## Jennifer Coulson 01/10/2023

1	UNITED STATES DISTRICT COURT
2	EASTERN DISTRICT OF MICHIGAN
3	SOUTHERN DIVISION
4	
5	ROBERT JULIAN-BORCHAK WILLIAMS,
6	Plaintiff,
7	-vs- No: 21-10827
8	HON. LAURIE J. MICHELSON
9	CITY OF DETROIT, a municipal
10	corporation; DETROIT POLICE
11	CHIEF JAMES CRAIG, in his
12	official capacity; and
13	DETECTIVE DONALD BUSSA, in
14	his individual capacity,
15	Defendants.
16	/
17	Pages 1 - 46.
18	
19	The videotaped deposition of JENNIFER COULSON
20	taken via Hanson Virtual Remote
21	commencing at 11:32 a.m.
22	Tuesday, January 10, 2023,
23	before Ann L. Bacon CSR-1297.
24	
25	



	01/10/2023	ь
1	APPEARANCES:	
2		
3	MR. MICHAEL J. STEINBERG (Not Present)	
4	Civil Rights Litigation Initiative	
5	University of Michigan Law School	
6	701 S. State Street, Suite 2020	
7	Ann Arbor, Michigan 48109	
8	(734) 763-1983	
9	mjsteinb@umich.edu	
10	Appearing on behalf of the Plaintiff.	
11		
12	MR. PHILIP E. MAYOR (P81691)	
13	MR. NATE WESSLER	
14	American Civil Liberties Union Fund of Michigan	
15	2966 Woodward Avenue	
16	Detroit, Michigan 48201	
17	(313) 578-6803	
18	pmayor@aclumich.org	
19	Appearing on behalf of the Plaintiff.	
20		
21		
22		
23		



24

25

1	APPEARANCES, Continued:
2	
3	MR. PATRICK CUNNINGHAM (P67643)
4	City of Detroit Law Department
5	2 Woodward Avenue, Suite 500
6	Detroit, Michigan 48226
7	(313) 237-5032
8	cunninghamp@detroitmi.gov
9	Appearing on behalf of the Defendants.
10	
11	MR. ALEXANDER W. ROOT (P80220)
12	MS. AIMEE L. BRIMACOMBE (P70926)
13	Michigan Department of Attorney General
14	525 W. Ottawa Street
15	Lansing, Michigan 48933-1067
16	(517) 335-7573
17	roota@michigan.gov
18	Appearing on behalf of the Michigan State Police.
19	
20	
21	
22	
23	



24

25

	01/10/2023		Page
1	TABLE OF CONTENTS		
2			
3	WITNESS	PAGE	
4	JENNIFER COULSON		
5	Examination by Mr. Mayor	5	
6	Examination by Mr. Cunningham	41	
7	Re-examination by Mr. Mayor	43	
8	Re-examination by Mr. Cunningham	45	
9			
10			
11			
12			
13	EXHIBITS		
14	NUMBER	PAGE	
15	Deposition Exhibit No. 1	26	
16	(3/8/19 E-mail)		
17	Deposition Exhibit No. 2	26	
18	(Digital Image Analysis Request)		
19	Deposition Exhibit No. 3	28	
20	(Photograph)		
21	Deposition Exhibit No. 4	39	
22	(Investigative Lead Report)		
23			
24			
25			



		01/10/2025
1		Hanson Virtual Remote
2		Tuesday, January 10, 2023
3		11:32 a.m.
4		
5		COURT REPORTER: My name is Ann Bacon,
6		a Michigan State notary public and certified
7		shorthand reporter and this deposition is being
8		held via videoconferencing equipment. The
9		witness and reporter are not in the same room.
10		The witness will be sworn in remotely pursuant
11		to agreement of all parties. The parties
12		stipulate that the testimony is being given as
13		if the witness was sworn in person.
14		JENNIFER COULSON
15		was thereupon called as a witness herein, after
16		having been first duly sworn to tell the truth,
17		the whole truth, and nothing but the truth, was
18		examined and testified as follows:
19		EXAMINATION
20		BY MR. MAYOR:
21	Q.	All right. Good morning, Miss Coulson. Thank
22		you again for being here. My name is Phil Mayor.
23		I'm an attorney. I represent Mr. Robert Williams
24		in a lawsuit against the Detroit Police Department,
25		among other Detroit entities. I know that you



- just jumped into a Zoom and there's a lot of
- images on here, so I just want to make sure you
- know who everybody is on the Zoom screen. I've
- 4 already told you who I am. Nate Wessler is my
- 5 co-counsel representing Mr. Williams. You
- 6 obviously know Mr. Root since he represents MSP.
- 7 Mr. Cunningham is an attorney for Detroit.
- 8 MR. CUNNINGHAM: Good morning,
- 9 Miss Coulson. Patrick Cunningham, I'm from the
- 10 City of Detroit Law Department.
- 11 A. Good morning.
- 12 MR. MAYOR: Miss Bacon is our court
- reporter. She'll be taking down everything we
- say today. Mr. Gudme I believe is not actively
- here. He just is running the recording of this
- screen, and Ms. Brimacombe you also know from
- 17 MSP, correct, Alex?
- 18 MR. ROOT: Correct.
- 19 Q. (Continuing, by Mr. Mayor) All right. If you
- don't have any questions about that, we'll go
- ahead and get started.
- 22 A. Okay.
- 23 Q. Miss Coulson, have you ever been deposed before?
- 24 A. No.
- 25 Q. Okay. Well, let me go ahead and give you some



- ground rules then so that we're all on the same
- 2 page about how this works, okay?
- 3 A. Okay.
- 4 Q. So what's going to happen, as you know, you're
- 5 under oath and I will be asking you a series of
- 6 questions and I just need you to answer them
- 7 honestly and straightforward. Does that sound
- 8 fair?
- 9 A. Yes.
- 10 Q. Okay. You need to -- what you just did is
- 11 perfect. You have to give verbal answers
- because Miss Bacon is taking down what we say
- today, so no mm-hmms, no nods, verbal answers to
- the questions so she can get that down in
- writing, okay? Does that sound fair?
- 16 A. Yes.
- 17 Q. If I ask you a question you don't understand,
- please just let me know and I'll find a new way
- of asking it. Does that sound fair?
- 20 A. Yes.
- 21 Q. Okay. We can take a break at any time you need
- one. Just let me know, but I will ask you to
- 23 finish answering any question that I've already
- asked when you ask for a break. Does that sound
- 25 fair?



- 1 A. Yes.
- 2 Q. And it's possible that Mr. Cunningham or
- 3 Mr. Root may object to a question I ask or to a
- few questions I ask. That's fine. They can do
- 5 that, but then you'll need to go ahead and
- 6 answer the question unless Mr. Root instructs
- you not to answer it. Does that sound fair?
- 8 A. Yes.
- 9 Q. Okay. And I don't mean this question
- disrespectfully, but have you consumed any
- 11 prescription medication or any other substance
- that would affect your ability to answer all of
- my questions honestly and straightforwardly this
- morning?
- 15 A. No.
- 16 Q. Did you review any documents before today's
- 17 deposition?
- 18 A. Yes.
- 19 O. What did you review?
- 20 A. My lead report and my supplemental report and
- 21 the date the e-mail came into our shared mailbox
- and the date I returned the e-mail.
- 23 Q. Okay. And we're going to get into what all of
- those things you just mentioned mean in due
- course, but first up front, you understand that



- we're here today in connection with a facial
- 2 recognition search that was conducted in March
- 3 of 2019 that identified Mr. Robert Williams as
- 4 an investigative lead, correct?
- 5 A. I wouldn't use that wording, but yes.
- 6 Q. Okay. What wording would you use?
- 7 A. I would not use identified.
- 8 Q. Let me try again. You understand that we're here
- 9 today in connection with the facial recognition
- 10 search that was conducted in March of 2019 which
- 11 resulted in an investigative lead naming
- 12 Mr. Williams as an investigative lead? You
- understand we're here about that incident, correct?
- 14 A. Yes.
- 15 O. So if I refer to the Williams incident or the
- Williams search or Robert Williams case, all of
- those things, is it fair that those things
- 18 you'll understand I mean we're talking about
- 19 this case and that facial recognition search?
- 20 A. Yes.
- 21 Q. Okay. And when I use the term facial recognition
- 22 search, I mean the process by which MSP receives
- a probe photo, enters that photo into the system
- and either turns back an investigative lead or
- does not turn back an investigative lead. Is



- 1 that fair?
- 2 A. Say it one more time.
- 3 Q. When I say the term facial recognition search, I
- 4 mean the process by which MSP first receives a
- 5 probe photo from someone in law enforcement,
- 6 enters that photo into its facial recognition
- 7 system, and then either turns back or does not
- 8 turn back an investigative lead to the requesting
- 9 law enforcement officer. Is that fair?
- 10 A. Yes.
- 11 Q. All right. Could you just go ahead and start by
- letting us know who your employer is?
- 13 A. I work for the State of Michigan, Michigan State
- 14 Police.
- 15 Q. And what position do you hold with MSP?
- 16 A. I'm a digital image examiner department specialist.
- 17 Q. And what are your responsibilities as a digital
- 18 examiner department specialist?
- 19 A. I process image facial recognition searches. I
- 20 lead projects and manage projects and I
- 21 construct photographic line-ups.
- 22 Q. Okay. And how long have you held that position?
- 23 A. Five years.
- 24 Q. So you were in that position in March of 2019,
- 25 correct?



- 1 A. Yes.
- 2 Q. Okay. And have you previously held any other
- 3 positions for MSP?
- 4 A. No.
- 5 Q. Okay. And what training have you received for
- 6 this position?
- 7 A. I received training from the FBI in morphological
- 8 comparison. I also received training from Ideal
- 9 Innovations, Incorporated in morphological
- 10 comparison. I've done in-house training and
- 11 that's it.
- 12 Q. Okay. I believe you described three trainings.
- 13 A training from the FBI, correct?
- 14 A. Correct.
- 15 Q. A training from Ideal Innovations?
- 16 A. Yes.
- 17 Q. And in-house training, correct?
- 18 A. Yes.
- 19 Q. Were each of those one-time trainings or are
- those recurring?
- 21 A. One-time trainings.
- 22 Q. Okay. All right. I will represent to you that
- we've already spoken with Miss Howard. You know
- 24 who Krystal Howard is?
- 25 A. Yes.



- 1 Q. Okay. And I understand that she's the manager
- of your division, so your supervisor reports to
- 3 her, is that correct?
- 4 A. Not of our division.
- 5 Q. Okay. Explain -- let me back up. Who is your
- 6 supervisor? What position do they hold?
- 7 A. My supervisor is Kelsey McArthur and she is the
- 8 unit manager.
- 9 Q. Ms. McArthur is the unit manager?
- 10 A. Yes. You're seeking currently, correct?
- 11 Q. Correct, although we'll get to 2019 in a second.
- 12 A. Okay.
- 13 Q. What is the relationship between Ms. McArthur
- and Ms. Howard?
- 15 A. Ms. McArthur reports to Ms. Howard.
- 16 Q. Okay. So your boss, Ms. McArthur, reports to
- 17 Ms. Howard?
- 18 A. Yes.
- 19 O. Okay. And what -- and who -- was Ms. McArthur
- your boss in March of 2019?
- 21 A. No.
- 22 Q. Who was your boss in March of 2019?
- 23 A. Ms. Howard.
- 24 Q. Ms. Howard was your direct supervisor in March
- 25 of 2019?



- 1 A. Yes.
- 2 Q. Do you know a woman named Angela Yankowski?
- 3 A. Yes.
- 4 Q. And who is she?
- 5 A. She now is the division director of biometrics
- 6 and identification.
- 7 Q. Okay. What title did she have in 2019, if you
- 8 recall, in March of 2019?
- 9 A. Section manager of the digital image -- sorry.
- 10 The digital image -- I'm drawing a blank. I don't
- 11 know what the acronym is, sorry. Our section.
- 12 Q. And what relationship was that role as section
- manager to the role that you held and still hold
- 14 in March of 2019?
- 15 A. She was the second -- can you ask that one more
- 16 time? I'm sorry.
- 17 Q. Yeah. What role -- you said that Ms. Yankowski
- was a section manager in March of 2019, correct?
- 19 A. Yes.
- 20 Q. Okay. What is the relationship of the section
- 21 manager in March of 2019 to your role?
- 22 A. She was Ms. Howard's supervisor.
- 23 Q. Okay. So in March of 2019 your understanding is
- that you reported to Ms. Howard? She was your
- direct supervisor and that Ms. Yankowski was



- with Ms. Howard's supervisor?
- 2 A. Yes.
- 3 Q. Thank you. Okay. So let me back up and
- 4 represent to you we have spoken with Ms. Howard
- 5 and we've discussed the general procedures that
- 6 are used in facial recognition at MSP with her
- 7 and I don't intend to sort of go through all of
- 8 those with you except as needed. But let me ask
- 9 you to your knowledge when you conducted the
- 10 facial recognition -- let me back up. You are
- 11 the examiner who conducted the facial recognition
- search involving Mr. Williams in March of 2019,
- 13 correct?
- 14 A. Yes.
- 15 Q. In conducting that search, and we'll talk about
- it in more detail, did you to your knowledge do
- anything different than standard operating
- 18 procedures for conducting a facial recognition
- 19 search?
- 20 A. Not to my knowledge.
- 21 Q. Okay. And I just want to, as I said, we have
- discussed some of the general procedures here
- and I'm going to run through them, make sure
- that my understanding of them is the same as
- 25 yours, okay?



- 1 A. Okay.
- 2 Q. All right. So our understanding, my understanding
- is that when you run a facial recognition
- 4 search, you first receive a probe photo from law
- 5 enforcement, the person they're interested in
- 6 identifying, correct?
- 7 A. I wouldn't say identifying, but --
- 8 Q. Fair enough. You receive a probe photo of
- 9 somebody who law enforcement is trying to figure
- 10 out who that person is, correct?
- 11 A. I wouldn't say it like that either.
- 12 Q. Okay. What would you say?
- 13 A. I would say we receive a probe photo from law
- 14 enforcement in search of an investigative lead.
- 15 Q. Okay. So is it your understanding that when law
- enforcement sends you that photo, they ultimately
- want to figure out who the person in the photo is?
- 18 A. I can't say what law enforcement wants. I can't
- 19 dictate what they want.
- 20 Q. Okay. Do you ever speak with law enforcement
- 21 detectives?
- 22 A. From time to time.
- 23 Q. Okay. Do you ever talk to them about the
- 24 searches you conduct?
- 25 A. From time to time.



- 1 Q. Okay. And no detective has ever told you that
- 2 the purpose of conducting a facial examination
- 3 search is to try to find the person who
- 4 committed a crime that's being documented in the
- 5 photos being sent to you?
- 6 MR. CUNNINGHAM: Objection. That's
- 7 both an argumentative question and a leading
- 8 question.
- 9 Q. (Continuing, by Mr. Mayor) You can answer.
- 10 A. Can you ask it again?
- MR. MAYOR: Yeah. Miss Bacon, do you
- mind reading back the question?
- 13 (Reporter reads back question.)
- 14 A. There have been times, yes.
- 15 Q. (Continuing, by Mr. Mayor) So there have been
- times when a law enforcement officer indicated
- to you that the reason they want a facial
- recognition search is to identify who committed
- 19 a crime?
- 20 A. From time to time, yes.
- 21 Q. All right. So when you receive a probe photo,
- 22 you then have the ability to alter that image
- 23 before putting it into the facial recognition
- 24 system, correct?
- MR. CUNNINGHAM: Objection, that's a



- 1 leading question.
- 2 Q. (Continuing, by Mr. Mayor) You can answer.
- 3 A. Typically we do not.
- 4 Q. But you have the ability to do so, correct?
- 5 MR. CUNNINGHAM: Same objection.
- 6 Q. (Continuing, by Mr. Mayor) You can answer.
- 7 A. Typically we do not. We could, but we do not.
- 8 Q. Okay. You could, you do have the ability to
- 9 alter the photo?
- 10 A. We could.
- 11 Q. Okay. And as you said, typically you do not alter
- it before putting it in the system, correct?
- 13 A. Correct.
- 14 Q. And when you run a search through the system, it
- searches through three different algorithms,
- 16 correct?
- 17 A. Correct.
- 18 Q. Okay. And two of those algorithms compare the
- 19 probe photo to the photos contained in MSP's
- 20 SNAP database, correct?
- 21 A. Yes.
- 22 Q. Okay. And when I say MSP, you understand that I
- 23 mean Michigan State Police, correct?
- 24 A. Yes.
- 25 Q. And when I refer to the SNAP database, you



- 1 understand that I'm referring to the database of
- driver's license photos, mugshots and a few
- 3 other photos that have been retained by MSP,
- 4 correct?
- 5 A. Correct.
- 6 Q. And when you run a search, a facial recognition
- 7 search, it also searches across the FBI
- 8 database, correct?
- 9 A. Correct.
- 10 Q. All right. And what photos do you understand
- are contained in the FBI's database?
- 12 A. Photos submitted from around the country that
- have a memo of understanding with the FBI.
- 14 Q. Do you know what kind of photos are contained in
- 15 that database?
- 16 A. I do not.
- 17 Q. Okay. And the two databases, the two algorithms
- that compare the probe photo to the SNAP database,
- 19 you understand that those are currently provided
- 20 by a company called Cognitech and a company
- 21 called Rank One, correct?
- 22 A. Currently?
- 23 Q. Currently.
- 24 A. Yes.
- 25 Q. All right. And in March of 2019 the two



- algorithms that were used across the SNAP
- database were Rank One and NEC, correct?
- 3 A. Correct.
- 4 Q. And my understanding is that when you conduct a
- facial recognition search, you get an array of
- 6 243 photos back from Rank One and NEC or
- 7 Cognitech, is that correct?
- 8 A. Correct.
- 9 Q. And you either receive 243 photos or you receive
- 10 no photos, correct?
- 11 A. Correct.
- 12 O. You never receive somewhere between zero and 243?
- 13 A. No.
- 14 Q. And if you get results back from the FBI database,
- 15 you get back 50 results, is that correct?
- 16 A. Yes.
- 17 Q. Never more, never less, zero or 50?
- 18 A. Yes.
- 19 Q. I'm sorry, I spoke over you. It's either zero
- or 50, correct?
- 21 A. Correct.
- 22 Q. Thank you. What is the process that you follow
- next once you've gotten galleries back from one
- 24 to three of the algorithms?
- 25 A. I go one to one through each gallery to do a



- 1 morphological comparison with each photo.
- 2 Q. Okay. Can you describe what that, describe in
- 3 more detail what that means that you do?
- 4 A. So the probe photo, I will go through each
- 5 return of the 243 and I will compare facial
- features of the returned to the probe photo to
- 7 look for similarities and differences.
- 8 Q. So if you have a gallery of 243 photos, does
- 9 that mean you go through every single one of
- 10 those photos?
- 11 A. Not typically.
- 12 Q. Okay. How many of them do you typically go
- through?
- 14 A. It depends on the probe, the quality of the
- 15 probe image.
- 16 Q. In what way does it depend on the quality of the
- 17 probe image?
- 18 A. If the probe image is high quality, so each
- 19 feature is extremely clear, for instance, a
- 20 social media photo where it's very clear or even
- 21 a photo from Zoom say where it's very clear,
- 22 usually the person would be in the top 25. If
- 23 the probe is not as good, typically I would go
- 24 up to 150.
- 25 Q. Okay. So when you say you go up to 25 or up to



- 1 150, does that mean you conduct a morphological
- 2 comparison of every single one of the photos
- 3 until you stop?
- 4 A. Yes.
- 5 Q. What kind of -- describe the morphological
- 6 comparison that you conduct.
- 7 A. I usually or typically will look for features on
- 8 the face. I will compare the eyes. I will look
- 9 at the medial canthus, the lateral canthus, the
- infraorbital creases, the upper eyelids, the
- 11 presence of a sclera, what color their eyes are,
- and then I will move on to the nose typically
- and go through each feature of the nose,
- including the columella, the ala, the nasal tip,
- 15 the way the nose connects to the face, the way
- the columella connects to the face, the way the
- 17 ala connects to the face. I will then move on
- 18 to the philtrum and the mouth and I will look at
- 19 all the features of the mouth, including the
- 20 upper vermilion border, the fissure of the
- 21 mouth, the lower vermilion border, if they have
- 22 a medial canthus -- or sorry, a medial sulcus.
- I will also look at facial hair growth patterns,
- 24 buccula lines. If they have any tattoos on
- 25 their face, I will look at those. I will also



- look at the ears and the composition of how the
- 2 features are placed on the face.
- 3 Q. And is that the same morphological comparison
- 4 that you would have conducted in March of 2019?
- 5 A. Yes.
- 6 Q. Okay. And each time you do a morphological
- 7 comparison, do you record it in some way?
- 8 A. Yes.
- 9 Q. How do you record it?
- 10 A. In what's called a supplemental report.
- 11 Q. Okay. And you prepare a supplemental report for
- every morphological comparison that you do?
- 13 A. Only the ones that produce leads.
- 14 Q. Okay. So you do not prepare supplemental reports
- for morphological comparisons that don't produce
- leads?
- 17 A. Correct.
- 18 Q. Was the practice you just described the same as
- 19 your practice in 2019 of conducting a
- 20 morphological comparison for the first 25 images
- 21 for a high quality probe photo?
- 22 A. I can't tell you how many I looked at that day
- specifically, but it would be the same practice
- of doing a morphological comparison, yes.
- 25 Q. And you mentioned -- I'm asking about your



- general practice in 2019, so was your general
- 2 practice in 2019 the same as your general
- 3 practice now?
- 4 A. Yes.
- 5 Q. So for a high quality probe photo, your general
- 6 practice in 2019 is that you would look at
- 7 approximately the first 25?
- 8 A. Approximately, yes.
- 9 Q. And for a lower quality probe photo, you would
- 10 look at approximately the first 150?
- 11 A. Approximately, yes.
- 12 Q. About how long does it take you to compare a
- probe photo to the galleries once you've gotten
- 14 them back?
- 15 A. It's hard to say.
- 16 Q. Okay. Are there -- when you get back a gallery,
- are there scores next to each of the photos?
- 18 A. Thresholds, yes.
- 19 O. Thresholds? What does a threshold mean to you?
- 20 A. Just a score that's returned.
- 21 Q. Okay. And what does that score mean?
- 22 A. Actually I don't look at the score because
- 23 that's not what I'm looking for.
- 24 O. Okay. But what does the score -- do you
- 25 understand what the score is scoring?



- 1 A. The similarities between the probe image and the
- 2 images in the gallery.
- 3 Q. According to whom?
- 4 A. The algorithm.
- 5 Q. Okay. Are the probe photos, are the photos in a
- 6 gallery that are returned in any particular order?
- 7 A. The highest amount of similarities based on the
- 8 templates are first, and then as it gets into
- 9 243 or towards the end, it's the least amount of
- 10 similarities.
- 11 Q. And you're aware of that when you review a
- gallery, that the ones that the algorithm
- identified as most likely are at the top?
- 14 A. Yes.
- 15 Q. And that the ones the algorithm identified as
- least likely are at the bottom?
- 17 A. Yes.
- 18 Q. And you said you don't pay attention to the
- scores. Are they blacked out or redacted in any
- 20 way or can you see them?
- 21 A. I can see them.
- 22 Q. And you pay a lot of attention to each photo,
- 23 right?
- 24 A. I do.
- 25 Q. And the score is right next to the photo?



- 1 A. Below it.
- 2 O. Below it. How far below it?
- 3 A. I couldn't tell you. I'm not sure.
- 4 Q. Is it on the same page?
- 5 A. Yes, it's directly below the photo.
- 6 Q. It's directly below the photo?
- 7 A. Yes.
- 8 Q. Okay. Turning to Mr. Williams' case, do you
- 9 remember being assigned to run the facial
- 10 recognition search that involved Mr. Williams?
- 11 A. It was not assigned to me.
- 12 Q. It was not assigned to you. How did you come
- to -- well, did you, in fact, conduct the facial
- recognition search involving Mr. Williams?
- 15 A. I did.
- 16 Q. How did it come to be your responsibility?
- 17 A. We get, we have a shared mailbox and we grab the
- requests as they come in, so we assign them to
- 19 ourselves I guess.
- 20 Q. So you were the person reviewing the shared mailbox
- 21 the day the request came in for Mr. Williams?
- 22 A. Yes.
- 23 Q. Okay. But no one specifically said, "Miss Coulson,
- go review this photo." It was because you were
- 25 reviewing the box that morning, it was your



- 1 responsibility?
- 2 A. Correct.
- 3 (Marked Exhibit No. 1.)
- 4 Q. (Continuing, by Mr. Mayor) I am going to pull up
- 5 a document here on my screen which I should be
- 6 able to share with you. Give me just one
- 7 moment. And we're going to label this document
- 8 Exhibit 1. Can you see the document on your
- 9 screen, Miss Coulson?
- 10 A. Yes.
- 11 Q. Okay. Do you recognize this document?
- 12 A. Yes.
- 13 O. What is this document?
- 14 A. This is the e-mail that we received in the
- 15 shared mailbox.
- 16 Q. The e-mail requesting that you perform a facial
- 17 recognition search?
- 18 A. Correct.
- 19 O. Okay. And I see that there are attachments and
- 20 it describes four attachments. Three of them
- are jpegs and jpegs are photographs, correct?
- 22 A. Yes.
- 23 Q. And the fourth one says DPD1810050167, correct?
- 24 A. Yes.
- 25 (Marked Exhibit No. 2.)



- 1 Q. (Continuing, by Mr. Mayor) I'm going to pull up
- what we're going to label Exhibit 2. Can you
- 3 see that document?
- 4 A. Yes.
- 5 O. What is this document?
- 6 A. This is the BID-002 form which is the request form
- 7 that is sent to us to have a facial recognition
- 8 search conducted or to have a photographic
- 9 line-up constructed or an image request.
- 10 Q. Okay. Do you recall receiving this document?
- 11 A. Yes.
- 12 Q. Okay. And is this, in fact, the request to do a
- facial recognition search in the crime for which
- Mr. Williams was ultimately returned as an
- 15 investigative lead?
- 16 A. Yes.
- 17 O. Okay. And this was attached to the e-mail that
- I showed you a moment ago as Exhibit 1, correct?
- 19 A. Yes.
- 20 Q. Okay. So these two documents, Exhibits 1 and 2,
- 21 combined with three photographs is what you
- 22 received and initiated the facial recognition
- 23 search at issue here?
- 24 A. Yes.
- 25 Q. Other than the e-mail that I showed you as



- 1 Exhibit 1 and this document Exhibit 2, did you
- 2 have any communication with anybody at DPD about
- 3 this crime or this search?
- 4 A. No.
- 5 Q. Okay. All right. I'm going to stop sharing my
- 6 screen and we'll go back to questions. All
- 7 right. So after you received Exhibit 1 and
- 8 Exhibit 2 and the photos, did you -- what was
- 9 your next step in the Williams facial
- 10 recognition search?
- 11 A. Entering the information into the case management
- 12 platform in DataWorks.
- 13 Q. Okay. And did you do that?
- 14 A. Yes.
- 15 O. Okay. And then what was your next step?
- 16 A. I ended up having to crop out other individuals
- in one of the photos that I had selected from
- 18 the three that were provided to the suspect that
- 19 they were looking to find a viable candidate for.
- 20 Q. Okay. Other than cropping the photo, did you
- 21 make any other alterations to the photo?
- 22 A. No.
- 23 (Marked Exhibit No. 3.)
- 24 O. (Continuing, by Mr. Mayor) I'm going to show you
- what we're going to label as Exhibit 3. Do you



- 1 recognize this document?
- 2 A. Yes.
- 3 Q. What is this document?
- 4 A. This is the image that was entered into the facial
- 5 recognition search after I had cropped it. As
- 6 you can see, that's a shoulder of somebody else.
- 7 Q. When you say that's a shoulder, you're
- 8 describing the bottom right of the photo?
- 9 A. Yes.
- 10 Q. Okay. And you've cropped a picture of more of
- that person out of the photo, correct?
- 12 A. Correct.
- 13 Q. But you have not altered it in any other way
- other than cropping it?
- 15 A. No.
- 16 Q. So you then entered this photo, Exhibit 3, into
- the facial recognition system and what kind of
- 18 results were returned?
- 19 A. I received a gallery from NEC of 243 and a
- 20 gallery from Rank One or ROC as it's also known
- of 243. I did not receive anything back from
- the FBI.
- 23 Q. Okay. Do you know why you didn't receive
- anything back from the FBI?
- 25 A. I do not.



- 1 Q. Did you inquire why you didn't receive anything
- 2 back from the FBI?
- 3 A. I did not.
- 4 Q. And where -- did Mr. Williams appear in any of
- 5 the galleries in either of the two galleries
- 6 that were returned?
- 7 A. Yes.
- 8 Q. Where did he appear?
- 9 A. In Rank One.
- 10 Q. And in what spot did he appear in the Rank One
- 11 gallery?
- 12 A. Number nine.
- 13 Q. Did he appear in the NEC gallery?
- 14 A. No.
- 15 Q. And the FBI gallery didn't return any results,
- so obviously you didn't prepare anything from
- 17 the FBI, correct?
- 18 A. Correct.
- 19 Q. So when you say that Mr. Williams appeared at
- 20 ninth in the Rank One gallery, what image of
- 21 Mr. Williams appeared in the ninth spot?
- 22 A. A driver's license photo.
- 23 Q. Okay. Do you know if the driver's license photo
- that appeared at ninth in the Rank One was
- Mr. Williams' then current driver's license?



- 1 A. I do not.
- 2 Q. Did you check if the driver's license photo that
- 3 appeared at ninth was his then current driver's
- 4 license?
- 5 A. I do not recall.
- 6 Q. You don't recall if you checked?
- 7 A. No, I don't recall.
- 8 Q. The SNAP database includes both people's current
- 9 driver's license and their expired driver's
- 10 licenses, correct?
- 11 A. Correct.
- 12 Q. When you get a potential match in a facial
- recognition search, do you check for all images
- of the person who is a potential match?
- 15 A. Sometimes.
- 16 Q. Did you do that in this instance?
- 17 A. I do not recall.
- 18 Q. Okay. Would there be any record of whether or
- not you checked that in MSP's system? Does it
- document whether or not you've checked other
- 21 photos?
- 22 A. Not that I'm aware of.
- 23 Q. Okay. Did Mr. Williams' photo turn up in the NEC?
- 24 A. It did not.
- 25 Q. It did not. Okay. Did you know that Mr. Williams'



- photo did not turn up in the NEC gallery?
- 2 A. Yes.
- 3 Q. Okay. What did you do with that information
- 4 that he had not turned up in the NEC gallery?
- 5 A. Nothing.
- 6 Q. Okay. And there is no protocol that requires
- you to check whether or not a photo that matches
- 8 in one gallery also matches other photos of the
- 9 same person, correct?
- 10 A. Correct.
- 11 Q. All right. So can you explain please how you
- went about with these two galleries, what were
- 13 your next steps?
- 14 A. I went one by one to do my morphological
- 15 comparisons of the images.
- 16 Q. How many images did you conduct a morphological
- 17 comparison of?
- 18 A. I don't recall.
- 19 Q. Did you do morphological comparisons against
- 20 photos in both of the arrays, both of the
- 21 galleries?
- 22 A. I did.
- 23 Q. But you don't recall how many photos?
- 24 A. I don't.
- 25 Q. How did you determine that the ninth photo in



- 1 the Rank One gallery was Mr. Williams?
- 2 A. How did I determine that -- I looked at his
- 3 information.
- 4 Q. Sorry. That was a bad question. Did you
- 5 determine that one of the photos was close
- 6 enough to -- did you identify an investigative
- 7 lead out of the two galleries that you had?
- 8 A. I did.
- 9 Q. How did you determine who was the correct
- 10 investigative lead?
- 11 A. Can you rephrase that?
- 12 O. Yes. How did you reach the conclusion of whom
- to return as an investigative lead?
- 14 A. I did a morphological comparison on him and
- 15 found enough similarities that helped me produce
- 16 the investigative lead.
- 17 O. Okay. What were the similarities that let you
- 18 return an investigative lead?
- 19 A. I liked the composition of his face, which is
- 20 where the features on his face were placed. I
- 21 liked where the tips of his ears hit in comparison
- 22 to the probe. I liked the way the ala connected
- to his face. I liked his nasal tip. I liked
- 24 his nasal root. I liked his nasal body. I
- loved the tip of his nose and the shape of his



- ala or the shape of his nostrils. I loved his
- 2 facial hair growth pattern, the thickness of his
- 3 lips, the fissure of his lips. I loved his
- 4 medial sulcus. I loved his buccula lines and
- 5 the way that the cheek bones sat in his face,
- and I loved the thickness of his cheeks. I also
- 7 liked the inner corner distance of the eyes and
- 8 the presence of the sclera of the eyes.
- 9 Q. Was there anything else?
- 10 A. That's all I can recall at this time.
- 11 Q. All right. And when you made that morphological
- 12 analysis, did you conduct a similar analysis for
- the other photos in the array?
- 14 A. Yes, typically that's what I do.
- 15 Q. But you don't recall how many of the other
- photos in the array you did that analysis for?
- 17 A. I do not.
- 18 O. When you reached Mr. Williams as the ninth in
- 19 the Rank One, did you continue conducting
- 20 morphological comparisons of more images?
- 21 A. Typically I would, but I do not recall if I did
- 22 it specifically in that case.
- 23 Q. Is there a name for the morphological comparison
- test that you conducted? Is there like a tool
- 25 that has a name or a scientific description?



- 1 A. Not that I'm aware of outside of morphological
- 2 comparison.
- 3 Q. Okay. And I believe we already covered this,
- 4 but you did not to your memory check to see if
- 5 any other photos of Mr. Williams were in the
- 6 SNAP database, correct, that you can recall?
- 7 A. Not that I can recall.
- 8 Q. So that you can recall, you did not check what
- 9 accuracy threshold score those other photos that
- 10 Mr. Williams might have generated?
- 11 A. Can you say that again?
- 12 Q. Yeah, that's fair. To your memory you were
- unaware of what accuracy threshold score other
- photos of Mr. Williams might have generated?
- MR. CUNNINGHAM: Object to that as a
- 16 leading question.
- 17 Q. (Continuing, by Mr. Mayor) You can answer.
- 18 A. No, I don't recall.
- 19 Q. Okay. All right. Did you -- I believe you
- 20 testified earlier that you prepared a report
- after identifying, after conducting the
- 22 morphological comparison of Mr. Williams?
- 23 A. Yes.
- 24 Q. And that was the supplemental report?
- 25 A. Yes.



- 1 Q. Okay. And you also testified earlier that you
- 2 prepared something called a lead report. What's
- 3 a lead report?
- 4 A. The investigative lead report.
- 5 Q. Okay. Go ahead, yes.
- 6 A. Which is what we return to the police agency.
- 7 Q. Okay. Do you return the supplemental report to
- 8 the police agency?
- 9 A. No.
- 10 Q. Okay. Once you determined that Mr. Williams was
- 11 your investigative lead, what did you do next?
- 12 A. I printed it to a PDF as we do and then I sent
- it off for a peer review.
- 14 Q. To whom did you send it for peer review?
- 15 A. Angie Yankowski.
- 16 Q. Okay. Did you e-mail it to Ms. Yankowski or how
- 17 did you convey it to Miss Yankowski?
- 18 A. I e-mailed it to her.
- 19 Q. When you e-mailed it to her, is there text in
- the e-mail or is it just an image of the photo?
- 21 A. It's a PDF attachment.
- 22 Q. Okay.
- 23 A. So the text in the photo would just be the PDF.
- 24 I don't even know how to describe it. It's just
- 25 the PDF and the PDF information.



- 1 Q. So you attached the PDF to the e-mail?
- 2 A. Yeah.
- 3 Q. Do you write anything -- did you write anything
- 4 else in the e-mail?
- 5 A. Not that I recall.
- 6 O. Just an e-mail with a PDF attached to it?
- 7 A. Yes.
- 8 O. How would Ms. Yankowski know what she was
- 9 supposed to do with that if she just gets an
- 10 e-mail with an attachment?
- 11 A. Our procedure, our work-flow procedures.
- 12 Q. So Ms. Yankowski would understand if she gets an
- investigative lead PDF from you, that you're
- implicitly asking her to review it?
- 15 A. Yes.
- 16 Q. Okay. And did she, in fact, review it?
- 17 A. She did.
- 18 Q. Okay. And when you sent that investigative lead
- to her, did you also send her the supplemental
- 20 report?
- 21 A. I did not.
- 22 Q. Did you send her the galleries?
- 23 A. No, that is not our practice.
- 24 Q. Okay. So the only thing she received from you
- is the lead report?



- 1 A. Correct.
- 2 Q. All right. And what was her response?
- 3 A. She agreed with my lead report.
- 4 Q. Okay. To your knowledge did you tell Ms. Yankowski
- 5 whether the photo in the lead report was
- 6 Mr. Williams' current driver's license?
- 7 A. No.
- 8 Q. To your knowledge did you tell her whether it
- 9 was an expired driver's license?
- 10 A. No.
- 11 Q. Okay. To your knowledge did you even know if it
- was an expired driver's license or his current
- 13 driver's license?
- 14 A. No.
- 15 Q. You did not know whether it was his current
- driver's license or an expired driver's license?
- 17 A. No.
- 18 Q. Because you didn't check, right?
- 19 A. No.
- 20 Q. No, you did not check?
- 21 A. No.
- 22 Q. Sorry. Is that correct, you did not check?
- 23 A. Oh, yes, that's correct. Sorry.
- 24 MR. CUNNINGHAM: You need to stop
- 25 asking leading questions, Phil.



- 1 (Marked Exhibit No. 4.)
- 2 Q. (Continuing, by Mr. Mayor) Okay. I'm going to
- 3 show you another document in just one moment
- 4 which we're going to label Exhibit 4. Do you
- 5 recognize this document? And I can scroll it if
- 6 you need me to.
- 7 A. This is a very bad version of my lead report.
- 8 Q. When you say it's a very bad version, do you
- 9 mean that it's inaccurate in some way or do you
- 10 mean that the copy quality is not high?
- 11 A. The copy quality is really bad.
- 12 Q. Okay. But this is a copy of your investigative
- lead report?
- 14 A. Can you scroll down please?
- 15 Q. Absolutely. Let me zoom out so you can see the
- 16 whole page at once.
- 17 A. Okay. Yes, this appears to be a very poor
- 18 quality of my lead report.
- 19 Q. Okay. But, again, by poor quality, you're not
- 20 saying it's inaccurate in any way?
- 21 A. Not the information in it outside of how dark it is.
- 22 Q. Okay. Is this the investigative lead report
- that you provided to Ms. Yankowski?
- 24 A. No.
- 25 Q. What did you provide to Ms. Yankowski?



- 1 A. A much higher quality version of this.
- 2 O. With the same information on it?
- 3 A. Yes.
- 4 Q. Is this the same -- is this a lower quality
- 5 version of the same document that you provided
- 6 to DPD?
- 7 A. Yes.
- 8 Q. Okay. I'm going to go ahead and stop sharing
- 9 this. After receiving Ms. Yankowski's sign-off,
- 10 did you do anything else to confirm the
- investigative lead before sending it to the DPD?
- 12 A. No.
- 13 Q. Did you ever receive any follow-up communication
- from anyone at DPD about the investigative lead?
- 15 A. No.
- 16 Q. Did you speak to anyone at DPD about the
- 17 investigative lead?
- 18 A. No.
- 19 Q. Nobody ever e-mailed you at DPD about the
- 20 investigative lead?
- 21 A. No.
- 22 Q. Okay. Did you provide anything other than a
- 23 higher quality version of the document I just
- showed you as Exhibit 4 to DPD?
- 25 A. No.



- 1 Q. Just a moment. Going back to the morphological
- 2 comparison that you conducted, when you conduct
- a morphological comparison, is that intended to
- 4 produce a positive identification?
- 5 A. No.
- 6 Q. What is it intended to do?
- 7 A. A viable candidate.
- 8 Q. And what do you mean by a viable candidate?
- 9 A. Someone who should be looked into further by the
- 10 police agency.
- 11 Q. Okay. And is it possible that someone with
- 12 apparently similar features could be returned as
- an investigative lead who is not the correct
- 14 person?
- 15 A. It's possible.
- 16 Q. Just one moment.
- 17 MR. MAYOR: All right. I don't believe
- there is anything else from me at this time.
- 19 Mr. Cunningham or Mr. Root might have a few
- 20 questions for you and I might have a couple
- 21 questions after they finish. I'll turn it over
- 22 probably to Mr. Cunningham.
- 23 EXAMINATION
- 24 BY MR. CUNNINGHAM:
- 25 Q. Okay. I just have a few questions, Miss Coulson.



- 1 When you received the probe image from the
- 2 Shinola investigation, you deemed it suitable
- 3 for facial recognition analysis, right?
- 4 A. Correct.
- 5 Q. And you submitted it using DataWorks and two of
- 6 the databases at least found it suitable enough
- 7 to generate a gallery, right?
- 8 A. Correct.
- 9 Q. And after doing your morphological examination,
- 10 you were able to generate an investigative lead,
- 11 right?
- 12 A. Correct.
- 13 Q. And you submitted your investigative lead to
- 14 your supervisor, Angela Yankowski, for review,
- 15 right?
- 16 A. My supervisor's supervisor.
- 17 Q. Okay. I'll rephrase. After you generated an
- investigative lead, you submitted that for peer
- 19 review, right?
- 20 A. Correct.
- 21 Q. And your peer agreed with your generation of an
- 22 investigative lead?
- 23 A. Correct.
- 24 Q. Okay. And when we were looking at Exhibit No. 4,
- 25 which was the bad copy of the investigative lead,



- the photographs in Exhibit 4 don't represent the
- 2 quality of photographs you were looking at when
- 3 you were looking at probe images, do they?
- 4 A. No.
- 5 MR. CUNNINGHAM: Okay. Those are the
- 6 only questions I have. Thank you.
- 7 MR. ROOT: I'm all set, so Phil, if you
- 8 have more questions, go ahead.
- 9 RE-EXAMINATION
- 10 BY MR. MAYOR:
- 11 Q. I believe just one question. Mr. Cunningham
- just asked you whether or not the image quality
- in Exhibit 4 accurately reflected the image
- quality of the image you were looking at. Do
- 15 you remember that question?
- 16 A. Yes.
- 17 Q. Since it's the last question that you received.
- Did the image that I showed you as Exhibit 3
- accurately reflect the image quality that you
- were looking at?
- 21 A. Can you reshow image three please?
- 22 Q. I can. I will share my screen again.
- 23 A. Yes.
- 24 O. This is image three. Okay. Would you agree
- 25 that a dimly lit photo is less likely to



- generate a good investigative lead?
- 2 A. It depends.
- 3 Q. Would you agree that a photo with shadows on it
- 4 is less likely to generate an investigative lead?
- 5 A. That also depends.
- 6 Q. When would shadows on a photo generate a better
- 7 investigative lead?
- 8 A. Well, it depends on where the shadows are.
- 9 Q. So you believe that sometimes shadows can be
- 10 helpful in generating an investigative lead?
- 11 A. Well, in the picture as a whole, if the shadows
- 12 are not on the subject, then it wouldn't matter.
- 13 Q. Okay. If the shadows are on the subject or on
- the subject's face, would that make for a less
- reliable investigative lead?
- 16 A. Well, that would depend on my morphological
- 17 comparison. If I ran the image and there was
- shadows directly over the face of the individual,
- there is a possibility that I wouldn't receive
- any returns to do a morphological comparison,
- 21 which means I wouldn't then be able to produce
- 22 an investigative lead.
- MR. MAYOR: Okay. Thank you. Nothing
- 24 further.





1		RE-EXAMINATION
2		BY MR. CUNNINGHAM:
3	Q.	The shadows in this case didn't prevent you from
4		performing a morphological examination, did they?
5	A.	No.
6		MR. CUNNINGHAM: That's it.
7		MR. MAYOR: I think we're done here,
8		Miss Coulson.
9	A.	Okay.
10		(Deposition concluded at 12:34 p.m.)
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		



1	STATE OF MICHIGAN)
2	COUNTY OF MACOMB )
3	I, Ann L. Bacon, a Notary Public in and for
4	the above county and state, do hereby certify
5	that the witness, whose attached deposition was
6	taken before me in the entitled cause on the
7	date, time and place hereinbefore set forth, was
8	first duly sworn to testify to the truth, and
9	nothing but the truth; that the testimony
10	contained in said deposition was reduced to
11	writing in the presence of said witness by means
12	of stenography; that said testimony was
13	thereafter reduced to written form by mechanical
14	means; and that the deposition is, to the best
15	of my knowledge and belief, a true and correct
16	transcript of my stenographic notes so taken.
17	I further certify that the signature to and
18	the reading of the deposition by the witness was
19	waived by counsel for the respective parties
20	hereto; also, that I am not of counsel to either
21	party or interested in the event of this case.
22	
23	Ann L. Bacon, Notary Public, Macomb County
24	Acting in Macomb County
25	My commission expires: 6/29/23



1

**1** 26:3,8 27:18,20 28:1,7

**10** 5:2

**11:32** 5:3

**12:34** 45:10

**150** 20:24 21:1 23:10

2

**2** 26:25 27:2,20 28:1,8

**2019** 9:3,10 10:24 12:11,20, 22,25 13:7,8,14,18,21,23 14:12 18:25 22:4,19 23:1,2,6

**2023** 5:2

**243** 19:6,9,12 20:5,8 24:9 29:19,21

**25** 20:22,25 22:20 23:7

3

**3** 28:23,25 29:16 43:18

4

**4** 39:1,4 40:24 42:24 43:1,13

5

**50** 19:15,17,20

Α

**a.m.** 5:3

ability 8:12 16:22 17:4,8

Absolutely 39:15

accuracy 35:9,13

accurately 43:13,19

acronym 13:11

actively 6:14

affect 8:12

agency 36:6,8 41:10

agree 43:24 44:3

agreed 38:3 42:21

agreement 5:11

**ahead** 6:21,25 8:5 10:11 36:5

40:8 43:8

**ala** 21:14,17 33:22 34:1

**Alex** 6:17

algorithm 24:4,12,15

**algorithms** 17:15,18 18:17

19:1,24

alter 16:22 17:9,11

alterations 28:21

altered 29:13

amount 24:7,9

analysis 34:12,16 42:3

Angela 13:2 42:14

**Angie** 36:15

**Ann** 5:5

answering 7:23

**answers** 7:11,13

apparently 41:12

appeared 30:19,21,24 31:3

appears 39:17

approximately 23:7,8,10,11

argumentative 16:7

array 19:5 34:13,16

arrays 32:20

assign 25:18

assigned 25:9,11,12

attached 27:17 37:1,6

attachment 36:21 37:10

attachments 26:19,20

attention 24:18,22

attorney 5:23 6:7

aware 24:11 31:22 35:1

В

**back** 9:24,25 10:7,8 12:5 14:3, 10 16:12,13 19:6,14,15,23 23:14,16 28:6 29:21,24 30:2

Bacon 5:5 6:12 7:12 16:11

**bad** 33:4 39:7,8,11 42:25

based 24:7

**BID-002** 27:6

biometrics 13:5

blacked 24:19

**blank** 13:10

**body** 33:24

**bones** 34:5

**border** 21:20,21

boss 12:16,20,22

**bottom** 24:16 29:8

**box** 25:25

break 7:21,24

**Brimacombe** 6:16

buccula 21:24 34:4

C

**called** 5:15 18:20,21 22:10 36:2

candidate 28:19 41:7,8

canthus 21:9,22

case 9:16,19 25:8 28:11 34:22

45:3

certified 5:6

**check** 31:2,13 32:7 35:4,8

38:18,20,22

**checked** 31:6,19,20

cheek 34:5

cheeks 34:6

**City** 6:10

clear 20:19,20,21

**close** 33:5

co-counsel 6:5

Cognitech 18:20 19:7

**color** 21:11

columella 21:14,16

combined 27:21

**committed** 16:4,18

communication 28:2 40:13

company 18:20

**compare** 17:18 18:18 20:5

21:8 23:12

**comparison** 11:8,10 20:1 21:2,6 22:3,7,12,20,24 32:17

33:14,21 34:23 35:2,22 41:2,3

44:17,20

**comparisons** 22:15 32:15,19

34:20

**composition** 22:1 33:19

concluded 45:10

conclusion 33:12

**conduct** 15:24 19:4 21:1,6

25:13 32:16 34:12 41:2

**conducted** 9:2,10 14:9,11 22:4 27:8 34:24 41:2

conducting 14:15,18 16:2

22:19 34:19 35:21

confirm 40:10

connected 33:22

connection 9:1,9

connects 21:15,16,17

construct 10:21

constructed 27:9

consumed 8:10

contained 17:19 18:11,14

continue 34:19

**continuing** 6:19 16:9,15 17:2,

6 26:4 27:1 28:24 35:17 39:2

**convey** 36:17

**copy** 39:10,11,12 42:25

corner 34:7

**correct** 6:17,18 9:4,13 10:25

11:13,14,17 12:3,10,11 13:18 14:13 15:6,10 16:24 17:4,12,

13,16,17,20,23 18:4,5,8,9,21

19:2,3,7,8,10,11,15,20,21

22:17 26:2,18,21,23 27:18

29:11.12 30:17.18 31:10.11

32:9,10 33:9 35:6 38:1,22,23

41:13 42:4,8,12,20,23

Coulson 5:21 6:9,23 25:23

26:9 41:25 45:8

**country** 18:12

**couple** 41:20

court 5:5 6:12

covered 35:3

creases 21:10

**crime** 16:4,19 27:13 28:3

crop 28:16

**cropped** 29:5,10

cropping 28:20 29:14

Cunningham 6:7,8,9 8:2 16:6,

25 17:5 35:15 38:24 41:19.22.

24 43:5,11 45:2,6

**current** 30:25 31:3,8 38:6,12,

15

D

dark 39:21

database 17:20,25 18:1,8,11,

15,18 19:2,14 31:8 35:6

databases 18:17 42:6

**Dataworks** 28:12 42:5

date 8:21,22

day 22:22 25:21

deemed 42:2

department 5:24 6:10 10:16,

18

depend 20:16 44:16

depends 20:14 44:2,5,8

deposed 6:23

deposition 5:7 8:17 45:10

describe 20:2 21:5 36:24

describes 26:20

describing 29:8

description 34:25

detail 14:16 20:3

detective 16:1

detectives 15:21

determine 32:25 33:2,5,9

determined 36:10

**Detroit** 5:24,25 6:7,10

dictate 15:19

differences 20:7

digital 10:16,17 13:9,10

dimly 43:25

direct 12:24 13:25

directly 25:5,6 44:18

director 13:5

**discussed** 14:5,22

disrespectfully 8:10

distance 34:7

division 12:2,4 13:5

**document** 26:5,7,8,11,13 27:3,5,10 28:1 29:1,3 31:20

39:3,5 40:5,23



documented 16:4

documents 8:16 27:20

**DPD** 28:2 40:6,11,14,16,19,24

**DPD1810050167** 26:23

drawing 13:10

**driver's** 18:2 30:22,23,25 31:2,3,9 38:6,9,12,13,16

**due** 8:24

duly 5:16

Ε

**e-mail** 8:21,22 26:14,16 27:17, 25 36:16,20 37:1,4,6,10

e-mailed 36:18,19 40:19

earlier 35:20 36:1

ears 22:1 33:21

employer 10:12

end 24:9

**ended** 28:16

**enforcement** 10:5,9 15:5,9,14, 16,18,20 16:16

entered 29:4,16

Entering 28:11

enters 9:23 10:6

entities 5:25

equipment 5:8

examination 5:19 16:2 41:23

42:9 45:4

examined 5:18

examiner 10:16,18 14:11

**Exhibit** 26:3,8,25 27:2,18 28:1,7,8,23,25 29:16 39:1,4

40:24 42:24 43:1,13,18

Exhibits 27:20

**expired** 31:9 38:9,12,16

explain 12:5 32:11

extremely 20:19

eyelids 21:10

eyes 21:8,11 34:7,8

F

**face** 21:8,15,16,17,25 22:2 33:19,20,23 34:5 44:14,18

facial 9:1,9,19,21 10:3,6,19 14:6,10,11,18 15:3 16:2,17,23 18:6 19:5 20:5 21:23 25:9,13 26:16 27:7,13,22 28:9 29:4,17 31:12 34:2 42:3

fact 25:13 27:12 37:16

**fair** 7:8,15,19,25 8:7 9:17 10:1, 9 15:8 35:12

**FBI** 11:7,13 18:7,13 19:14 29:22,24 30:2,15,17

FBI's 18:11

feature 20:19 21:13

features 20:6 21:7,19 22:2

33:20 41:12

figure 15:9,17

find 7:18 16:3 28:19

**fine** 8:4

finish 7:23 41:21

fissure 21:20 34:3

**follow** 19:22

follow-up 40:13

form 27:6

found 33:15 42:6

**fourth** 26:23

front 8:25

G

**galleries** 19:23 23:13 30:5 32:12,21 33:7 37:22

gallery 19:25 20:8 23:16 24:2,

6,12 29:19,20 30:11,13,15,20 32:1,4,8 33:1 42:7

general 14:5,22 23:1,2,5

generate 42:7,10 44:1,4,6

generated 35:10,14 42:17

generating 44:10

generation 42:21

give 6:25 7:11 26:6

good 5:21 6:8,11 20:23 44:1

**grab** 25:17

ground 7:1

growth 21:23 34:2

**Gudme** 6:14

guess 25:19

Н

hair 21:23 34:2

Hanson 5:1

happen 7:4

**hard** 23:15

held 5:8 10:22 11:2 13:13

**helped** 33:15

helpful 44:10

high 20:18 22:21 23:5 39:10

higher 40:1,23

highest 24:7

hit 33:21

hold 10:15 12:6 13:13

**honestly** 7:7 8:13

**Howard** 11:23,24 12:14,15,17, 23,24 13:24 14:4

Howard's 13:22 14:1

ı

**Ideal** 11:8,15

**identification** 13:6 41:4 **identified** 9:3,7 24:13,15

identify 16:18 33:6

identifying 15:6,7 35:21

image 10:16,19 13:9,10 16:22 20:15,17,18 24:1 27:9 29:4 30:20 36:20 42:1 43:12,13,14, 18,19,21,24 44:17

**images** 6:2 22:20 24:2 31:13 32:15,16 34:20 43:3

implicitly 37:14

in-house 11:10,17

inaccurate 39:9,20

incident 9:13,15

includes 31:8

**including** 21:14,19

**Incorporated** 11:9

individual 44:18

individuals 28:16

**information** 28:11 32:3 33:3 36:25 39:21 40:2

infraorbital 21:10

initiated 27:22

Innovations 11:9,15

inquire 30:1

instance 20:19 31:16

instructs 8:6

intend 14:7

intended 41:3.6

interested 15:5

investigation 42:2

investigative 9:4,11,12,24,25 10:8 15:14 27:15 33:6,10,13, 16,18 36:4,11 37:13,18 39:12, 22 40:11,14,17,20 41:13 42:10,13,18,22,25 44:1,4,7, 10,15,22 involved 25:10

involving 14:12 25:14

**issue** 27:23

J

January 5:2

jpegs 26:21

jumped 6:1

Κ

Kelsey 12:7

kind 18:14 21:5 29:17

**knowledge** 14:9,16,20 38:4,8,

11

Krystal 11:24

L

label 26:7 27:2 28:25 39:4

lateral 21:9

**law** 6:10 10:5,9 15:4,9,13,15, 18,20 16:16

lawsuit 5:24

lead 8:20 9:4,11,12,24,25 10:8,20 15:14 27:15 33:7,10, 13,16,18 36:2,3,4,11 37:13, 18,25 38:3,5 39:7,13,18,22 40:11,14,17,20 41:13 42:10, 13,18,22,25 44:1,4,7,10,15,22

leading 16:7 17:1 35:16 38:25

**leads** 22:13,16

**letting** 10:12

**license** 18:2 30:22,23,25 31:2, 4,9 38:6,9,12,13,16

licenses 31:10

line-up 27:9

line-ups 10:21

lines 21:24 34:4

lips 34:3

lit 43:25

long 10:22 23:12

looked 22:22 33:2 41:9

lot 6:1 24:22

loved 33:25 34:1,3,4,6

lower 21:21 23:9 40:4

M

made 34:11

mailbox 8:21 25:17,20 26:15

make 6:2 14:23 28:21 44:14

manage 10:20

management 28:11

manager 12:1,8,9 13:9,13,18,

21

**March** 9:2,10 10:24 12:20,22, 24 13:8,14,18,21,23 14:12

18:25 22:4

marked 26:3,25 28:23 39:1

match 31:12,14

**matches** 32:7,8

matter 44:12

**Mayor** 5:20,22 6:12,19 16:9, 11,15 17:2,6 26:4 27:1 28:24 35:17 39:2 41:17 43:10 44:23 45:7

**Mcarthur** 12:7,9,13,15,16,19

means 20:3 44:21

media 20:20

medial 21:9,22 34:4

medication 8:11

memo 18:13

memory 35:4,12

mentioned 8:24 22:25

**Michigan** 5:6 10:13 17:23

mind 16:12

**mm-hmms** 7:13

**moment** 26:7 27:18 39:3 41:1, 16

**morning** 5:21 6:8,11 8:14 25:25

morphological 11:7,9 20:1 21:1,5 22:3,6,12,15,20,24 32:14,16,19 33:14 34:11,20, 23 35:1,22 41:1,3 42:9 44:16, 20 45:4

mouth 21:18,19,21

move 21:12,17

**MSP** 6:6,17 9:22 10:4,15 11:3 14:6 17:22 18:3

MSP's 17:19 31:19

mugshots 18:2

#### Ν

**named** 13:2

naming 9:11

nasal 21:14 33:23,24

**Nate** 6:4

**NEC** 19:2,6 29:19 30:13 31:23 32:1,4

needed 14:8

**ninth** 30:20,21,24 31:3 32:25 34:18

nods 7:13

nose 21:12,13,15 33:25

nostrils 34:1

notary 5:6

**Number** 30:12

0

oath 7:5

object 8:3 35:15

objection 16:6,25 17:5

officer 10:9 16:16

one-time 11:19,21

operating 14:17

order 24:6

#### Ρ

**p.m.** 45:10

parties 5:11

Patrick 6:9

pattern 34:2

patterns 21:23

pay 24:18,22

**PDF** 36:12,21,23,25 37:1,6,13

peer 36:13,14 42:18,21

people's 31:8

perfect 7:11

perform 26:16

performing 45:4

**person** 5:13 15:5,10,17 16:3 20:22 25:20 29:11 31:14 32:9 41:14

Phil 5:22 38:25 43:7

philtrum 21:18

photo 9:23 10:5,6 15:4,8,13, 16,17 16:21 17:9,19 18:18 20:1,4,6,20,21 22:21 23:5,9, 13 24:22,25 25:5,6,24 28:20, 21 29:8,11,16 30:22,23 31:2, 23 32:1,7,25 36:20,23 38:5 43:25 44:3,6

photographic 10:21 27:8

**photographs** 26:21 27:21

43:1,2

**photos** 16:5 17:19 18:2,3,10, 12,14 19:6,9,10 20:8,10 21:2 23:17 24:5 28:8,17 31:21

32:8,20,23 33:5 34:13,16 35:5,9,14

00.0,0,11

picture 29:10 44:11

platform 28:12

**police** 5:24 10:14 17:23 36:6,8

41:10

poor 39:17,19

**position** 10:15,22,24 11:6

12:6

positions 11:3

positive 41:4

possibility 44:19

potential 31:12,14

 $\boldsymbol{practice} \ \ 22{:}18{,}19{,}23\ 23{:}1{,}2{,}3{,}$ 

6 37:23

prepare 22:11,14 30:16

prepared 35:20 36:2

prescription 8:11

presence 21:11 34:8

prevent 45:3

previously 11:2

printed 36:12

**probe** 9:23 10:5 15:4,8,13 16:21 17:19 18:18 20:4,6,14, 15,17,18,23 22:21 23:5,9,13 24:1,5 33:22 42:1 43:3

procedure 37:11

procedures 14:5,18,22 37:11

process 9:22 10:4,19 19:22

produce 22:13,15 33:15 41:4

44:21

projects 10:20

protocol 32:6

provide 39:25 40:22

provided 18:19 28:18 39:23

40:5

public 5:6

**pull** 26:4 27:1

purpose 16:2

pursuant 5:10

putting 16:23 17:12

Q

**quality** 20:14,16,18 22:21 23:5,9 39:10,11,18,19 40:1,4, 23 43:2,12,14,19

**question** 7:17,23 8:3,6,9 16:7, 8,12,13 17:1 33:4 35:16 43:11,15,17

**questions** 6:20 7:6,14 8:4,13 28:6 38:25 41:20,21,25 43:6,8

R

ran 44:17

**Rank** 18:21 19:2,6 29:20 30:9, 10,20,24 33:1 34:19

**RE-EXAMINATION** 43:9 45:1

reach 33:12

reached 34:18

reading 16:12

reads 16:13

**reason** 16:17

**recall** 13:8 27:10 31:5,6,7,17 32:18,23 34:10,15,21 35:6,7, 8,18 37:5

**receive** 15:4,8,13 16:21 19:9, 12 29:21,23 30:1 40:13 44:19

**received** 11:5,7,8 26:14 27:22 28:7 29:19 37:24 42:1 43:17

receives 9:22 10:4

receiving 27:10 40:9

recognition 9:2,9,19,21 10:3, 6,19 14:6,10,11,18 15:3 16:18,23 18:6 19:5 25:10,14 26:17 27:7,13,22 28:10 29:5, 17 31:13 42:3

recognize 26:11 29:1 39:5

record 22:7,9 31:18

recording 6:15

recurring 11:20

redacted 24:19

refer 9:15 17:25

referring 18:1

reflect 43:19

reflected 43:13

relationship 12:13 13:12,20

reliable 44:15

remember 25:9 43:15

Remote 5:1

remotely 5:10

rephrase 33:11 42:17

**report** 8:20 22:10,11 35:20,24 36:2,3,4,7 37:20,25 38:3,5 39:7,13,18,22

reported 13:24

reporter 5:5,7,9 6:13 16:13

reports 12:2,15,16 22:14

represent 5:23 11:22 14:4

43:1

representing 6:5

represents 6:6

request 25:21 27:6,9,12

requesting 10:8 26:16

requests 25:18

requires 32:6

reshow 43:21

response 38:2

responsibilities 10:17

responsibility 25:16 26:1

resulted 9:11

results 19:14,15 29:18 30:15

retained 18:3

**return** 20:5 30:15 33:13,18 36:6,7

**returned** 8:22 20:6 23:20 24:6 27:14 29:18 30:6 41:12

**returns** 44:20

**review** 8:16,19 24:11 25:24 36:13,14 37:14,16 42:14,19

reviewing 25:20,25

Robert 5:23 9:3,16

**ROC** 29:20

role 13:12,13,17,21

**room** 5:9

root 6:6,18 8:3,6 33:24 41:19

43:7

rules 7:1

run 14:23 15:3 17:14 18:6 25:9

running 6:15

S

**sat** 34:5

scientific 34:25

sclera 21:11 34:8

**score** 23:20,21,22,24,25 24:25

35:9,13

scores 23:17 24:19

scoring 23:25

screen 6:3,16 26:5,9 28:6

43:22

scroll 39:5,14

search 9:2,10,16,19,22 10:3 14:12,15,19 15:4,14 16:3,18 17:14 18:6,7 19:5 25:10,14 26:17 27:8,13,23 28:3,10 29:5 31:13

**searches** 10:19 15:24 17:15 18:7

10.1

section 13:9,11,12,18,20

seeking 12:10 selected 28:17

send 36:14 37:19,22

sending 40:11

sends 15:16

series 7:5

**set** 43:7

**shadows** 44:3,6,8,9,11,13,18

45:3

**shape** 33:25 34:1

**share** 26:6 43:22

shared 8:21 25:17,20 26:15

**sharing** 28:5 40:8

She'll 6:13

Shinola 42:2

shorthand 5:7

shoulder 29:6,7

**show** 28:24 39:3

**showed** 27:18,25 40:24 43:18

sign-off 40:9

similar 34:12 41:12

**similarities** 20:7 24:1,7,10

33:15,17

**single** 20:9 21:2

**SNAP** 17:20,25 18:18 19:1

31:8 35:6

**social** 20:20

**sort** 14:7

**sound** 7:7,15,19,24 8:7

**speak** 15:20 40:16

specialist 10:16,18

specifically 22:23 25:23 34:22

**spoke** 19:19

**spoken** 11:23 14:4

**spot** 30:10,21

standard 14:17

**start** 10:11

started 6:21

**State** 5:6 10:13 17:23

**step** 28:9,15

**steps** 32:13

stipulate 5:12

**stop** 21:3 28:5 38:24 40:8

straightforward 7:7

straightforwardly 8:13

**subject** 44:12,13

subject's 44:14

submitted 18:12 42:5,13,18

substance 8:11

suitable 42:2,6

sulcus 21:22 34:4

**supervisor** 12:2,6,7,24 13:22,

25 14:1 42:14,16

supervisor's 42:16

**supplemental** 8:20 22:10,11,

14 35:24 36:7 37:19

supposed 37:9

suspect 28:18

**sworn** 5:10,13,16

**system** 9:23 10:7 16:24 17:12,

14 29:17 31:19

Т

taking 6:13 7:12

talk 14:15 15:23

talking 9:18

**tattoos** 21:24

templates 24:8

term 9:21 10:3

test 34:24

testified 5:18 35:20 36:1

testimony 5:12

text 36:19,23

thickness 34:2,6

thing 37:24

things 8:24 9:17

threshold 23:19 35:9,13

**Thresholds** 23:18,19

time 7:21 10:2 13:16 15:22,25

16:20 22:6 34:10 41:18

times 16:14,16

tip 21:14 33:23,25

tips 33:21

title 13:7

today 6:14 7:13 9:1,9

today's 8:16

told 6:4 16:1

tool 34:24

top 20:22 24:13

training 11:5,7,8,10,13,15,17

trainings 11:12,19,21

truth 5:16,17

Tuesday 5:2

turn 9:25 10:8 31:23 32:1

41:21

turned 32:4

Turning 25:8

turns 9:24 10:7

typically 17:3,7,11 20:11,12,

23 21:7,12 34:14,21

U

ultimately 15:16 27:14

unaware 35:13



understand 7:17 8:25 9:8,13, 18 12:1 17:22 18:1,10,19 23:25 37:12

**understanding** 13:23 14:24 15:2,15 18:13 19:4

unit 12:8,9

upper 21:10,20

٧

verbal 7:11,13

vermilion 21:20,21

version 39:7,8 40:1,5,23

viable 28:19 41:7,8

videoconferencing 5:8

Virtual 5:1

W

Wessler 6:4

Williams 5:23 6:5 9:3,12,15,16 14:12 25:10,14,21 27:14 28:9 30:4,19,21 33:1 34:18 35:5, 10,14,22 36:10

**Williams'** 25:8 30:25 31:23,25 38:6

**woman** 13:2

wording 9:5,6

work 10:13

work-flow 37:11

works 7:2

write 37:3

writing 7:15

Υ

Yankowski 13:2,17,25 36:15, 16,17 37:8,12 38:4 39:23,25 42:14

Yankowski's 40:9

**years** 10:23

Z

**zoom** 6:1,3 20:21 39:15

