α
 8
          Q
               Okay. Do you live in the apartment
 9
     complex?
10
          Α
               Yes.
11
               How long have you lived in Canfield?
          Q
12
          Α
13
               Okay. There is a map here, Grand Jury
          Q
     Exhibit Number 25, and it is an aerial view of some
14
15
     streets and apartment buildings that make up the
     Canfield Apartment Complex, okay. And if you look
16
17
     here, the street that cuts through the complex is
18
     Canfield Drive, okay?
19
          Α
               (Nods head.)
20
               And if you were to drive this way, that's
     going west and West Florissant is out here, okay.
21
22
     And if you are driving this way down Canfield Drive
23
     and you are driving that way you're going into the
     Northwinds Apartment Complex, okay?
24
25
          Α
               (Nods head.)
```

```
Page 228
               Does that help kind of orient you to where
 1
          Q
 2
     you are?
 3
          Α
               Yes.
               Now, I don't want you to say your address
 4
          Q
 5
     because that's not necessary. But what I want you
     to do is use this laser pointer, do you see your
 6
 7
     building on there? Don't say it, but do you see it?
 8
          Α
               Yes.
 9
               So this is a laser pointer. If you press
     this button, you know, it puts a red dot on the map.
10
11
                    So you don't have to say it, but the
     grand jurors can see it, where is the apartment that
12
13
     you live in?
14
               (Indicating.)
          Α
15
               This one right here?
          Q
               (Nods head.)
16
          Α
               Are you putting it on this unit right
17
18
     there?
19
          Α
               Right.
20
               Okay. And so were you living there on
          Q
    August 9th of this year?
21
22
          Α
               Yes.
23
          Q
               And do you recall anything special about
     that morning?
24
25
          Α
               No.
```

		Page 229
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 morn	ing?
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	apartment	s, 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 t	hese units has a front door and a sliding
1		

	Page 230
1	glass door. And when you walk out, there's like a
2	wooden balcony or wooden area, correct?
3	A (Nods head.)
4	<b>Q</b> 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	<b>A</b> Yes.
11	Q Okay. Where were you when something
12	started to happen?
13	A On the staircase.
14	<b>Q</b> And so were you on the staircase outside
15	of your apartment unit?
16	A Yes.
17	${f Q}$ 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	<b>A</b> Yes.
22	Q Were you with anybody?
23	A No.
24	${f Q}$ And we also know from pictures that each,
25	this is an overhang that covers the staircase from
1	

```
Page 231
     rain and snow, correct?
 1
 2
          Α
               Correct.
               And we also know that there is like a wall
 3
          Q
     that is in front of that?
 4
 5
          Α
               Correct.
               All right. So when you were on the
 6
          Q
 7
     staircase, could you see Canfield Drive from where
 8
     you were?
 9
          Α
               Yes.
               Were you sitting or standing, do you
10
          Q
11
     recall?
12
               Sitting.
          Α
13
               Okay. And so if this is, I'm just going
     to do a line in this direction. If I bisect
14
15
    Canfield at this point, could you see from this
     point west?
16
17
          Α
               Yes.
18
               Could you see from this point east?
          Q
19
          Α
               Only so far.
20
               And is it because this building blocked
          Q
     your view of some things?
21
22
          Α
               Yes.
23
               And so if you are sitting outside your
24
     unit, you can probably see beyond this intersection
     of Canfield Drive and Canfield, well, this is like a
25
```

Page 232 little loop around Canfield Drive, correct? 1 2 That's correct. Α 3 Q But, for example, where this white car is in the map on the picture, which wasn't there that 4 5 day, this image was not taken that day, but, for 6 example, you wouldn't be able to see that far from where you were; is that right? 7 8 Α No. So what did you see that drew your 9 10 attention? 11 Well, there were two guys walking down the street in the middle of street and, uh, police car 12 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 they were and I guess had another conversation that 16 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, and then once he ran from the car, I seen the 20 officer get out of his car and shoot in his 21 22 direction, but that's all I seen. 23 Okay. So use the laser pointer and show 24 us where the two boys were when you first saw them 25 walking on Canfield?

		Page 233
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 middl	le 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	particula	arly.
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 read:	ing 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 o	or anything have you?

		Page 234
1 ,	A No.	
2	Q Okay. Um, so let me ask yo	u this. When
3	you were on the staircase at your res	idence, if you
4	were to look too far west on Canfield	Drive, would
5	this building block your view?	
6	A No.	
7	<b>Q</b> And why not?	
8	A Um, because the staircase i	s more out then
9	the building.	
10	<b>Q</b> Okay. So you said you saw	them about this
11	area and you can see them, this build	ing didn't
12	block your view from where you could	see them from
13	here?	
14	A Yes.	
15	<b>Q</b> Okay. Which direction were	they walking?
16	Were they walking into the complex?	
17	<b>A</b> East.	
18	<b>Q</b> East?	
19	A Right.	
20	<b>Q</b> So you said a police car ca	me?
21	A Right.	
22	<b>Q</b> A truck I think you said?	
23	A Yeah, it was a truck, yes.	
24	<b>Q</b> Was it like a pickup truck	or SUV truck?
25	A SUV.	

		Page 235
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 an	nything?
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 th	ne officer inside the truck at this point?
17	A	No, because he was driving west, it was
18	the drive	r's side on the west.
19	Q	So you are looking at the passenger side
20	of the tru	ack 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	y an officer inside the truck, correct?
25	A	Correct.

		Page 236
1 1	Q	Could you hear what was being said?
2	A	No.
3	Q	All right. So are you saying there was a
4	conversat	tion just based upon what you saw?
5	A	Right.
6	Q	And then you said at some point the boys
7	kept wal	king and the officer backed up. Did the
8	officer p	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 e	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	d 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 th	ne 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?	

	Page 237
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	$oldsymbol{Q}$ Okay. So then you said at that point the
10	officer is continuing to talk to the boys?
11	A Correct.
12	<b>Q</b> 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	<b>Q</b> 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	<b>Q</b> 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?
l	

		Page 238
1 .	A	Yes.
2	Q	Now, we know that the boy that was shot is
3	Mike Brow	n, 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. Whe	n he was standing on the other side, was he
9	on the dr	iver'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 rocki	ng, 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 B	rown, let's just call him the bigger guy,
25	and then	there's another guy with him, was he

_			
			Page 239
	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	r?
	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 tryi	ng to get away from the altercation or what
	13	was going	on with them. So he was walking forward a
	14	little bi	t.
	15	Q	When you say forward, was he walking east
	16	a little 1	oit?
	17	A	East, yes.
	18	Q	Okay. And how about anybody else, did you
	19	see any o	ther 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 c	oming through, I remember seeing a white
	23	car becaus	se the second guy, when the first shot was
	24	fired, he	ran and got behind the car. The
	25	altercation	on is still going on because Mike Brown
1			

	Page 240
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	<b>Q</b> 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	<b>Q</b> 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.

		Page 241
1	Q	Or two gunshots?
2	A	Yes.
3	Q	Did you see Mike Brown do anything when
4	those gun	shots 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 wh	en 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 t	he 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 h	is flip flops come off?
18	A	Right.
19	Q	And when you saw him run, could you tell
20	at that p	oint if he had been injured?
21	A	No, because he was running like he was
22	kind of s	kipping 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?	

		Page 242
1	A	No.
2	Q	Okay. And you said that he ran out of his
3	flip flops	s?
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 vel	nicle, 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 th	nat got out?
20	A	No.
21	Q	Did you see any other police trucks at
22	that point	t?
23	A	No.
24	Q	So he's by himself?
25	A	Yes.

	Page 243
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	$oldsymbol{Q}$ All right. When he first gets out of the
10	car, do you see the gun?
11	A No.
12	$oldsymbol{Q}$ 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	$oldsymbol{Q}$ 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

	Page 244
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	<b>Q</b> 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.

		Page 245
1	<b>Q</b> So	o did you see how he was holding the gun?
2		e had it like police, you know.
3		th both hands?
4		eah.
5		ere his arms out in front of him?
6		eah.
7		tended like that? (indicating)
8		eah.
9	<b>Q</b> Ar	nd you said that he fired a shot and at
10	the time tha	at he fired that shot, could you still
11	see Mike Bro	own or had Mike Brown disappeared beyond?
12	<b>A</b> No	o, I can't see him any more.
13	<b>Q</b> So	o at that point you don't know what Mike
14	Brown's doir	ng?
15	<b>A</b> Ri	ght, correct.
16	<b>Q</b> Ar	nd so you said how many shots did he fire
17	at that poir	nt?
18	<b>A</b> Ma	aybe four or five, I don't know.
19	<b>Q</b> Sc	there's a series of shots?
20	<b>A</b> Ye	eah.
21	<b>Q</b> Is	s he moving while he's shooting?
22	<b>A</b> It	is like he took a couple then moved and
23	then he shot	
24		there is two series of shots?
25		orrect.

	Page 246
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	${f Q}$ 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	${f Q}$ 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	${f Q}$ Okay. And so in that first series of
24	shots, how many do you think?
25	A Maybe two or three.

		Page 247
1 ,	Q	Okay. And then there's like just a couple
2	seconds p	ause?
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 shoo	ting?
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 se	e him walking back towards my vision.
12	Q	So at some point he disappears from your
13	sight bec	ause 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 g	uesstimate, from when the shooting all
20	stops unt	il 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?

	Page 248
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	<b>Q</b> 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	<b>Q</b> Okay. And so do you remember which hand
25	he was holding the gun in?

A No.  2
<pre>with his hand, was it the hand that didn't have the gun in?  A It didn't have the gun, right.  Q So you just made a motion with your hand</pre>
<pre>gun in?  A It didn't have the gun, right.  Q So you just made a motion with your hand</pre>
5 A It didn't have the gun, right. 6 Q So you just made a motion with your hand
6 <b>Q</b> So you just made a motion with your hand
7 like you would be shaking something off on your hand
, III.e you would be blicking bollectiffing off on your flatful
8 or shaking your hand, is that what you just kind of
9 did?
10 <b>A</b> Right, yes.
11 Q But you didn't see any blood on his hand?
12 <b>A</b> No.
Or any blood on his uniform?
14 No.
15 $\mathbf{Q}$ And to your knowledge, did anybody that
16 was in your apartment that day see this?
17 <b>A</b> No.
Okay. So nobody else was out on the
19 stairs with you the whole time that happened?
20 <b>A</b> No.
21 <b>Q</b> Did you ever go down, did you ever go down
22 towards the street?
23 <b>A</b> Yes, after the incident took place.
Q Okay. After it happened, did you go down
25 at that point or did you go back into your

Page 250 apartment, or what did you do? 1 2 See, while it was going on, some people in my house heard the shots. So my girlfriend came out 3 and was like, what's somebody shooting for. And she 4 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 was like, and he was laying in the middle of the 10 11 street. Did you ever see the officer who shot him, 12 Q 13 did you ever see that officer go down by the body? Uh, no, I didn't see that. 14 Α 15 How about did you ever see the officer's O. truck, did it ever move? 16 17 No. Α 18 So after this happened and the police 19 came, the truck stayed there? 20 Α Yes. 21 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 anybody try to move the body? 24

Α

No.

25

	Page 251
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	<b>Q</b> You just didn't hear any voices or
12	screaming or anything?
13	A No.
14	${f Q}$ 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	<b>A</b> Yes.
20	<b>Q</b> 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	<b>Q</b> And eventually some FBI agents knocked on
25	your door and asked if you had seen something and
	your door and asked if you had seen something and

			Page 252
	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 h	old anything?
	13	A	No.
	14	Q	Did you ever see anything fall or drop,
	15	being dro	pped from somebody?
	16	A	No.
	17	Q	Um, did you ever see what became of the
	18	littler g	uy?
	19	A	Um, as the shooting is going on, like he
	20	hid behin	d 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 M	ike Brown. So he ran back behind the
	24	police ca	r and ran behind right here and ran behind
	25	this buil	ding.
ı			

	Page 253
1 ,	${f Q}$ 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	${f Q}$ 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	${f Q}$ 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.

		Page 254
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 pa	assenger side or the driver's side of the
16	police ca	ar?
17	A	The passenger side.
18	Q	So you were looking through the passenger
19	side thro	ough?
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 the	ey were scuffling, right?
25	A	Correct.

			Page 255
	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 B	rown 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 t	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 s	so I couldn't see whether or not he kept
	25	running of	r not.
1			

	Page 256
1 .	${f Q}$ 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	<b>Q</b> 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	<b>A</b> Yes.
11	${f Q}$ When he got out of the truck, what was he
12	doing?
13	A He faced his direction.
14	${f Q}$ Faced the direction that Mike Brown was
15	running?
16	<b>A</b> Yes.
17	Q Was Mike Brown's back to the officer?
18	A Yes.
19	${f Q}$ 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	$oldsymbol{Q}$ 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

	Page 257
1 ,	he was getting ready to run towards him, or
2	whatever, I can't say the motions about.
3	<b>Q</b> 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	<b>Q</b> 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

```
Page 258
     turn around in the street, but.
 1
 2
                               Someone coming from that
 3
     direction, coming from West Florissant that pulled
     into that lot?
 4
 5
          Α
               I really can't say. I think it was a
     vehicle, I won't say that I know it was.
 6
 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
     got out of the car, the first shots that were fired,
10
     you could not see Mike Brown at that time?
11
12
               Correct.
          Α
                              : So you don't know if his
13
14
     back was to the officer, you assume he was, he was
15
     running away?
16
          Α
               Right.
                              : You don't know for sure?
17
18
         Α
               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
     nothing but the truth in the case aforesaid,
24
25
     deposes and says in reply to oral
```

```
Page 259
     interrogatories, propounded as follows, to-wit:
 1
 2
                          EXAMINATION
     BY MS. ALIZADEH:
 3
               Sir, could you state your name and spell
 4
          Q
 5
     it for the court reporter?
 6
          Α
 7
 8
          Q
               And, sir, back in August of this year,
 9
     were you living in the Canfield Green Apartment
10
     Complex?
11
          Α
               Yes.
               And I am going to direct you to look at
12
          Q
13
     Grand Jury Exhibit Number 25, which is a map of the
     streets of the buildings that make up the Canfield
14
15
     Apartment Complex. Do you see your building that
     you lived in back then?
16
17
               Yes.
          Α
18
               Can you use that laser pointer and point
19
     to where your building was?
20
               (Indicating.)
          Α
               Okay. And so we heard some testimony that
21
          Q
22
     these buildings have three floors?
23
          Α
               Yes.
24
               What floor were you on?
          Q
25
               The third floor.
          Α
```

		Page 260
1	Q	Okay. And back on August 9th of this
2	year, aro	und the noon hour, do you recall what you
3	were doin	g?
4	A	I was in my room. I was, at the time,
5	video tex	ting.
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 vi	deo 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		

	Page 261
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	${f Q}$ So when you are doing this, this video
7	texting on Glide, is your phone recording what's
8	being done?
9	<b>A</b> 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	<b>A</b> Yes.
17	<b>Q</b> What did you hear?
18	A I heard gunshots.
19	<b>Q</b> And so have you heard gunshots before?
20	A Yes.
21	<b>Q</b> 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
	chest ganonots were a freeze bre rouger than what

```
Page 262
     I'm used to hearing. It alerted me because I had a
 1
 2
     conversation with my roommate and she said, you
 3
     know, she said
                       , what was that. She called me
        , what's that, and then I said those sound like
 4
 5
     gunshots.
 6
               Okay. Now, did you later discover that
 7
     you had actually recorded the gunshots while you
 8
     were video texting your friend?
               I -- it did not, it did not. I wasn't
 9
     thinking that I did, I was concentrating on sending
10
11
     my video, but I heard it in the background, but I
     was focused on talking to who I was talking to.
12
13
          Q
               Okay. Now, you've seen that video again;
14
     is that right?
15
          Α
               Yes.
               And can you, that's you in the video and
16
17
     your voice is heard in the video talking to
18
     somebody, right?
19
          Α
               Yes.
20
               And you can hear some shots in the
21
     background?
22
          Α
               Yes.
23
               Did you video, does your video capture all
24
     of the shots that you heard?
25
          Α
               No.
```

	Page 263
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	<b>Q</b> Do you recall how many shots you heard
6	before your video begins?
7	A Approximately two.
8	${f Q}$ 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?

	Page 264
1 ,	A Yes.
2	<b>Q</b> 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	<b>A</b> 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	${f Q}$ Um, and this clip, this clip is just a
14	matter of a few seconds long, is that fair to say?
15	<b>A</b> Yes.
16	${f Q}$ 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	<b>A</b> Yeah.
∠5   	A Yean.

```
Page 265
               MS. ALIZADEH: We can listen to this as
 1
 2
     many times as you want.
               (Playing the audio recording.)
 3
               MS. ALIZADEH: Just before we do that
 4
 5
     again, that was you on the video?
 6
          Α
               Yes.
 7
               MS. ALIZADEH: And you can hear some
 8
     gunshots in the background?
 9
               Yes.
          Α
               MS. ALIZADEH: You want to hear it again?
10
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
     as many times as you want, but in light of maybe
14
     letting him go and you all getting out of here
15
     today, I don't have any other questions for this
16
               Sheila, do you have any questions for him?
17
18
               MS. WHIRLEY: Just to make it clear that
19
     you did not tape or record the actual shooting of
     Mike Brown, did you?
20
21
               No.
          Α
22
               MS. WHIRLEY: This recording that you
23
     made, it was unintentional; is that correct?
24
          Α
               Right.
25
               MS. WHIRLEY: And the actual shooting of
```

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Page 266
     him being shot and falling, you do not have that on
 1
 2
     videotape anywhere?
 3
          Α
               No.
               MS. WHIRLEY: Okay. That's all I have.
 4
 5
     Any questions?
 6
               (End of the testimony
                                                     and
 7
     end of Grand Jury Hearing Volume XIX.)
 8
 9
     State of Missouri
                         SS.
10
11
     County of St. Louis
                          , a Licensed Certified Court
12
          I,
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
     depositions, do hereby certify that pursuant to
16
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
     by the grand jury first carefully examined and duly
21
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
```

	Page 267
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.
16	
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18	The second secon
19	The second se
20	<del></del>
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Page 268
     COURT MEMO
 1
 2
 3
 4
 5
     State of Missouri v. Darren Wilson
 6
 7
     CERTIFICATE OF OFFICER AND
 9
     STATEMENT OF DEPOSITION CHARGES
10
11
     DEPOSITION OF Grand Jury Volume XIX
12
     11/4/2014
13
    Name and address of person or firm having custody of
14
     the original transcript:
15
16
17
     St. Louis County Prosecuting Office
     100 South Central, 2nd floor
18
     Clayton, MO 63105
19
20
21
22
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Page 269
 1
     ORIGINAL TRANSCRIPT TAXED IN FAVOR OF:
 2
     St. Louis County Prosecuting Office
 3
     100 South Central, 2nd floor
 4
     Clayton, MO 63105
 5
 6
     Total:
 7
 8
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	Page 270
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
14	
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