Court of Appeals No. 12CA1589 City and County of Denver District Court No. 09CR5412 Honorable Anne M. Mansfield, Judge

The People of the State of Colorado,

Plaintiff-Appellee,

v.

Kenneth Froehler,

Defendant-Appellant.

JUDGMENT AFFIRMED

Division V Opinion by CHIEF JUDGE LOEB Kapelke* and Nieto*, JJ., concur

Announced July 30, 2015

Cynthia H. Coffman, Attorney General, John T. Lee, Assistant Attorney General, Denver, Colorado, for Plaintiff-Appellee

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*Sitting by assignment of the Chief Justice under provisions of Colo. Const. art. VI, § 5(3), and § 24-51-1105, C.R.S. 2014.

¶ 1 Defendant, Kenneth Froehler, appeals the judgment of conviction entered on a jury verdict finding him guilty of sexual exploitation of a child. We affirm.

I. Background

- ¶ 2 Froehler checked into the Renaissance Hotel in Denver in the early afternoon of March 17, 2009. That evening, two men who appeared to be hotel guests found a flash drive plugged into one of the hotel's business center computers. The men opened some of the files on the flash drive and discovered child pornography. They immediately turned the flash drive over to hotel security. The men did not identify themselves and asked not to be involved further. The security guard contacted the police and gave them the flash drive.
- The next morning, Froehler called the front desk and asked if anyone had turned in a flash drive. He described the missing flash drive as black with the words "DataTraveler" on it. Because that description matched the flash drive turned in the night before, the clerk contacted the police.
- ¶ 4 Responding officers approached Froehler in the hotel parking lot and asked him about the flash drive. Froehler described its

appearance and told them it contained personal pictures, pictures of Christmas lights, pictures of his dog, and business invoices from his company. Later investigation revealed that the flash drive contained those items, as well as 155 images and 4 videos of child pornography. Police later searched five laptops found in Froehler's home but discovered no child pornography on any of them.

The prosecution charged Froehler with one count of sexual exploitation of a child, a class four felony. At trial, the defense argued that someone else put child pornography on the flash drive after Froehler had accidently left it in the hotel computer. A jury convicted Froehler, and the trial court sentenced him to two years in the custody of the Department of Corrections and three years mandatory parole.

II. Discussion

On appeal, Froehler contends that the trial court abused its discretion by allowing the detective who investigated the case to give improper lay testimony about (1) the dates associated with the images on the flash drive and (2) ImageScan, the software program used to search Froehler's laptops. Froehler contends that this evidence constituted expert testimony that should have been

excluded because the detective was not disclosed or qualified as an expert. For the reasons set forth below, we discern no reversible error.

A. Standard of Review

- ¶ 7 We review the trial court's evidentiary rulings for an abuse of discretion. *People v. Stewart*, 55 P.3d 107, 122 (Colo. 2002); *People v. Veren*, 140 P.3d 131, 136 (Colo. App. 2005). A trial court abuses its discretion if its ruling is manifestly arbitrary, unreasonable, or unfair, or based on an erroneous view or application of the law. *Stewart*, 55 P.3d at 122; *People v. Bondurant*, 2012 COA 50, ¶ 79; *People v. Esparza-Treto*, 282 P.3d 471, 480 (Colo. App. 2011).
- ¶ 8 Froehler timely objected to the detective's testimony.

 Accordingly, we apply the harmless error standard for reversal. *See Stewart*, 55 P.3d at 124; *People v. Ramos*, 2012 COA 191, ¶ 6 (*cert. granted* Feb. 18, 2014). Under this standard, we may not reverse a conviction if we "can say with fair assurance that, in light of the entire record of the trial, the error did not substantially influence the verdict or impair the fairness of the trial." *Stewart*, 55 P.3d at 124 (internal quotation marks omitted).
- ¶ 9 We reject Froehler's contention that the constitutional

harmless error standard applies here. Colorado appellate courts have uniformly applied the ordinary harmless error standard where, as here, the defendant contends that expert testimony was improperly admitted as lay testimony and the objection was preserved. *See, e.g., id.*; *Ramos*, ¶ 6; *Veren*, 140 P.3d at 140.

B. Applicable Law

- ¶ 10 Whether the trial court abused its discretion here turns on whether admission of the detective's testimony was proper under CRE 701. *Stewart*, 55 P.3d at 122. That rule, which governs lay opinion testimony, applies because the prosecution did not seek to qualify the detective as an expert witness under CRE 702. *Id.*
- ¶ 11 Under CRE 701, a witness who is not testifying as an expert may give testimony in the form of opinions or inferences only if those opinions or inferences are
 - (a) rationally based on the perception of the witness, (b) helpful to a clear understanding of the witness' testimony or the determination of a fact in issue, and (c) not based on scientific, technical, or other specialized knowledge within the scope of Rule 702.

Froehler's argument focuses on the third requirement, which prohibits opinions based on "scientific, technical, or other

- specialized knowledge" from being admitted as lay testimony. Id.
- ¶ 12 In determining whether testimony is lay or expert, the critical inquiry is whether a witness' testimony is based upon "specialized knowledge." Veren, 140 P.3d at 137. Lay witness opinion testimony is proper only if the opinions or inferences "do not require any specialized knowledge and could be reached by any ordinary person." Id. (internal quotation marks omitted). In deciding whether an opinion is one that could be reached by any ordinary person, courts consider whether ordinary citizens can be expected to know certain information or to have had certain experiences. Id. Courts also consider "whether the opinion results from 'a process of reasoning familiar in everyday life,' or 'a process of reasoning which can be mastered only by specialists in the field." Id. (quoting People v. Rincon, 140 P.3d 976, 983 (Colo. App. 2005)).
- ¶ 13 In *People v. Stewart*, the supreme court recognized the difficulty in classifying a police officer's testimony as expert or lay opinion testimony. 55 P.3d at 123. Police officers regularly, and appropriately, offer testimony under CRE 701 based on their perceptions and experiences. *Id.* However, "[o]fficer testimony becomes objectionable when what is essentially expert testimony is

improperly admitted under the guise of lay opinions." *Id.* The court held that where an officer's testimony is based not only on his or her perceptions, observations, and experiences, but also on the officer's specialized training or education, the officer must be properly qualified as an expert before offering such testimony. *Id.* at 124.

- ¶ 14 The parties have not cited, and we have not found, any published Colorado appellate case that has addressed the distinction between lay and expert testimony in the context of computer-related testimony. Because CRE 701 mirrors Rule 701 of the Federal Rules of Evidence, we look to federal cases construing that rule for guidance. *See Stewart*, 55 P.3d at 123.
- ¶ 15 In *United States v. Ganier*, 468 F.3d 920, 924 (6th Cir. 2006), the Sixth Circuit considered testimony by a forensic computer specialist who used forensic software to determine what searches were run on a computer. The court rejected the Government's argument that this was "simply lay testimony available by running commercially-available software, obtaining results, and reciting them." *Id.* at 925 (internal quotation marks omitted). The court reasoned that interpreting the reports generated by the software

would require the specialist to "apply knowledge and familiarity with computers and the particular forensic software well beyond that of the average layperson." *Id.* at 926. It distinguished this type of knowledge from the average lay person's familiarity with commonly used software programs:

Software programs such as Microsoft Word and Outlook may be as commonly used as home medical thermometers, but the forensic tests [the specialist] ran are more akin to specialized medical tests run by physicians. The average layperson today may be able to interpret the outputs of popular software programs as easily as he or she interprets everyday vernacular, but the interpretation [the specialist] needed to apply to make sense of the software reports is more similar to the specialized knowledge police officers use to interpret slang and code words used by drug dealers.

Id. (citations omitted). The court concluded that the testimony at issue involved "scientific, technical, or other specialized knowledge" and constituted expert testimony. *Id.*

¶ 16 In *United States v. Wilson*, 408 F. App'x 798, 808 (5th Cir. 2010) (unpublished opinion), the Fifth Circuit considered testimony by an investigator who reviewed the defendant's e-mail account and, based on the empty sent-box, determined that the defendant

had deleted all sent e-mails. *Id.* The investigator did not use forensic software, and his computer experience was limited to using Microsoft Office products. *Id.* The court concluded that his examination of the e-mail account fell "within the realm of knowledge of the average lay person" and was "based on reasoning familiar in everyday life." *Id.* (internal quotation marks omitted). Accordingly, it was properly admitted as lay opinion testimony. *Id.*

- ¶ 17 Similarly, in *United States v. Lee*, 339 F. App'x 153, 160 (3d
- Cir. 2009) (unpublished opinion), the Third Circuit held that a witness who used a map prepared by a GPS computer program to calculate the distance between two buildings properly testified as a lay witness. The court reasoned that the witness "relie[d] on a tool used in everyday life, and require[d] no specialized training or knowledge." *Id*.
- ¶ 18 Finally, in *United States v. Marsh*, 568 F. App'x 15, 16-17 (2d Cir. 2014) (unpublished opinion), the Second Circuit concluded that an FBI agent who used a forensic extraction device to retrieve text messages from a cell phone properly gave lay testimony about the contents of the messages. The court reasoned that he "did not purport to render an opinion based on the application of specialized"

knowledge to a particular set of facts; nor did his testimony turn on or require a technical understanding of the programming or internal mechanics of the technology." *Id.* at 17.

¶ 19 With these cases in mind, we now turn to the detective's testimony in this case.

C. Testimony About Image Dates

¶ 20 Froehler first contends that the trial court abused its discretion in allowing the detective to testify that the "date created" and "date modified" associated with the pornographic images on the flash drive preceded the date of Froehler's hotel stay. Froehler argues that this constituted expert testimony that was improperly admitted as lay testimony. We disagree.

1. Trial Court Proceedings

- ¶ 21 During her investigation, the detective sent the flash drive to the Rocky Mountain Computer Forensic Lab. The lab used forensic software to extract information about the images, including dates they were created, modified, and accessed. The lab placed the contents of the flash drive on a CD and provided a report listing the dates associated with the images.
- ¶ 22 The defense requested disclosure of expert testimony before

trial. The prosecution represented that it would not introduce any expert testimony but would have the detective testify as a lay witness about the dates in the lab report. On the morning of trial, the defense moved to exclude the report and related testimony, arguing, among other grounds, that its admission through a lay witness would be improper.

- ¶ 23 After hearing arguments from counsel, the trial court ruled that the detective would not be permitted to testify about information obtained from the lab's forensic analysis. However, the court ruled that the detective could give lay testimony about any information she herself observed by looking on the flash drive.
- ¶ 24 Following the court's ruling, the detective plugged the flash drive into her computer and examined the images herself without the assistance of the lab's forensic software. She was then permitted to testify at trial based on her own personal observations.
- ¶ 25 On direct examination, the detective testified that she personally observed the created, modified, and accessed dates when she clicked on the images on the flash drive. She explained that she right-clicked each image file and hit "properties," and the computer then showed the created, modified, and accessed dates

associated with the file. She was unable to view prior access dates because when she clicked on the file, the accessed date changed to the date she looked at it. However, she did observe the created and modified dates. She testified that those dates were prior to March 17, 2009, the date Froehler checked into the hotel.

2. Analysis

¶ 26 We conclude that the detective's testimony about the dates associated with the image files was properly admitted as lay witness testimony. The detective testified about the dates she personally viewed during her examination of the flash drive, which was separate from the lab's forensic analysis. She did not use forensic software to extract the dates, nor did she rely on information generated by the lab's forensic analysis. Cf. Ganier, 468 F.3d at 926. Rather, she accessed the dates simply by plugging the flash drive into her computer and right-clicking on the image files. In our view, the method she used to view the dates did not require any specialized knowledge or familiarity with computers beyond that of the average lay person. Right-clicking on a file to view its properties requires some basic computer competency, but it is within the realm of knowledge of ordinary people who use computers in

everyday life. *See also Wilson*, 408 F. App'x at 808 (viewing e-mail sent-box was "within the realm of knowledge of the average lay person"); *Lee*, 339 F. App'x at 160 (using GPS map "require[d] no specialized training or knowledge").

- ¶ 27 Moreover, the detective did not testify about the meaning or significance of the dates on the flash drive. For example, she did not explain whether "date created" referred to the date that the file was originally created or the date the file was loaded onto the flash drive. Nor did she testify to conclusions or inferences based on the dates. She simply reported the dates she observed, without interpreting them. Any ordinary person could make the same observation simply by clicking on the file.
- ¶ 28 Under these circumstances, we conclude that the detective's testimony about the image dates was not based on "scientific, technical, or other specialized knowledge" within the scope of CRE 702. Accordingly, it was properly admitted as lay testimony under CRE 701.
 - D. Testimony About ImageScan Software
- ¶ 29 Froehler next contends that the trial court abused its discretion in allowing the detective to give lay testimony about the

ImageScan software program used to search Froehler's home computers, arguing that it also constituted expert testimony.

Although this is a closer issue, we agree that the detective's testimony was improperly admitted as lay testimony. Nevertheless, we conclude that its admission was harmless under the circumstances of this case.

1. Trial Court Proceedings

¶ 30 The parties stipulated to certain facts regarding the search of Froehler's home computers. During cross-examination of the detective, the court read this stipulation to the jury:

The parties have agreed upon the following facts which you may accept as true:

- 1) Pursuant to a legal request from the Denver Police Department, the McHenry County Illinois Sheriff's Department seized computers from the home of Kenneth Froehler . . . on November 11, 2009.
- 2) The Sheriff's [sic] did not call Mr. Froehler prior to appearing at his home to conduct the search.
- 3) They collected two Toshiba Satellite notebook computers, a Panasonic notebook computer, and two Sony notebook computers.
- 4) Utilizing a program called Image Scan, the McHenry County Illinois Sheriff's Department

scanned all files and media in Mr. Froehler's computers.

- 5) Image Scan is a software tool which was created for law enforcement by the FBI's Computer Analysis Response Team.
- 6) No images of child pornography were found on any of the computers seized from Mr. Froehler's home.
- ¶ 31 On redirect examination, the prosecutor asked the detective what ImageScan was. Defense counsel objected on the basis that the detective had not been qualified as an expert. The court overruled the objection and allowed the detective to testify as follows:

ImageScan was developed by the FBI for law enforcement to do on-site search of a computer, . . . it just runs through the computer and pulls out any pictures.

. . . It doesn't do like a full forensic search or anything, literally just pulling the pictures. And once it does that, then it puts it in a format where you can click through thumbnails of pictures and see if any of them are related to your case, but it doesn't go beyond just the images.

The detective also confirmed that she had personally used ImageScan.

¶ 32 The prosecutor next asked the detective what types of things ImageScan would not find. Defense counsel again objected, and the court again overruled her objection. The detective then testified about the limitations of ImageScan:

It's not going to give you a history of what's been going on with the computer. It literally just pulls up the images that are on the computer. If somebody's used a wipe program on a computer, or if they have a file sharing program and then they clear it out afterwards, ImageScan is not going to give you the history of that. It's only going to give you the images that are on there.

[I]f it had been deleted but not cleared out yet, then it would pull up the deleted image, but it's not going to do a search for anything really beyond that.

[I]f it's an image and you just deleted it, ImageScan might still have it, but as time goes on, that area gets written over, so if that's a file there or an image and it's deleted and then it's written over, I believe ImageScan is not going to find it.

¶ 33 Finally, the prosecutor asked the detective whether ImageScan would be able to find pictures that had been saved on a flash drive.

The detective responded: "If somebody's using a computer and moving it — directly downloaded through the computer to an external drive, it's not going to — the images won't be on the

computer for ImageScan to pull up."

¶ 34 Defense counsel briefly recross-examined the detective and confirmed that no child pornography had been found on Froehler's home computers.

2. Lay or Expert Testimony

- ¶ 35 Whether the detective's testimony about ImageScan was expert testimony or lay testimony is a close question. On the one hand, the testimony was based, at least in part, on the detective's personal experience with using the program. *See Stewart*, 55 P.3d at 123 (noting that police officers regularly offer testimony under CRE 701 based on their perceptions and experiences). She did not claim to have expertise in forensic computer analysis, nor did she describe any specialized training related to ImageScan as a basis for her testimony. *See id.* at 124 (officer's testimony based on specialized training is expert testimony); *cf. Ganier*, 468 F.3d at 926.
- ¶ 36 On the other hand, her testimony concerned a particular software program that was developed specifically for law enforcement. The general public could not be expected to have experience with, or even access to, that software. *See Veren*, 140

P.3d at 137; see also Ganier, 468 F.3d at 925-26 (interpretation of a report generated by forensic software was expert testimony, even where such software was commercially available); cf. Wilson, 408 F. App'x at 808 (no expert testimony where investigator whose only computer experience was using Microsoft Office looked at e-mail account without forensic software). Moreover, the detective's testimony went beyond explaining the search that was conducted in this case. She gave a technical description of the program's capabilities and limitations, and she offered assessments about whether it could retrieve images under various hypothetical scenarios. In our view, this testimony required specialized knowledge beyond that of the average layperson, including at least some technical understanding of how the program operated. Cf. Marsh, 568 F. App'x at 17 (no expert testimony where testimony did not "turn on or require a technical understanding of the programming or internal mechanics of the technology"); People v. Stewart, No. 303879, 2012 WL 3966300, at *1 (Mich. Ct. App. Sept. 11, 2012) (unpublished opinion) (FBI forensic examiner did not give expert testimony where using forensic software program did not require specialized knowledge or training and forensic examiner did

not testify about how the software worked).

¶ 37 On balance, we conclude that the detective's testimony about ImageScan was based on "specialized knowledge" within the scope of CRE 702 and, therefore, constituted expert testimony.

Accordingly, the trial court erred in admitting it as lay testimony under CRE 701.

3. Harmless Error

- ¶ 38 We next apply a harmless error analysis to determine whether the error warrants reversal. We conclude that the admission of the detective's expert testimony was harmless in this case.
- The improperly admitted testimony about ImageScan related to the search of Froehler's home computers, not the flash drive which was the basis for the charged offense. It was only tangentially relevant to the central disputed issue in this case whether Froehler "knowingly possessed" the child pornography on the flash drive. *See* § 18-6-403(3)(b.5), C.R.S. 2014 ("knowingly" is an element of the offense of sexual exploitation of a child).
- ¶ 40 Froehler argues that the absence of child pornography on his computers "tended to make it less likely" that he put the child pornography on the flash drive, because one could "infer that

someone who has child pornography on a flash drive probably has child pornography on other electronic devices." Thus, he claims that the detective's testimony about ImageScan's limitations undermined the exculpatory value of that evidence. Even according to this argument, the link between the ImageScan testimony and the flash drive is attenuated. Evidence about the software used to search Froehler's home computers had no direct bearing on whether Froehler "knowingly possessed" the child pornography on the flash drive.

- ¶ 41 Moreover, the detective's testimony about ImageScan was not the only evidence of "knowing possession." In his closing argument, the prosecutor relied on other evidence admitted without objection to show that the flash drive contained child pornography before Froehler left it in the hotel's business center. Specifically, the prosecutor highlighted:
 - testimony that the business center was busy during
 Froehler's stay;
 - photographs showing that the screen of the computer where Froehler's flash drive was found faced the hallway;
 and

• testimony that the child pornography on the flash drive was organized into folders.

The prosecutor argued that it was unlikely someone could have downloaded 155 images and 4 videos of child pornography on the business center computer, put them on the flash drive, and organized them into folders without being seen. He also relied on the detective's testimony that the dates on the image files preceded the date of Froehler's stay, which, as we have concluded above, was properly admitted.

- ¶ 42 Given the other evidence of "knowing possession," as well as the attenuated link between that disputed issue and the ImageScan testimony, we conclude that the improperly admitted testimony did not "substantially influence the verdict or impair the fairness of the trial." *Stewart*, 55 P.3d at 124 (internal quotation marks omitted); *cf. Veren*, 140 P.3d at 140 (officers' improperly admitted expert testimony was not harmless because it was the "key testimony at trial" establishing an element of the crime).
- ¶ 43 Froehler contends that the failure to disclose the detective's expert testimony before trial prevented defense counsel from adequately preparing for cross-examination or hiring an expert to

rebut the detective's opinions. However, Froehler did not ask for a continuance at trial. *See People v. Greer*, 262 P.3d 920, 931 (Colo. App. 2011) ("[D]efendant's claim that he was unfairly surprised and unable to prepare adequately for cross-examination is discredited by his failure to move for a continuance."). Nor does Froehler explain how defense counsel's cross-examination would have been different had the detective's testimony been disclosed prior to trial. Likewise, he does not explain how, if at all, a defense expert would have rebutted the detective's testimony about ImageScan's limitations.

¶ 44 Under these circumstances, we conclude that any error in admitting the detective's testimony about ImageScan was harmless and does not warrant reversal.

III. Conclusion

¶ 45 The judgment is affirmed.

JUDGE KAPELKE and JUDGE NIETO concur.