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Kyle Vircks - May 14, 2014

Direct Examination by Ms. Stabe 1 ladies and gentlemen. Please go back in the jury room for a 2 couple of minutes. 3 (Jury not present.) THE COURT: Y'all may be seated in the 4 5 courtroom. б (Recess.) 7 (Jury present.) 8 THE COURT: Please be seated. Call your next, 9 please. MS. STABE: State calls Kyle Vircks. 10 11 THE COURT: Ladies and gentlemen, this witness 12 has been previously sworn in. Proceed, please. 13 14 MS. STABE: Thank you, Your Honor. 15 KYLE VIRCKS, 16 having been first duly sworn, testified as follows: DIRECT EXAMINATION 17 18 Q. (BY MS. STABE) Please introduce yourself to the 19 jury. 20 Α. My name is Kyle Vircks. I'm a chemist with the Harris County Institute of Forensic Sciences. 21 22 0. How long have you been with the Harris County 23 Institute of Forensic Sciences? 24 Α. I started my position there December of 2012. 25 What department are you in there? Q.

The drug chemistry laboratory. 1 Α. Okay. Is that lab certified? 2 0. 3 Α. Yes. Who is it certified by? 4 0. 5 It's certified through the American Board of Α. б Criminalists -- excuse me. The American Society of Crime 7 Lab Directors. 8 0. Okay. And was it certified back at the time that this case happened, April of 2013? 9 Yes, it was. 10 Α. Now, what about your educational background? 11 Ο. Can 12 you explain that to the jury? I have a bachelor's of science degree in chemistry 13 Α. 14 with criminalistic emphasis from the University of Wisconsin-Platteville and a master of science degree of 15 16 chemistry from Illinois State University. 17 Ο. Okay. What is your title with the Institute of Forensic Sciences? 18 19 Α. Currently I'm a Forensic Chemist II specialist. 20 Q. Okay. Can you explain to the jury what the duties are in that position? 21 22 Α. Major duties are to receive evidence and analyze it for controlled, noncontrolled substances, so basically 23 24 taking unknown substances that are submitted to our 25 laboratory as evidence and issuing a report of what that

1 compound is.

2 Q. Okay. Did you receive any specific training in the3 area of drug analysis?

A. Yeah. When I started this position, there's an
intensive training program having to do with -- first you
just observe casework other analysts do. Once that's
completed, you do supervised casework, then there's also
proficiency testing and optional certification testing
that's performed.

10 Q. Okay. How long does this training period go on?
11 A. A few months, depending on how quickly you get
12 through it.

13 Q. Okay. And do you belong to any professional 14 organizations?

15 A. I've been a member of the American Chemical Society16 for about five years.

17 Q. And what about -- have you published any papers in18 the area of drug analysis?

A. Through my graduate research, I published a paper
on the detection of synthetic cathinones, also called bath
salts, illicit drugs.

Q. And about how many cases have you looked at sinceyou've been working with the Institute of Forensic Sciences?

- 24 25
- A. Hundreds, maybe thousands.
- Q. Have you testified as an expert in court before?

Α. 1 Yes. How many times, approximately? 2 0. This would be the fourth. 3 Α. Does that include expert testimony in the courts of 4 0. 5 this county? 6 Α. Yes. 7 All right. When you receive a piece of paper to Ο. 8 test at the lab, can you explain to the jury how it's received? 9 The officers from a submitting agency will just 10 Α. bring that evidence to our evidence room. From there it 11 will get logged into the system. At that point it will get 12 assigned a unique identification number with a bar code. 13 14 That bar code will get placed on the evidence itself and 15 then a duplicate of that bar code will get placed on that 16 submission form that accompanies that evidence and that just states where it came from, what it is. But that bar code 17 18 will be placed on both places. 19 From there the evidence will travel up to our 20 lab, in the drug chemistry laboratory, where we have a secure vault. The analysts in the laboratory don't have 21 22 access to that vault. If they want to work the case that day that has to do with that evidence, we fill out a request 23 24 form to receive that evidence. The evidence technician will retrieve that evidence from the vault. We use secure PIN 25

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numbers to show the transfer between the evidence technician
 to the analyst, so each person puts in a number to make sure
 that -- to identify who they are.

From there I will match the evidence -- the physical evidence to the submission form that was submitted with the case. If everything matches and I believe that -and that -- it's known that that evidence belongs to that case, I'll go ahead and open it. Every bar code I come across in that case, I'll put my initials on to show that I'm the one that was touching that evidence.

11 Then -- in this case I was the evidence 12 processor. We have a two-part system. So my job at that 13 point is to describe the evidence, log it into our computer 14 system and describe and weigh every -- the evidence and take 15 representative samples.

16 Q. Okay. And what would happen if for some reason 17 evidence that was received wasn't sealed?

If it wasn't sealed, we would make sure that 18 Α. 19 everything that's on the submission form is in the case. Τf 20 not, the agency is always called, if there's any question, if evidence is missing or anything of that sort, and it's 21 22 not worked until it's known that all the evidence is present but we'll go ahead and seal it ourselves to make sure 23 24 nothing else happens between that time.

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Q. Okay. And in this case, do you recall, when you

received this evidence, was it sealed properly? 1 Yes, everything was completely sealed. 2 Α. 3 0. Okay. And so, you said in this particular case, you were the evidence processor? 4 5 Α. Yes. 6 0. Could you explain to the jury then what your duties 7 are as the evidence processor? 8 Α. So, based on the evidence that's submitted, we take into account judicial weight cutoffs for penalties but it's 9 10 the evidence processor's duty to figure out what evidence 11 should be -- what samples should be taken for testing. So 12 basically I open the case and determine what samples need to be taken, I will weigh each piece of evidence so that 13 14 there's a weight associated with it and I'll take two representative samples from every piece of evidence that is 15 16 being tested. 17 The first sample is a presumptive sample and 18 that's just to determine an idea of what the compound is and 19 we do that with an instrument called a gas chromatograph 20 flame ionization detector and that basically just says, hey, this could be a substance. It's not definitive. 21 22 The second sample is for a confirmatory test; 23 in this case, a gas chromatograph with a mass spectrometer, 24 and that actually will give the identification of the 25 compound. Only when those two tests gave the same result,

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we'll call it a confirmed result. 1 2 MS. STABE: Okay. May I approach the witness, Your Honor? 3 THE COURT: Uh-huh. 4 5 (BY MS. STABE) I'm showing you what's been marked Ο. б as State's Exhibit No. 3. And looking at this, do you 7 recognize State's Exhibit No. 3? 8 Α. Yes, I do. 9 Okay. How do you recognize it? Q. Those bar codes that I was referring to before all 10 Α. 11 have my initials on them to show that I was the one that touched it. 12 Okay. And is this the same sample that you 13 Q. 14 received and tested in this particular case? 15 Α. Yes, it is. 16 0. Okay. And so, you yourself actually conducted the 17 scientific analysis on it? 18 Α. I did not. I took the samples but did not come to the conclusions of the results. 19 20 Q. Oh, I'm sorry. What I mean is you're the one that ran it through the instruments and did that testing on it? 21 22 Α. Yes. 23 Okay. And you're also the person that weighed the 0. 24 sample? 25 Α. Yes, yes.

1	Q. Okay. And so, would you mind reading for the jury,
2	on the envelope of State's Exhibit No. 3, what is the unique
3	laboratory number that is on the envelope?
4	A. It says IFS13-03995.
5	Q. Okay. And then on the evidence that was inside
6	State's Exhibit No. 13 (sic), can you please read the unique
7	lab number on that as well?
8	A. Be IFS13-03995.
9	Q. Okay. And when you received this envelope, when
10	you got it, had it been tampered with in any way?
11	A. Not that I could tell.
12	Q. Okay. And so, got it sealed, everything appeared
13	normal?
14	A. Yes.
15	Q. And then from the time that you tested it to
16	when I guess, do you seal it back up after you're done
17	testing?
18	A. When I take those samples, I'll seal it back up and
19	it's returned to the evidence technician that goes back into
20	the vault.
21	Q. Okay. And do you see any unique markings on here
22	that you can identify as yours?
23	A. The green tape that you see on this packaging is
24	our laboratory evidence tape and my initials and date when I
25	sealed it are present.

Q. Okay. So after you test the substance, what do you
 do with it?

- A. As far as the evidence itself?
- Q. Yes.

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A. After it's sealed up, it's returned to the evidence technician at the end of the day. We're not allowed to keep evidence at our desk for prolonged periods of time. It will stay in the vault until the report is issued back to the agency and then at that point the agency will come and pick that evidence back up and it won't -- no longer be in our position.

MS. STABE: Okay. Your Honor, at this time,
I'll offer State's Exhibit No. 3 and its contents into
evidence after tendering to opposing counsel.

MR. AYERS: I don't have any objection, Judge. *THE COURT:* State's 3's admitted, and
contents.

MS. STABE: Thank you. Okay.

19 Q. (BY MS. STABE) And so -- let's see. So I'm taking 20 out the contents of State's Exhibit No. 3. And there's 21 actually, it looks like, would you agree with me, two 22 different baggies that were in State's Exhibit No. 3? 23 A. Correct.

24 Q. Okay. And there's this smaller baggie that was25 inside. Does that also have the unique laboratory number on

1 it? Yeah, it's the same bar code with my initials. 2 Α. Okay. And so, do you recognize these as the same 3 0. substances that you tested in this case? 4 5 Α. Yes. 6 0. And can you describe to the jury, I mean, what do 7 you do -- how do you go about weighing a substance? 8 Α. So basically, since there were two bags of this 9 crystal-like substance, we're going to go for the heavier 10 one because that will have the higher penalty, so that's what we're going to decide to test. From that point, after 11 12 it's logged into the computer system -- our balance is actually connected in our computer system through a network 13 14 port -- we will take our weighing vessel, place it on the balance, hit the button to zero it out so it's showing that 15 16 that weight of that weigh boat does not get incorporated 17 into the weight. Then the whole net weight -- it was 18 actually poured out of the bag into the weigh boat to get 19 just the weight of the substance inside; that's recorded. Α small amount of the substance is taken for the first sample; 20 that weight is recorded to show that there's a difference. 21 22 The same thing for the second sample; that difference is recorded. And at the very last step, we'll take the 23 24 substance, place it back into the original container and record the weight and it should equal zero within our 25

laboratory criteria to show that everything went back into 1 the bag. 2 Okay. And you followed that procedure in this 3 Ο. case? 4 5 Α. Yes. б MS. STABE: Your Honor, may I publish the 7 contents of State's Exhibit 3 to the jury? 8 THE COURT: You may. 9 Q. (BY MS. STABE) My gloves are too big. So after 10 you weigh it, you say you take two separate samples; is that 11 right? 12 Α. Correct. You say the first test is a presumptive test? 13 Q. 14 Correct. Α. And what type of scientific instrument do you use 15 0. for that? 16 Α. 17 A gas chromatograph with flame ionization detector, GC-FID. 18 19 Can you explain to the jury, you know, what that is 0. 20 and how that works? 21 So basically -- both of these tests, the first Α. 22 instrument component is the GC, or gas chromatograph, and basically all that is, it's a big, fancy oven that will ramp 23 24 up at a temperature rate set by the instrument to separate 25 the components based on their boiling points. So you can

think of it -- it's a long path and the substance goes in all at once and there's multiple things in this one substance. As it travels through this instrument, it gets split up in its different components and they each come out separately and then we can actually detect each separate component separately.

Q. Okay. What is done to ensure that the instrument8 is working properly?

9 Every morning we have daily maintenance before it's Α. 10 actually put into service for that day and we actually run a 11 control standard to make sure that the instrument's still 12 working in the proper way that it was from the previous day and within the laboratory's criteria. If the criteria set 13 14 forth is met and the instrumental blank -- so we just run a 15 blank to make sure that nothing has been retained by the 16 instrument -- if that's blank, then the instrument's put 17 into service for the day.

18 Q. Okay. And you said there's controls. Can you19 explain what those are?

A. The control used for daily maintenance is just astandard cocaine sample that we get from a certified vendor.

Q. Okay. And so, if for some reason the instrument doesn't come back with the appropriate results, what are you going to do?

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A. We will take the instrument out of service, perform

any maintenance and it won't return to service until all the 1 criteria are met. 2 Okay. And so, in this case, was there any issue 3 0. with the flame ionization detector when you were testing the 4 5 sample? б Α. No, there wasn't. 7 Okay. And then after you get that presumptive 0. 8 test, you said you go on to use -- is it gas chromatograph 9 mass spectrometry? Spectrometry? 10 Α. Yes, correct. Okay. And can you explain what that is to the 11 Ο. 12 jury? Same basic idea, it's going to separate all the 13 Α. 14 components -- that's the gas chromatograph -- but in this case there's a mass spectrometer. As those samples come off 15 16 of the gas chromatograph, they go into the mass 17 spectrometer. What that does, it bombards the sample with 18 energy and breaks it up into little pieces called fragments. 19 So it's basically like a jigsaw puzzle. We can look at all 20 those pieces. They'll only fit one way, so we kind of work our way back from those pieces to figure out what compound 21 22 was broken up into those pieces. 23 And same situation: Do you have policies in place 0. 24 and standards in place to ensure the instrument's working 25 properly?

A. Pretty much the exact same standards. A cocaine is
run every day to make sure that it's still within the
criteria and in this case, you know, a blank is run to make
sure the instrument is blank with each sample. If the
instrument's not -- if the instrumental blank shows any kind
of deviation from being blank, if there's something there,
that data is not used and it's rerun.

8 Q. So you'll run one sample through, clear it out to 9 make sure there's nothing else in the instrument and then 10 run it through again and clear it out again after that?

A. Correct.

12 Q. And how is the -- is there something that prints13 out of the instrument? How does that work?

A. The way our laboratory's set up, it will compile all the data for us and print it into a PDF or electronic file, electronic document and that will be placed on our network. From that point the analyst will receive that data and they'll come to the conclusions after looking at it, reviewing it and they'll write up the report and publish the report.

21 *Q.* Okay.

22 MS. STABE: May I approach the witness, Your 23 Honor?

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THE COURT: You may.

Q. (BY MS. STABE) I'm showing you what's been marked

1	as State's Exhibit No. 4. Do you recognize this?
2	A. Yes.
3	Q. Okay. And without going into the contents, what is
4	State's Exhibit No. 4?
5	A. It's the laboratory report that was issued to the
6	submitting agency for this case.
7	Q. Okay. And is this a fair and accurate copy of the
8	report?
9	A. Yes, it is.
10	Q. And so, it's basically an exact copy of the
11	original; is that right?
12	A. It appears to be.
13	Q. Okay. And you had a hand in preparing the report
14	or you did some of the analysis in this case?
15	A. What I put in the computer system shows up on the
16	report but I didn't compile the report.
17	MS. STABE: Okay. Your Honor, at this time
18	I'll tender to opposing counsel and offer State's Exhibit 4
19	into evidence.
20	MR. AYERS: No objection, Judge, to State's
21	Exhibit 4.
22	THE COURT: State's 4 is admitted.
23	MS. STABE: May I publish it to the jury?
24	THE COURT: You may.
25	Q. (BY MS. STABE) So you said State's Exhibit No. 4

is the laboratory report that applies to this particular 1 case? 2 3 Α. Correct. And is that same unique laboratory number listed on 4 0. 5 both the outside envelope of State's Exhibit 3 and on the б individual bag in State's Exhibit 3 that's present on the 7 lab report? 8 Α. It is. 9 Okay. And can you just show the jury where that Q. 10 is? And, yes, you can point on this. 11 (Indicating.) Α. 12 Ο. Okay. So we already read that to the jury before but can you just confirm what that laboratory number is? 13 14 Α. It's IFS13-03995. Okay. And what is the suspect's name in this case? 15 0. 16 Α. Based on the submission form that was submitted to 17 us, it is Forest Penton, Jr. 18 Q. Okay. And you said that in this instance you were 19 the evidence processor and so, you weighed the evidence in this case? 20 Correct. 21 Α. 22 Q. Okay. What was the result of the first bag that 23 was weighed? 24 Α. Item No. 1 was -- weighed 25.216 grams. 25 Q. Okay. And which bag that I was showing was Item

1 No. 1?

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A. The larger one.

3 Q. And then Item 1A, did you also weigh that bag as 4 well?

5 A. Yes. That was weighed, the gross weight was 6 2.727 grams, and "gross" there just means it was weighed 7 with the bag. Since it wasn't being tested, there was no 8 reason to empty it out.

What is the reason that you did not test Item 1A? 9 Q. For this case, the charge was a Controlled 10 Α. The highest penalty for that, over 4 grams, 4 11 Substance 1. 12 to 200, I believe. One of the items weighed 25 grams, which is over 4 grams. Nothing in this case was going to add up 13 14 to over the next highest weight range, so there's no reason to weight the second, smaller item. 15

16 Q. Okay. And so, the larger bag was 25.216 grams of 17 the weight that you received?

18 A. Correct.

19 Q. Okay. And are you able to testify as to, you know,20 what the substance was that y'all believed it to be?

A. I can refer to the report but I did not come to theconclusion.

23 Q. Okay. And so, what is the result written in the 24 report?

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A. The analyst for the case determined that it was --

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Kyle Vircks - May 14, 2014 Cross-Examination by Mr. Ayers

1	for Item 1 was methamphetamine.
2	MS. STABE: I'll pass the witness.
3	MR. AYERS: Just a couple questions, Judge.
4	CROSS-EXAMINATION
5	Q. (BY MR. AYERS) Is it Vircks?
6	A. Vircks.
7	Q. One more time?
8	A. Vircks.
9	Q. Vircks with a K?
10	A. Correct.
11	Q. Okay. Sorry. Mr. Vircks, just a couple quick
12	questions. You mentioned in response to a question by the
13	prosecutor that your records indicate that this
14	methamphetamine was somehow connected to Forest Penton, Jr.
15	There's nothing in your knowledge or your interaction with
16	the case that tells you who that dope belongs to, correct?
17	A. Correct.
18	Q. You're just basing that on the paperwork the
19	officer submitted to you; that's the name you plug in,
20	correct?
21	A. Correct.
22	Q. But there's nothing about your analysis or any
23	information you have that in any way connect that dope, that
24	methamphetamine to Forest Penton or anybody else, correct?
25	A. No.

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1	Q. In your lab, you certainly don't do any other
2	analysis, like you're not checking for fingerprints or DNA
3	or anything like that. You're just weighing it and testing
4	it
5	A. Yeah, our specific laboratory is just drug
6	analysis.
7	Q. All right. And this information, this evidence,
8	once it came to you, it was never, according to your
9	records, sent to any other labs for any other analysis?
10	A. No.
11	Q. You weighed it, tested it, kept it till you
12	released it to the officer yesterday, right?
13	A. Correct.
14	MR. AYERS: Nothing further.
15	MS. STABE: Pass the witness, Your Honor.
16	THE COURT: You may stand down. Any objection
17	to this witness being excused?
18	MR. AYERS: Not at all, Judge.
19	MS. STABE: No, Your Honor.
20	THE COURT: You may be excused. Call your
21	next, please.
22	MS. STABE: State calls Kay McClain.
23	THE COURT: This witness was previously sworn,
24	ladies and gentlemen.
25	Proceed, please.

	Kay McClain - May 14, 2014 Direct Examination by Ms. Stabe
1	MS. STABE: Thank you, Your Honor.
2	KAY MCCLAIN,
3	having been first duly sworn, testified as follows:
4	DIRECT EXAMINATION
5	Q. (BY MS. STABE) Could you please introduce yourself
6	to the jury?
7	A. Hi. My name's Kay McClain.
8	Q. Where do you currently work?
9	A. I work at the Harris County Institute of Forensic
10	Sciences in the drug chemistry lab. I'm the drug chemistry
11	manager.
12	Q. What is your duty as the drug chemistry manager?
13	A. I supervise ten chemists right now. I also am able
14	to write reports and technically review those reports.
15	Q. Okay. How long have you been with the Harris
16	County Institute of Forensic Sciences?
17	A. I've been with them 13 years.
18	Q. Did you do anything else in the science field
19	before then?
20	A. Yes. I worked for five years right out of college
21	in an environmental lab and then I came to the Institute of
22	Forensic Sciences. I worked for about ten months in the
23	toxicology lab as a technician and then moved to the drug
24	chemistry lab and worked my way up through that lab as a
25	chemist until drug chemistry manager.