

Final Report of

Review and Audit of Selected Casework

of the

Firearms Examination Unit

of the

Forensic Science Laboratory Division,
Department of Forensic Sciences,
District of Columbia

March 18, 2021

Final Report of Review and Audit of the DFS Firearms Examination Unit

I. Introduction

On March 12, 2021, the Washington, D.C. Office of the Attorney General (OAG) requested that the audit team prepare a final report of its findings based on a review of additional relevant source materials received after the issuance of the audit team's May 21, 2020 interim report and June 4, 2020 first addendum report. These additional source materials include, but are not limited to: 1) documents received by the United States Attorney's Office (USAO) pursuant to a subpoena and subsequent court order in the case of United States vs. Rondell McLeod, Case No. 2017 CF1 9869, that requested production of all documents from the Department of Forensic Sciences (DFS) related to CCNs 15-180-695 and 15-128-515 [Exhibits 20 and 23] and 2) interview summaries and other materials gathered by the Washington, D.C. Office of the Inspector General (OIG). A list of relevant source materials is contained in Appendix A at the end of this report.

II. Executive Summary

The DFS was created through the "Department of Forensic Sciences Act of 2011" by the Council of the District of Columbia. The DFS provides various services to a number of agencies/clients, including the Metropolitan Police Department, the Office of the Chief Medical Examiner, the OAG, the Department of Health, the Fire and Emergency Medical Services Department, the USAO, and other law enforcement or investigative agencies. Its mission is to provide "high-quality, timely, accurate, and reliable forensic science services...[using] best practices and best available technology; a focus on unbiased science and transparency; and the goal of enhancing public safety."¹

Though the DFS is composed of several units, this report (and previous reports) by the audit team specifically addresses the Firearms Examination Unit (FEU). However, many of the findings of the audit team expand beyond the FEU and into the entire management of the DFS.

Conflicting results were reported by the FEU and an independent examiner hired by the USAO in the case of United States vs. Rondell McLeod in which fired cartridge cases were compared between two homicide cases. The FEU reported that the same firearm fired the cartridge cases from the two homicide cases, while the USAO's independent examiner reported that two different firearms were involved. Because of concerns with the DFS's response to the conflicting results, the USAO, with support from the OAG and the OIG, initiated an audit to determine the validity of the results, determine the cause of the conflicting results, determine whether the DFS acted in accordance with professional practices of a forensic science laboratory in addressing the conflicting results, and determine if the DFS was reaching reliable conclusions in the work it performed.

Initially, only limited information was available to the audit team. However, that information was sufficient for the audit team to reach initial findings that raised concerns about the

¹ <https://dfs.dc.gov/page/about-dfs>, accessed 03/13/2021

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function of the FEU and the reliability of its results, as well as questionable practices by the management to address the conflicting results. Specifically, it was determined that the DFS's reported results were erroneous, that the DFS examiner's comparison photographs depicted different physical specimens than depicted in other examiners' comparison photographs, and the USAO's independent examiner reached correct results. Throughout the course of the audit, additional information in the form of laboratory records, emails, and interview summaries became available. The technical issues addressed by this audit are captured in the body of this report and the previous reports issued by the audit team.² The following is a summary of the most prominent findings:

- Two FEU examiners, one of whom is the FEU Supervisor, were tasked with evaluating the conflicting results between the DFS and the USAO's independent examiner. These two FEU examiners initially agreed with the conclusion of the USAO's examiner, who reached the correct conclusion that the cartridge cases from the two homicide cases were fired by different firearms (i.e. an "Elimination" conclusion). However, based on all documentation available to the audit team, this conclusion does not appear to have been disclosed outside of the DFS. According to an OIG interview summary, the FEU Supervisor stated that after the results were reported internally to DFS management, a meeting that included the FEU Supervisor and several DFS managers was held. The parties to the meeting collectively agreed that the DFS should report a finding of "inconclusive", meaning that no conclusion could be reached, despite the fact that the FEU Supervisor and the other FEU examiner had reached the conclusion that the two groups of cartridge cases had been fired by different firearms. Conclusions must always be reached with impartiality, based on the examination and interpretation of evidence. Laboratory management has an affirmative duty to ensure impartiality by shielding examiners from outside influence or other pressures. In this instance, laboratory management not only failed to safeguard the examiners, but actually served as the source of the influence. By these actions, the management of the DFS and the FEU Supervisor misled their accrediting organization, oversight boards, clients, and other stakeholders about their processes and conclusions.
- DFS management notified the ANSI National Accreditation Board (ANAB), which accredits the laboratory, and the Science Advisory Board (SAB) of an "inconclusive" result prior to initiating a properly documented examination of the evidence and issuing a report of analysis. DFS management dismissed the FEU Supervisor's recommendation to send the evidence to an unbiased, independent examiner. Instead, DFS management assigned the FEU Supervisor as the primary analyst to complete the examination documentation and author the report. It was this very FEU Supervisor who had helped draft the ANAB and SAB notifications, who was aware of the conflicting results by all DFS examiners involved in the case, and who up to that point had not conducted any casework since 2015 when he began employment at the DFS. These actions demonstrate poor judgment by DFS management that put their employees in an untenable situation.

² See Interim Report dated May 21, 2020 and Addendum to Interim Report dated June 4, 2020.

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- After the aforementioned examiners evaluated the evidence and determined that the DFS had previously erred, the verifying examiner of the original analysis was asked to conduct a re-examination. After standing by his original conclusion, he was called into the office of the FEU Manager³ and pressured to change his conclusion, to which the verifier relented. From the FEU Manager's office, the verifier sent an email from his personal cellular telephone to the FEU Manager notifying him of the change of conclusion. The FEU Manager accepted this change of conclusion, knowing that it was not based on any examination or reevaluation of evidence. This change of conclusion was then reported to the USAO, the ANAB, the SAB, and other stakeholders. This event is another example of improper practices by the DFS that are foundationally unacceptable and violate the DFS's tenets of integrity, accountability, and trust.⁴
- Though not reported, at least two additional current FEU examiners have examined the evidence in question, and at least one of them reached multiple erroneous conclusions. The other current examiner appears to have been leaning toward an erroneous conclusion but did not complete a full examination. It appears that DFS management has failed to report and completely ignored these analytical errors and their serious implications.
- The DFS has failed to adequately address the error in the in their previous report of analysis, dated August 8, 2017. The DFS has maintained the position that the error was administrative in nature (only), as the examiner incorporated an incorrect photograph into her case record. While it is not disputed that an administrative error did occur, there is compelling evidence that the examiner also made an analytical error and reached an erroneous conclusion. However, the DFS has only taken steps to address the administrative error. These steps are inadequate to address the analytical error and to determine if other erroneous conclusions were reported by the involved examiner.
- The DFS's representations to its accrediting body, the ANAB, and to the SAB about the handling of this matter were incomplete and misleading. Complete transparency with these two organizations is requisite (and is included in the DFS's own mission statement) for an oversight process(es) to have any credibility.

Based on the above findings, the audit team does not have confidence in the analytical results of the FEU. The audit team recommends that the FEU immediately cease performing casework and that clients and stakeholders not rely on results from the FEU. A comprehensive evaluation of the technical competence of all current examiners is required, followed by retraining and testing to establish that they are competent to perform casework and reach appropriate conclusions. Casework already completed by the FEU should be reexamined by qualified examiners in an effort to determine if additional errors have been made. It does not appear that the DFS possesses the qualifications to perform the necessary evaluations, retraining,

³ At the DFS lab the "Manager" and "Supervisor" are two separate positions, with the "Supervisor" reporting to the "Manager".

⁴ These tenets are found in the header of the DFS's Closeout Report of Complaint/Inquiry Review [Exhibit 41].

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testing, and casework review that is required, and the audit team recommends that appropriate qualified persons from outside of the DFS be brought in to perform these activities.

The above findings also illustrate very serious, and perhaps more troubling, problems associated with DFS management. DFS management not only failed to properly address the conflicting results reported to the DFS by the USAO, but also engaged in actions to alter the results reached by the examiners assigned to conduct a reexamination of the evidence. DFS management then misrepresented the various activities undertaken and analytical conclusions reached to their clients and stakeholders, including the USAO, the OAG, their accrediting organization (ANAB), and the SAB. In the opinion of the audit team, such actions by management indicate a lack of adherence to core principles of integrity, ethics, and professional responsibilities. Management has cast doubt on the reliability of the work product of the entire DFS laboratory.

III. Detailed Analysis and Conclusions

Summary of Conclusions from the Audit Team's May 21, 2020 and June 4, 2020 Reports

Source materials, that were listed in the previous reports, are referenced in this report and will use exhibit numbering from the original reports. Any new exhibit numbering and attachment lettering for this final report will continue from where the prior audit team reports ended.

The following is a summary of findings and conclusions reached in the aforementioned reports:

- Daniel Barrett and Luciano Morales (co-signed 1/27/2016 report) as well as Alicia Vallario (and her verifier, Michael Mulderig) concluded that two fired 10mm Auto caliber cartridge cases, Item #16 submitted under CCN 15-128-515 and Item #45 submitted under CCN 15-180-695, were fired in the same firearm. [Exhibits 02 and 03, respectively] Travis Spinder, an independent examiner hired by the USAO, (and his verifier) concluded that Items #16 and #45 were not fired in the same firearm. [Exhibit 04] FEU Supervisor Jonathan Fried (and his verifier Ashley Rachael) reported a finding of "inconclusive" in his May 27, 2020 report, indicating that they were unable to determine whether or not Items #16 and #45 were fired in the same firearm. [Exhibit 16]
- The photograph labeled as depicting a comparison of Items #16 and #45 contained in Alicia Vallario's examination documentation under CCN 15-128-515 and CCN 15-180-695, dated 08/08/2017, does not depict the same specimens examined and reported on by Daniel Barrett and Luciano Morales, Travis Spinder, and Jonathan Fried. [Attachment B-Figures 1 through 7]
- The findings of "inconclusive" by Jonathan Fried are not supported by his narrative notes and comparison photographs. Rather, his notes and photographs, as well as those of his verifier, Ashley Rachael, support the conclusion that Items #16 and #45 were not fired in the same firearm. [Attachment C-Figures 1 through 6] This conclusion

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is commonly referred to as an “elimination” or “exclusion”, which is the conclusion reached by Travis Spinder. [Exhibit 04]

- In response to a letter from Assistant United States Attorney Michael Ambrosino dated January 17, 2020 in which Ambrosino notified the DFS of the discrepancy between the conclusions of Alicia Vallario and Travis Spinder [Exhibit 12], Assistant General Counsel Todd Smith issued a reply letter dated January 23, 2020 indicating that Alicia Vallario and Travis Spinder had not examined the same specimens and, therefore, Ambrosino’s statements were “erroneous” [Exhibit 14]. DFS Director Jenifer Smith reiterated this position in a memorandum to Deputy Mayor Kevin Donahue dated February 14, 2020. [Exhibit 13]
- DFS Director Jenifer Smith issued a letter to United States Attorney Timothy Shea dated May 22, 2020, indicating that a review of Alicia Vallario’s work revealed an “administrative error” in that Vallario incorporated the wrong photograph into her examination documentation. This letter also indicated that Vallario’s verifier (Michael Mulderig) reexamined the evidence and changed his conclusion from “identification” to “inconclusive.” [Exhibit 15]

Analysis of Additional Source Materials Pertaining to the Examination of Items #16 and #45

John Murdock, another independent examiner retained by the USAO, issued a report dated June 15, 2020, containing his conclusion that Items #16 and #45 were not fired in the same firearm. Murdock’s conclusions were verified by a second qualified examiner⁵. [Exhibit 24] Murdock’s (and the verifier’s) conclusion is in agreement with that of Travis Spinder (and his verifier) [Exhibit 04], who was previously retained by the USAO to examine these same items. Thus, all independent examiners (a total of four) reached the same conclusion that Items #16 and #45 were not fired in the same firearm. At the time of their examinations, neither Spinder nor Murdock were aware of any prior conclusions reached by any other examiners.^{6 7}

In its June 4, 2020 report, the audit team expressed concern over the “inconclusive” results regarding the comparison of Items #16 and #45 reported by FEU Supervisor Jonathan Fried in his May 27, 2020 report. The narrative notes and photographs from Jonathan Fried and his verifier, FEU firearms examiner Ashley Rachael, support the definitive conclusion of “elimination”, meaning that the items were not fired in the same firearm. A significant point to note is that Fried’s report clearly states an **analysis start date of May 12, 2020**. [Exhibit 16]

⁵ This verifier is Todd Weller, a member of the audit team and one of the authors of the audit reports. His examination of the actual evidence was disclosed in the body of Exhibit 8 of the Audit Team’s May 21, 2020 report. His verification is also disclosed in the body of John Murdock’s June 15, 2020 report [Exhibit 24].

⁶ Audit team interview with Travis Spinder on May 19, 2020.

⁷ John Murdock’s examination documentation under Laboratory Number PCF 20-2-2, page 1 of 38, dated 05/11/2020, under the Remarks section: “I was asked to do the comparisons blind-without any info about previous exams.”

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Amongst the source materials received since the audit team's June 4, 2020 report is an email from Ashley Rachael to Wayne Arendse, and others, dated April 30, 2020. [Exhibit 25] Attached to that email is a slide presentation entitled "Confidential Case Review", dated April 30, 2020, which contains the names Ashley Rachael and Jonathan Fried on the cover slide (slide 1 of 21). In summary, the presentation contains a timeline of the various examinations of Items #16 and #45. It indicates that Fried and Rachael reviewed the documentation from prior examinations and then conducted their own examination of the evidence items.⁸ The 16th slide contains the following bullet points:

- "All the cartridge cases in both homicide cases were examined in an attempt to locate the cartridge cases pictured in Vallario's file"
- "After a thorough review, it was determined that the photograph in Vallario's case file was not a picture of any of the items in either of the two homicide cases"
- "Conclusions reached by independent reports were also confirmed"

The 19th slide contains the following bullet points:

- "Based on a microscopic examination conducted by both Jonathan Fried and Ashley Rachael of Items #1 (16) and #22.24 (45), it was determined to be an **elimination** and not an identification as indicated by Morales and Vallario" (Note: the word elimination was **bold-faced** and underlined on the slide; emphasis was not added by the undersigned audit team)
- "This elimination transitively agrees with the conclusion reached by the private examiner"

The 21st slide is entitled "Next Steps" and contains the following bullet points:

- "Assign re-work of NIBIN Verification to another qualified examiner not involved thus far"
- "Report to stakeholders for transparency"
- "Locate photograph of Item #1 (16) and #22.24 (45) taken by Vallario if it exists"
- "Determine root cause of the incorrect photograph being printed, initialed by both examiner and verifier and then making it into case file"

The audit team also received an email sent by Forensic Science Laboratory Director Wayne Arendse to ANSI National Accreditation Board (ANAB) Compliance Investigator Anna Yoder dated May 6, 2020. [Exhibit 29] Attached to the email was a letter from Arendse to Yoder and a slide presentation. The letter contains the following statement (emphasis added):

"At the **conclusion of their review of the relevant physical evidence**, the FEU Supervisor and senior Firearms Examiner **concluded that the original identification should have**

⁸ This is further supported by an email chain between Ashley Rachael and Jonathan Fried on April 29, 2020. Email from Fried to Rachael states in part: "I was thinking that at some point we (or I) will be asked why we did not catch this in January, so I was kicking around a couple of bullet points that we may want to look at". Rachael replied: "Absolutely. I was planning on putting a slide in there about that. I mean, it's simple: document review vs. evidence review. This error would not have been caught without examining the evidence. And on paper it appears that 4 people looked at the items and agreed via the documentation. And then you have Travis saying he didn't look at the same items as Alicia. Also true. It's gonna be fine. And **now evidence review turned up different results. No problem!**" (emphasis added) [Exhibit 42]

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been determined inconclusive. Based on this determination, the FEU manager discussed the matter with the original verifying examiner to review the physical evidence. Upon review, the original verifying examiner concluded that the association between the two cartridge casings at issue should be determined inconclusive.”

This statement conflicts with statements and findings in the slide presentation emailed by Ashley Rachael to Wayne Arendse just six days prior, which indicates that Jonathan Fried and Rachael reached a conclusion of elimination and agreed with Travis Spinder’s conclusions. No documents have been provided indicating an analysis by Fried and/or Rachael to support this change in interpretation, which occurred after the April 30, 2020 slide presentation and before the May 6, 2020 email to ANAB.

During a presentation to the DFS SAB on July 31, 2020, FEU Manager Jonathan Pope provided an explanation of the DFS’s inquiry into the conclusions reached by Alicia Vallario regarding Items #16 and #45. One of his accompanying slides, the 108th slide in the series, contained the following statement: “The change in findings from verifier prompted re-examination by the FEU Supervisor yielded a [sic] inconclusive finding.” [Exhibit 30] This position taken is in conflict with the April 30, 2020 slide presentation in which Jonathan Fried and Ashley Rachael reached a conclusion of elimination. [Exhibit 25] Furthermore, the sequence of events presented by Pope contradicts the sequence of events contained in 1) Wayne Arendse’s May 6, 2021 letter to the ANAB [Exhibit 29], which states that the FEU Supervisor’s (Jonathan Fried) review of the evidence prompted the review by the original verifying examiner (Michael Mulderig) and 2) the April 30 slide presentation [Exhibit 25], which is dated one day prior to Michael Mulderig’s reexamination of the evidence.

During a presentation to the DFS SAB on October 16, 2020, FEU Supervisor Jonathan Fried provided an explanation of the DFS’s inquiry into the conclusions reached by Alicia Vallario regarding Items #16 and #45. His accompanying slides, the 129th through 136th slides in the series, indicate that he evaluated all 10mm Auto caliber cartridge cases from both shooting events, 16 from one event and 12 from the other, which include Items #16 and #45, respectively. He reached a finding of “inconclusive”. [Exhibit 31] No mention was made during this meeting of his and Ashley Rachael’s original conclusion of “elimination”, nor the reasons the conclusion was changed.

Three emails were sent from Michael Mulderig to Jonathan Pope on 05/01/2020.

- The first email, sent at 1:17PM from Michael Mulderig’s DFS email account, indicates that 12 of the 10mm Auto caliber cartridge cases under CCN 15-180-695, including Item #45, were fired in the same firearm. Two comparison photographs were attached. [Exhibit 26]
- The second email, sent at 1:20PM from Michael Mulderig’s DFS email account, indicates that Items #16 and #45 were fired in the same firearm. Three comparison photographs were attached. [Exhibit 27]
- The third email, sent at 3:00PM from michaelmulderig@gmail.com, indicates that “After further review of comparison between homicide DFS 15-00253 and NIBIN DFS 15-

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000673 I am reversing my opinion to be inconclusive due to a sufficient agreement [sic] of individual characteristics.” No photographs or notes were attached to this email. At the end of the email is the text “Sent from my iPhone”.⁹ [Exhibit 28]

Michael Mulderig was interviewed by the USAO on December 7, 2020. [Exhibit 32] The following is a synopsis based on the summary prepared by the USAO: Mulderig stated that he was called into FEU Manager Jonathan Pope’s office after he sent his email reaffirming his conclusion that Items #16 and #45 were fired in the same firearm. [Exhibit 26] During the meeting, Pope told him that other examiners were “inconclusive”, and repeatedly asked Mulderig if his conclusion was actually “inconclusive”. Though Pope never told Mulderig to change his conclusion, Mulderig believed that Pope was pushing him to reverse his decision. As a result, Mulderig sent his 3:00PM email [Exhibit 28] from his personal email account on his iPhone while he was still in Pope’s office, without any further examination of the evidence. Mulderig still believed that his original conclusion of identification was correct, but he felt pressured by Pope to change his conclusion. He believed it was a mistake to change his conclusion the way he did.

Images of the packaging for Items #16 and #45 were contained within John Murdock’s examination documentation. [Exhibit 24 and Attachment D] The notes pages containing the images were dated May 28, 2020 and June 8, 2020, respectively.

Images of the Item #16 envelope reveal the following sets of initials and dates:

- EAB (Bustamante) 05/01/2020¹⁰
- EAB (Bustamante) 05/04/2020
- JAF (Fried) 05/01/2020
- JAF (Fried) 05/12/2020
- JAF (Fried) 05/(?)/2020
- AV (Vallario) 08/08/2017¹¹

Other initials and dates are present. Some are from previous examinations by Travis Spinder, John Murdock, etc., and some are illegible to the audit team.

Images of the Item #45 envelope reveal the following sets of initials and dates:

- EAB (Bustamante) 05/04/2020
- EAB (Bustamante) 5/(?)/2020
- M with circle around it (Mulderig) 05/01/2020¹²
- JAF (Fried) 05/(?)/2020
- JAF (Fried) 05/12/2020
- JAF (Fried) 05/27/2020

⁹ Chain of custody records [Exhibits 21 and 22] indicate that Michael Mulderig relinquished custody of Items #16 and #45 for the final time on May 1, 2020 at 2:07PM.

¹⁰ Michael Mulderig identified the initials “EAB” as belonging to Elizabeth Bustamante during an interview with the audit team on August 13, 2020.

¹¹ Alicia Vallario identified these initials as hers during an interview with the audit team on July 8, 2020.

¹² Michael Mulderig identified these initials as his during an interview with the audit team on August 13, 2020.

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- AV (Vallario) 08/08/2017

Other initials and dates are present. Some are from previous examinations by Travis Spinder, John Murdock, etc., and some are illegible to the audit team.

A review of chain of custody records for Items #16 and #45 [Exhibits 21 and 22] reveals that both items were in the possession of the following individuals on the following dates:

04/28/2020 - Ashley Rachael

05/01/2020 - Jonathan Fried, Michael Mulderig, Elizabeth Bustamante

05/04/2020 - Jonathan Fried, Elizabeth Bustamante

05/12/2020 through 05/27/2020 (various dates) - Jonathan Fried¹³

FEU examiner Elizabeth Bustamante was interviewed by the OIG on January 27, 2021 and again on January 28, 2021. [Exhibits 33 and 43] The following is a synopsis based on the summary prepared by the OIG: Bustamante stated, in part, that she was asked by FEU Manager Jonathan Pope to review Items #16 and #45 and report her findings to him. Pope told her there would be no report and no verification, and the assignment was not recorded in the laboratory information management system (LIMS). As a result, worksheets were not completed to document her examination. However, the chain of custody was recorded in LIMS and Bustamante initialled the evidence packaging. On May 1, 2020, Bustamante examined Items #16 and #45 and reached a conclusion of identification. She sent an email to Pope notifying him of her conclusion and attached three photographs to that email. [Exhibit 34] On May 4, 2020, Bustamante examined all of the 10mm Auto caliber cartridge cases, 12 from one CCN and 16 from the other CCN. She concluded that the 12 cartridge cases from one CCN were all fired in a single firearm. She also concluded that the 16 cartridge cases from the other CCN were all fired in a single firearm. She then intercompared five pairs of cartridge cases, with each pair including one cartridge case from each CCN. For each of these five pairs she reached a conclusion of identification, meaning that, in her opinion, all of the cartridge cases (28 in total) were fired in one firearm. She took hand-written notes of her examination and then emailed those notes to herself. [Exhibit 35] Regarding the hand-written notes and the reason she emailed them to herself, Bustamante stated: "I imagine I scanned them to myself because I typically write these on scratch paper that could easily be lost or misplaced. When I'm working on a case I'm assigned, any information I write on scratch paper gets transcribed into an electronic format (either LIMS or Mideo systems), but since I wasn't recording this examination in any official capacity, I scanned the page to have a record of what I did." Bustamante later learned that FEU examiner Cody Elder had also examined Items #16 and #45, and she stated that Elder told her he reached a conclusion of identification. Regarding the DFS's decision to report an inconclusive, Bustamante surmised because it was a "safer answer". Bustamante explained that inconclusive can be the right answer, but in this case, it happened to be the safest answer, "because you can't be wrong".

FEU examiner Cody Elder was interviewed by the OIG on February 12, 2021. [Exhibit 36] The following is a synopsis based on the summary prepared by the OIG: Elder stated that FEU

¹³ For large periods of time during this date range the records indicate that Item #16 was in a storage location.

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Supervisor Jonathan Fried casually asked him to look at the cartridge cases in question (Items #16 and #45) but did not ask him to document his examination or reach a conclusion. At the time of the examination, Elder was not provided with the case number nor any other information about the evidence, and he was not placed on the chain of custody record. At the conclusion of his examination, Elder returned the evidence to Fried and told him that they looked “pretty good” and that he observed some agreement in aperture shear marks. Elder realized at a later time that the evidence he was asked to examine was related to evidence that Fried was re-examining. Elder knew it had to be related to the USAO complaint because that was the only case that Fried was working. He considered the way the DFS was handling this matter to be unusual, as Fried does not conduct casework and this is the first case that Elder had known Fried to complete. Also, it is common for examiners to consult with one another and discuss their opinions, but Fried asked Elder to examine the evidence and no further discussion ever took place. Elder was not certain of the date he examined the evidence, but it was before Fried issued his report (on May 27, 2020).

FEU examiner Ashley Rachael was interviewed by the OIG on December 1, 2020 and again on March 9, 2021. [Exhibits 39 and 40] The following is a synopsis based on the summary prepared by the OIG: Rachael stated that in January 2020 she learned of a discrepancy between the conclusions of DFS contract examiner Alicia Vallario and the USAO’s independent examiner. She indicated that due to continued pressure from the USAO, the DFS decided to rework the case. Rachael was assigned as the examiner and Jonathan Fried as the verifier. Upon reviewing all of the cartridge cases, Rachael determined that Vallario had included the wrong photograph in the case file. Rachael and Fried completed a microscopic review of four cartridge cases and, based upon that review, she and Fried determined that the USAO examiner, Travis Spinder, had reached the correct conclusion of elimination. Because they had performed only a (microscopic) “review” and not a “re-examination”, no reports were created, and no updates were made in LIMS. Rachael and Fried worked together to create a PowerPoint to present their findings to Wayne Arendse and Jonathan Pope. General Counsel Todd Smith, Crime Scene Sciences Director Chris LoJacono, and Senior Deputy Director Abdel Maliky also viewed the PowerPoint presentation. In the PowerPoint presentation, Rachael and Fried recommended a re-examination by an independent firearms examiner, but instead the DFS assigned Fried to conduct the re-examination. Rachael was aware that Elizabeth Bustamante and Michael Mulderig also reviewed the evidence, but Bustamante and Mulderig were trying to “figure out what was wrong and who was wrong” as opposed to conducting an (official) examination. Rachael recalled that an email was forwarded to her indicating Mulderig’s change of conclusion. Rachael opined that if Mulderig had not changed his conclusion, the DFS may not have elected to conduct a reexamination. Rachael could not explain why the DFS had sent emails to the ANAB and the SAB on May 6, 2020, notifying those organizations that a re-examination had been conducted. Rachael admitted that sending the emails to the ANAB and the SAB with a conclusion prior to the start of the re-examination was troublesome. Rachael stated that when she conducted her verification for Fried in late May 2020, she examined all cartridge cases from both homicide cases and noted similarities and differences, which caused her to reach a finding of inconclusive.

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FEU Supervisor Jonathan Fried was interviewed by the OIG on December 1, 2020 and again on March 9, 2021. [Exhibits 37 and 38] The following is a synopsis based on the summary prepared by the OIG: Fried stated that he was first made aware of the discrepancy between the conclusions of DFS contract examiner Alicia Vallario and the USAO's independent examiner in January 2020. He reviewed Vallario's original case file and determined that her documentation, including her photograph, supported her conclusion of identification. In April 2020, Fried and Ashley Rachael were instructed to conduct a review of the evidence, which included a microscopic examination. Their examination revealed that Vallario had incorporated the wrong photograph into her case file. Additionally, Fried and Rachael reached a conclusion of elimination (meaning that Items #16 and #45 were not fired in the same firearm). This conclusion of elimination agreed with the conclusion of the USAO's independent examiner. Fried and Rachael presented their findings in a PowerPoint presentation to Wayne Arendse, with Jonathan Pope listening by phone, on April 30, 2020. After that presentation, Fried and Rachael met with Senior Deputy Director Abdel Maliky and General Counsel Todd Smith to present their findings. Fried stated that Pope and Arendse had concerns over the conclusion of elimination and that it showed the DFS had made a mistake. Fried said there was "lots of chaos" as a result. The evidence was subsequently presented to Michael Mulderig and Elizabeth Bustamante, who both examined it and reached a conclusion of identification. Fried was aware that Mulderig then changed his finding to inconclusive, but acknowledged that there was insufficient time for Mulderig to have conducted a full examination in the time that Mulderig had the evidence. Fried stated he may have asked Cody Elder to examine the evidence "in passing". Fried stated it was possible Steven Chase may have also examined the evidence. Fried described this as "answer shopping, looking for consensus", a practice not uncommon at the DFS, and described it as having other examiners look to "see if they see what you see." Through a discussion with Pope and Arendse it was decided to report a finding of inconclusive because of all the different conclusions reached by the various examiners. Fried was aware of a letter sent to the SAB (and the similarly worded letter sent to ANAB on May 6, 2020). By that point in time no examiner, other than Michael Mulderig, who did not have sufficient time to conduct a full examination, had actually reached a finding of inconclusive. Because of his knowledge of the various conclusions that had been reached, Fried felt that he was inherently biased and recommended that the evidence be sent to an outside examiner for review. He stated he "pushed back as long as I could" on the decision for him to do the reexamination. His request was denied, and he was told by Pope that the orders for him to do the reexamination came from DFS Director Jenifer Smith (but he never received those orders directly from Director Smith). On May 12, 2020 he began his official examination of the evidence. He stated that this was the first time he had conducted a firearm examination at the DFS, and if he could do it over again, he would have resigned rather than conduct the reexamination. Though never directly told to reach a finding of inconclusive, Fried believes that he was manipulated by management into conducting an examination when he had a bias. The disparate findings of the other examiners caused him to question his initial conclusion of elimination. When asked why the DFS never disclosed the conflicting conclusions to ANAB and the SAB, Fried stated that "they [DFS] played with the semantics." If there was no active examination request, there was no need to write a report or disclose findings. Fried stated DFS management was happy with the inconclusive finding and based this on an issue brought to

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him by Lyndon Watkins (the DFS Supervisor of Quality Assurance). Watkins brought to Fried's attention four 2016 FEU cases with contradictory conclusions, and the DFS issued new reports with inconclusive results. Fried stated the quality control documents provided no explanation or follow-up to support this change to inconclusive.¹⁴

The following is a summary of information obtained from and supported by the additional source materials pertaining to the examination of Items #16 and #45:

- In late April 2020, Ashley Rachael and Jonathan Fried examined Items #16 and #45 (as well as two other cartridge cases, one from each homicide case) and reached a conclusion of elimination.
- On April 30, 2020, Ashley Rachael emailed a slide presentation to Wayne Arendse (and others) indicating that she and Jonathan Fried compared Items #16 and #45 and reached a conclusion of elimination (with the word elimination **bold-faced** and underlined). This conclusion was followed by the statement "This elimination transitively agrees with the conclusion reached by the private examiner". The same presentation stated "conclusions reached by independent reports were also confirmed."
- In the same slide presentation, Jonathan Fried and Ashley Rachael recommended "Next Steps", including the reporting of these findings to stakeholders, the reexamination of the evidence by an examiner who has had no prior involvement (and presumably no prior knowledge), and a variety of quality assurance measures.¹⁵
- At the request of FEU Manager Jonathan Pope, Elizabeth Bustamante examined Items #16 and #45 on May 1, 2020, then examined these items along with all the remaining 10mm Auto caliber cartridge cases on May 4, 2020. Her results, along with photographs, were emailed to Pope. However, it does not appear that these results were ever disclosed by the DFS. Bustamante also produced hand-written notes that she emailed to herself. These notes, along with her May 1, 2020 email, reveal that she reached an incorrect conclusion of identification on six separate comparisons.
- Based on his emails, and supported by chain of custody records, Michael Mulderig conducted an examination of Items #16 and #45, as well as other items, on May 1, 2020. At 1:20PM he sent an email to Jonathan Pope indicating that he was standing by his original conclusion of identification. Other than the photographs he included with the email, there is no documentation of his examination. Less than one hour later, at 2:07PM, Mulderig relinquished custody of the evidence for the final time. At 3:00PM, Mulderig sent an email from a personal (non-DFS) email account to Pope indicating that after further review he was changing his conclusion from identification to inconclusive.

¹⁴ The audit team has made a good faith effort to accurately summarize the interview summaries of the OIG. Jonathan Fried's March 9, 2021 interview summary is 10 pages in length and contains many contradicting statements by Fried.

¹⁵ The audit team believes that these are sound recommendations and agrees with them.

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According to Mulderig, this change of conclusion occurred in Pope's office and was not based on any further examination or reconsideration of the evidence, but rather on pressure Mulderig felt from Pope. Despite the circumstances surrounding Mulderig's change of conclusion, the DFS reported this change to the ANAB on May 6, 2020, to United States Attorney Timothy Shea on May 22, 2020, and to the SAB on July 31, 2020.

- On May 6, 2020, Wayne Arendse notified the ANAB that Items #16 and #45 were reexamined by "the FEU Supervisor" and a "senior Firearms Examiner" and the finding was inconclusive regarding whether or not these items were fired from the same firearm. Neither FEU Supervisor Jonathan Fried nor Firearms Examiner Ashley Rachael reexamined these items between the date they reached their initial conclusion of elimination and May 6, 2020. According to Fried, the decision to report a finding of inconclusive was made in a meeting with Jonathan Pope and Wayne Arendse and was due to the conflicting results from the various examiners who had examined the evidence, rather than an examiner having reached a finding of inconclusive through examination and interpretation of the evidence.
- At some point in time prior to May 27, 2020, Cody Elder believes he examined Items #16 and #45. His examination was not documented, and he is not reflected in the chain of custody records. Elder did not reach a formal conclusion, but observed agreement in aperture shear marks and stated to Jonathan Fried that the cartridge cases he examined looked "pretty good", suggesting that he was leaning toward, even if preliminarily, a conclusion of identification.
- On May 27, 2020, Jonathan Fried issued a report of his examination of Items #16 and #45, with Ashley Rachael as his verifier. His report indicates that he reached a finding of "inconclusive" regarding these items. Moreover, his report states that his examination began on May 12, 2020. This date of the initiation of analysis is 1) twelve days after the April 30, 2020 slide presentation indicating a conclusion of elimination was sent from Rachael to Wayne Arendse; 2) eleven days after chain of custody records first indicate the items were in Fried's possession; 3) eleven days after Fried's initials and date first appear on the evidence packaging; and 4) six days after the DFS represented to the ANAB that the finding was inconclusive.

Analysis of Additional Source Materials Pertaining to the Quality Assurance Inquiry into Alicia Vallario's Reported Identification of Items #16 and #45

In his May 6, 2020 letter to the ANAB, Wayne Arendse indicated that the DFS's review of Alicia Vallario's August 8, 2017 report revealed an "administrative error" in that she incorporated the wrong photograph. [Exhibit 29] This position was reiterated by DFS Director Jenifer Smith in her May 22, 2020 letter to United States Attorney Timothy Shea [Exhibit 15].

During the July 31, 2020 SAB meeting, Jonathan Pope explained that the DFS was able to identify the source of the incorrect photograph that Alicia Vallario had incorporated into her

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report. It was taken by Vallario on June 29, 2017 as part of an unrelated case. [Exhibit 30, 109th slide in the series] Through the assistance of the Cyber Operations Section at the DFS, the photograph that Vallario actually took of her comparison of Items #16 and #45 was located. That photograph had a filename that corresponds with Items #16 and #45. [Exhibit 30, slide 110] The audit team has reviewed that photograph and has confirmed that Items #16 and #45 are, in fact, depicted. Furthermore, the items are arranged in the photograph in a manner that suggests to the audit team that Vallario was attempting to illustrate a correspondence of toolmarks in support of her conclusion of identification.

During the October 16, 2020 SAB Meeting, Jenifer Smith suggested that Alicia Vallario may have made her interpretation from the photograph, rather than the actual evidence items.¹⁶ However, chain of custody records indicate that Vallario had custody of Items #16 and #45 on the date of her examination. [Exhibits 21 and 22] The packaging contains seals with Vallario's initials and the date of her examination. [Attachment D] The photograph recovered by the Cyber Operations Section contains Items #16 and #45 in a relative orientation suggestive of an attempt to illustrate correspondence of toolmarks in support of her conclusion of identification. [Exhibit 30, slide 110] Furthermore, pages 3 and 4 of Vallario's examination documentation contain narrative notes indicating that she reached a conclusion of identification: "Item #22.24 [#45] submitted under DFS15-00253 and Item #1 [#16] submitted under DFS15-00673 are two (2) caliber 10mm Auto cartridge cases, Federal and PMC brands, which were microscopically examined and identified as having been fired in the same firearm based on firing pin aperture shear marks." [Exhibit 03] Of importance, it is standard practice in the field of firearm and toolmark identification to reach conclusions from the microscopic comparison of evidence items, not from photographs, and to prepare contemporaneous documentation. The standard to which the DFS is accredited by the ANAB requires contemporaneous documentation.¹⁷ The audit team interviewed Vallario on November 5, 2020. She was emphatic that she has only reached conclusions from the microscopic examination of evidence and has never reached a conclusion from the examination of photographs.

¹⁶ From the audio recording of the SAB meeting, part 2: 43:47 - OAG attorney Elizabeth Wieser: "But I thought she [Vallario] actually analyzed the physical evidence?"

43:55 - Jenifer Smith: "She did, we know she did, we know she took a picture of it. But she could have then looked at the wrong photograph after she put her notes together and made the actual interpretation off the wrong photograph. And that is, in fact, we don't know. We don't know. We have asked her and she doesn't remember, and um but that is, I think, what we struggle with, right, because we have a process in place and, and, in this instance it's possible she did not follow the process of looking ... making her conclusion under the microscope but in fact relying on a picture that she took and inserted it at, into the wrong time. And, you know, it's supported by the fact that when they pulled up the file and looked at the documentation and the paperwork that that's what they looked up at first, right, and so this is why we have really dug into changing our process, you know you will make sure that, you know, you look at these things, you verify these things, you take the right photos, you document the photos correctly, and then we're going to go into a little bit later, um, the review that John is doing of all of this examiner's cases, um, so we have a summary of where we are on that too, just to help you out, um, to kind of know, cause when you have a contractor like this who is no longer with you then you have to go back and look at all their work before and we'll talk about what we're doing in that instance and share that with you."

¹⁷ ISO/IEC 17025:2017 (the standard to which DFS is accredited), section 7.5.1, requires that "Original observations, data, and calculations shall be recorded at the time they are made ...".

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The above information provides compelling evidence that Alicia Vallario reached an erroneous conclusion based on her examination of the actual evidence items, which is an analytical error. She also incorporated the wrong photograph into her report, which is an administrative error. Thus, both an analytical error and an administrative error occurred, not solely an administrative error as stated by the DFS.

Analysis of the DFS Closeout Letter into the USAO Complaint of an Erroneous Conclusion

On March 5, 2021, the DFS issued a closeout letter [Exhibit 41] in response to the January 17, 2020 letter from the USAO reporting a potential false identification by Alicia Vallario [Exhibit 12].

The closeout letter indicates that “the verifier of the 2017 NIBIN confirmation reviewed his initial conclusion and changed it from *Identification* to *Inconclusive*. Based on the change of conclusion, FEU assigned two qualified examiners to re-examine the evidence associated with the 2017 NIBIN confirmation report, and to issue a re-work report if necessary.” “On May 27, 2020, DFS FEU issued a re-work report reaching a different conclusion from both the 2017 NIBIN confirmation report and the purported conclusion of the still unavailable USAO contract examiners.” [Exhibit 41, pg 4]

The “verifier” referred to in the closeout letter is Michael Mulderig, and the “two qualified examiners” are Jonathan Fried and Ashley Rachael. The sequence of events reported by the DFS, that the change of conclusion by the verifier prompted the re-examination of evidence which ultimately led to Fried’s May 27, 2020 report, is directly contradicted by the April 30, 2020 slide presentation [Exhibit 25] in which Fried and Rachael reached a conclusion of elimination *before* Mulderig ever reexamined the evidence and changed his conclusion. [Exhibits 21, 22, 26, 27, 28, and 32] Furthermore, based on the conclusion of elimination reached by Fried and Rachael on or before April 30, 2020, it was already apparent that a re-examination report would be needed.

The closeout letter also reaffirms the DFS’s position that Alicia Vallerio only made an administrative error, but it fails to recognize the compelling evidence that she made both an analytical and administrative error.

Additional Considerations

Based on the above findings and conclusions, the audit team notes that there are issues regarding disconcerting practices within the laboratory, the representations made by the DFS to its oversight bodies, clients, and stakeholders, and the corrective actions taken in response to the erroneous conclusions regarding Items #16 and #45.

- According to an OIG interview summary, the initial conclusion (elimination) reached by Jonathan Fried and Ashley Rachael was changed (to inconclusive) during a meeting with DFS managers. Conclusions must always be based on the examination and

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interpretation of evidence, yet DFS managers actively engaged in the change of conclusion as opposed to allowing examiners to arrive at independent, unbiased conclusions. Michael Mulderig's conclusion was changed in much the same manner, in the office of a DFS manager while under pressure. His change of conclusion, also, was accepted by DFS management. Laboratory management has an affirmative duty to ensure impartiality by shielding examiners from outside influence or other pressures.¹⁸ In these instances, laboratory management not only failed to safeguard the examiners, but was the source of the pressure and influence.

- The finding of "inconclusive" is a legitimate interpretation used in firearm and toolmark examination, as well as many other disciplines in forensic science. However, the finding of "inconclusive" is reached when the examiner has thoroughly evaluated the evidence and has determined that there is insufficient support for either a conclusion of identification or elimination. It is not appropriate to report "inconclusive" because laboratory management or staff views it as "safe" or that it "can never be wrong".¹⁹ Indeed, reporting a finding of inconclusive when the evidence supports an elimination or identification can leave the fact finder with an incorrect understanding of the evidence. According to the OIG interview summaries, as well as other documentation available to the audit team, there is no evidence that any of the DFS examiners reached an inconclusive finding based on an examination of the evidence prior to the DFS reporting this result to the ANAB (and the SAB) on May 6, 2020.²⁰ Instead, according to the OIG interview summaries, inconclusive was reached during managerial discussions in an attempt to reconcile conflicting identification and elimination conclusions. Proper conflict resolution should involve the consensus of unbiased, qualified examiners who provide interpretations based on an examination of the physical evidence and who fully document the bases for their interpretations. DFS management's decision to report an inconclusive finding instead of performing documented conflict resolution ignored their obligations of disclosure and accountability.
- Laboratory accreditation, such as that provided by the ANAB, relies upon accurate and complete representations by the laboratory. If the following were not provided:

¹⁸ ISO/IEC 17025:2017 (the standard to which DFS is accredited), section 4.1 et seq., requires that "Laboratory activities shall be undertaken impartially and structured and managed so as to safeguard impartiality." "The laboratory management shall be committed to impartiality." "The laboratory shall be responsible for the impartiality of its laboratory activities and shall not allow commercial, financial or other pressures to compromise impartiality."

¹⁹ A finding of inconclusive should be considered "wrong" when there clearly is sufficient support for a conclusion of identification or elimination.

²⁰ As discussed elsewhere in this report, Michael Mulderig stated in an interview with the USAO that he changed his conclusion from identification to inconclusive while under pressure in Jonathan Pope's office and not based on an examination of the evidence. Jonathan Fried stated to OIG investigators that Mulderig did not have the evidence in his possession long enough to conduct a full examination and change his conclusion from identification to inconclusive.

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- 1) the April 30, 2020 slides indicating that Jonathan Fried and Ashley Rachael reached a conclusion of elimination, based on microscopic examination, and that they concurred with the conclusion of the independent examiner(s);
- 2) the manner in which they changed their conclusion to “inconclusive”; and
- 3) Michael Mulderig’s multiple May 1, 2020 interpretations and the manner in which his final finding of “inconclusive” was reached

the ANAB may have the misunderstanding, based on the May 6, 2020 letter from Wayne Arendse, that inconclusive was the only finding reached, and that the finding was based on an examination of the physical evidence. The same would apply if the ANAB was not informed of Elizabeth Bustamente’s and Cody Elder’s examination of the evidence. The audit team shares the same concern that the SAB may not have had a complete understanding of the analyses and the manner in which changes of conclusions occurred. The DFS Director repeatedly held to the position that their accrediting body (ANAB), and the oversight of the SAB, were the entities to assess the validity of the work product.²¹ However, without all relevant information being disclosed to them, these organizations cannot provide effective oversight.

- In early May of 2020, the DFS’s oversight bodies (the SAB and the ANAB) were informed by DFS management that an inconclusive finding was reached. This was done prior to the DFS initiating a fully-documented examination of the evidence and issuing a report of analysis. FEU examiners had recommended that outside, uninvolved examiners reexamine the evidence. DFS management rejected this recommendation, and instead ordered FEU Supervisor Jonathan Fried, who had not conducted any casework since his start of employment at the DFS, to perform the (official) reexamination knowing that Fried was aware of the ANAB and SAB notifications. This placed Fried (and his verifier, Ashley Rachael) in a nearly impossible situation, for if they were to contradict the letters to ANAB and the SAB it would likely raise major concerns within the oversight organizations. The laboratory management should never have put their staff in this ethical dilemma.
- The DFS has represented that Alicia Vallario’s error is “administrative” only. However, Vallario made her interpretation on the correct evidence. Thus, Vallario’s conclusion of identification is an analytical error. All indications are that the DFS, to date, has not acknowledged that an analytical error occurred. As a result, the DFS’s corrective actions have focused on a review of photographs and documentation designed to detect similar administrative errors. [Exhibit 30, 134th slide in the series & Exhibit 31, 139th slide in the series] This corrective action is inadequate as it does not address analytical errors that may have occurred, which is a substantial gap in the inquiry by the DFS.

²¹ As examples, see the SAB meetings held on 10/16/20 and 1/15/21.

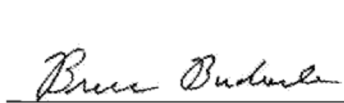
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- Of importance regarding the DFS technical practices is a lack of and/or incomplete documentation of examinations. On April 30, 2020, Jonathan Fried and Ashley Rachael reported to DFS management a conclusion of elimination regarding Items #16 and #45. This conclusion was reported in a slide presentation, but no contemporaneous documentation of the examination that led to this conclusion has been provided. Elizabeth Bustamante examined the evidence, but there is no official documentation of her examination. The only documentation that exists are hand-written notes that she emailed to herself and photographs that she emailed to FEU Manager Jonathan Pope. Cody Elder examined the evidence, yet there is no record that he ever had custody of the evidence and no documentation of his examination whatsoever. Policies should be implemented at the DFS to ensure documentation and disclosure of all analyses by the involved examiners.

IV. Report Limitations

The findings contained in this report are based on the information available to the audit team as of the date of the report. As noted in this report, some of the findings are based on interview summaries provided by the USAO and the OIG, and we assume these summaries are accurate and fair representations of what was discussed. If additional information becomes available these findings may be subject to revision.

This report was completed on March 18, 2021 and describes the opinions and conclusions of the undersigned.



Bruce Budowle



James Carroll



Todd J. Weller

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Appendix A - Source Materials

Exhibit numbering in this report continues from where the prior audit team reports ended. Source materials that were listed in the previous reports may be referenced in this report but are not relisted below.

- Subpoena from the United States Attorney's Office to Todd Smith or an authorized representative of DFS in the case of United States vs. Rondell McLeod, Case No. 2017 CF1 9869, dated 07/15/2020. [Exhibit 20]
- Chain of custody report for DFS Lab Case #15-00673 (CCN 15-128-515) dated 12/07/2020. [Exhibit 21]
- Chain of custody report for DFS Lab Case #15-00253 (CCN 15-180-695) dated 12/07/2020. [Exhibit 22]
- Order of the Superior Court of the District of Columbia in the case of United States vs. Rondell McLeod, Case No. 2017 CF1 9869, dated 11/10/2020, and referenced privilege log. [Exhibit 23]
- Report and examination documentation by John Murdock under Laboratory Number "PCF 20-2-2", dated 06/15/2020. [Exhibit 24]
- Email from DFS examiner Ashley Rachael to DFS Forensic Science Laboratory (FSL) Director Wayne Arendse, Crime Scene Sciences Director Christopher LoJacono, Senior Deputy Director Abdel Maliky, and General Counsel Todd Smith, dated 04/30/2020, with subject "Confidential Case Review". Attached to the email is a slide presentation containing 21 slides, dated 04/30/2020, and titled "Confidential Case Review". [Exhibit 25]
- Email from Michael Mulderig (DFS email account) to Jonathan Pope, dated 05/01/2020, with subject "Review of HO 15-00253" with two photographs attached. [Exhibit 26]
- Email from Michael Mulderig (DFS email account) to Firearms Examination Unit (FEU) Manager Jonathan Pope, dated 05/01/2020, with subject "NIBIN Comparison" with three photographs attached. [Exhibit 27]
- Email from Michael Mulderig (michaelmulderig@gmail.com) to Jonathan Pope, dated 05/01/2020, with subject "Case Review." [Exhibit 28]
- Email from Wayne Arendse to ANSI National Accreditation Board (ANAB) Compliance Investigator Anna Yoder, dated 05/06/2020, with subject "***CONFIDENTIAL** RE: 200127-DCDFS-Firearms Examiner-Inquiry". Attached to the email is a letter from Wayne Arendse to Anna Yoder dated 05/06/2020, a 15 page slide presentation titled "Potential False Identification Review", and copies of laboratory reports. [Exhibit 29]
- Slide presentation from 07/31/2020 Science Advisory Board Meeting. [Exhibit 30]
- Slide presentation from 10/16/2020 Science Advisory Board Meeting. [Exhibit 31]
- Summary of interview of Michael Mulderig by USAO Supervisory Special Agent Bryan Molnar on 12/07/2020. [Exhibit 32]
- Summary of interview of Elizabeth Bustamante by OIG Special Agents Eric Saunders and Victor Castro on 01/27/2021. [Exhibit 33]
- Email from Elizabeth Bustamante to FEU Manager Jonathan Pope, dated 05/01/2020, with subject "comparison results" with three photographs attached. [Exhibit 34]

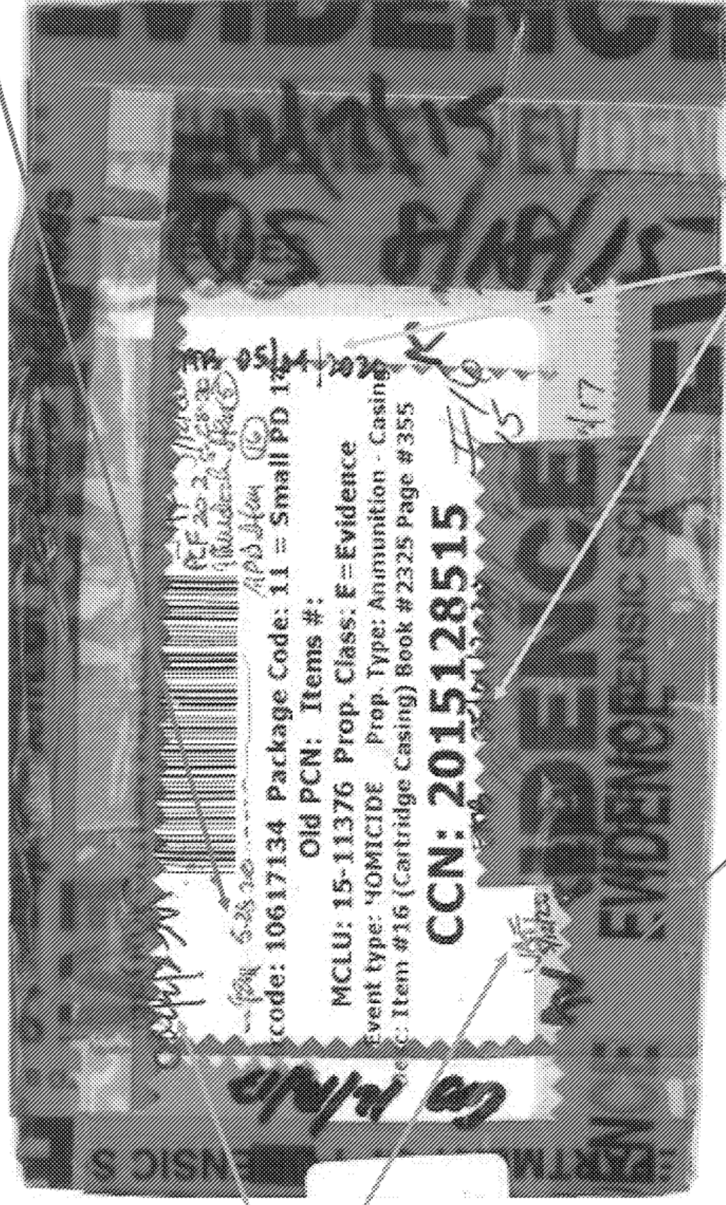
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- Email from Elizabeth Bustamante to herself, dated 05/04/2020, with subject "Message from KM_C308" with one page of handwritten notes attached. [Exhibit 35]
- Summary of interview of Cody Elder by OIG Special Agents Eric Saunders and Victor Castro on 02/12/2021. [Exhibit 36]
- Summary of interview of Jonathan Fried by OIG Special Agents Eric Saunders and Derek Savoy on 12/01/2020. [Exhibit 37]
- Summary of interview of Jonathan Fried by OIG Special Agents Eric Saunders and Victor Castro on 03/09/2021. [Exhibit 38]
- Summary of interview of Ashley Rachael by OIG Deputy Assistant Inspector General Meredith Helm and Special Agent Russell Adams on 12/01/2020. [Exhibit 39]
- Summary of interview of Ashley Rachael by OIG Deputy Assistant Inspector General Meredith Helm and Special Agent Derek Savoy on 03/09/2021. [Exhibit 40]
- DFS Department Operations Manual 15 Closeout Report of Complaint/Inquiry Review Team Regarding January 17, 2020 Erroneous NIBIN Confirmation Complaint, signed on 03/05/2021. [Exhibit 41]
- Email chain between Jonathan Fried and Ashley Rachael, dated 05/01/2020, with subject "powerpoint". [Exhibit 42]
- Summary of interview of Elizabeth Bustamante by OIG Special Agents Eric Saunders and Victor Castro on 01/28/2021. [Exhibit 43]

Attachment D: Figures for Final Report

Images of inner evidence envelopes showing initials and dates.

Packaging of Item 16-Side A



Murdock 5-28-20

Fried 5/7/20 &
5/12/20

Vallario
8/3/?

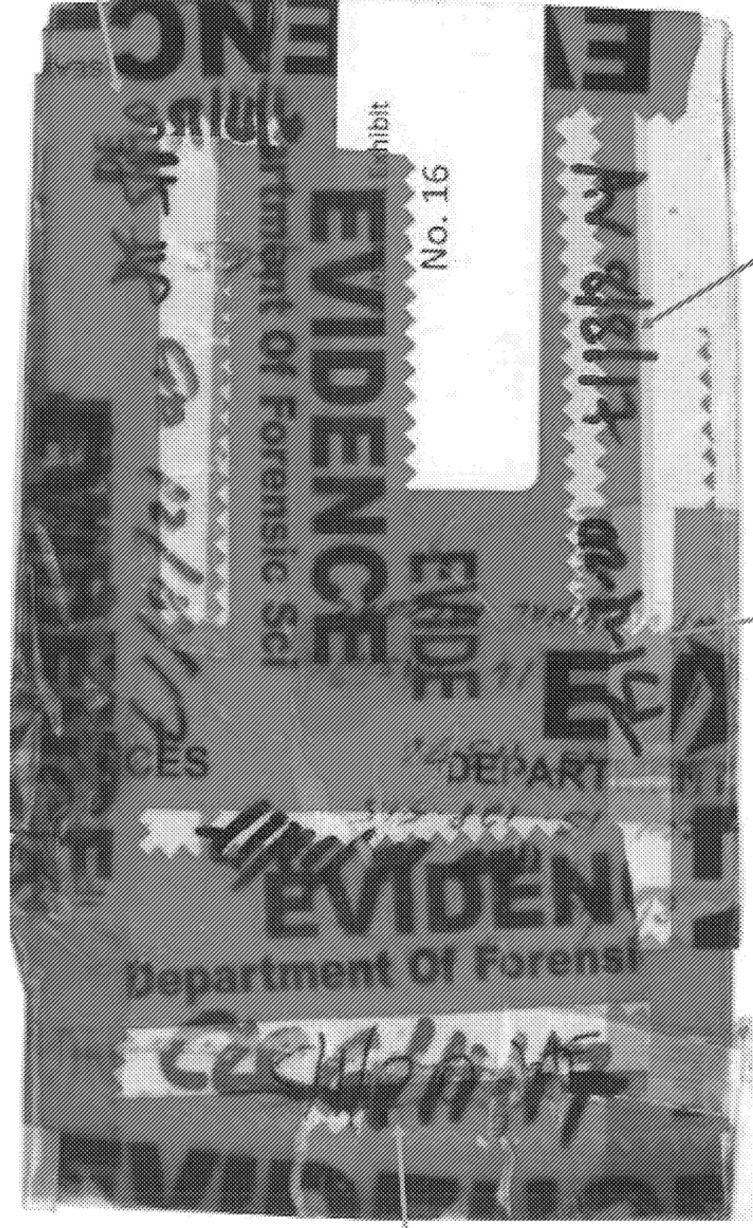
Bustamante
5/1/20 & 5/4/20

Images of packaging from Murdock notes, PCF-20-2-2, report dated June 15, 2020

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Packaging of Item 16-Side B



Fried
5/1/20

Fried 5/1(?) /20

Vallario
8/8/17

Spinder 1-4-20

Images of packaging from Murdock notes, PCF-20-2-2, report dated June 15, 2020

Packaging of Item 45-Side A

The image shows several evidence bags from the Department of Forensic Science. The bags are labeled "EVIDENCE" and "Department of Forensic Science". Handwritten labels on the bags include:

- "Item #45"
- "JAX 5/27/20"
- "Fried 5/27/20 & Fried? 5/7/20"
- "Mulderig 1/11/16"
- "Bustamante 5/7/20"
- "Murdock 1/24/20 & 6/7/20"
- "Fried 5/12/20 & 5/27/20"

The bags are stacked and some have date stamps.

Fried 5/27/20 &
Fried? 5/?/20

Murdock 1/24/20 &
6/7/20

Fried 5/12/20 &
5/27/20

Mulderig
1/11/16

Fried 5/12/20

Images of packaging from Murdock notes, PCF-20-2-2, report dated June 15, 2020

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USAO-009087

Mulderig
5/1/20

Bustamante
5/4/20

5-1-20 (20)

EVIDENCE

EVIDENCE

EVIDENCE

EVIDENCE

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