



IN THE SUPREME COURT OF THE STATE OF DELAWARE

DAKAI CHAVIS,)
)
Defendant-Below,)
Appellant,)
)
v.) No. 520, 2018
)
)
STATE OF DELAWARE,)
)
Plaintiff-Below,)
Appellee.)

ON APPEAL FROM THE SUPERIOR COURT
OF THE STATE OF DELAWARE

STATE'S SUPPLEMENTAL ANSWERING BRIEF

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I. ADMISSION OF THE DNA TEST RESULTS DID NOT VIOLATE CHAVIS’S RIGHTS UNDER THE SIXTH AMENDMENT’S CONFRONTATION CLAUSE OR DELAWARE’S CHAIN OF CUSTODY LAWS.

Argument

In his opening brief, Chavis argues that his Sixth Amendment right to confront witnesses against him requires that all forensic analysts who had participated in the DNA analysis should have been available for cross-examination at trial. *See* Op. Brf. at 8. After receiving the State’s answering brief and Chavis’s reply, on August 5, 2019, this Court ordered the parties to submit supplemental briefs addressing six questions:¹

1. What, if any, effect do the relevant United States Supreme Court precedents (*e.g.* *Crawford* [*v. Washington*²], *Bullcoming* [*v. New Mexico*³], *Melendez-Diaz* [*v. Massachusetts*⁴], *Williams* [*v. Illinois*⁵]) have on the appellant’s Confrontation Clause claim? What impact, if any, does *Martin v. State*, 60 A.3d 1100 (Del. 2013), have on your analysis of those precedents?
2. What practical and policy implications should the Court consider in connection with the appellant’s claim that all individuals who participated in the DNA analysis should have been available for cross-examination at trial?

¹ *Dakai Chavis v. State*, No. 520, 2018, Letter Order (Aug. 5, 2019) (hereinafter, the “Order”).

² 541 U.S. 36 (2004).

³ 564 U.S. 647 (2011).

⁴ 557 U.S. 305 (2009).

⁵ 567 U.S. 50 (2012).

3. What, if any, legal significance should attach to Exhibits C and D (A66-69) of the appellant's March 14, 2018 Response to State's Motion *in Limine*, which stated that the relevant samples were transferred to Rachel Aponte and Feng Chen, respectively, for "analysis"?
4. On September 27, 2017, counsel for the appellant filed a motion to compel the State to answer an August 1, 2017 discovery request, which, among other things requested "all laboratory notes, including all written records generated by any and all employees/agents of [Bode Cellmark] in connection with the preparation and evaluation of all specimens ... in this case" and "all documents and reports relied upon and/or consulted by [Bode Cellmark] in reaching its analysis (*sic*) and conclusions in this case." It does not appear as though the Superior Court ruled upon the motion to compel. Did the State comply with the August 1, 2017 discovery request? If it did, identify (by record citation) all notes, records, or documents produced *that were made part of the Superior Court record*.
5. The State's answering brief suggests that those who "produce data" are subject to cross-examination while those who merely "prepare[] samples" are not. Evaluate this framework, and include in any discussion how this framework might apply to non-DNA laboratory tests.
6. In the event the Court determines that Chavis's constitutional rights were violated, was the error harmless beyond a reasonable doubt? In responding to this question, please address "the damaging potential of [Chavis's] cross-examination [had it been] fully realized"⁶ at trial.

This is the State's supplemental answering brief.

1. The Confrontation Clause was satisfied under relevant United States Supreme Court precedents and Martin v. State.

Chavis argues that relevant Supreme Court precedents and *Martin* show that "[a]ll analysts who participated in testing the DNA samples in this case made either implicit or explicit out-of-court testimonial statements that were relied upon and

⁶ *Delaware v. Van Arsdall*, 475 U.S. 673, 684 (1986).

relayed to the jury by Sarah Siddons.” *See* Suppl. Op. Brf. at 9. Chavis alleges he “ha[d] the right to confront each of the testing analysts upon whose out-of-court testimonial statements Siddons relied and that she relayed to the jury.” *Id.* at 13. Chavis lists others involved in the six stages of generating the DNA profiles (evidence examination, extraction, quantification, amplification, electrophoresis, and report) whom he claims he had the right to confront in addition to Siddons, a DNA analyst with Bode. *Id.* at 11-12, B2, B41.⁷ For the profile generated from the apartment window at 61 Fairway Road (the evidence sample), these technicians included: (i) Rachel Aponte (“Aponte”), a sampling technician who “unsealed the package, cut the swab at a specific length, and placed the pieces in the test tubes” during the evidence examination stage; (ii) Kelsey Powell, who assisted in the extraction stage by adding chemicals to test tubes, using a centrifuge to separate liquid from the swabs, discarding the swabs, and placing the test tubes into a

⁷ Although “analyst” and “technician” may have been used interchangeably in this proceeding, the terms have distinct meanings in the relevant scientific field. For example, the Federal Bureau of Investigation (“FBI”) defines an “analyst” as someone who “conducts and/or directs the analysis of forensic samples, interprets data and reaches conclusions,” while a technician does not. *See* FBI, Quality Assurance Standards for Forensic DNA Testing Laboratories, § 2 <https://www.fbi.gov/file-repository/quality-assurance-standards-for-forensic-dna-testing-laboratories.pdf/> view, last accessed October 26, 2019. Moreover, an analyst must have a degree in certain scientific fields, while a technician must have “[d]ocumented training specific to their job function(s).” *Id.* at §§ 5.4.1, 5.6.1.

refrigerator;⁸ and (iii) Douglas Ryan, who used a robot during the extraction stage to add reagents to the test tubes to separate the DNA from everything else, and who also assisted Siddons in the quantification stage to measure the amount of DNA in the samples by placing a tray with the samples onto a machine. *See* Suppl. Op. Brf. at 11-12, A41-42, B47. Chavis also identifies other technicians whom he contends he had the right to confront about processing his buccal swab (the reference sample): (i) Feng Chen (“Chen”), a sampling technician who performed similar duties as Aponte during the evidence examination stage; and (ii) Vanessa Sufrin, who added chemicals to the test tubes and used a centrifuge during the extraction stage. *See* Suppl. Op. Brf. at 12, A43, B47. Chavis claims that “[e]ach of the analysts made implicit assertions that he or she followed proper protocols to generate accurate data” and that, without these assertions, “what would have been left of [Siddons]’ testimony—that she matched two DNA profiles she could not herself identify—would have been meaningless.” Suppl. Op. Brf. at 12-13. Chavis’s arguments are unavailing.

⁸ The police sent multiple evidence samples to Bode for analysis, but Siddons determined that only one of them had sufficient DNA during the extraction stage. A42.

A. Siddons alone made testimonial statements because she relied on nontestimonial, machine-generated data.

Siddons relied on machine-generated data to draft her report and is the only person from Bode who made testimonial statements. This Court has recognized the “substantial uncertainty about whether a particular statement is ‘testimonial’ or otherwise triggers the Confrontation Clause.”⁹ In *Crawford*, the Supreme Court concluded that the Confrontation Clause applies to “‘witnesses’ against the accused—in other words, those who ‘bear testimony.’”¹⁰ *Crawford* concerned the prosecution using the defendant’s wife’s recorded out-of-court statement to police that the defendant stabbed someone who had tried to rape her.¹¹ The Court concluded that the statement was inadmissible because it was a testimonial statement which the defendant did not have the opportunity to confront in violation of the Sixth Amendment.¹² The Court concluded that a defendant’s confrontation right is not limited to in-court testimony, and explained that “the principal evil at which the Confrontation Clause was directed was the civil-law mode of criminal procedure, and particularly its use of *ex parte* examinations against the accused.”¹³ However,

⁹ *Martin*, 60 A.3d at 1102.

¹⁰ *Crawford*, 541 U.S. at 51.

¹¹ *Id.* at 38.

¹² *Id.* at 68-69.

¹³ *Id.* at 50.

not all hearsay statements implicate this concern.¹⁴ The *Crawford* Court determined that “testimony” is typically “[a] solemn declaration or affirmation made for the purpose of establishing or proving some fact,”¹⁵ and provided a list of “[v]arious formulations of the core class” of such statements:

[E]x parte in-court testimony or its functional equivalent—that is, material such as affidavits, custodial examinations, prior testimony that the defendant was unable to cross-examine, or similar pretrial statements that declarants would reasonably expect to be used prosecutorially, extrajudicial statements ... contained in formalized testimonial materials, such as affidavits, depositions, prior testimony, or confessions, statements that were made under circumstances which would lead an objective witness reasonably to believe that the statement would be available for use at a later trial.¹⁶

The Court left “for another day any effort to spell out a comprehensive definition of ‘testimonial’” but determined the term applied “at a minimum to prior testimony at a preliminary hearing, before a grand jury, or at a former trial; and to police interrogations.”¹⁷

In *Davis v. Washington*, the Supreme Court considered “when statements made to law enforcement personnel during a 911 call or at a crime scene are ‘testimonial.’”¹⁸ The Court established the primary purpose test:

¹⁴ *Id.* at 51

¹⁵ *Id.* (modification in original).

¹⁶ *Id.* at 51-52 (internal quotations and citations omitted).

¹⁷ *Id.* at 68.

¹⁸ *Davis v. Washington*, 547 U.S. 813, 817 (2006).

Statements are nontestimonial when made in the course of police interrogation under circumstances objectively indicating that the primary purpose of the interrogation is to enable police assistance to meet an ongoing emergency. They are testimonial when the circumstances objectively indicate that there is no such ongoing emergency, and that the primary purpose of the interrogation is to establish or prove past events potentially relevant to later criminal prosecution.¹⁹

Because the 911 operator questioned the victim so the police could respond to an ongoing emergency, the interrogation was nontestimonial, and the operator was not required to testify at trial.²⁰ The Court did not attempt “to produce an exhaustive classification of all conceivable statements ... as either testimonial or nontestimonial.”²¹ The Court also did not “dispute that formality is indeed essential to testimonial utterance,” but it did not determine the amount of formality needed.²² In *Jones v. State*, this Court concluded that *Crawford* and *Davis* held that “a statement is testimonial and implicates the Confrontation Clause where it is given in non-emergency circumstances and the declarant would recognize that his statements could be used against him in subsequent formal proceedings.”²³ This is unlike “‘a casual remark to an acquaintance’ [which] is a nontestimonial statement.”²⁴

¹⁹ *Id.* at 822.

²⁰ *Id.* at 828.

²¹ *Id.* at 822.

²² *Id.* at 830 n.5.

²³ *Jones v. State*, 940 A.2d 1, 12 (Del. 2007).

²⁴ *Id.* (quoting *Crawford*, 541 U.S. at 51).

In *Melendez-Diaz*, *Bullcoming*, and *Williams*, the Supreme Court considered the Confrontation Clause's application to scientific reports. In *Melendez-Diaz*, the Court determined that the admission of three notarized "certificates of analysis" from the state's forensic laboratory at trial, which attested that the substances in the petitioner's possession were cocaine, violated his Sixth Amendment right to confront witnesses against him.²⁵ The particular affidavits were testimonial statements subject to the Confrontation Clause because, in lieu of the analyst's testimony, the "'certificates' [we]re functionally identical to live, in-court testimony, doing 'precisely what a witness does on direct examination.'"²⁶ But, the Court was careful to "not hold, and it is not the case, that anyone whose testimony may be relevant in establishing the chain of custody, authenticity of the sample, or accuracy of the testing device, must appear in person as part of the prosecution's case."²⁷ In other words, "this does not mean that everyone who laid hands on the evidence must be called."²⁸ "[G]aps in the chain [of custody] normally go to the weight of the evidence rather than its admissibility."²⁹ Moreover, "[i]t is up to the prosecution to decide what steps in the chain of custody are so crucial as to require evidence; but

²⁵ *Melendez-Diaz*, 557 U.S. at 308, 329.

²⁶ *Id.* at 310-11 (quoting *Davis*, 547 U.S. at 830).

²⁷ *Melendez-Diaz*, 557 U.S. at 311 n.1.

²⁸ *Id.*

²⁹ *Id.* (internal quotation and citation omitted).

what testimony *is* introduced must (if the defendant objects) be introduced live.”³⁰

Bullcoming involved a defendant’s arrest for driving while intoxicated.³¹ The Supreme Court reversed the defendant’s conviction, finding he had a right to confront the analyst who completed and signed the report stating his blood alcohol concentration (“BAC”) level after testing his blood sample in a gas chromatograph machine.³² The Court noted that “[o]peration of the [gas chromatograph] machines requires specialized knowledge and training. Several steps are involved in the gas chromatograph process, and human error can occur at each step.”³³ In the report, the analyst left the “remarks” section blank, which implicitly certified the sample’s integrity and validity of the analysis, but he also made express certifications, including following laboratory procedures.³⁴ Because the analyst who had provided the BAC level and the certification was not available to testify, another analyst who “was familiar with the laboratory’s testing procedures, but had neither participated in nor observed the test on Bullcoming’s blood sample” testified instead.³⁵ In concluding that the Confrontation Clause was violated, the Supreme Court noted that

³⁰ *Id.*

³¹ *Bullcoming*, 564 U.S. at 651.

³² *Id.* at 652-54.

³³ *Id.* at 654.

³⁴ *Id.* at 653, 660.

³⁵ *Id.* at 652, 655.

“[the non-testifying analyst] certified to more than a machine-generated number.”³⁶ In finding the report testimonial, the Court concluded it resembled *Melendez-Diaz*’s certificates, and “the formalities attending the ‘report of blood alcohol analysis’ are more than adequate to qualify [the non-testifying analyst’s] assertions as testimonial.”³⁷

Justice Sotomayor wrote a concurring opinion and identified the circumstances not present, including asking the expert witness under Federal Rule of Evidence 703 “for his independent opinion about underlying testimonial reports that were not themselves admitted into evidence.”³⁸ The Court also did not “address what degree of involvement is sufficient because [the testifying analyst] had no involvement whatsoever in the relevant test and report.”³⁹ Nor did the Court “decide whether ... a State could introduce (assuming an adequate chain of custody foundation) raw data generated by a machine in conjunction with the testimony of an expert witness.”⁴⁰

In *Williams*, the Supreme Court applied the Confrontation Clause to DNA evidence and concluded in a plurality opinion that the prosecution had not violated

³⁶ *Id.* at 661.

³⁷ *Id.* at 665.

³⁸ *Id.* at 673.

³⁹ *Id.*

⁴⁰ *Id.* at 674.

Williams’s Sixth Amendment right to confront witnesses against him.⁴¹ Following the victim’s abduction and rape, the police sent samples from the victim’s rape kit to Cellmark, a private laboratory; Cellmark generated a male DNA profile from the victim’s vaginal swabs and wrote a report.⁴² Williams, who was not a suspect at the time, was arrested on unrelated charges, and the state police laboratory generated his DNA profile from a blood sample.⁴³ The police laboratory determined the profiles matched after a computer search.⁴⁴ At Williams’s bench trial for sexual assault, the prosecution called an expert from the police laboratory to testify that Williams could not be excluded as the semen’s source on the swabs and that the profiles matched based on statistical probabilities in various ethnic populations.⁴⁵ No one from Cellmark testified, Cellmark’s report was not admitted into evidence, and the expert who testified did not identify the report as a source of her opinions.⁴⁶

Williams’s plurality concluded that the expert’s testimony did not violate the Confrontation Clause because “[o]ut-of-court statements that are related by the

⁴¹ *Williams*, 567 U.S. at 57. Because *Williams* is a plurality opinion with two concurrences, this Court has found that the case has limited precedential value. *See Martin*, 60 A.3d at 1104 n.35. This Court has also found *Williams* confusing. *See id.* at 1104.

⁴² *Williams*, 567 U.S. at 59.

⁴³ *Id.*

⁴⁴ *Id.*

⁴⁵ *Id.* at 60-62.

⁴⁶ *Id.* at 60-63; *see Martin*, 60 A.3d at 1104.

expert solely for the purpose of explaining the assumptions on which the opinion rests are not offered for their truth and thus fall outside the scope of the Confrontation Clause.”⁴⁷ The plurality determined that the expert had testified with personal knowledge as to the truth that Cellmark was an accredited laboratory, the police occasionally sent samples to Cellmark for DNA testing, the shipping manifests showed that the police laboratory sent and received back the victim’s vaginal swabs, and Cellmark’s DNA profile matched a sample produced by the police laboratory from Williams.⁴⁸ The plurality determined that Cellmark’s report was not offered to prove, for its truth, the assertion “that the matching DNA profile was found in semen from the vaginal swabs,” but was a premise the analyst could rely on to provide her expert opinion.⁴⁹ Even if Cellmark’s report had been admitted into evidence, “there would have been no Confrontation Clause violation,” because the report was “very different from the sort of extrajudicial statements, such as affidavits, depositions, prior testimony, and confessions that the Confrontation Clause was originally understood to reach.”⁵⁰ The plurality noted that “[t]he abuses that the Court had identified as prompting the adoption of the Confrontation Clause shared the

⁴⁷ *Williams*, 567 U.S. at 58.

⁴⁸ *Id.* at 70.

⁴⁹ *Id.* at 72.

⁵⁰ *Id.* at 58.

following two characteristics: (a) they involved out-of-court statements having the primary purpose of accusing a targeted individual ... and (b) they involved formalized statements.”⁵¹ The plurality found that the primary purpose of sending the victim’s samples to Cellmark was to catch a rapist on the loose, and “[t]he profile that Cellmark provided was not inherently inculpatory.”⁵² Justice Thomas, who constituted the majority’s fifth vote, concurred only in the judgment because the report lacked the “formality and solemnity to be considered testimonial.”⁵³ Otherwise, he would have “share[d] the dissent’s view of the plurality’s flawed analysis.”⁵⁴

In his concurring opinion, Justice Breyer said the Court did not answer the question: Where multiple technicians are involved in DNA testing, “[w]ho should the prosecution have had to call to testify?”⁵⁵ Justice Breyer would have considered Cellmark’s report to “fall outside the category of ‘testimonial’ statements that the Confrontation Clause makes inadmissible.”⁵⁶ The four-justice dissent in *Williams* viewed Cellmark’s report as testimonial because the analyst who had generated the

⁵¹ *Id.* at 82.

⁵² *Id.* at 58.

⁵³ *Id.* at 103 (internal quotation and citation omitted).

⁵⁴ *Id.*

⁵⁵ *Id.* at 90.

⁵⁶ *Id.* at 94.

report “became a witness whom Williams had the right to confront” when the prosecution introduced its substance into evidence.⁵⁷ Based on Justice Thomas’s concurring opinion and the dissent, five justices concluded Cellmark’s report was admitted for the truth “that [Cellmark] successfully derived a male DNA profile and that the profile came from [the victim’s] swabs.”⁵⁸

In *Martin*, this Court determined that the State had violated the Confrontation Clause by introducing the testing analyst’s testimonial statements through another expert witness who was merely the “note-taking laboratory supervisor.”⁵⁹ The State admitted into evidence at trial the toxicology report from the defendant’s blood sample showing the presence of PCP.⁶⁰ The testing analyst had prepared a batch report using a gas chromatograph machine, which screened the sample for PCP, and the expert witness had used the batch report to prepare her own report certifying the test results.⁶¹ *Martin* found that the expert had relied on the testing analyst’s reports, conclusions, and notes to certify that Martin’s blood contained PCP.⁶² The testing analyst had made “notations on checklists about the procedures she followed,

⁵⁷ *Id.* at 125.

⁵⁸ *Id.* at 103; *see Martin*, 60 A.3d at 1106.

⁵⁹ *Martin*, 60 A.3d at 1108-09.

⁶⁰ *Id.* at 1101.

⁶¹ *Id.*

⁶² *Id.* at 1107.

processe[d] the data the machine generate[d], [told] the machine to print, and generate[d] a batch packet with the results.”⁶³

Martin concluded, based on *Williams*, that the State had introduced the substance of the testing analyst’s statements and had admitted the testing analyst’s representations and conclusions for their truth.⁶⁴ And, under *Bullcoming*, the Court concluded that the testing analyst’s underlying statements and representations were testimonial.⁶⁵ *Martin* noted that *Bullcoming* found “[a] document created solely for an ‘evidentiary purpose’ ... made in aid of a police investigation, ranks as testimonial.”⁶⁶ *Martin* interpreted *Bullcoming* as “reject[ing] the proposition that conclusions drawn from a gas chromatograph machine are mere transcriptions requiring no interpretation and no independent judgment” and “contemplat[ing] that the certifying witness must either observe or perform the test.”⁶⁷ As an example of the batch report requiring interpretation and independent judgment, *Martin* found that the “absence of a notation in the batch report indicates that the testing analyst observed nothing abnormal about the test, *assuming* the [testing] analyst followed

⁶³ *Id.* at 1108 n.60.

⁶⁴ *Id.* at 1107.

⁶⁵ *Id.*

⁶⁶ *Id.* at 1107-08.

⁶⁷ *Id.* at 1106-07.

the laboratory's operating protocols about notations."⁶⁸ Although, unlike *Bullcoming*, the laboratory supervisor had signed the report's certification, *Martin* determined that "[l]ike the testifying analyst in *Bullcoming*, [the expert witness] merely reviewed [the testing analyst's] data and representations about the test, while having knowledge of the laboratory's standard operating procedures, without observing or performing the test herself."⁶⁹ *Martin* concluded that the Sixth Amendment guaranteed the right "to confront the analyst who performed the test in order to determine her proficiency, care, and veracity."⁷⁰

Other jurisdictions have determined that a DNA profile is not a testimonial statement. For example, in *United States v. Summers*, the Fourth Circuit found that the Confrontation Clause was not violated from an FBI unit analyst's testimony about DNA testing.⁷¹ The unit analyst had compared the DNA profiles generated by subordinate analysts, including from a jacket worn by the defendant.⁷² The unit analyst wrote a report, which included the samples' allele table, concluding that Summers was the major contributor of DNA on the jacket; the report was admitted

⁶⁸ *Id.* at 1108 n.64 (emphasis in original).

⁶⁹ *Id.* at 1109.

⁷⁰ *Id.*

⁷¹ *United States v. Summers*, 666 F.3d 192, 202-04 (4th Cir. 2011), *cert. denied*, 568 U.S. 851 (2012).

⁷² *Id.* at 195-96.

into evidence.⁷³ None of the subordinate analysts testified at trial.⁷⁴ In determining that the Confrontation Clause was not violated, *Summers* relied on Fourth Circuit precedent concluding that machine-generated data was not hearsay because raw data from a machine is not a statement, and a machine is not a declarant.⁷⁵ *Summers* found that “[t]he numerical identifiers of the DNA allele here, insofar as they are nothing more than raw data produced by a machine,” are nontestimonial.⁷⁶ *Summers* concluded that the DNA profiles were admissible under Rule 703 because of “the predominance therein of [the testifying analyst’s] independent, subjective opinion and judgment relative to the lesser emphasis accorded the objective raw data generated by the analysts.”⁷⁷ Unlike *Melendez-Diaz* and *Bullcoming*, which “each involved one or more absent expert’s ‘certification’ with respect to the meaning of the underlying raw data, [n]o such certification is at issue here.”⁷⁸ “The only evidence interpreting the raw data was provided by [the testifying expert] via his report and live testimony, and he was strenuously cross-examined by the defense.”⁷⁹

⁷³ *Id.* at 196.

⁷⁴ *Id.*

⁷⁵ *See id.* at 202; *United States v. Washington*, 498 F.3d 225, 231 (4th Cir. 2007), *cert. denied*, 557 U.S. 934 (2009) (involving gas chromatograph machine).

⁷⁶ *Summers*, 666 F.3d at 202.

⁷⁷ *Id.* at 201.

⁷⁸ *Id.* at 203.

⁷⁹ *Id.*

Separately, the Fourth Circuit concluded in *Washington* that “[a]ny concerns about the reliability of ... machine-generated information is addressed through the process of authentication not by hearsay or Confrontation Clause analysis.”⁸⁰

Neither the Supreme Court nor *Martin* has held that an analyst who uses a genetic analyzer machine and software to generate a DNA profile is considered a “testimonial” witness. *Melendez-Diaz* is distinguishable because it did not involve DNA evidence, and the certificates were admitted into evidence without any witness testimony.⁸¹ Both *Bullcoming* and *Martin* are factually inapposite as involving gas chromatograph machines, and *Martin* did not determine whether a DNA profile is nothing more than machine-generated data. *Martin* did conclude that “interpreting the results of a gas chromatograph machine involves more than evaluating a machine-generated number,” and relied on *Bullcoming*’s citation to “representations, relating to past events and human actions not revealed in raw, machine-produced data.”⁸² However, *Bullcoming* cited to both the blank “remarks” section in the laboratory report and express statements that the non-testifying analyst

⁸⁰ *Washington*, 498 F.3d at 231.

⁸¹ *Melendez-Diaz*, 557 U.S. at 308.

⁸² *See Martin*, 60 A.3d at 1108 (quoting *Bullcoming*, 564 U.S. at 660).

had made in the report.⁸³ *Bullcoming* did not decide whether an expert could testify about machine-generated data if an adequate chain of custody is established.⁸⁴

Here, Siddons' July 2017 report was testimonial. Her report opined that the DNA profiles from the apartment window and Chavis matched and calculated the probabilities of finding the same profile in various ethnic populations. *See* B1. Under *Crawford* and *Davis*, there was not an ongoing emergency when Siddons wrote the report because Chavis had been arrested for the burglary, and the report's primary purpose was to demonstrate that Chavis was at the apartment during the burglary, a relevant fact at trial. Similarly, under *Bullcoming* and *Martin*, the report was created for the evidentiary purpose of identifying Chavis as the burglar. Siddons interpreted and independently judged that the profiles matched, and her statements in the report about the match and probabilities were accusatory.

While Siddons' testimony was necessary at trial, she relied on nontestimonial, machine-generated data for her report. The DNA profiles were obtained during the electrophoresis stage by running the samples through a genetic analyzer machine that exposed the DNA to an electrical field; separated, labeled, and displayed each locus; and displayed each locus using an electropherogram, which resembled a line

⁸³ *See Bullcoming*, 564 U.S. at 660; *Summers*, 666 F.3d at 203 (interpreting *Bullcoming*).

⁸⁴ *Bullcoming*, 564 U.S. at 674.

graph. A42-44, A46. Software measured the DNA fragments' lengths and determined the allele values. A46. Siddons checked that the profiles were readable. A43-44. The DNA profiles were not statements, nor were the machine and software declarants.⁸⁵ The technicians who operate a genetic analyzer machine and software cannot independently affirm or deny that samples will yield complete DNA profiles.⁸⁶ The technicians who generate this data are not necessary witnesses. As explained below, Chavis had an adequate opportunity to explore the testing analyst's "proficiency, care, and veracity."⁸⁷ Chavis's confrontation right was not violated because Siddons relied on nontestimonial data to create her testimonial report.

B. Siddons alone made testimonial statements because any implicit statements from the non-testifying technicians lacked formality.

Chavis does not emphasize any specific, express, testimonial statements that the non-testifying technicians made but argues that "[e]ach of the analysts made implicit assertions that he or she followed proper protocols to generate accurate data." *See* Suppl. Op. Brf. at 12-13. Chavis's reliance on these assertions weighs against finding that they had made testimonial statements.

⁸⁵ *See Washington*, 498 F.3d at 231.

⁸⁶ *See State v. Stillwell*, 2019 WL 4455041, at *6 (N.H. Sept. 18, 2019).

⁸⁷ *Martin*, 60 A.3d at 1109.

In *Crawford* and *Davis*, the Supreme Court indicated that a testimonial statement must possess some amount of formality.⁸⁸ This Court and others have determined that a statement's informality can be a factor demonstrating its nontestimonial nature.⁸⁹ In *Derr v. State*, the Maryland Court of Appeals found that “[t]he common point of agreement between the plurality opinion [in *Williams*] and Justice Thomas’s concurring opinion is that statements must, at least, be formalized, or have ‘indicia of solemnity’ to be testimonial.”⁹⁰ *Martin* also does not support Chavis’s argument that every person involved in DNA analysis makes implicit, testimonial statements about following laboratory procedures and must be available for cross-examination. *Martin* did not determine how much formality is required for a testimonial statement. The *Martin* decision was not based on implicit statements made by everyone who had handled the evidence. Contrary to Chavis’s implicit

⁸⁸ See *Crawford*, 541 U.S. at 51; *Davis*, 547 U.S. at 831 n.5.

⁸⁹ *Jones*, 940 A.2d at 12; see *Derr v. State*, 73 A.3d 254, 272-73 (Md. 2013), cert. denied, 573 U.S. 903 (2014); *People v. Lopez*, 286 P.3d 469, 477 (Cal. 2012), cert. denied, 568 U.S. 1217 (2013) (The court “need not consider the primary purpose of nontestifying analyst ... laboratory report on the concentration of alcohol in defendant’s blood because ... the critical portions of that report were not made with the requisite degree of formality or solemnity to be considered testimonial.”).

⁹⁰ *Derr*, 73 A.3d at 272-73 (serological and DNA test results not sufficiently formalized and therefore non-testimonial).

statement theory, *Martin* identified testimonial statements as the testing analyst's "reports, conclusions, and notes."⁹¹

C. The non-testifying technicians' work did not implicate the Confrontation Clause.

The non-testifying technicians who prepared the samples for Siddons did not perform work that implicated the Confrontation Clause because they completed ministerial or mechanical tasks, and they were not necessary witnesses at trial to satisfy Chavis's confrontation right. In granting the State's motion to admit the DNA test results, the Superior Court reached a similar conclusion by declining to find that "the functions of the functionaries that prepared the sample were testimonial statements, so [the court does not] think that the right of confrontation is abused by their not giving testimony in this case." A82.

In *United States v. Boyd*, the District Court for the Southern District of New York concluded that technicians who performed mechanical or ministerial tasks regarding DNA testing did not need to testify to satisfy the Confrontation Clause.⁹² At trial, the prosecution admitted the DNA test results through the analyst who initially prepared the samples for testing and determined that the DNA profiles matched, but who had not performed the extraction, quantification, or amplification

⁹¹ See *Martin*, 60 A.3d at 1108.

⁹² *United States v. Boyd*, 686 F. Supp. 2d 382, 384 (S.D.N.Y. 2010), *aff'd*, 401 F. App'x 565 (2d Cir. 2010).

stages.⁹³ In arguing that Boyd’s confrontation right was violated, the defense “speculated that each technician at each stage was called upon to engage in non-ministerial analyses and ... that each step was critical to the final determination of a DNA profile.”⁹⁴ In rejecting this claim, *Boyd* concluded that the expert witness, “although admitting that he did not personally witness several of the intervening steps, testified in detail about the routine procedures involved at each step and the ministerial nature of those steps.”⁹⁵ *Boyd* found that “the intervening steps were performed on the basis of established procedures that allowed little to no discretion,” the witness was familiar with those intervening procedures, and the intervening technicians were less able to respond to questions about the procedures than “the more expert witness.”⁹⁶ *Boyd* concluded that where “DNA testing in its preliminary stages requires the technician simply to perform largely mechanical or ministerial tasks, then, absent some reason to believe there was error or falsification, the need to call such a technician as a witness may not become a constitutional necessity.”⁹⁷ Here, the non-testifying technicians who prepared the samples performed similar ministerial or mechanical tasks by unsealing packages, cutting swabs, placing pieces

⁹³ *Id.*

⁹⁴ *Id.* at 384-85.

⁹⁵ *Id.* at 385.

⁹⁶ *Id.*

⁹⁷ *Id.* at 384.

of swab into test tubes, adding chemicals, placing a tray onto a machine, and using centrifuges.⁹⁸

Courts have also held that not everyone involved in DNA analysis must testify without deciding whether technicians who prepare samples merely perform ministerial or mechanical acts. In *People v. John*, the New York Court of Appeals noted that “it is the generated numerical identifiers and the calling of the alleles at the final stage of the DNA typing that effectively accuses defendant of his role in the crime charged.”⁹⁹ “Thus, the claim of a need for a horde of analysts is overstated,” and “an analyst who witnessed, performed or supervised the generation of *defendant’s* DNA profile, or who used his or her independent analysis on the raw data, as opposed to a testifying analyst functioning as a conduit for the conclusions of others, must be available to testify.”¹⁰⁰

In *State v. Roach*, the New Jersey Supreme Court found that the Confrontation Clause was satisfied by the analyst, who had obtained the defendant’s DNA profile from a buccal swab, testifying about her comparison of this profile with the profile generated by another analyst from evidence samples.¹⁰¹ The court concluded that

⁹⁸ *See id.*

⁹⁹ *People v. John*, 52 N.E.3d 1114, 1127 (N.Y. Ct. App. 2016).

¹⁰⁰ *Id.* at 1127-28 (emphasis added).

¹⁰¹ *State v. Roach*, 95 A.3d 683, 686-87, 697-98 (N.J. 2014), *cert. denied*, 135 S. Ct. 2348 (2015).

“neither *Bullcoming*’s holding nor *Melendez-Diaz*’s require that every analyst involved in a testing process must testify in order to satisfy confrontation rights.”¹⁰² Instead, a supervisor, co-worker, or other truly independent reviewer can qualify as an expert witness “to testify about a report that incorporates expert conclusions the [witness] has drawn from comparing analysts’ results without transgressing a defendant’s confrontation rights.”¹⁰³ “However, the testimony must be provided by a truly independent and qualified reviewer of the underlying data and report, and the witness may not merely parrot the findings of another.”¹⁰⁴ Similarly, the Rhode Island Supreme Court in *State v. Lopez* held that the expert witness, who had not “performed any part of any of the testing” and “was not present or observing when the tests were performed,” was able to testify about DNA test results without violating the Confrontation Clause.¹⁰⁵ *Lopez* relied on *Melendez-Diaz*’s conclusions that not every person ““who laid hands on the evidence”” was required to testify and that gaps in the chain of custody normally concerned the weight, not admissibility, of the evidence.¹⁰⁶ *Lopez* found that the witness had “personally reviewed and independently analyzed all the raw data, formulated the allele table, and then

¹⁰² *Id.* at 694, 697.

¹⁰³ *Id.* at 695.

¹⁰⁴ *Id.*

¹⁰⁵ *State v. Lopez*, 45 A.3d 1, 13-19 (R.I. 2012).

¹⁰⁶ *Id.* at 16 (quoting *Melendez-Diaz*, 557 U.S. at 311 n.1).

articulated his own final conclusions concerning the DNA profiles and their corresponding matches.”¹⁰⁷

Here, nothing in the record suggests that the non-testifying technicians were anything other than professionals who completed their tasks in the ordinary course of business. In *Williams*, Justice Breyer concluded the “word ‘testimonial’ as having outer limits and *Crawford* as describing a constitutional heartland.”¹⁰⁸ Justice Breyer considered reports “such as the DNA report before us presumptively to lie outside the perimeter of the [Confrontation] Clause.”¹⁰⁹ He found that “Cellmark’s DNA report embodies technical or professional data, observations, and judgments” and that “the employees who contributed to the report’s findings were professional analysts working on technical matters at a certified laboratory.”¹¹⁰ He determined that “the need for cross-examination is considerably diminished when the out-of-court statement was made by an accredited laboratory employee operating at a remove from the investigation in the ordinary course of business.”¹¹¹ Based upon the prevailing case law as applied to the facts of this case, Siddons could testify about the tasks the other technicians completed.

¹⁰⁷ *Id.* at 13.

¹⁰⁸ *Williams*, 567 U.S. at 93, 99.

¹⁰⁹ *Id.* at 99.

¹¹⁰ *Id.* at 94.

¹¹¹ *Id.* at 99.

D. Siddons' testimony was admissible under Delaware Rules of Evidence 703 and 705, and Chavis waived his Confrontation Clause claim to the extent he elicited any hearsay statements.

Siddons' testimony was also properly admitted because she could rely on other facts or data as an expert witness when providing her expert opinion, and she could disclose any hearsay statements from the non-testifying technicians to the extent Chavis elicited these statements on cross-examination. In *Nelson v. State*, this Court concluded that DNA evidence is admissible under Delaware Rule of Evidence 702 when the expert witness testifies about the match and the underlying statistical calculation.¹¹² In addition, Delaware Rule of Evidence 703 provides:

An expert may base an opinion on facts or data in the case that the expert has been made aware of or personally observed. If experts in the particular field would reasonably rely on those kinds of facts or data in forming an opinion on the subject, they need not be admissible for the opinion to be admitted. Upon objection, if the facts or data would otherwise be inadmissible, the proponent of the opinion may disclose them to the jury only if their probative value in helping the jury evaluate the opinion substantially outweighs their prejudicial effect.¹¹³

This Court has concluded that “[w]hile an expert is afforded latitude under Rule 703 to incorporate into the methodology source material normally relied upon in the expert’s field, the use of specific contested data poses a particular risk of

¹¹² *Nelson v. State*, 628 A.2d 69, 76 (Del. 1993); *Harris v. State*, 2014 WL 3888254, at *4 (Del. Aug. 7, 2014) (“Harris’ claim that ‘the statistical probabilities or frequencies of DNA ... have not been demonstrated to be reliable’ is simply without merit.”).

¹¹³ D.R.E. 703.

circumvention of hearsay restrictions.”¹¹⁴ “Hearsay” includes a statement that “[t]he declarant does not make while testifying at the current trial or hearing” and that “[a] party offers in evidence to prove the truth of the matter asserted in the statement.”¹¹⁵ In turn, a “statement” includes “a person’s oral assertion, written assertion, or nonverbal conduct, if the person intended it as an assertion.”¹¹⁶ Delaware Rule of Evidence 705 may require an expert to disclose underlying facts or data on cross-examination otherwise inadmissible as hearsay.¹¹⁷ “Hearsay data underlying an expert’s opinion are admissible if elicited by the defendant on cross-examination ... Therefore, basis evidence that is hearsay may become available to the jury to evaluate a witness’s credibility.”¹¹⁸ A defendant may also waive a Confrontation Clause claim by eliciting a hearsay statement on cross-examination.¹¹⁹

¹¹⁴ *Gannett Co., Inc. v. Kanaga*, 750 A.2d 1174, 1187 (Del. 2000).

¹¹⁵ D.R.E. 801(c)(1)-(2).

¹¹⁶ D.R.E. 801(a).

¹¹⁷ D.R.E. 705(a).

¹¹⁸ *Commonwealth v. Greineder*, 984 N.E.2d 804, 818-21 (Mass. 2013), *cert. denied*, 571 U.S. 865 (2013) (although concluding that data regarding DNA testing from non-testifying analysts was erroneously admitted during expert witness’s direct examination, court finding the error had not prejudiced the defendant because, among other reasons, defense counsel had used the data on cross-examination to bolster his theory that the DNA testing was unreliable and to attack the expert’s credibility).

¹¹⁹ *See Goode v. State*, 136 A.3d 303, 313 (Del. 2016); *Greineder*, 984 N.E.2d at 819 (finding that cross-examination results in both an expert’s data becoming admissible under Massachusetts’ Rule 705 and amounting to a waiver of one’s confrontation right).

Here, Siddons could rely on the DNA profiles and probabilities generated because they are the types of data an expert typically uses to determine if the profiles matched. Because the defense also cross-examined Siddons about her opinion that problems did not arise with processing the samples, including contamination, Chavis opened the door for Siddons to disclose any hearsay statements she relied on to reach her conclusion. *See* B48-49. Chavis also waived any Confrontation Clause claim for the statements he elicited on cross-examination.¹²⁰

Nor was Siddons' testimony forbidden under *Martin*, which found one of the circumstances present that was not before the Supreme Court: “[T]he constitutionality of allowing an expert witness to discuss others’ testimonial statements if the testimonial statements were not themselves admitted as evidence.”¹²¹ Because Siddons testified at trial, any of her prior statements would not constitute hearsay.¹²² To the extent this Court concludes that a DNA profile is nothing more than machine-generated data, Siddons would not have relied on or transmitted hearsay statements.¹²³ Nor did *Martin* decide in the context of scientific

¹²⁰ *See Goode*, 136 A.3d at 313; *Greineder*, 984 N.E.2d at 819

¹²¹ *Martin*, 60 A.3d at 1109.

¹²² *See* D.R.E. 801(c)(1).

¹²³ *See Summers*, 666 F.3d at 202; *Washington*, 498 F.3d at 231.

reports whether a defendant can waive a Confrontation Clause claim by eliciting hearsay statements on cross-examination.

E. Siddons' testimony otherwise satisfied the Confrontation Clause.

Even if this Court concludes, based on *Martin*, that the DNA profiles in Chavis's case were testimonial because they were created for an evidentiary purpose and required interpretation and independent judgment, or that Siddons had transmitted other technicians' hearsay statements, Siddons' testimony satisfied Chavis's confrontation right. The electrophoresis stage constituted the test that *Martin* describes because Siddons used the genetic analyzer machine and software to test the prepared samples for complete DNA profiles. *See* A42-44. Unlike *Martin's* expert witness, Siddons was the testing analyst and did more than just take notes and supervise.¹²⁴ Chavis fails in his attempt to elevate the ministerial or mechanical functions of the non-testifying technicians to those of a testing analyst.

Chavis had a sufficient opportunity to cross-examine Siddons about her "proficiency, care, and veracity" as *Martin* required.¹²⁵ "[T]he Confrontation Clause guarantees an opportunity for effective cross-examination, not cross-examination that is effective in whatever way, and to whatever extent, the defense might wish."¹²⁶

¹²⁴ *Martin*, 60 A.3d at 1108-09.

¹²⁵ *Id.* at 1108.

¹²⁶ *Van Arsdall*, 475 U.S. at 679 (internal quotation and citation omitted).

The opportunity to cross-examine for error or falsification is not “boundless,” and “absent some reason to believe” this had occurred, the other technicians were not necessary witnesses.¹²⁷ Nothing in the record demonstrates that the DNA samples were tampered with or processed erroneously. Here, Bode generated the DNA profile for the evidence sample around December 21, 2016—three weeks before it received the reference sample on January 16, 2017, and the samples were processed separately. *See* A69, B2, B45. The samples produced a single source DNA profile. *See* B49. Contamination or a processing error would have resulted in generating multiple DNA profiles from a sample, or a profile would have appeared in the laboratory’s negative controls that tested the reagents’ cleanliness. *See* B48-49. Nothing in the record suggests this occurred. Notably, *John, Roach, and State v. Lopez* would have allowed Siddons’ testimony about the DNA test results because she performed or supervised the generation of Chavis’s DNA profile, or she personally and independently reviewed the raw data and articulated her own conclusions about the profiles and the match. In any event, Siddons had sufficient involvement and personal knowledge to have testified about the results as the testing analyst. Therefore, Chavis’s Confrontation Clause claim fails.

¹²⁷ *Boyd*, 686 F. Supp. 2d at 384; *see Lopez*, 45 A.3d at 16.

2. Requiring all individuals who participated in the DNA analysis to be available for cross-examination at trial raises practical and policy issues.

Practical and policy issues must be considered in assessing Chavis's argument that all individuals who participated in the DNA analysis should have been available for cross-examination. He argues that not requiring "all analysts in a multi-analyst process" to testify and relying on "Siddons' assurances at trial regarding the actions of the other analysts ... provide[s] an opportunity for fraudulent and incompetent analysts to eternally escape cross examination and confrontation." *See* Suppl. Op. Brf. at 16. Chavis alleges that "[u]pholding the right to confront all the testing analysts in a multi-analyst testing process prevents the State from unfairly and unreasonably shifting the burden to the defendant to secure the presence of an adverse witness at trial." *Id.* at 17. Chavis's argument is unavailing.

In *State v. Michaels*, the New Jersey Supreme Court considered whether admitting an expert's testimony and report from gas chromatograph results violated the Confrontation Clause where the expert had not run the machine.¹²⁸ In concluding there was no violation, the court stated:

[A] few state high courts have found that a defendant's confrontation rights are violated when the analyst who physically performed the tests at issue does not testify, even when the testifying expert is a supervisor who reviewed the data generated by the analyst and prepared the report based on that data. That approach has the advantage of avoiding the

¹²⁸ *State v. Michaels*, 95 A.3d 648, 651 (N.J. 2014), *cert. denied*, 135 S. Ct. 761 (2014).

possibility that the United States Supreme Court may one day agree on the most exacting interpretation of confrontation rights vis-à-vis multiple actors involved in handling and testing evidence subject to all forms of forensic testing. However, ... that outcome is uncertain. And taking the most rigid approach to confrontation rights in the context of forensic reports carries practical drawbacks that range from moderate to severe. It leaves no meaningful solution where the analyst or analysts no longer work at the lab, are unavailable, or are deceased. There is a real likelihood that such dilemmas may arise in cold cases. Further, it cannot be assumed that retesting a sample is invariably a possibility. Moreover, demanding the in-court testimony of every analyst is unnecessary for providing the defendant with meaningful cross-examination on every testing process utilized in forensic examinations.¹²⁹

Requiring every technician who had participated in DNA analysis to be available for cross-examination raises significant practical and policy issues. The State may be discouraged from expending finite and limited resources to engage in DNA testing if the results will be inadmissible unless numerous expert witnesses testify.¹³⁰ If a case with DNA evidence remains unsolved for many years, it is possible that one of the laboratory technicians who had participated in generating a relevant DNA profile from an evidence sample may not be available to testify due to a job change, disability, or death. In Chavis's case, Bode no longer employed Aponte or Chen at the time of trial. *See* B47. The evidence providing a DNA profile may not be able to be retested because generating the profile may have entirely

¹²⁹ *Id.* at 677 (internal citations omitted).

¹³⁰ *See Williams*, 567 U.S. at 58.

consumed the sample.¹³¹ The inability to introduce DNA evidence could result in cold cases not being prosecuted because there is insufficient other evidence.

Although Chavis relies on *Young v. United States*¹³² to support his claim that all analysts involved in processing the DNA evidence made testimonial statements and must be available for cross-examination (*see* Suppl. Op. Brf. at 12-13), this decision acknowledged the practical problem of an expert witness's unavailability and considered possibly allowing the prosecution "to call a substitute expert to testify when the original expert who performed the testing is no longer available (through no fault of the government), retesting is not an option, and the original test was documented with sufficient detail for another expert to understand, interpret, and evaluate the results."¹³³ Moreover, the Fourth Circuit in *Summers* "heartily agree[d] ... that the handling of evidence, calibration of equipment, and the like can be fertile ground for cross-examination," but had to "tempur [its] agreement with the

¹³¹ *See* Laboratory Division, FBI, Handbook of Forensic Services, 29 (2019), <https://www.fbi.gov/file-repository/handbook-of-forensic-services-pdf.pdf/view>, last accessed on October 21, 2019 (to obtain a DNA profile from hair evidence, the FBI will request permission from the prosecution and/or investigating agency to consume a hair sample for mitochondrial DNA testing where the hair sample is less than three centimeters in length).

¹³² *Young v. United States*, 63 A.3d 1033 (D.C. 2013).

¹³³ *Id.* at 1049 (internal quotation and citation omitted).

practical observation that a serious challenge to processing defects is likely to arise only infrequently.”¹³⁴

DNA is different than other types of forensic evidence. “[A] DNA profile is evidence that tends to exculpate all but one of the more than 7 billion people in the world today,” and the “[u]se of DNA evidence to exonerate persons who have been wrongfully accused or convicted is well known.”¹³⁵ Although *Crawford* rejected the notion of “[d]ispensing with confrontation because testimony is obviously reliable,”¹³⁶ the nature of DNA evidence provides additional security for Chavis’s confrontation right without requiring every technician involved in the process to testify. Testing for a DNA profile—a person’s unique, biological identifier¹³⁷—is different than testing for the presence or quantity of controlled substances as in *Martin*. The plurality in *Williams* noted that “the knowledge that defects in a DNA profile may often be detected from the profile itself provides a further safeguard.”¹³⁸ Justice Breyer concluded in *Williams* that an employee at an accredited laboratory

¹³⁴ *Summers*, 666 F.3d at 204.

¹³⁵ *Williams*, 567 U.S. at 58.

¹³⁶ *Crawford*, 541 U.S. at 62.

¹³⁷ See *Nelson*, 629 A.2d at 75 (“The important feature of DNA for forensic science purposes is that, with the exception of identical twins, no two people have the same DNA makeup.”).

¹³⁸ *Williams*, 567 U.S. at 85.

removed from a police investigation diminishes the need for cross-examination.¹³⁹

Therefore, as a practical matter, each person in the chain is not a necessary testimonial witness.

3. No legal significance should attach to Exhibits C and D of the appellant's March 14, 2018 Response to State's Motion in Limine, which stated that the relevant samples were transferred to Aponte and Chen for analysis.

Chavis argues that this Court should attach legal significance to notes in the samples' chain of custody logs, which stated that the samples were transferred to Aponte or Chen for "analysis," because this "confirms that these two analysts were active participants in the testing." *See* Suppl. Op. Brf. at 19. Chavis is mistaken.

This Court should not attach legal significance to the word "analysis." Chain of custody logs are admissible as a business record because the entity normally creates them to manage its affairs.¹⁴⁰ In the context of the Confrontation Clause,

¹³⁹ *See id.* at 95.

¹⁴⁰ *See* D.R.E. 803(6) providing for the admission of a business record through testimony of a qualified witness that "was made at or near the time by—or from information transmitted by—someone with knowledge;" "the record was kept in the course of a regular conducted activity of a business, organization ... whether or not for profit;" "making the memorandum, report, record or data compilation was a regular practice of that activity;" and "the opponent does not show that the source of the information or the method or circumstances of preparation indicate a lack of trustworthiness"); *State v. Brockmeyer*, 751 S.E.2d 645, 660 (S.C. 2013) ("We find the facts of this case demonstrate that the evidence logs were kept as business records for the purpose of identifying and storing evidentiary items."); *Lopez*, 286 P.3d at 482 (concluding that several notations on the chain of custody logsheet were nontestimonial because the entries were "made for the administration of an entity's affairs" and "[t]he laboratory could not conduct its business were it unable to identify

Melendez-Diaz noted that “business and public records are generally admissible absent confrontation not because they qualify under an exception to the hearsay rules, but because—having been created for the administration of an entity’s affairs and not for the purpose of establishing or proving some fact at trial—they are not testimonial.”¹⁴¹ A notation’s relevance at trial does not automatically transform it into a testimonial statement.¹⁴²

Here, Bode’s chain of custody logs are business records, and Chavis has not demonstrated that Bode created them specifically to use at trial. Because such logs normally track where samples are in their processing, “analysis” was perhaps shorthand for why Aponte and Chen removed the samples from Bode’s evidence room. It is more probative to examine the actual work that the technicians performed on them, which was ministerial or mechanical. Therefore, Chavis’s argument that the word “analysis” has legal significance fails.

4. Whether the State complied with Chavis’s August 1, 2017 discovery request.

This Court has asked the parties to address Chavis’s supplemental discovery request regarding the DNA evidence and his Motion to Compel Discovery of a[n]

samples and track them through the course of their processing”) (internal quotation and citation omitted).

¹⁴¹ *Melendez-Diaz*, 557 U.S. at 324.

¹⁴² *Lopez*, 286 P.3d at 482.

August 1, 2017 Request (DI 24), which he filed on September 27, 2017.¹⁴³ Chavis’s discovery request asked the State for “all laboratory notes, including all written records generated by any and all employees/agents of [Bode Cellmark] in connection with the preparation and evaluation of all specimens ... in this case” and all “documents and reports relied upon and/or consulted by [Bode Cellmark] in reaching its analysis and conclusions in this case.”¹⁴⁴ Because “[i]t does not appear as though the Superior Court ruled upon the motion to compel,” this Court has asked if the State complied with the discovery request and has directed the parties to cite “all notes, records or documents produced *that were made part of the Superior Court record.*”¹⁴⁵ Chavis responds that “[w]hile the State provided proficiency information for Siddons, it failed to provide general proficiency tests for the laboratory itself or any of the other analysts involved in the DNA testing.” Suppl. Op. Brf. at 22. Chavis identifies the samples’ inventory sheets, their chain of custody logs, and Siddons’ affidavit as having become part of the record. *Id.*

After Chavis filed his motion to compel, the Superior Court held a final case review on October 9, 2017, where the following exchange occurred:

[DEFENSE COUNSEL]: So the case has been—the trial date has been rescheduled from the 16th of October to December 5th. There is outstanding DNA discovery in this matter, I filed a motion to compel

¹⁴³ Order at 2.

¹⁴⁴ *Id.*

¹⁴⁵ *Id.*

THE COURT: Oh, did I just see that upstairs? August 1st you requested it, they haven't responded, and it was—

[DEFENSE COUNSEL]: Multiple burglary case, Your Honor.

THE COURT: Trespass.

[DEFENSE COUNSEL]: And a couple burglaries.

So what happened was. I've been asking for it for a while, it's supplemental discovery for DNA about procedures and things like that. The State has received that from Bode Cellmark, the lab, just last week and [the prosecutor], who I saw today, I thought she was going to be in here, she showed me the discovery. There's a disk, I'm supposed to get that today. I'm then going to have it reviewed by someone in my office to determine what I'm going to do at that point, whether I'm going to be filing a motion to exclude the DNA, but at this point I'm not sure what I'm doing because it hasn't been reviewed yet.

THE COURT: Is the motion that you filed going to be mooted in the next 24 hours?

[DEFENSE COUNSEL]: The motion to compel, I believe, is mooted now because I saw a disk, unless she's lying to me as to what is on that disk.

THE COURT: Seeing the disk and actually having information that you—okay.

[DEFENSE COUNSEL]: Can we pass my motion for two weeks, then, my motion to compel? I will have—

THE COURT: We're calling you, I think [the court] is call you and counsel like now, right now, to set up a teleconference to resolve your motion—

[DEFENSE COUNSEL]: Thank you.

THE COURT:—so you get your stuff.

If you've already got your stuff, call [the court] and tell [the court] that's already taken care of and call it off, but I don't want to call it off until it's done.

[DEFENSE COUNSEL]: I believe I'm going to have my stuff today, then it still needs to be reviewed to determine what I'm going to do next.

THE COURT: Put the case review on for the 20th of November, is that all right?

THE PROTHONOTARY: Yes.

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Chavis withdrew his motion to compel on November 14, 2017. DI 39. The State's documentation on the record about the measures it took to satisfy Chavis's discovery request and to address his motion to compel is admittedly lacking. The State does not dispute Chavis's factual representations about the State's discovery production regarding the DNA evidence or the items that became part of the record. It appears the State provided defense counsel with discovery in response to Chavis's supplemental request between October 9 and November 14, 2017. Chavis's withdrawal of his motion to compel indicates he was satisfied with the State's discovery production. Moreover, the parties fully litigated the State's motion *in limine* to admit the DNA test results at trial, which was filed after Chavis withdrew the motion to compel. *See* DI 39, 44. Chavis did not object to the admission of the DNA evidence in his response to the State's motion *in limine* based upon the State's discovery production. Nor has Chavis shown prejudice.

5. The State did not intend to suggest a test under the Confrontation Clause based on whether a technician produced data.

This Court has asked the parties to address the State's suggestion in its answering brief that "those who 'produce data' are subject to cross-examination while those who merely 'prepare samples' are not."¹⁴⁶ The State did not intend to

¹⁴⁶ *Id.*

create a test for determining who must be available for cross-examination under the Confrontation Clause based on whether the technician had produced data, and the State's use of the phrase "produce data" was inartful. Rather, the State intended to show that the technicians who prepared the samples performed ministerial or mechanical functions which did not implicate the Confrontation Clause.

6. Any violation of the Confrontation Clause was harmless beyond a reasonable doubt.

Chavis claims that any Confrontation Clause violation was not harmless beyond a reasonable doubt because "testimony of all of the testing analysts was crucial to the State's case," testimony from the non-testifying technicians would not have been cumulative, and "[n]o other cross-examination on the proficiency, care and veracity of the absent lab analysts was available." Suppl. Op. Brf. at 26-27. Chavis is incorrect.

In *Delaware v. Van Arsdall*, the Supreme Court held that a Confrontation Clause violation is subject to harmless error analysis: "The correct inquiry is whether, assuming that the damaging potential of the cross-examination were fully realized, a reviewing court might nonetheless say that the error was harmless beyond a reasonable doubt."¹⁴⁷ The analysis depends upon "a host of factors, all readily available to reviewing courts," including:

¹⁴⁷ *Van Arsdall*, 475 U.S. at 684.

[T]he importance of the witness' testimony in the prosecution's case, whether the testimony was cumulative, the presence or absence of evidence corroborating or contradicting the testimony of the witness on material points, the extent of cross-examination otherwise permitted, and, of course, the overall strength of the prosecution's case.¹⁴⁸

This Court has determined that “harmless error analysis is a case-specific, fact-intensive exercise.”¹⁴⁹

Here, the State's case relied on DNA evidence, and the State would have had insufficient evidence to prosecute Chavis for the burglary without it. However, this is only one factor in the analysis. Testimony from the non-testifying technicians was not critical, and arguments related to their lack of testimony concerned the weight, not admissibility of the evidence.¹⁵⁰ The Confrontation Clause does not require every individual who handled the evidence to provide live testimony to establish the chain of custody.¹⁵¹ Siddons was the necessary witness for admitting the DNA evidence, and her opinion that the DNA profiles matched was based on her independent analysis of data obtained from her involvement in the testing. The other

¹⁴⁸ *Id.*

¹⁴⁹ *Dawson v. State*, 608 A.2d 1201, 1204 (Del. 1992).

¹⁵⁰ *Melendez-Diaz*, 557 U.S. at 311 n.1.

¹⁵¹ *Id.*; *Milligan v. State*, 116 A.3d 1232, 1240 (Del. 2015); see *Speers v. State*, 999 N.E.2d 850, 855 (Ind. 2013), *cert. denied*, 572 U.S. 1120 (2014) (court finding no Confrontation Clause violation where the expert witness had analyzed samples for DNA evidence, but the technician who had transferred blood drops with DNA onto cloth had not testified, as “[t]he significance of any gap created by the absence of the [non-testifying technician's] testimony was a matter for the jury to weigh”).

technicians were not critical to show that laboratory procedures had been followed, and their testimony would have been cumulative of Siddons' explanation regarding this. *See* B48-49.

Other evidence also corroborated Siddons' conclusion. Siddons testified that a technician would have reported possible contamination when documenting the amount of a swab that had been cut, or the technician would have mentioned the event in a separate case note. *See* B48. Siddons said that contamination would have resulted in a DNA profile appearing in the laboratory's negative controls, or a sample would have generated multiple DNA profiles. *See* B48-49. Nothing in the record suggests this occurred. Chavis has not shown how he would have bolstered his defense by attacking the DNA evidence's reliability based on this corroborating evidence. The fact that the samples were processed separately further eliminated the potential for errors. *See* B45. Chavis has not demonstrated prejudice because nothing in the record shows that the evidence had been tampered with or processed erroneously. Any error in admitting the test results was not prejudicial because, in the very least, Chavis had a meaningful opportunity to cross-examine Siddons, who was employed by the same laboratory that tested the samples and provided opinions based on personal knowledge.¹⁵² Any error in admitting the hearsay statements

¹⁵² *See Greineder*, 984 N.E.2d at 818-21 (any error in admitting DNA test results on direct examination did not prejudice the defendant because he had "a meaningful opportunity to cross-examine [the expert witness] on the reliability of the data that

Siddons relied on to reach her conclusion that laboratory procedures had been followed did not prejudice Chavis because he opened the door to this testimony when he cross-examined Siddons about potential problems with processing the samples.¹⁵³ Any error was harmless beyond a reasonable doubt.

formed the basis of her expert opinion” based on the laboratory having tested the crime scene evidence, although the witness had not personally performed the testing).

¹⁵³ *See id.*

CONCLUSION

The State respectfully requests that this Court affirm the judgment below for the foregoing reasons.

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Dated: October 28, 2019

IN THE SUPREME COURT OF THE STATE OF DELAWARE

DAKAI CHAVIS,)
)
 Defendant-Below,)
 Appellant,)
)
 v.) No. 520, 2018
)
)
 STATE OF DELAWARE,)
)
 Plaintiff-Below,)
 Appellee.)

**CERTIFICATE OF COMPLIANCE WITH TYPEFACE REQUIREMENT
AND TYPE-VOLUME LIMITATION**

1. This brief complies with the typeface requirement of Rule 13(a)(i) because it has been prepared in Times New Roman 14-point typeface using Microsoft Word 2016.
2. This brief complies with the type-volume limitation of Rule 14(d)(i) because it contains 9,946 words, which were counted by Microsoft Word 2016.

Dated: October 28, 2019

/s/ Brian L. Arban