SPECIAL COUNSEL'S REPORT ON INDEPENDENT INVESTIGATION OF KEVIN COOPER'S CLAIM OF INNOCENCE

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I. SUMMARY OF SPECIAL COUNSEL'S CONCLUSIONS

In 1985, a unanimous jury convicted Kevin Cooper of the murders of Doug Ryen, Peggy Ryen, Jessica Ryen, and Chris Hughes, and the attempted murder of Josh Ryen (the "Ryen/Hughes Crimes"). Cooper was sentenced to death. Cooper's appeal of his conviction and multiple post-conviction challenges in state and federal court were unsuccessful.

In 2000, the State and Cooper's counsel entered into an agreement that certain pieces of evidence be subjected to DNA testing, which had not been available at the time of Cooper's 1984 trial. That 2001 DNA testing did not exculpate Cooper; to the contrary, it provided further evidence of his guilt. Further tests of the evidence were conducted in connection with a lengthy evidentiary hearing in the United States District Court for the Southern District of California in 2005. The district court likewise concluded that the further testing did not exculpate Cooper. Cooper's legal challenges to his conviction and death sentence were exhausted by 2011.

In 2016, Cooper filed a Clemency Petition asking the then-Governor of California, Edmund G. Brown, Jr., to grant a reprieve of his death sentence, and conduct further investigation—including further DNA testing—into Cooper's claim of innocence. Cooper's Clemency Petition requests that he be pardoned if investigation shows he is innocent or that he be retried if any questions of innocence remain after investigation. Governor Brown thereafter ordered further DNA testing of certain evidence from the case. After Governor Gavin Newsom took office, he reaffirmed Governor Brown's order and ordered additional DNA testing. After the DNA testing was complete, in May 2021 Governor Newsom issued an executive order appointing Morrison Foerster LLP as Special Counsel to the Board of Parole Hearings, the agency responsible for investigating clemency matters, to evaluate the DNA testing results and to conduct an independent investigation of Cooper's claim of innocence.

Special Counsel has evaluated the DNA test results and other evidence, and conducted additional investigation. Cooper has not established his claim that he is innocent. The evidence of Cooper's guilt is extensive and conclusive.

The DNA testing conducted after trial is highly incriminating. First, the DNA testing showed that blood found on a wall in the Ryens' home, where the murders occurred, matched Cooper. Second, Cooper's blood and Doug Ryen's blood were found on a t-shirt found by the road near the Ryens' home and near a house where Cooper acknowledges he was hiding out until shortly before the murders. Third, Cooper's DNA was found on cigarette butts recovered from the Ryens' station wagon that was stolen after the murders. The DNA evidence corroborates the testimonial, physical, forensic, and circumstantial evidence that was presented at trial, which was sufficient to persuade the jury of Cooper's guilt even without the DNA evidence that became available later.

Cooper contends that the DNA evidence, plus much more of the evidence introduced at trial, was planted by the authorities as part of a conspiracy to frame, and wrongfully convict, Cooper. Special Counsel and our retained experts carefully evaluated Cooper's theory that State and local law enforcement officials fabricated or planted evidence around the time of his arrest in 1983 and also before the DNA testing occurred. Cooper has not established that the evidence of his guilt has been fabricated or planted. The evidence, including the DNA evidence itself, dispels the contention that the evidence was fabricated or planted.

Special Counsel and retained experts also considered Cooper's arguments that others—specifically Lee Furrow, acting with others—were the "true" killers. Cooper has not established that others committed the Ryen/Hughes Crimes. The contention that someone else committed the crimes is refuted by the overwhelming evidence of Cooper's guilt, and by the absence of any DNA evidence or any other persuasive evidence that points to any other person as the culprit.

In reaching these conclusions, Special Counsel has carefully reviewed extensive documentation related to this case, including the testimony and evidence introduced at Cooper's lengthy trial in 1984 and 1985, and records from three evidentiary hearings on his claims that he is innocent and was framed with the use of fabricated evidence. Special Counsel has also reviewed materials relating to Cooper's numerous petitions for writ of habeas corpus in state and federal court. Special Counsel also reviewed the results of the

DNA tests and the parties' submissions about the results of those tests, and retained several experts and received their independent reports. Special Counsel received substantial information and briefing from both Cooper's representatives and the San Bernardino District Attorney's Office ("the District Attorney").

There are various matters that Special Counsel did *not* address or consider because they were outside the scope of the assignment to evaluate Cooper's claims of innocence. Special Counsel was not asked to make a recommendation about whether Cooper's Clemency Petition should be granted in any respect. Special Counsel did not consider whether the outcome of Cooper's trial might have been different under different circumstances, such as whether he had different counsel or trial resources, if he had been able to present, or had presented, different evidence at trial, or if pre-trial or trial rulings had been different, or whether Cooper's trial was unfair in any way. Special Counsel did not investigate Cooper's allegations of prosecutorial or law enforcement misconduct except insofar as the allegation was relevant to Cooper's claim of innocence. Special Counsel did not consider whether any decision about the charges or penalty sought, or the conduct by those involved in the trial, or the jury's verdict, was improperly influenced by Cooper's race. Special Counsel did not consider whether there was any evidence that militated against the death penalty. Special Counsel carefully considered specific requests on behalf of Cooper for further inquiry and have concluded that there is no reasonable possibility that more investigation beyond what has already been conducted in this matter could affect the conclusion that evidence of Cooper's guilt is conclusive.

II. CHRONOLOGY

A. The Ryen/Hughes Crimes and Cooper's Arrest

1. Saturday June 4, 1983, and Sunday, June 5, 1983

On the evening of Saturday, June 4, 1983, Doug and Peggy Ryen, their two children—ten-year-old Jessica and eight-year-old Josh—and Josh's friend, eleven-year-old Chris Hughes, attended a barbeque at a friend's home until about 9:00 p.m. When Chris, who had been invited to spend the night at the Ryens' house, did not come home

the next morning, his parents went to the Ryens' house in Chino Hills to investigate. When Chris' father looked through a sliding glass door and saw bodies on the floor of the Ryens' house, he broke through a door, and found the lifeless bodies of his son Chris, and Doug, Peggy, and Jessica Ryen. He found Josh alive but with severe and life-threatening wounds, including a slashed throat. The victims all suffered numerous sharp force injuries, including from a hatchet. The Ryens' station wagon was missing.

The San Bernardino Sheriff's Department ("Sheriff's Department") assumed responsibility for the investigation. In the days following the crime, the Sheriff's Department collected numerous pieces of evidence. Criminalist David Stockwell arrived at the Ryens' house and took photographs and collected approximately 45 separate pieces of evidence on June 5. (89 R.T. 3502-03.)[1] Among the evidence collected on June 5, 1983, was a bed sheet. When Stockwell inspected that sheet further, back at the crime lab, he saw a "rust color" "footwear impression." (*Id*. at 3506.) A shoeprint was also found on a spa cover at the Ryens' house.

Because the Ryens' house was within two miles of the California Institute for Men ("CIM"), then a minimum security state prison, and Boys Republic (an all-boys' school in Chino Hills that housed troubled adolescents), the authorities looked into several persons who had recently gone missing from those institutions. On June 5, 1983, the Sheriff's Department learned of three people who had escaped from CIM days before the murders, including "David Trautman," who had escaped on June 2, 1983. (Discovery at 1730.)[2] Also on June 5, 1983, the Sheriff's Department determined that Trautman's true identity was Kevin Cooper, who had come to California from Pittsburgh, Pennsylvania. (Discovery at 2, 53-54, 1916.) When they contacted law enforcement authorities in Pennsylvania, officers learned that several warrants had been issued for Kevin Cooper's

[1] R.T. cites are to the Reporter's Transcripts of Cooper's 1984-1985 trial.
[2] "Discovery" refers to materials provided by the District Attorney to Cooper's lawyers in discovery during the 1984-1985 trial.

arrest in connection with a robbery, kidnapping, and rape in Pennsylvania in October 1982 after Cooper had escaped from Mayview State Hospital. (*Id*. at 81-83, 86-87, 102.)

On the afternoon of June 5, a neighbor of the Ryens discovered an Estwing-brand hatchet with what looked like dried blood on it in the weeds not far down the road from the Ryens' house. (90 R.T. 3789-91.)

On June 5 officers attempted to access a house owned by Larry Lease and Roger Lang (the "Lease house") about 100 yards from the Ryens' house, but were unable to do so because all the doors and windows were locked. (86 R.T. 2721-22, 2728-30, 2797-99.) An officer looking through the windows did not see anything of note in the house. (86 R.T. 2797-99.)

2. Monday, June 6, 1983

In the early hours of Monday morning (12:25 a.m.) of June 6, 1983, during the initial investigation at the Ryens' house, Criminalist Stockwell observed a blood droplet on a painted drywall surface of the hallway across from the bedroom where the victims were found. He gouged the drywall to collect the portion of the surface where the droplet stain appeared. He placed it in a metal pillbox-style container, and labeled the container "A-41." (89 R.T. 3511-12.)

Also on Monday, June 6, Detectives Moran and Hall went to the Lease house at the request of Lease to "determine if there was anybody in the residence." (86 R.T. 2802.) Lease wanted "someone to go in the house even if they had to break in just to thoroughly check the inside of the house." (86 R.T. 2730.) Detectives Moran and Hall entered the locked property with their guns drawn, along with Mr. Lease and Jack Fletcher through a sliding glass door that Fletcher jimmied open. (86 R.T. 2802-03.) The detectives did not find anyone, and did not note any evidence during their sweep of the Lease house. (86 R.T. 2804; Cl. Pet., Ex. 80 (SBSD Report, June 8, 1983).)

On June 6, 1983, a neighbor of the Ryens told Detective Moran that late on the night of Saturday June 4, 1983, or possibly just after midnight on June 5, 1983, she saw

the Ryens' station wagon being driven away from the Ryens' residence at "a very high rate of speed." (Discovery at 415.) The Sheriff's Department issued an all-points bulletin for the Ryens' station wagon.

3. Tuesday, June 7, 1983

On June 7, 1983, Deputy Sheriff Scott Field recovered a tan t-shirt, which appeared to be blood-stained, near the Canyon Corral Bar and the Ryens' residence. (101 R.T. 6510; Cl. Pet., Ex. 70.)

By June 7, 1983, media reports stated that it appeared the victims had been attacked with a hatchet. (Eric Malnic & Richard West, *Boy Who Survived Chino Massacre to Be Questioned*, L.A. Times, June 7, 1983.) That day, Roger Lang, a co-owner of the Lease house, sent his employees, Richard Sibbitt and Perry Burcham, to the Lease house to "see if there was anything out of place, missing" and to check if Lease's hatchet "was still in the residence." (86 R.T. 2856.) Sibbitt and Burcham arrived at the Lease house before noon and noticed that the hatchet was not by the fireplace in the living room where it would typically be located. (86 R.T. 2858-59.) They entered one of the bedrooms (which was later referred to as the "Bilbia bedroom," because Kathleen Bilbia had been staying in the bedroom until she cleaned up the house and left on June 1, 1983. (86 R.T. 2666.) Burcham looked in the closet and saw some bedding in the closet. (86 R.T. 2877.) Sibbitt entered the room after Burcham and noticed a hatchet sheath laying on the floor. (86 R.T. 2859.) Sibbitt told Burcham not to disturb anything and went to alert detectives at the Ryens' house. (86 R.T. 2859, 2862-63.)

Sibbitt and Burcham informed Deputy Bobby Phillips about their discovery, and Phillips went to the Lease house. (87 R.T. 2903.) After Phillips saw the hatchet sheath and other items on the floor of the Bilbia bedroom, he immediately left to contact Sergeant Swanlund. (87 R.T. 2905.) When Swanlund arrived, he and Phillips entered the residence together and Sergeant Swanlund noted the hatchet sheath, bedding in the partially open closet, and items in the closet, including a box, some rope, and a matchbook. (86 R.T. 2840-42.) Sergeant Swanlund then brought criminalists Craig Ogino and Stockwell to the Lease house to collect the physical evidence. (86 R.T. 2842; 87 R.T.

3070.) At that time, Ogino noticed and collected a khaki green button and noted a reddish-brown stain on it. (87 R.T. 3072-73.) A bloodstained piece of rope (referred to as "J-9") was found in the Bilbia bedroom closet either later that day or early on June 8, 1983. (86 R.T. 2838, 2842; 94 R.T. 4655.) Officers also found a cardboard box, containing tobacco debris, and a black plastic lid containing what appeared to be charred cigarette butts. (87 R.T. 3077-78.) On June 22 and 23, Sergeant Swanlund wrote a report regarding "Crime Scene, Area Search" that detailed the search conducted on June 7, 1983. (Discovery at 760-66.) On June 30, 1983, Sergeant Swanlund added a section to that report titled "Observations/Opinions" in which he opined that the person staying at the Lease house had previously been in custody because the loose tobacco and use of the plastic lid were consistent with his observations of incarcerated persons who rolled their own cigarettes. (Discovery at 767.)

Also on June 7, 1983, a shoeprint was found in dust at the Lease house. Deputy Sheriff Smith drew a sketch of the print that day. (103 R.T. 6864.)

4. Wednesday, June 8, 1983

On the evening of June 8, 1983, Criminalists Ogino and Stockwell conducted luminol testing, a presumptive test for blood, at the Lease house. Blood was indicated (a) in the shower and sink in the Bilbia bathroom, (b) on the rug in the hallway leading to the Bilbia bedroom, and (c) near the Bilbia bedroom closet. (87 R.T. 3078-83.) After they conducted the luminol testing, they conducted a second presumptive blood test in the same locations using ortho-tolidine. (87 R.T. 3082; 92 R.T. 4298-99.) Those test results were consistent with the presence of blood. (*Id.*)

Thus, by the end of the day on June 8, 1983, the Sheriff's Department had obtained evidence that there was blood present at the Lease house and that someone had been recently staying there without permission, which suggested there could be a connection between the Lease house and the Ryen/Hughes Crimes. The Sheriff's Department did not know, at that time, who had been staying at the Lease house without permission.

5. Thursday, June 9, 1983

On June 9, 1983, the Sheriff's Department obtained records of telephone calls from the Lease house. (Cl. Pet., Ex. 75; Discovery at 790-92.) The telephone records showed that, shortly after midnight on June 3, 1983, a nearly two-hour telephone call had been made from the Lease house to Yolanda Jackson in Los Angeles. (Cl. Pet., Ex. 75; Discovery at 2, 790-91.) In connection with its investigation of the persons who had escaped from CIM, the Sheriff's Department had previously learned that Jackson had visited Cooper at CIM on May 30, 1983. (Discovery at 2.)

After obtaining the telephone records, officers contacted the authorities in Pennsylvania regarding a Pittsburgh number that had been called from the Lease house on June 3 and 4, 1983. Officers learned that the Pittsburgh number belonged to Diane Williams, a friend of Cooper's. (Cl. Pet., Ex. 75; Discovery at 2, 14) The call to Diane Williams on June 4 lasted 34 minutes and ended around 8:30 p.m. (Cl. Pet., Ex. 75; Discovery at 2, 790-91.) Officers then learned that Williams stated she had received a collect call on June 6, 1983 (the day after the murders) from Cooper, who said he was in Mexico and needed money. (Discovery at 2, 14.)

Thus, by June 9, 1983, the Sheriff's Department had information that Cooper, an escapee from CIM and a fugitive with outstanding warrants from Pennsylvania, had been hiding out in the Lease house close in time to the Ryen/Hughes crimes and then had travelled to Mexico, where he needed money. (Discovery at 1-2, 14.) The Sheriff's Department applied for, and received, a warrant for Cooper's arrest on June 9, 1983.

6. Saturday, June 11, 1983

On June 11, 1983, a person contacted the Long Beach Police Department and reported that he observed a station wagon parked in the parking lot of Saint Anthony's Catholic Church in Long Beach, California that matched the description of the Ryens' station wagon. (Discovery at 613.) Later that day, the station wagon was towed to the Long Beach impound lot, where Detective Hall, and Criminalists Ogino and Stockwell, among others, were present and involved in processing the station wagon for evidence.

(Discovery at 614.) That day Criminalists Ogino and Stockwell located, collected, and logged dozens of items of physical evidence from the Ryens' station wagon, including what was later determined to be a pubic hair found on the front passenger floor (labeled V-19), fibers, plant burrs, cigarette butts, loose tobacco, and vacuum sweepings. (Discovery at 617-18, 1712-13.) Two cigarette butts found on June 11, 1983, were of particular relevance: one hand-rolled cigarette butt located in the crevice of the front seat (labeled V-12), and one filter cigarette butt recovered from the front passenger floor (labeled V-17). (Discovery at 1713.) A written report signed by both Ogino and Stockwell states that on June 11, 1983 (the day the station wagon was first searched) they collected V-12 and V-17 from the station wagon while it was in Long Beach. (Discovery at 1712-14.) Blood was also found inside the Ryens' station wagon, which was later determined to be consistent with two of the murder victims.

Detective Hall also prepared a report about the finding of the station wagon and its recovery on June 11, 1983. He noted: "[l]ocated on the front seats and floorboard area of the vehicle, were tobacco type substances." (Discovery at 617.) Detective Hall did not collect evidence or log evidence; as stated, Criminalists Ogino and Stockwell did so. (Discovery at 615-17.)

7. Cooper's Arrest on July 30, 1983

In the early morning hours of July 30,1983, a man who owned a boat anchored off Santa Cruz Island contacted the Coast Guard to report his wife had been raped on board by a Black man named Angel Jackson. (Discovery at 1749-50.) The Coast Guard and Santa Barbara County Sheriff's Department investigated and apprehended "Jackson," who was fleeing to shore in a dinghy. (*Id*. at 1772.)

The woman was airlifted to the mainland for treatment and questioning. (*Id*. at 1751.) The woman reported that, when she resisted Jackson's sexual advances as her husband slept nearby, Jackson put a knife to her throat, threatened to kill her and her husband, raped her, sodomized her, forced her to orally copulate him, attempted to orally copulate her, and lightly traced his knife into her abdomen and neck, leaving marks or light cuts on both areas. (*Id*. at 1750-51.) While at the Santa Barbara County Sheriff's

Department, the woman saw Cooper's photograph on a "Wanted" poster regarding the Ryen/Hughes Crimes and identified Cooper as the man who had raped her. (*Id*. at 1752.)

On July 30, 1983, Cooper was charged with both the rape charge and the Ryen/Hughes Crimes. (*Id.* at 1775.) He was arraigned on August 1, 1983, and pleaded not guilty.

That day, authorities drew Cooper's blood into vial VV-2, which contained the blood preservative EDTA, pursuant to standard practice at the time.

B. The 1984-1985 Trial

Cooper's trial was conducted in San Diego County after the venue was changed from San Bernardino County due to the extensive media coverage there. Pre-trial proceedings were extensive, lasting more than 30 weeks. Jury selection began on September 11, 1984, and the case was submitted on February 7, 1985, after 47 days of trial testimony. More than 110 witnesses testified, including Cooper. (Index of Trial Transcripts, *People v. Cooper*, Superior Court, San Bernardino County, 1985, No. OCR-9319.)

After deliberating for seven days, on February 19, 1985, the jury convicted Cooper of four counts of first-degree murder and one count of attempted murder in the first degree. The jury determined the penalty as death. On May 15, 1985, the San Diego County Superior Court sentenced Cooper to death.

On May 6, 1991, the California Supreme Court affirmed the conviction and death sentence. *People v. Cooper*, 53 Cal. 3d 771 (1991).

On December 16, 1991, the United States Supreme Court denied Cooper's petition for writ of certiorari. *Cooper v. California*, 502 U.S. 1016 (1991).

C. Post-Conviction Proceedings and Initial DNA Testing

Appendix A to this Report recites the full procedural history of Cooper's many state and federal habeas petitions between 1994 and 2009, when the last of them was resolved. None of the litigation resulted in relief on any of Cooper's claims. Cooper's

post-conviction proceedings most relevant to the question of his guilt or innocence are discussed below.

Cooper's third state habeas petition to the California Supreme Court filed on December 23, 1998, requested DNA testing that Cooper argued would establish his innocence. On November 4, 1999, Cooper filed a motion to file a successive (third) federal habeas corpus petition seeking "DNA testing on the drop of blood found in the hallway outside the Ryen family master bedroom [A-41], saliva from the hand-rolled and manufactured cigarette butts [V-12 and V-17] found inside the abandoned Ryen station wagon, blood smears on a tan T-shirt found near the Canyon Corral Bar, and hairs found in the hand of victim Jessica Ryen." *Cooper v. Calderon*, No. 99-71430, 2003 U.S. App. LEXIS 27035, at *1-2 (9th Cir. Feb. 14, 2003). Both the state and federal habeas petitions were denied.

In 2000, California enacted Penal Code section 1405, which authorized an incarcerated person convicted of a felony to file a motion before the trial court that entered the judgment of conviction, seeking DNA testing in certain circumstances. On September 29, 2000, Cooper filed such a motion in the San Diego County Superior Court where he was convicted. The case was assigned to Superior Court Judge William Kennedy. Before Cooper's motion was resolved, the State and Cooper reached an agreement regarding DNA testing. On May 10, 2001, the State and Cooper, who was represented by counsel and "two nationally recognized DNA experts," Dr. Edward Blake and Christopher Plourd, entered into a Joint Post-Conviction DNA Testing Agreement ("JTA"), which specified the items of evidence to be tested:

- the drop of blood found in the hallway of the Ryens' house (A-41);
- the hand-rolled (V-12) and manufactured (V-17) cigarette butt found inside the Ryens' station wagon after it was recovered in Long Beach;
- the hatchet found near the Ryens' home shortly after the crimes;
- the tan T-shirt found near the Canyon Corral Bar;

- the button found in the Bilbia bedroom of the Lease house;
- and hair recovered from the hands of the victims.

Cooper v. Brown, No. 04-CV-656H, 2005 U.S. Dist. LEXIS 46232, at *49-50 (S.D. Cal. May 27, 2005). "The Agreement provided that STR Profiler Plus DNA testing be performed by the [Cal DOJ Lab] on the specified items of evidence in two stages: 'blind' STR Profiler Plus DNA testing was to be performed on the specified pieces of crime scene evidence, followed by STR Profiler Plus DNA testing on the known exemplars from Petitioner and the victims. The 'blind' test results from the crime scene evidence would then be compared with the results obtained from the known reference samples from Petitioner and the victims. Petitioner's own post-conviction DNA expert, Dr. Blake, identified the drop of blood (A-41) and the two cigarette butts recovered from the stolen Ryen station wagon as 'the most relevant biological evidence' in the case." *Id.* at *49-50.

Before the DNA results were completed, Cooper filed another motion in the San Diego action seeking an evidentiary hearing on the issue whether San Bernardino County Criminalist Dan Gregonis had tampered with or contaminated evidence in 1999 when he checked out A-41 from the Sheriff's Department property room before A-41 was sent to the Cal DOJ Lab.

Judge Kennedy received a report on the DNA testing (on July 11, 2002, and a supplemental report on September 24, 2002 the "2002 DNA Tests"). United States District Judge Marilyn Huff later summarized the results of the 2002 DNA Tests in her 2005 ruling on Cooper's later habeas petition:

> Those results provide strong evidence of [Cooper's] DNA from blood inside the Ryen residence (one in 310 billion), from saliva on two cigarette butts recovered from the stolen Ryen station wagon (one in 19 billion and one in 110 million), and from a T-shirt found on the side of a road that contained [Cooper's] blood (one in 110 million) and victim Doug Ryen's blood (one in 1.3 trillion). (Supplemental DOJ Physical Evidence Exam Report dated Sept. 24, 2002.) In addition to the DNA evidence inculpating [Cooper], DNA profiles of blood taken from a hatchet that was taken from the house where

> [Cooper] hid after his escape from prison matched that of several of the victims including Doug and Jessica Ryen and Chris Hughes. (Supplemental DOJ Physical Evidence Exam Report dated Sept. 24, 2002.)

Cooper v. Brown, 2005 U.S. Dist. LEXIS 46232, at *2.

On October 22, 2002, Cooper filed another motion in the San Diego County Superior Court action seeking *mitochondrial* DNA testing of approximately 1,000 hairs recovered from the victims' hands, because the hair was found not to be appropriate for *nuclear* DNA testing. Cooper also renewed his motion for an evidentiary hearing regarding his claim of evidence tampering or contamination. (July 2, 2003, Order Denying Mot. for Mitochondrial DNA Testing, Claim of Evidence Tampering, and Request for Post-Conviction Discovery ("Kennedy Order"), *People v. Cooper*, No. CR72787 (San Diego County Superior Court, July 2, 2003), 2:23-3:6; *see Cooper v. Brown*, 2005 U.S. Dist. LEXIS 46232, at *11.) On June 16, 2003, Cooper filed another motion in the San Diego action, seeking further testing of the tan t-shirt to determine if EDTA was present, which Cooper argued would show whether Cooper's blood had been planted on the t-shirt. (Kennedy Order at 3:13-20); *Cooper v. Brown*, 2005 U.S. Dist. LEXIS 46232, at *11.

Judge Kennedy held an evidentiary hearing on June 23-25, 2003. (Kennedy Order at 3:27-4:1); *Cooper v. Brown*, 2005 U.S. Dist. LEXIS 46232, at *11. At the conclusion of the evidentiary hearing, Judge Kennedy denied Cooper's motions relating to evidence tampering, his requests for EDTA testing of the tan t-shirt, and his request for mitochondrial DNA testing of the hairs found in Jessica Ryen's hand. (Kennedy Order at 11:19-22); *see Cooper v. Brown*, 2005 U.S. Dist. LEXIS 46232, at *10-11. On October 22, 2003, the California Supreme Court rejected Cooper's challenge of Judge Kennedy's ruling. *See Cooper v. Brown*, 2005 U.S. Dist. LEXIS 46232, at *11-12.

On December 17, 2003, the San Diego County Superior Court set Cooper's execution date for February 10, 2004. *See id*. at *12.

On February 6, 2004, Cooper filed an application in the Ninth Circuit seeking authorization to file a successive petition for writ of habeas corpus which raised the matters on which he lost in the San Diego County Superior Court. That application was denied on February 8, 2004, by a three-judge panel. *Cooper v. Woodford*, 357 F.3d 1019 (9th Cir. 2004). On February 9, 2004, the Ninth Circuit sua sponte agreed to hear en banc Cooper's application for authorization to file another habeas petition and then granted Cooper permission to file another habeas petition. *See Cooper v. Woodford*, 357 F.3d 1054 (9th Cir. 2004); *Cooper v. Woodford*, 358 F.3d 1117 (9th Cir. 2004). In granting Cooper permission to file another federal habeas petition, the Court stated:

> This case centers on Cooper's claim that he is innocent. No person should be executed if there is doubt about his or her guilt and an easily available test will determine guilt or innocence. Cooper has asked specifically that two tests be done.
>
> First, Cooper asks that the blood on the t-shirt be tested for the presence of the preservative EDTA. The presence of such a preservative would show that his blood was not on the t-shirt at the time of the killings, but was rather placed there at some later time.
>
> Second, Cooper asks that the blond or light brown hair in Jessica Ryen's hand be subjected to mitochondrial DNA testing. Such testing, if favorable to Cooper, would exclude other members of the Ryen family and Chris Hughes as sources of the hair. It could also positively identify Lee Furrow, and perhaps others, as the killer or killers, if those men can now be located.
>
> In his brief to us, Cooper states, "Through readily available mitochondrial testing of blond hairs found in one of the victim's hands, and testing for the presence of the preservative agent EDTA on a T-shirt[] the State belatedly claimed contained Mr. Cooper's blood, the question of Mr. Cooper's innocence can be answered once and for all."

Cooper v. Woodford, 358 F.3d 1117, 1124 (9th Cir. 2004).

On April 2, 2004, Cooper filed his third petition for writ of habeas corpus in the Southern District of California before Judge Marilyn Huff.

Judge Huff ordered mitochondrial DNA testing of hair found in Jessica Ryen's left and right hands, two hairs from Doug Ryen's right hand, and one hair from Christopher Hughes. *Cooper v. Brown*, 2005 U.S. Dist. LEXIS 46232, at *88. Mitotyping Technologies, LLC ("Mitotyping") conducted the mitochondrial DNA testing on hair samples obtained from Jessica Ryen's hands. (Aug. 2, 2004 Mitotyping Techs., LLC Report to Judge Huff at 2.) Mitotyping concluded that it could not exclude either Jessica Ryen, Peggy Ryen, Joshua Ryen, or their maternal relatives as the possible donor of the human hair samples recovered from Jessica Ryen's hands. (*Id*. at 7.) In addition, Mitotyping concluded that some of the recovered hair samples were animal hairs. (*Id*. at 6.) As a result of the Mitotyping analysis, Judge Huff determined that the mitochondrial DNA testing of hair failed to establish that someone other than Cooper committed the Ryen/Hughes Crimes. *Cooper v. Brown*, 2005 U.S. Dist. LEXIS 46232, at *88.

Regarding the tan t-shirt, Judge Huff ordered tests intended to determine if there were elevated levels of EDTA on the shirt, which Cooper had argued would indicate Cooper's blood had been planted on the tan t-shirt. Judge Huff concluded that the test results did not support Cooper's theory.

In addition to the mitochondrial DNA testing of hair and EDTA testing of the tan t-shirt, Judge Huff conducted an evidentiary hearing at which forty-two witnesses testified on a wide range of topics, which Cooper presented in support of his claims that he was innocent of the Ryen/Hughes Crimes. At the conclusion of the evidentiary hearing, on April 22, 2005, Judge Huff denied Cooper's third federal habeas petition. *Id.* at *15.

On December 4, 2007, a three-judge panel of the Ninth Circuit affirmed Judge Huff's ruling. *Cooper v. Brown*, 510 F.3d 870 (9th Cir. 2007). Cooper filed a petition for rehearing en banc, which was denied on May 11, 2009. *Cooper v. Brown*, 565 F.3d 581 (9th Cir. 2009). Although the Ninth Circuit refused to rehear the matter en banc, four judges wrote dissenting opinions, including Judge William Fletcher, who wrote a lengthy

dissent.

On August 12, 2010, Cooper filed a motion in San Diego Superior Court, pursuant to California Penal Code section 1405, seeking still more DNA testing of (1) the tan T-shirt; (2) item VV-2 (the vial of blood drawn from Cooper in 1983); and (3) A-41 (the drop of blood on a paint chip from the Ryens' home). *See Cooper v. Ramos for Cnty. of San Bernardino*, No. CV 11-3942 SVW (OPx), 2011 WL 13193322, at *1 (C.D. Cal. Nov. 10, 2011). Cooper alleged that the 2002 DNA Tests revealed DNA from an unknown individual on these items. *Id.* He alleged that re-testing these items using then-current DNA technology could allow him to identify the source of this foreign DNA, thereby providing support for his claim that incriminating DNA evidence was planted at the crime scene. *Id.* On January 14, 2011, the Superior Court denied Cooper's motion. *Id.* at *2.

D. Cooper's Clemency Petitions

Cooper filed a clemency petition with Governor Schwarzenegger in January 2004, about a month before Cooper's scheduled execution on February 10, 2004. Cooper sought clemency on the grounds, among others, that he might suffer from a mental deficiency due to an automobile accident that occurred when he was stealing a car as a juvenile. Governor Schwarzenegger denied clemency on January 30, 2004.

Cooper submitted another clemency petition to Governor Schwarzenegger, but Governor Schwarzenegger did not act on that second clemency petition before leaving office in 2011.

On February 17, 2016, Cooper submitted a new petition for clemency to Governor Jerry Brown, again asserting that he is innocent of the Ryen/Hughes Crimes and that he had been framed by the Sheriff's Department and the District Attorney. Cooper's Clemency Petition requested, among other things, that Governor Brown order an investigation into Cooper's claim of innocence.

E. Governor Brown's Order for Additional DNA Testing

On August 17, 2018, Cooper's representatives sent a letter to Governor Brown asking that he order more DNA testing.

In December 2018, Governor Brown issued an order directing "limited retesting of certain physical evidence in the case" and appointing retired Los Angeles County Superior Court Judge Daniel Pratt as Special Master to choose a laboratory to conduct the further DNA testing, to secure and deliver the listed evidentiary items to the chosen laboratory, to oversee the testing, and to resolve and decide all disputes between the People and Cooper's representatives related to testing scope and protocols. (Executive Order B-61-18.) Specifically, Governor Brown called for further testing of the tan t-shirt, an orange towel that had been found near the tan t-shirt, the handle of the hatchet, and the sheath of that hatchet found in the Lease house. (*Id*.)

F. Governor Newsom's February 22, 2019 Order for Additional DNA Testing

After taking office in January 2019, Governor Newsom issued an order on February 22, 2019, affirming former Governor Brown's executive order, and identifying additional pieces of evidence for more DNA testing: hairs collected from the victims' hands and the crime scene, the vial of Cooper's blood that was taken when he was arrested (VV-2), the A-41 blood drop, fingernail scrapings from the victims, and the khaki green button. (Executive Order N-07-19.)

On April 4, 2019, the Special Master designated Bode Technology ("Bode") as the laboratory to conduct the DNA testing described in the executive orders. That testing was conducted between February 2019 and December 2020.

In January 2021, the Special Master announced that he would not be making findings of fact about the results of those tests. (Feb. 23, 2021 Letter from the Office of the District Attorney, County of San Bernardino to Gov. Newsom at 1-2.) (The orders appointing the Special Master did not provide for him to make findings.) The parties

thereafter sent letters to Governor Newsom presenting their differing views on the significance of the DNA testing.

G. Governor Newsom's May 28, 2021 Executive Order

On May 28, 2021, Governor Newsom signed an executive order that stated:

> 1) The law firm of Morrison and Foerster, LLP is appointed to serve as Special Counsel to the Board of Parole Hearings for the purpose of conducting an independent investigation in connection with Mr. Cooper's application for clemency and claim of innocence.
>
> 2) Among its duties, the firm shall conduct a full review of the trial and appellate records in this case and of the facts underlying the conviction, including facts and evidence that do not appear in the trial and appellate records. The firm's review shall include an evaluation of all available evidence, including the recently conducted DNA tests.

(Executive Order N-06-21.)

H. Special Counsel's Investigation

Special Counsel and experts who Special Counsel retained conducted the independent investigation requested. The investigation included: reviewing the reporters' transcript of the trial court proceedings, including the pre-trial proceedings, voir dire, the trial testimony, and arguments of counsel; viewing trial exhibits in San Diego County Superior Court; reviewing the California Supreme Court's opinion affirming Cooper's conviction and the opinions available on LEXIS or Westlaw on Cooper's numerous post-conviction filings; reviewing the transcripts of the evidentiary hearing before Judge Kennedy in 2003; reviewing the transcripts of the proceedings before Judge Huff in 2004 and 2005, including the evidentiary hearing in 2005; reviewing the discovery materials that were produced at the time of Coopers' trial; reviewing substantial material Special Counsel received from the District Attorney and Cooper's representatives in response to numerous requests for information; interviewing witnesses; reviewing Cooper's Clemency Petition and exhibits; reviewing the letters and reports by Cooper's representatives and by the District Attorney in connection with the DNA testing and other matters; reviewing media accounts, both at the time of the crime and more recently

regarding Cooper's claim of innocence; reviewing the prison records of Cooper and other persons allegedly involved in the crime for information related to Cooper's claims of innocence; and, interviewing Furrow and Cooper, among others. Special Counsel retained experts on DNA and other forensic testing, on crime scene analysis, and on eyewitness memory. These experts had substantial experience evaluating claims of wrongful convictions, and had been involved in establishing that persons had been wrongfully convicted on numerous occasions.

III. EVALUATION OF THE EVIDENCE AND COOPER'S ARGUMENTS THAT HE WAS FRAMED

Below is Special Counsel's evaluation of the most important pieces of evidence and Cooper's claims that the evidence used to convict him and sustain his conviction was fabricated or planted.

The most important evidence is the DNA evidence developed after Cooper's trial that incriminates Cooper and reinforces the jury verdict. Cooper has not established that the evidence subjected to DNA testing was planted, and Special Counsel concludes that it was not.

A. Drop of Blood on Hallway Wall—A-41

1. The Discovery of the Blood Drop

At 12:25 a.m. on June 6, 1983, Criminalist Stockwell collected a portion of wallboard where a blood droplet stain appeared, which he placed in the container labelled "A-41." (89 R.T. 3511-12.) That blood droplet was collected before Cooper was arrested and a sample of his blood obtained.

2. The Evidence at Trial About the Blood Drop

San Bernardino County Criminalist Daniel Gregonis conducted various tests on A-41 shortly after the crime and determined that the blood on A-41 did not come from any of the victims. (93 R.T. 4426.) Gregonis developed a genetic profile of the blood on A-41 that he provided to Dr. Jeffrey Morris, a Clinical Assistant Professor of Pathology at the University of California Irvine School of Medicine, and a Pathologist at Memorial

Medical Center in Long Beach.

At trial, Dr. Morris testified that the complete conventional genetic profile determined from bloodstain A-41 would be expected to occur in approximately 1 in 25,000 persons of Black ancestry. (94 R.T. 4677, 4688.) He also testified that, for all intents and purposes, all persons of other ethnicities besides White people were eliminated as potential sources of the A-41 bloodstain. (*Id*.)

3. The 2002 DNA Testing of the Blood Drop

A-41 was DNA tested in 2002 pursuant to the JTA. By 2002, A-41 consisted of (1) blood powder on the inside surface of the original pillbox and (2) one small residual wallboard fragment. The Cal DOJ Lab, in conjunction with Cooper's expert, Dr. Blake, performed DNA testing on A-41 and detected a mixture of DNA of one major contributor and (at least) one trace level contributor. The Cal DOJ Lab determined Cooper was the major contributor to A-41. (Sept. 24, 2002 Cal. DOJ DNA Lab'y, Suppl. Physical Exam. Report.) Chris Hughes, Jessica Ryen, and Peggy Ryen were excluded as minor contributors to A-41, but the comparisons were inconclusive as to whether Doug Ryen and/or Josh Ryen were minor contributors because of the extremely limited amount of genetic information from the second contributor. (*Id.*)

4. The 2019 DNA Testing of the Blood Drop

A-41 was shipped to Bode in 2019 for further DNA testing pursuant to the Governors' Executive Orders. Bode detected DNA from a single contributor and confirmed that DNA profile from A-41 matched that of DNA collected from Cooper. Bode's 2019 testing did not obtain any DNA profile from a second contributor. (Nov. 18, 2019 Bode Technology Test Results at 3.)

5. Cooper's Contention About the Blood Drop

Cooper does not contend that his blood was planted at the Ryens' home before A-41 was collected on June 6, 1983. Cooper's blood was not drawn until August 1, 1983, and thus could not have been planted on the wall of the Ryens' house on or before June 6, 1983.

Instead, Cooper asserts that San Bernardino County Criminalist Gregonis falsified evidence about A-41 twice—once in 1983 and then a second time in 1999. First, Cooper asserts that before trial "[Gregonis] falsified [the] test results for blood drop A-41." (Cl. Pet. at 67.) Cooper contends that Gregonis improperly delayed the testing until after Cooper's blood was obtained so he could falsify his test results to match Cooper's blood. Second, Cooper contends that A-41 was completely consumed during testing performed at the time of Cooper's trial, and that Gregonis on August 12, 1999, gained access to A-41, and to Cooper's blood, and planted Cooper's blood in A-41. Thus, when it tested A-41 in 2002, the Cal DOJ Lab determined the blood matched Cooper's. (*See, e.g.*, Cl. Pet. at 131-32, 203 & n.291.)

Both issues are addressed below and in the report of expert Alan Keel, which is an exhibit hereto. In short, the evidence does not support Cooper's arguments that evidence about A-41 was manipulated or planted.

6. Special Counsel's Conclusions

a. The evidence does not support Cooper's arguments that Cooper's blood was planted in A-41 before DNA testing

Cooper asserts that A-41 was entirely consumed during testing in 1983; that Criminalist Gregonis on August 12, 1999, checked out A-41 from the evidence locker for 24 hours, during which time he allegedly put a bit of someone else's blood in the VV-2 Cooper reference blood vial, and then placed some of that mixture from VV-2 in A-41 so that if and when A-41 were tested in the future, it would match Cooper's DNA profile. Cooper asserts that Gregonis perjured himself when he testified in 2003 at the evidentiary hearing before Judge Kennedy that he had not opened A-41 or the glassine bindle containing A-41 in 1999. (Nov 25, 2020 Cooper Letter to Gov. Newsom at 6.) Cooper relies on Gregonis' initials and the date on the glassine bindle to assert that Gregonis did open the glassine bindle in August 1999. Cooper argues that the 2002 DNA Tests, which showed the presence of a minor contributor in addition to Cooper, support his theory that Gregonis planted a mixture of bloods in A-41 in 1999.

For several reasons, Special Counsel concludes that Cooper has not established

that A-41 was completely exhausted during testing in 1983 or that Cooper's blood was added to A-41 after trial.

First, Cooper does not establish that it was impossible for A-41 to be further tested after trial because A-41's contents were entirely consumed during testing in 1983.[3] An attorney representing Cooper went to the crime lab facility in September 1998, reviewed A-41, and noted that material still existed in A-41 at that time. (Dec. 20, 1998 Decl. of David Bernstein ¶¶ 11, 13.) Further, only a minute amount of genetic material was needed for DNA testing at the time of the later DNA tests. The fact that there may have been an insufficient amount of blood available for further conventional blood testing in 1983 or 1984 is not inconsistent with the fact that enough blood existed to perform more advanced DNA testing in 2001 and 2019/2020. Cooper's expert at trial, Dr. Blake, was involved in the testing of A-41 in 1983 and 1984, and he also observed and participated in the DNA testing in 2002. Dr. Blake never suggested that there was not enough genetic material for DNA testing of A-41 in 2002. Thus, Cooper does not establish that the material in A-41 that was DNA tested in 2002 and 2019/2020 must have been planted because A-41 was entirely consumed during pre-trial testing.

Second, the evidence establishes that Cooper's blood from VV-2 was ***not*** added to A-41. When Cooper's blood was drawn by the Sheriff's Department into vial VV-2 on August 1, 1983, shortly after Cooper's arrest, the preservative EDTA was added to the vial to prevent degradation of the sample, a standard practice at the time. When VV-2 was analyzed in 2019 by Bode, it revealed a still "robust and pristine DNA profile" for Cooper, which would be expected because of the EDTA preservative. (Keel Report at 20.) By contrast, when A-41, containing the blood sample from a wall in the Ryens' home to which EDTA was never added, was tested by the Cal DOJ Lab in 2002, Cooper's DNA profile was markedly degraded, although a complete DNA profile could still be obtained. If someone seeking to plant evidence had taken blood with EDTA from

[3] Gregonis testified that "an extremely small quantity of blood" remained. (9th Cir. No. 05-99004, 4 E.R. 723-24.)

VV-2 and added it or placed it in the pillbox containing A-41 in 1999, then Cooper's DNA profile obtained from A-41 in 2002 would have been "robust and pristine," just as it was in VV-2. It was not. That fact alone dispels Cooper's theory that his blood was taken from VV-2 and planted in A-41 before DNA testing occurred.

Third, the evidence does not support the theory that Gregonis checked out A-41 from the evidence locker for 24 hours in 1999 for the purpose of planting blood from VV-2 into A-41 to frame Cooper. There was an evidentiary hearing in 2003 at which time Gregonis and others testified— and were cross-examined by Cooper's lawyers—about Gregonis obtaining access to A-41 in August 1999. Gregonis testified that he checked A-41 out of the evidence locker because Assistant District Attorney John Kochis had asked him to verify that A-41 still existed; he testified that he did not open the pillbox where A-41 was originally stored, he did not open the glassine bindle containing A-41, nor did he place or plant Cooper's blood in A-41. (June 23, 2003 R.T. at 99-100, 111, 114, 117-19.)

A photograph of the glassine bindle shows Gregonis' initials and the date "8/13/99." Cooper argues that Gregonis' initials on the glassine bindle establish that he *opened* the bindle, but there is no direct evidence that Gregonis opened the glassine bindle containing A-41. The presence of Gregonis' initials on the glassine bindle on the day he *checked out* A-41 does not establish that he *opened* the bindle. Cooper's lawyers did not ask Gregonis during the 2003 hearing what the significance was of his initials on the glassine bindle.

Fourth, in addition to having to open the bindle and the pillbox to plant evidence, Gregonis in 1999 would have also had to (1) obtain access to the VV-2 blood vial located in San Bernardino; (2) open it; (3) somehow obtain a small quantity of liquid blood from that vial; and (4) somehow turn that liquid into a fine powder, which was the condition of the sample A-41 when it was opened by the Cal DOJ Lab in 2002. Cooper has not presented any evidence that any of those steps occurred. Instead, Cooper asserts only that Gregonis would have had access to the VV-2 vial in 1999.

At the 2003 evidentiary hearing before Judge Kennedy, Gregonis testified that in 1995, the San Bernardino County Crime Lab went through an accreditation process

during which it was recommended that a seal be placed on each vial of blood. (June 23, 2003 E.R.T. 125-26.)[4] Thus, a seal was placed on VV-2 in 1995. Gregonis testified that the seal placed on VV-2 in 1995 was still intact at the time of the evidentiary hearing in 2003. (*Id.* at 129.) Gregonis also testified that the last time he had taken anything out of VV-2 was in August 1983. (*Id.*) Further, Charles Meadows, who supervised the crime lab blood freezer, testified that the seal on vial VV-2 remained intact from 1995 until at least 2003. (June 24, 2003 E.R.T. 170-71.) That evidence refutes Cooper's claim that Gregonis opened VV-2 in 1999 and used it to plant evidence in A-41.

After hearing all the evidence and assessing the credibility of witnesses, Judge Kennedy rejected Cooper's theory that Gregonis planted Cooper's blood in A-41 in 1999. Although Special Counsel does not simply defer to that determination for purposes of the investigation, it is relevant to the evaluation of the evidence and Cooper's claims of innocence that a judge who had the opportunity to hear live testimony and cross-examination ruled that Cooper had not proved his claims after a full evidentiary hearing.

Keel also concludes that the presence of the DNA of a "minor contributor" in A-41 does not support Cooper's theory of planting. First, Keel notes that the proportional amount of DNA from the major donor in A-41 is so much greater than the amount of DNA from the minor contributor that only an extraordinarily minute amount of blood from the minor contributor could have been added (e.g., one drop added to a vial that is three-quarters full). Keel observes that there would have been no point in adding such a small amount if the goal were to plant evidence. Keel also explains that introducing a second person's blood intentionally just before DNA analysis would be inconsistent with an attempt to implicate Cooper.

Further, Cooper's expert Dr. Blake was aware in 2002 that the DNA tests of A-41 showed both a major contributor and a minor contributor. At the time those tests were conducted, a DNA analysis of Cooper's blood had not been conducted, so Dr. Blake's

[4] E.R.T. cites are to the Reporter's Transcripts of the evidentiary hearings before Judge Kennedy in 2003.

report referenced the DNA profile as "Unknown Male #1." Despite knowing that the DNA tests showed a minor contributor in A-41, Dr. Blake wrote in his July 24, 2001 report that:

> It is apparent from the success at this first stage of investigation that most of the outstanding fact issues surrounding the biological evidence can now be answered. Unknown Male #1 either is or is not Kevin Cooper. If Unknown Male #1 is not Kevin Cooper, the State's theory of this case is fundamentally undermined. If, on the other hand, Unknown Male #1 is Kevin Cooper, the State's proof in this litigation is not only undisturbed, it is made more rigorous.

(July 24, 2001 Blake Report at 7.) After DNA analysis of Cooper's blood, Cooper's profile was found to match the profile identified as Unknown Male #1. Thus, Cooper's own DNA expert did not believe that the presence of a minor contributor in A-41 cast any doubt that Cooper was the major contributor.

The presence of the DNA of a minor contributor in A-41 does not support Cooper's planting theory, and there is ample evidence that undermines the theory, including the evidence showing that the DNA profile obtained was degraded and not "robust and pristine" as one would expect if blood from VV-2 was planted in A-41. The claim that some other person's blood was added to VV-2, and then the mixture added to the A-41 pillbox in 1999 is not a more likely explanation for the presence of a minor contributor than the possibility that (1) Doug Ryen or Josh Ryen[5] is the minor contributor or (2) the trace amount of a second DNA profile was introduced innocently during handling of the exhibit.

Furthermore, there was little motive for Gregonis to place Cooper's blood in A-41, and good reason not for him to do so. In August 1999, when Cooper alleges that Gregonis placed a small portion of dried blood in powder form into A-41, there was no need to

[5] The September 24, 2002 Report also states "It is inconclusive whether either Doug or Josh Ryen could be the minor contributor, although some of the low level results (below the interpretational threshold) in the A-41A profile would suggest that neither one is." (*Id.* at 4.)

"frame" Cooper to secure his conviction. Cooper had been convicted and his conviction had been affirmed by the California Supreme Court. The People would not have needed to manufacture ***additional*** evidence of Cooper's guilt in 1999; Cooper's conviction would stand unless Cooper could prevail on a successive habeas claim that itself had procedural hurdles before it would even be considered on its merits. Indeed, if Gregonis in 1999 wanted to ensure that Cooper could not prevail on a habeas petition, Gregonis had no reason to plant material in A-41 if it had truly been entirely consumed by testing at the time of trial. Asserting that there was no more of A-41 to test would have been sufficient to thwart Cooper's claims.

In sum, Keel's analysis and Special Counsel's review of the evidence leads to the conclusion that the DNA testing that showed the presence of Cooper's blood in Exhibit A-41 was not the result of tampering. The presence of Cooper's blood in A-41, found on a wall in the Ryens' house the day after the Ryen/Hughes Crimes, incriminates Cooper.

b. The evidence does not support Cooper's contention that Gregonis falsified test results of A-41 in 1983

Even if Cooper could establish that the DNA testing of A-41 in 2002 and 2019 was unreliable, he would also need to establish that the original testing performed on A-41 in 1983 and 1984 was flawed and unreliable. Cooper fails to do so.

Cooper contends that before trial "[the Sheriff's Department] falsified its test results for blood drop A-41" (Cl. Pet. at 67). Cooper argues that Gregonis improperly delayed testing A-41 so he would know Cooper's phenotype before committing to an analysis of A-41, and Gregonis intended to incriminate Cooper regardless of the truth. Cooper also argues that Gregonis tested A-41 incorrectly, and improperly affected the test results, by placing contents from A-41 and a Cooper sample side-by-side on the same testing plate.

DNA expert Keel independently evaluated Cooper's claim about Gregonis' testing methods. In summary, Keel reports that Gregonis' records demonstrate a thoughtful, systematic, and effective investigative approach to analyzing A-41. Keel also notes that Gregonis performed many of his tests before Cooper's blood was obtained. Keel found

no evidence that Gregonis delayed any tests in order to know what results he wanted to obtain.

With regard to placing both the A-41 and VV-2 samples on the same test plate, Keel reports that this practice was standard in the 1980s, and was also done by Cooper's own expert, Dr. Blake, when he conducted testing in October 1983. Keel further reports that although the A-41 bloodstain and Cooper's sample were on the same plate, they were separated by a control sample or by an empty test slot. Keel concludes that the testing in 1983 established that it was exceedingly likely that the blood in A-41 was Cooper's blood (a finding confirmed by the DNA testing of A-41).

c. Cooper's claims based on Gregonis' alleged conduct in other actions are not persuasive

In support of his argument that Gregonis falsified evidence about A-41 twice, Cooper's representatives assert that Gregonis falsified evidence, altered testing results, and testified in an unethical manner in three other cases: *Richards v. County of San Bernardino*, U.S. District Court, Central District of CA- Eastern Division (Case No. 17-cv-00497-SJO-SP); *Coffman v. Patrick*, U.S. District Court, Central District of CA (Case No. 06-CV-07304-AB) and *Watley v. Lamarque*, U.S. District Court, Central District of CA (Case No. 02-CV-0155-GAF- RNB). Cooper's representatives suggest that Gregonis' testimony in the Cooper case should be disregarded because, if Gregonis planted evidence or gave false testimony in other cases, he likely did so in Cooper's case as well.

In *Coffman* and *Watley*, convicted persons argued in their habeas petitions that Gregonis engaged in misconduct, but those arguments have not been proven and their habeas petitions were denied. In *Richards*, a 1983 civil rights action, the district court granted summary judgment in favor of Gregonis on a claim that Gregonis had planted fibers under the murder victim's fingernails to frame the defendant. The Ninth Circuit reversed that grant of summary judgment finding that triable issues of fact existed, which precluded the grant of summary judgment. Even if Gregonis were in the future to be found to have committed misconduct or testing errors in *Richards*, the physical evidence in Cooper's case shows conclusively that no one planted or tampered with A-41.

B. The Tan T-Shirt

1. The Discovery of the Tan T-Shirt

On June 7, 1983, Deputy Sheriff Scott Field recovered a tan t-shirt, which appeared to be blood-stained, in a field near the Canyon Corral Bar, which was not far from the Ryens' house. (101 R.T. 6510.)

2. The Evidence at Trial About the Tan T-Shirt

Pre-trial serological testing by Gregonis on a cutout and a stained portion of the t-shirt confirmed the presence of human blood, ABO type A, and the presence of several protein markers that were consistent with Doug Ryen. (93 R.T. 4604-06.) The prosecution did not introduce the tan t-shirt or the cutout portion of the shirt into evidence at trial.

Cooper's defense lawyer introduced the body of the t-shirt (without the cutout) as Exhibit 169, in furtherance of his theory that three men seen at the Canyon Corral Bar on June 4, 1983, one of whom was said to be wearing a tan t-shirt, committed the Ryen/Hughes Crimes.

3. The 2002 DNA Testing

Under the JTA, both the major portion (the body) of the tan t-shirt (Exhibit 169, kept in the San Diego County Courthouse) and the cutout portion (housed in the San Bernardino County Crime Lab) were shipped to the Cal DOJ Lab for DNA testing. (July 7, 2002 DOJ Physical Evidence Exam. Report.)

Senior Criminalist Steven Myers performed the DNA analysis, observed by Dr. Blake representing Cooper. Myers concluded that Cooper was the donor of some of the blood found on the body of the tan t-shirt (Exhibit 169). Myers concluded the blood on the body of the tan t-shirt that matched Cooper's DNA profile could be expected to occur at random in the Black population with a frequency of 1 out of 110 million. (Sept. 24, 2002 Cal. DOJ DNA Lab'y, Suppl. Physical Exam. Report.)

Myers determined that Doug Ryen was also a donor of some of the blood found on a part of the cutout from the tan t-shirt, and as a possible contributor to some of the blood

found on the body of the tan t-shirt. The blood from the tan t-shirt that matched the DNA profile of Doug Ryen could be expected to occur at random in the White population with a frequency of 1 out of 1.3 trillion persons. (*Id*.) Peggy Ryen was identified as a possible contributor of a blood spot on the body of the tan t-shirt. (*Id*.)

4. The 2019 DNA Testing

In 2019, Bode performed a "habitual user" analysis of the tan t-shirt, testing for the presence of DNA profiles at locations where they were most likely to be found from someone who has worn the garment. Bode found no meaningful evidence as to the wearer of the t-shirt.

5. Cooper's Contentions About the Tan T-Shirt

Cooper does not contend that any of the blood on the body of the tan t-shirt or the cutting was planted before trial to frame Cooper. Rather, he contends that someone (not Gregonis)[6] placed Cooper's blood from VV-2 on the cutting of the t-shirt *after* Cooper's conviction and before the cutting was subjected to DNA testing in 2001. As discussed, Cooper asserted in his appeal from a habeas proceeding in 2004 that testing the body of the tan t-shirt for the presence of EDTA would show his blood from VV-2 had been planted on the shirt sometime after 1983. A panel of the Ninth Circuit ordered tests for the presence of EDTA on the tan t-shirt. *Cooper v. Brown,* 358 F.3d 1117, 1124, 1135 (9th Cir. 2004). Judge Huff "adopted a 'control' method of testing in which the amount of EDTA detected in a stain would be compared to the amounts of EDTA found in various control swatches from other non-stained portions of the T-shirt." *Cooper*, 2005 U.S. Dist. LEXIS 46232, at *98. Initially, expert reports from the proceeding before Judge Huff reached apparently contradictory test results. Cooper's expert, Dr. Kevin Ballard, found no elevated EDTA in the stains on the tan t-shirt compared with EDTA levels found in testing the control swatches. *Id*. at *112-13. The State's expert, Dr. Gary

[6] Special Counsel asked Cooper's representatives to identify the various ways they contend Gregonis fabricated evidence, and Cooper's representatives did not reference the tan t-shirt.

Siuzdak, found an extremely elevated EDTA level in a location identified as Sample 1, cut from a portion of the t-shirt near a bloodstain identified as Cooper's blood. Dr. Siuzdak submitted a follow-up report in October 2004 stating, "I now believe that the samples tested were contaminated with EDTA in my laboratory and therefore must retract the report submitted." (Quoted in Judge Fletcher's dissent in *Cooper v. Brown*, 565 F.3d at 601.) Judge Huff concluded that the test results did not support the theory that Cooper's blood was planted on the t-shirt. *Cooper v. Brown*, 2005 U.S. Dist. LEXIS 46232, at *115-16, *137-38.

Judge Fletcher's dissenting opinion in 2009 includes an extended discussion of the theory that Cooper's blood was planted on the tan t-shirt. Judge Fletcher offered a quantitative analysis that he himself performed comparing the Siuzdak and Ballard measurements, which he argued showed that the differences in EDTA that Siuzdak and Ballard measured were different in absolute numbers but, in relative proportion, were "remarkably consistent." *Cooper v. Brown*, 565 F.3d at 603-607. Judge Fletcher rejected Siuzdak's conclusion that his testing had been contaminated and concluded that Siuzdak's initial finding of extremely elevated EDTA on the tan t-shirt was probably valid. Judge Fletcher offered the hypothesis that the piece of Sample 1 provided to Dr. Ballard to test contained less of Cooper's blood than the piece Dr. Siuzdak's received to test. *Id*. at 604. Further, Judge Fletcher discounted the testimony that the vial VV-2 had remained sealed since 1995, quoting Cooper's lawyer's argument before Judge Kennedy in the 2003 evidentiary hearing that "blood could be withdrawn from those [vials] without breaking any seals." *Id*. at 606 (quoting June 25, 2003 E.R.T. 330). Judge Fletcher concluded that "the [EDTA] test results we already have strongly suggest that Cooper's blood was planted on the t-shirt." *Id*. at 608.

6. Special Counsel's Conclusions

Special Counsel and Keel considered the claims and Judge Fletcher's hypothesis that, sometime after trial and before the DNA testing in 2002, Cooper's blood was taken from VV-2 and planted on the body of the tan t-shirt that was in evidence in the San Diego County Courthouse. Cooper does not establish that his blood was planted on the

tan t-shirt after trial.

First, as discussed above regarding A-41, if Cooper's blood from VV-2 was planted on the body of the t-shirt, the DNA profile obtained in 2002 would have been robust and pristine, like VV-2 was when Bode tested it in 2019, due to the presence of the preservative EDTA. The DNA profile was not robust and pristine. Keel states that the test result shows severe degradation of the Cooper blood stain on the t-shirt. (Keel Report, Ex. 11.) He states: "[T]his level of degradation proves the blood on the t-shirt, from Mr. Cooper and others, could not have been planted from vial VV-2 after the t-shirt was retrieved from the Court in 2001 for DNA testing because the blood in VV-2 is still pristine in 2019." (Keel Report at 32.)

Furthermore, Keel considers the EDTA test ordered by Judge Huff in 2004 to have been a "poor strategy" since EDTA is so common in the environment that a finding of EDTA on the tan t-shirt would not prove that EDTA-preserved blood was the source. (*Id.* at 38.)

Keel also concludes the findings of the EDTA testing in 2004 do not show elevated EDTA levels on the tan t-shirt. Keel explains that, contrary to Judge Fletcher's theory, Dr. Siuzdak and Dr. Ballard were not given different pieces of the t-shirt. Instead, the samples cut from the tan t-shirt were each treated with a testing liquid to extract the relevant chemical constituents, and the liquid extract derived from each sample was split into thirds – identical in composition – one of which went to each of Dr. Siuzdak and Dr. Ballard, and the third of which was retained by the laboratory that made the extracts. Keel explains that accurate testing of each sample should have produced the same or very similar results since they were all testing the same liquid extract to prevent the very situation that Judge Fletcher hypothesized in his dissent. Keel accepts the conclusion by Dr. Siuzdak that he had found contamination in his controls, which explained why his test results were seemingly different. Further, the test performed by Dr. Ballard, Cooper's own expert, did not show elevated EDTA.

According to Keel, results so disparate must have been caused by testing error. Dr. Siuzdak's statement that his results reflected EDTA contamination that occurred in his

laboratory fits the evidence, while Judge Fletcher's analysis relies on an incorrect factual assumption. Keel thus confirms Judge Huff's conclusion that, based on Dr. Ballard's findings, the testing showed that Cooper's blood on the tan t-shirt was not planted from vial VV-2.

Cooper fails to establish that one or more persons tampered with the tan t-shirt evidence for other reasons as well. Since the prosecution did not use the tan t-shirt at trial, it is implausible someone planted Cooper's blood on it *before* trial. Cooper does not contend otherwise. Thus, Cooper's theory would require that, after it appeared the tan t-shirt would be DNA tested, someone obtained the sealed vial of Cooper's blood, VV-2, from the locked freezer in the San Bernardino County Crime Lab, gained access to the tan t-shirt at the San Diego County Courthouse, and then smeared Cooper's blood on the t-shirt before sending it to the Cal DOJ Lab. No evidence of such a plot has been presented.

To the contrary, evidence from several witnesses from different agencies refutes such a plot. William Nicks, the evidence clerk for the San Diego County Superior Court, testified before Judge Kennedy in 2003 and authenticated a list of persons who had access to the trial exhibits, including the tan t-shirt; no one from the San Bernardino County Sheriff's Department is listed as having had access during the relevant time. (June 23, 2003 E.R.T. 150:1-152:12.) Our review of the list shows that the persons shown as having access to the exhibits were either lawyers or representatives of the Cal DOJ Lab. (San Diego Superior Court Exhibit Room Log [marked as Exhibit 27 at the June 23, 2003 hearing].) There is no evidence to support speculation that persons in charge of evidence at the San Diego County Courthouse were part of a conspiracy to allow evidence at the Court to be altered in order to defeat Cooper's post-conviction attacks on the judgment.

Further, as noted above, both Gregonis and Meadows testified that the seal on vial VV-2 remained intact from 1995 until at least 2003. (June 23, 2003 E.R.T. 129; *id.* at 170-71.)

Finally, as stated, there would have been little motive for persons in around 2001

to falsify evidence against Cooper as Cooper's theory presupposes; because Cooper had already been convicted, no additional incriminating evidence was needed. Cooper does not claim that Gregonis was involved in tampering with the tan t-shirt, and Cooper does not identify any specific persons who he asserts committed the tampering.

Summing up, the presence of Cooper's blood and Doug Ryen's blood on the tan t-shirt found on June 7, 1983, near the Ryens' home incriminates Cooper. Cooper does not establish that his blood was planted on the tan t-shirt.

C. The Cigarette Butts in the Ryens' Station Wagon

1. The Discovery of the Cigarette Butt Evidence

Two cigarette butts, V-12 and V-17, were found on June 11, 1983 in the Ryens' station wagon, which was recovered in Long Beach. (90 R.T. 3806-07, 92 R.T. 4205-06.)

2. The Evidence at Trial About the Cigarette Butts

At trial there was evidence that, while at CIM, Cooper smoked hand-rolled cigarettes using rolling paper and a particular brand of tobacco—"Role-Rite"—issued free to incarcerated persons that was not sold retail, but only to institutions in California, including CIM. There was also testimony that V-12 and V-17 were consistent with tobacco found at the Lease house and with Role-Rite tobacco, and they were unlike tobacco publicly available for purchase. (95 R.T. 4891.) A manager with the company that manufactures Role-Rite tobacco testified that he had "no doubt" that the tobacco found in the Ryens' station wagon was Role-Rite. (95 R.T. 4908.) Conventional genetic analysis of the saliva on the two cigarette butts from the Ryens' station wagon was mostly inconclusive, but was consistent with the cigarettes having been smoked by a "nonsecretor" such as Cooper. *People v. Cooper*, 53 Cal. 3d at 799-800.

3. The 2002 DNA Tests

The two cigarette butts found in the Ryens' station wagon were among the pieces of evidence tested pursuant to the JTA in 2001. That testing showed Cooper's DNA was present on both V-17 (with a population frequency of 1 in 19 billion) and V-12 (1 in 110 million). *Id*. at *146.

4. Cooper's Contention about the Cigarette Butts

Cooper makes two arguments about V-12 and V-17. First, Cooper asserts that they were both planted in the Ryens' station wagon by law enforcement on ***June 12, 1983***, after it was towed from Long Beach to San Bernardino as part of the plot to frame him. Cooper's argument is based on his contention that V-12 and V-17 were allegedly not in the Ryens' station wagon when Detective Hall first searched the wagon on June 11, 1983, because Detective Hall did not identify them specifically in his report. Cooper therefore asserts V-12 and V-17 "mysteriously appeared" for the first time when the vehicle was examined again in San Bernardino on June 12, 1983. (Cl. Pet. at 11, 68-69.) Cooper also asserts that, "Stockwell and Ogino's report did not show the times, dates and persons responsible for gathering this evidence. The only documentation of the results of Stockwell and Ogino's search is a handwritten, undated and unsigned note." (Cl. Pet. at 214.)

Second, Cooper makes a further claim that concerns V-12, but not V-17. Cooper argues that V-12 was entirely consumed by testing performed in 1983-1984, and another portion of cigarette paper with Cooper's DNA on it was planted in the pillbox holding V-12 in 1999 before DNA testing. Cooper asserts that, during pre-trial proceedings, Gregonis testified that V-12 was "exhausted" during testing by Brian Wraxall, a forensic serologist with Serologic Research Institute ("SERI") in 1984 such that the defense could not independently test it. (57 R.T. 4947.) Cooper asserts that V-12 "inexplicably . . . reappeared" at trial, (Cl. Pet. at 69), when Stockwell testified on December 4, 1984 that when he opened the canister for V-12, he saw a portion of the cigarette paper (92 R.T. 9241). Cooper asserts that when Gregonis inventoried exhibits in 1999, he indicated that an envelope from SERI did not contain the V-12 pillbox; that when V-12 was received by the Cal DOJ Lab in 2001, the trial exhibit containing V-12 contained a piece of burned cigarette paper; and that the paper remnant was thereafter tested for Cooper's DNA. Cooper asserts that V-12 had grown from 4 millimeters to 7 millimeters and "refolded itself." (Cl. Pet. at 69.) Cooper suggests that, after DNA testing was called for, someone placed into the V-12 container material from another cigarette butt, labeled "QQ" during

the investigation, that had been retrieved from a vehicle that Cooper used before he was sentenced to CIM. Cooper asserts Exhibit QQ, the cigarette butt found in the car he used before he was sentenced to CIM, was no longer contained in the bag in which it had been stored in the lab, but had been moved to another location. By 1999, Cooper asserts QQ was no longer in that second location.

5. Special Counsel's Conclusions

a. Cooper's contention that V-12 and V-17 were planted

The linchpin of Cooper's contention that V-12 and V-17 were planted is that that V-12 and V-17 were allegedly not collected on June 11, 1983, when the station wagon was first searched in Long Beach, and "mysteriously appeared" when the station wagon was searched in San Bernardino on June 12, 1983. The evidence disproves Cooper's contentions. A written report signed by both Ogino and Stockwell states that on ***June 11, 1983*** (the day the station wagon was first searched) they collected V-12 and V-17 from the station wagon while it was in Long Beach. (Discovery at 1712-14.) Furthermore, they both testified under oath that they found those items on ***June 11, 1983*** while collecting evidence from the wagon in Long Beach. (92 R.T. 4233-4235, 4286-4289.) Cooper does not argue that the evidence showing V-12 and V-17 were recovered on June 11, 1983, in Long Beach should be disregarded or rejected. Instead, in his Clemency Petition and during our investigation, Cooper ignores the testimony and documents that show V-12 and V-17 were collected on June 11, 1983, in Long Beach, during the initial search of the wagon.

Nor is there any inconsistency between Detective Hall's report and the report of Ogino and Stockwell. Detective Hall noted "tobacco type substances" "on the front seats and floorboard area of the vehicle," although he did not itemize or collect the items, leaving that work for the criminalists. (Discovery at 617.)

Cooper's assertion that V-12 and V-17 were not found until the wagon was searched in San Bernardino on June 12, 1983, is factually incorrect.

Cooper claims that numerous butts of cigarettes he had smoked at the Lease house

were collected but never formally logged into evidence, and speculates that those cigarette butts were then planted in the wagon. Cooper's only cited evidence for that theory is his own testimony at trial that he smoked many cigarettes at the Lease house. There is no evidence that any cigarette butts were collected by officers at the Lease house and stashed away for future planting. Cooper's theory that San Bernardino County Sheriff's Department officers searching the Lease house on or about June 7, 1983, logged some, but not all of the cigarette butts they found, presumably because they already contemplated using them later to plant evidence to bolster their case is considerably less likely true than accepting that the cigarettes were left in the Ryens' station wagon by Cooper.

Cooper's theory that V-12 and V-17 were planted was the subject of considerable testimony in the Kennedy evidentiary hearing, where Ogino, Stockwell and others testified again, and were cross-examined again. Cooper necessarily contends that Ogino and Stockwell perjured themselves again in that proceeding. After hearing all the evidence, Judge Kennedy rejected Cooper's claim that V-12 and V-17 were planted.

Cooper fails to establish that V-12 and V-17 were planted in the Ryens' station wagon.

b. Cooper's contention that V-12 was entirely consumed during testing and other material was planted before it was DNA tested

Cooper's contention is two-part: first that V-12 was entirely exhausted by Wraxall's testing of it, and second, that someone thereafter put other cigarette material with Cooper's DNA on it in the container holding V-12 before it was DNA tested in 2001.

Regarding the question whether V-12 was entirely exhausted by Wraxall's testing, Wraxall died several years ago so he cannot be asked about his testing methods or whether those testing methods consumed, or exhausted, all remnants of cigarette paper in V-12. When Wraxall testified at trial, he did not state that his testing in 1984 completely consumed V-12, and his bench notes do not state that all remnants of cigarette paper were

consumed. Gregonis' testimony during pre-trial proceedings in July 1984 that there was "not enough left [of V-12] for the defense to do independent testing on it" at that time does not necessarily mean that there was literally nothing left in the container holding V-12 that could be tested in 2001 using more modern DNA tests. (57 R.T. 4947.)

Cooper's expert Dr. Blake was involved in Wraxall's testing of V-12 in 1984. (94 R.T. 4732.) If he thought Stockwell's or Gregonis' trial testimony about the remnants of V-12 they observed was inconsistent with Wraxall's testing of V-12, surely Blake would have testified about that when he testified in Cooper's defense.

Furthermore, if V-12 had in fact been entirely exhausted by Wraxall's testing in 1984, there was very little or no motive to place a small piece of cigarette paper that may have been smoked by Cooper in the canister marked as Exhibit 584 ***after*** Wraxall's testing and ***before*** trial. No further testing of V-12 occurred during that time or was contemplated. If all of V-12 had truly been consumed during testing, it would have been a simple thing to explain to the jury why nothing remained of V-12.

It is highly implausible that someone planted cigarette material with Cooper's DNA on it before trial on the chance that someday V-12 would be subjected to further testing post-trial, especially after Gregonis had testified during pre-trial proceedings that Wraxall's testing left too little of V-12 for the defense to do independent testing on it. Further, the fact that Gregonis testified that Cooper's experts could not test the remains with then-available methods does not establish that there was insufficient material left for more advanced DNA testing of V-12 in 2001.

Separately, Cooper contends that after trial someone tampered with V-12 *again*, before it was DNA tested. Cooper bases that contention on the theory that the description of the remains of V-12 at Cooper's trial in 1984 was different from the DOJ's description of V-12 it received in 2001 before DNA testing. Cooper does not establish a discrepancy.

At trial, Gregonis was shown Exhibit 584, a brass canister where "the remainder" of cigarette butt V-12 that Gregonis had analyzed was stored. (93 R.T. 4471.) Gregonis testified that V-12 was no longer in the same condition as when it was collected at the scene due to the tests that had been conducted on V-12. (93 R.T. 4471-72.) Specifically,

he testified the cigarette butt had been separated and the tobacco taken out of the paper. (93 R.T. 4472.)

After Gregonis testified about Exhibit 584, Ogino testified at trial on December 17, 1984, that earlier that day he moved V-12 from Exhibit 584, to Exhibit 584-A, a clear plastic box which he sealed, but which would allow the jury to inspect its contents without handling the actual tobacco and paper. (96 R.T. 5047.)

Gregonis' testimony at trial in 1984 of what he saw in Exhibit 584 matches closely with the DOJ's staff's handwritten notes made when 584-A was opened for DNA testing in July 2001. Those notes reflect that 584-A contained "loose tobacco debris" and "one small burned paper remnants [sic]." (Cl. Pet., Ex. 87 at ER 01670; *see* Cl. Pet. at 69.) Notes by Blake, Cooper's own expert, about the exhibit state: "The unburned edges have been cut away. It is obvious that most of the cigarette has been consumed in previous testing." (Cl. Pet., Ex. 87 at ER 1670.) Gregonis' testimony of the contents of 584 in 1984 and Blake's description of the contents of 584-A in 2001 are similar. The fact that the remains of V-12 appeared to be unchanged between Cooper's trial in December 1984 and the time the Cal DOJ Lab examined the remains of V-12 in 2001 dispels the contention that someone planted other cigarette material, with Cooper's DNA on it, between trial and DNA testing in 2001. Furthermore, 584-A was kept at the San Diego County Courthouse with the other trial exhibits and no one from the San Bernardino County Sheriff's Department who could have planted cigarette material with Cooper's DNA on it in the exhibit container accessed those exhibits in the period 1999 to 2001.

Cooper asserts that, when V-12 was tested for DNA in 2001, it had grown from 4 mm to 7 mm and "refolded itself." (Cl. Pet. at 69.) Cooper does not cite any evidence showing that V-12 "refolded" itself. V-12 was not a folded cigarette when it was received by the Cal DOJ Lab in 2001. (Cl. Pet., Ex. 87 at ER 01670; see Cl. Pet. at 69.) We also do not conclude that the difference between a measurement of 4 mm versus 7 mm of an irregularly shaped remnant of a burnt cigarette paper indicates that someone planted material in V-12 after trial and before DNA testing in 2001. Further, although there was an evidentiary hearing before Judge Kennedy in 2003 to address Cooper's

claims that the DNA testing that had occurred was unreliable because of alleged evidence tampering, it appears Cooper did not raise this claim about V-12 growing and "refolding" itself. It also does not appear that Cooper's counsel raised this theory in connection with the 2004-2005 evidentiary hearing before Judge Huff when witnesses could have been called and cross-examined, and Judge Huff could have considered the claim. Summing up the evidence about the cigarette butts, the DNA testing places Cooper in the Ryens' station wagon that was stolen after the murders. Cooper has not established that both V-12 and V-17 were planted, or tampered with, to secure his conviction. The DNA testing of cigarette butts is incriminating.

D. Other DNA Testing Was Inconclusive

As stated, one of the two pieces of evidence that Cooper wanted further testing of in 2004 to resolve his claims of innocence "once and for all" was hair found in Jessica Ryen's hands. Mitotyping Technologies, LLC ("Mitotyping") conducted mitochondrial DNA testing on hair samples obtained from Jessica Ryen's hands. (Aug. 2, 2004 Mitotyping Techs., LLC Report to Judge Huff at 2.) Mitotyping concluded that it could not exclude Jessica Ryen, Peggy Ryen, Joshua Ryen, or their maternal relatives as the possible donor of the human hair samples recovered from Jessica Ryen's hands. (*Id*. at 7.) In addition, Mitotyping concluded that some of the recovered hair samples were animal hairs. (*Id*. at 6.) As a result of the Mitotyping analysis, the District Court ruled that the DNA testing failed to show that someone other than Cooper committed the Ryen/Hughes Crimes. *Cooper v. Brown*, 2005 U.S. Dist. LEXIS 46232, at *88.

In 2020, Bode conducted additional testing on the hair samples recovered from Jessica Ryen's hands. Bode determined that two of the hair samples recovered from Jessica Ryen's left hand were apparent human hairs, while three samples appeared to be of non-human origin. (*See* June 4, 2020 Bode Tech. Suppl. Forensics Case Report, at 4.) Bode further concluded that while the human hairs were not suitable for nuclear DNA analysis, they were potentially suitable for mitochondrial DNA analysis. (*Id.)* In October 2020, Bode conducted mitochondrial DNA testing on two human hair samples from Jessica Ryen's left hand. (Oct. 28, 2020 Bode Tech. Suppl. Forensics Case Report, at 2.)

Bode failed to obtain a mitochondrial DNA profile from one of the samples, and, due to irreproducibility, could not report the mitochondrial DNA data obtained from the other sample. (*Id*.) Bode's 2020 testing results were thus inconclusive.

Governor Newsom ordered DNA testing of fingernail scrapings of the victims. Bode's tests yielded either no DNA profiles or yielded such limited data that no conclusions could be made. (Nov. 18, 2019 Bode Technology Test Results at 2-3.)

Other items which were DNA tested, but which did not yield usable data, are discussed below.

E. Additional Evidence

1. Pubic Hair in the Ryens' Station Wagon that Matched Cooper's Pubic Hair

a. Discovery of pubic hair in the station wagon

Ogino testified that he collected a black curly hair (V-19) from the floor of the Ryens' station wagon, in front of the front seat passenger side, on the evening of June 11, 1983, at the Long Beach impound lot. (92 R.T. 4235.)

b. Evidence at trial about the pubic hair

Charles Morton, a criminalist with the Institute of Forensic Science Criminalistics Laboratory, testified at trial that the hair found in the front passenger floor of the wagon and labeled V-19 was pubic hair belonging to a Black man, was indistinguishable from Cooper's pubic hair, and was unlike the pubic hair of Doug or Peggy Ryen. (96 R.T. 5011-5015.)

DNA testing of V-19 was not requested by Cooper or performed.

c. Cooper's contentions about the pubic hair

Cooper's Clemency Petition does not address V-19 or Morton's testimony about it. Cooper has never claimed that anyone planted his pubic hair in the Ryens' station wagon.

d. Special Counsel's conclusions about the pubic hair evidence

Morton's testimony that the pubic hair found in the Ryens' station wagon was that of a Black man and was indistinguishable from Cooper's pubic hair incriminates Cooper. That evidence is further reinforced by the DNA evidence regarding V-12 and V-17 that places Cooper in the Ryens' station wagon.

2. "Dude" Tennis Shoeprints in the Ryens' House

a. The discovery of the shoeprint

At trial, the prosecution introduced evidence regarding three shoeprints. The first was a faint shoeprint found on a spa cover outside the Ryens' master bedroom on June 5, 1983. (88 R.T. 3363; 94 R.T. 4763.) The second was a bloody shoeprint on a folded bed sheet located in the Ryens' master bedroom that was also collected on June 5, 1983. (89 R.T. 3506; 94 R.T. 4762.) The third was a shoeprint from the Lease house, made in the dust in the room with the pool table, that was found on June 7, 1983. (87 R.T. 2925; 94 R.T. 4760.)

At trial, Criminalist David Stockwell testified that he arrived at the Ryens' home around 2:45 p.m. on June 5, collected approximately 45 separate pieces of evidence including the bed sheet with the shoeprint, and took photographs. (89 R.T. 3502-03.) The sheet was taken back to the crime laboratory in San Bernardino, and "at some point later in time," Stockwell discovered "what appeared . . . to be a footwear impression on the sheet." (*Id*. at 3506.) He testified that it was a "rust color impression," consistent with it "being made in blood." (*Id*. at 3506-07.)

b. The evidence at trial about the shoeprint

The prosecution argued that shoeprint evidence at the Ryens' house matched the shoeprint at the Lease house and the tread of a tennis shoe (the Pro-Keds Dude) that was issued at prisons, including CIM, and which was not sold in retail locations.

c. Cooper's contentions about the shoeprint evidence

Cooper asserts that the shoeprint evidence presented to the jury was not probative

of his guilt because: (1) shoeprint evidence in general is unreliable and now considered "junk science," (2) the type of shoe that allegedly left the prints was not nearly as rare as the prosecution argued at trial, (3) the shoeprints could have been left by numerous people since the crime scene was not properly maintained, (4) there was no evidence that Cooper had a pair of Pro-Ked Dude shoes, and (5) the shoeprint evidence was "likely" planted by law enforcement. Cooper further suggests that the prosecution presented false testimony at trial related to the shoeprints evidence.

In pre-trial proceedings, Deputy Sheriff Gale Dewey Duffy testified that he did not see any shoe impressions in the Ryens' master bedroom on June 5. (43 R.T. 3343.) However, Duffy testified at trial that he arrived at the Ryens' house shortly after 2 p.m. on June 5, to take pictures of the crime scene. (88 R.T. 3357, 3359.) He did not notice or photograph the shoeprint on the bed sheet during his first walk-through, but he photographed the shoeprint after it was pointed out to him by someone approximately two hours after he arrived. (89 R.T. 3497.) Cooper's counsel pointed out this fact at trial, but neither Cooper's counsel nor the District Attorney's representative asked Duffy to explain or comment on it. (89 R.T. 3498.)

Judge Fletcher stated in his dissenting opinion in 2004 in *Cooper v. Brown*: "At trial, only one person testified that he saw the bloody print while the sheet was still in the bedroom. That person was SBCSD Deputy Duffy. . . If Deputy Duffy was telling the truth at the preliminary hearing, no one saw the blood print on the sheet while it was in the bedroom. If Deputy Duffy was telling the truth at the preliminary hearing, he lied at trial." *Cooper v. Brown*, 565 F.3d at 616. Judge Fletcher suggests that there was no shoeprint on the bed sheet on June 5 when Duffy was taking photographs or when Stockwell collected the bed sheet, but that someone later obtained a Pro Keds Dude tennis shoe, dipped it in some red-colored substance, and placed a shoeprint on the bed sheet before Stockwell observed it later.

Cooper also questions the shoeprint evidence on the ground that it was presented at trial through the testimony of William Baird, the Crime Laboratory Manager with the San Bernardino County Sheriff's Department at the time, who concluded that the three

prints obtained from the Ryens' house and the Lease house were consistent and made by a Pro-Keds tennis shoe. (94 R.T. 4767.) Cooper asserts that Baird, soon after Cooper's trial, was found to have stolen heroin unrelated to the Cooper case from the evidence locker at the crime laboratory, although there is no evidence that Baird was using any drugs at the time of the Cooper investigation and Baird has denied that he was using any drugs at the time of the Cooper investigation. (Cl. Pet. at 53, 97; *Id.*, Exs. 1, 17.) Cooper has not presented any evidence or theory to support a claim that Baird in June 1983 would have been motivated to fabricate evidence to frame Cooper due to Baird's conduct regarding stealing drugs from evidence.

Cooper asserts that shoeprint evidence is inherently suspect and its use has been discredited. Cooper asserts that "identification of a particular shoeprint as coming from the tread of a particular shoe is no longer accepted as scientifically valid." (Cl. Pet. at 98.) However, the prosecution did not argue that a particular shoeprint came from a particular shoe; the prosecution argued that the shoeprint was relatively rare and unique to the incarcerated population.

d. Special Counsel's conclusions about the shoeprint evidence

The thrust of Cooper's arguments about the shoeprint evidence is that the prosecution knew the evidence it presented to the jury was unreliable or false, rendering the jury verdict suspect. As stated, Special Counsel was asked to evaluate Cooper's claim of innocence, not the fairness of Cooper's trial or whether the outcome might have been different if different evidence had been presented.

The evidence of a shoeprint on the bedsheet in the Ryens' house is not strong evidence of Cooper's guilt, but it has probative value. Regardless, even if there were no evidence of shoeprints that tied Cooper to the murder, there is other, conclusive evidence of Cooper's guilt, including DNA evidence that was unavailable at the time of trial.

3. Hatchet and Hatchet Sheath

a. The discovery of the hatchet and sheath

On the afternoon of June 5, a neighbor of the Ryens discovered an Estwing-brand hatchet with what looked like dried blood on it in the weeds not far down the road from the Ryens' home. (90 R.T. 3789-91.)

On June 7, 1983, Sibbitt and Burcham found a hatchet sheath on the floor of the Bilbia bedroom in the Lease house. (86 R.T. 2857-61; 86 R.T. 2876-79.)

b. The evidence at trial about the hatchet and sheath

Larry Lease testified that a hatchet kept at the Lease house, which had been seen there as recently as May 30, 1983, was missing after the crime. (86 R.T. 2773-75; Discovery at 755-56.) At trial, Sibbitt identified that missing hatchet as the hatchet taken into evidence. (86 R.T. 2856-59.) Percy Burcham, Virginia Lang, and Kathy Bilbia also testified that the hatchet that was recovered was the hatchet missing from the Lease house. (86 R.T. 2685, 2878-79; 87 R.T. 2978-79.)

The coroner testified that in his opinion the wounds on the victims were consistent with a hatchet, one or two knives, and an ice pick. (90 R.T. 3835-3929; 91 R.T. 3931-3946.)

There was blood and hair on the hatchet. Pre-trial testing of the blood determined it was ABO type B, consistent with Josh Ryen, who was the last victim attacked. (Discovery at 1725.) The hairs were determined to be consistent with hair from Josh and Doug Ryen. (96 R.T. 5015-16.) No fingerprints were found on the hatchet. (90 R.T. 3798.)

c. The DNA testing of the hatchet and sheath

In 2001, the hatchet was sent to the Cal DOJ Lab pursuant to the JTA. DNA testing performed at that time determined that Jessica Ryen, Doug Ryen and Chris Hughes were all included as contributors to the blood on the hatchet. Josh Ryen and Peggy Ryen could not be excluded as possible contributors. (Sept. 25, 2002 Cal. DOJ Suppl. Physical Evidence Exam Report.)

Bode conducted further DNA testing in 2019 but failed to develop any DNA profiles from the hatchet handle or the hatchet sheath. (Nov. 18, 2019 Bode Technology Test Results at 2-3.)

d. Cooper's contentions about the hatchet and sheath

Cooper contends the hatchet sheath was planted in the Bilbia bedroom in the Lease house by the Sheriff's Department to frame Cooper. Cooper notes that on Wednesday, June 8, officers lifted fingerprints from inside the closet door in the Bilbia bedroom. Those fingerprints matched Detective Moran's. (87 R.T. 2927-28, 2938, 2965; 89 R.T. 3471-72.)

Detective Moran later testified that he did not enter the Bilbia bedroom when he entered the Lease house on June 6, 1983, and only remembered going into "three bedrooms, one bathroom, and a kitchen area." (86 R.T. at 2807-08.) (As discussed below, Moran's testimony about not entering the Bilbia bedroom was inaccurate, if not untrue.) Detective Hall testified that he did not enter the Bilbia bedroom on June 6, 1983, because he saw Detective Moran exiting the bedroom and turned around. (86 R.T. 2832, 2836.) Detective Moran testified he did not enter the Lease house at any point after June 6, 1983. (86 R.T. 2805.) Cooper argues that Detective Moran lied about being in the Bilbia bedroom on June 6, 1983, and that this is evidence that the Sheriff's Department planted evidence, including the hatchet sheath, in the Bilbia bedroom before evidence was discovered there on June 7, 1983.

Cooper further argues the hatchet belonged to Lee Furrow, who Cooper blames for the Ryen/Hughes Crimes.

e. Special Counsel's conclusions about the hatchet and sheath

Cooper does not establish that the hatchet sheath was planted in the Bilbia bedroom to frame Cooper. Special Counsel concludes it was not.

The authorities did not establish that Cooper had been staying in the Lease house until June 9, 1983, when they obtained the telephone records that linked Cooper to the Lease house. That fact refutes the theory that the evidence in the Lease house was planted

there on or before June 7, 1983, in order to frame Cooper. Until the authorities could connect Cooper to the Lease house, it would be illogical for them to plant evidence related to the murders in the Lease house, even assuming the authorities had a desire to frame Cooper.

Cooper has argued that the authorities had a strong suspicion by June 7, 1983, that Cooper had been in the Lease house because loose tobacco was among the items found there, which indicated to Sergeant Swanlund that someone who had previously been in custody had been in the Lease house. However, the hatchet sheath was found by Sibbitt and Burcham *before* detectives were brought in to look for and collect evidence, at which time loose tobacco was noticed. (86 R.T. 2857-61, 2876-79.)

Further, if the evidence found by Sibbitt and Burcham on June 7, 1983, had been planted by officers as part of a plan to frame Cooper, that plan would have had to have been devised almost immediately after the murders were discovered on June 5, 1983. As discussed below in Section VI, Cooper speculates that the plan to frame Cooper was conceived by Sheriff Tidwell because of political pressure to solve the crime. There is no evidence to suggest that Sheriff Tidwell was facing any political pressure, or criticism for failing to solve the crime as early as June 5 or June 6, 1983, when Cooper suggests the plan to frame Cooper was initiated. Further, a plan to frame Cooper would likely have needed to involve numerous persons to collect all the evidence and stage it in the Lease house for Sibbitt and Burcham to find by around noon on June 7, 1983. There is no direct or circumstantial evidence that such an elaborate plot was created within hours of the murders, implemented, and then concealed for the nearly 40 years since the crimes.

It should also be noted how risky it would have been for officers to decide within a day or two of the murders to frame Cooper for the crimes. There had not been much, if any, testing of the evidence collected within the first two days after the victims were found. For all the Sheriff's Department knew on June 5 or June 6 when this hypothetical plan to frame Cooper would have had to have been hatched, there was physical evidence that would have precluded Cooper as the killer or that conclusively pointed to someone else. Further Cooper might have had an ironclad alibi. Any decision to plant evidence in

the Lease house to frame Cooper could have ruined any later prosecution of the "true" killer.

Special Counsel notes that Moran's testimony that he was never in the Bilbia bedroom appears inaccurate, and possibly knowingly false, given fingerprint evidence placing him in the Bilbia bedroom. But that inaccurate, or even knowingly false, statement does not support the theory that evidence was planted in the Bilbia bedroom before June 7, 1983 to frame Cooper. The reasonable inference to explain Moran's testimony is either that he lied about entering the Bilbia bedroom because he did not want to admit he had overlooked items that were relevant to the investigation, or that Moran was confused about which rooms he had entered on June 6, 1983. Cooper fails to establish that the sheath and other evidence were planted in the Bilbia bedroom before June 7, 1983, in an effort to frame Cooper.

Cooper also fails to establish that the hatchet that was found belonged to Lee Furrow for the reasons discussed below in Section V.

Evidence that a hatchet was missing from the Lease house after the Ryen/Hughes Crimes, and the presence of a hatchet sheath in the Bilbia bedroom where Cooper was staying, incriminate Cooper.

4. Bloodstained Khaki Button in the Bilbia Bedroom

a. Discovery of a bloodstained button

After Sibbitt and Burcham informed officers about their discovery of the hatchet sheath and other evidence in the Bilbia bedroom, the room was searched more thoroughly and criminalist Craig Ogino noticed and processed a khaki green button with a reddish-brown stain on it. (87 R.T. 3072-73.)

b. The evidence at trial about the button

The prosecution offered testimony that ABO and serological testing during July and August 1983 showed Type A blood on the button (matching both Cooper and Doug Ryen's blood type). (Discovery at 1720-29; 93 R.T. 4454.) The prosecution also presented evidence that the button was "identical in appearance to buttons on field jackets

inmates wore at CIM, including one [Cooper] was seen wearing shortly before his escape." *People v. Cooper*, 53 Cal. 3d 771, 796 (1991).

c. DNA evidence about the button

Attempts to obtain DNA results from the button in 2001 and 2019 were unsuccessful.

d. Cooper's contentions about the button

Cooper argued at trial and continues to argue that the button was planted by the Sheriff's Department and that the button that was found did not match the buttons on the jacket he was issued at CIM. Cooper suggests (but does not have any direct evidence) that someone from the San Bernardino County Sheriff's Department went to CIM, obtained a jacket (or at least a button), smeared a minute amount of blood on it, and then planted it in the closet of the Bilbia bedroom where it was found by Ogino on June 7, 1983

e. Special Counsel's conclusions about the button

Finding a button with blood on it that is consistent with Cooper's own blood in a location where Cooper admits he slept has some probative value but not much, since Cooper could have gotten his own blood on that button in numerous ways.

Rather than just question the probative value of the button, Cooper has instead pointed to the evidence surrounding the button to argue that the Sheriff's Department wanted to frame Cooper and to present fabricated evidence at his trial.

Special Counsel does not conclude that anyone fabricated and planted the bloodstained button in order to frame Cooper. The button was found on June 7, 1983, before the Sheriff's Department obtained the telephone records showing Cooper had been at the Lease house and before the tobacco was found that might have tipped off someone that whoever had been in the Lease house had previously been incarcerated. Special Counsel also does not conclude that the button that was found in the Bilbia bedroom was of a different color than the buttons on the jacket Cooper was issued at CIM. At trial, the button was described as "khaki green." *People v. Cooper*, 53 Cal. 3d at 796. At trial,

Cooper described the jacket he was wearing when he escaped as "tan or a brown." (97 R.T. 5357.) Coopers' theory that the khaki green button must have been planted because a button of that color could not have come from a tan or brown jacket is not supported by the evidence. Furthermore, Cooper does not have any evidence that anyone from San Bernardino Sheriff's Department obtained a prison jacket from CIM before the button was found on June 7, 1983. Cooper's only evidence in support of that theory is a declaration from Cooper's investigator who spoke to a former Reserve Deputy Sheriff who said he could not remember obtaining a jacket from CIM. (Cl. Pet. Ex. 90 at 2.) Much less is there any evidence that someone obtained a jacket from CIM on June 5 or June 6, smeared blood on the button, and planted it in the Lease house before noon on June 7, 1983. Thus, Cooper does not establish that the authorities obtained a button, smeared a minute amount of blood on it, and planted it in the Bilbia bedroom in order to frame Cooper.

5. Bloodstained Rope Found in the Bilbia Bedroom

a. Discovery of the bloodstained rope

Two pieces of bloodstained rope were found during the investigation and used as evidence at trial. One piece of rope (referred to as "A-3") was found in the driveway of the Ryens' house on June 6, 1983, by Criminalists Stockwell and Schechter. The other piece of rope (referred to as "J-9") was found in the Bilbia bedroom closet where Cooper had slept. One piece of rope had a center cord while the other did not. (106 R.T. 7694.)

J-9 was first spotted in the Bilbia closet by officers on June 7, 1983. (86 R.T. 2838, 2842.) J-9 was collected for evidence either later that day or early on June 8th. (94 R.T. 4655.) The bloodstain on J-9 appeared to be relatively light and superficial when compared to the stain on A-3. (94 R.T. 4733.)

b. Evidence at trial about the bloodstained rope

The prosecution presented testimony from Wraxall, a forensic serologist with SERI, that he tested J-9 in November 1984 against the blood of Cooper, Michael Martinez (another escapee from CIM), and each of the victims. His initial tests indicated

a mixture of bloodstains that potentially included: Cooper, Martinez, and Doug Ryen. (94 R.T. 4718.) Through further testing, Wraxall determined the blood on J-9 was consistent only with Doug Ryen's blood, but not Cooper's nor any of the other victims. (94 R.T. 4720.)

Regarding A-3, Wraxall's testing showed the blood on A-3 was consistent with the blood of all of the Ryen victims. The prosecution focused on the fact that A-3 was found in the same location where the Ryens' station wagon had been parked, and that physical evidence found in the station wagon, like the tobacco and pubic hair, was connected to Cooper. (106 R.T. 7760-61.)

The defense focused upon the uncertainty about where the rope might have come from, the fact that the forensic testing was inconclusive, and Cooper's testimony that J-9 was not present when Cooper slept in the closet. (97 R.T. 5419; 99 R.T. 5834-36; 104 R.T. 7164-65.) The defense also noted none of the victims had any physical markings or injuries that indicated they were bound by rope. (92 R.T. 4165.)

c. Cooper's contentions about J-9 and A-3

Cooper's Clemency Petition does not address J-9 or A-3.

Special Counsel asked Cooper's representatives about their contentions regarding J-9 and A-3. In response, Cooper's representatives sent a memorandum which addressed Gregonis' testimony at trial that the testing he performed on J-9 indicated the blood on the rope was consistent with either Doug Ryen or Cooper. (93 R.T. 4457.) Cooper's representatives also wrote: "After reviewing Gregonis's lab notes regarding J-9 (excerpted pages attached as 'Gregonis Lab notes A-3 J-9') and a recent short discussion with our expert, Bicka Barlow, we believe that the test did not even conclusively establish that the stains were blood. Many of the tests show no result at all or inconclusive results." (Apr. 20, 2022 Memo from Cooper representatives regarding rope bundle (J-9) and Rope Piece (A-3) at 1 n.2.) The memorandum did not address Wraxall's testimony at trial that the testing he conducted ruled out Cooper as the source of the blood on J-9. (94 R.T. 4720.)

Special Counsel asked Cooper's representatives and the District Attorney about

why J-9 had not been DNA tested and their positions on whether J-9 should now be DNA tested. Cooper's representatives indicated they did not seek DNA testing of J-9. The District Attorney indicated it would not make J-9 available for DNA testing of J-9 because there had not previously been a request, or order, to DNA test J-9.

d. Special Counsel's conclusions about J-9 and A-3

Wraxall's trial testimony that the blood on J-9 did not come from Cooper and that only Doug Ryen could not be eliminated as the source of the blood on the rope found in the Bilbia bedroom where Cooper stayed is incriminating. That is, it is incriminating that the rope with Doug Ryen's blood on it was found in the Bilbia bedroom.

Cooper has not argued that someone obtained a piece of rope, placed Doug Ryen's blood on it and planted it the Bilbia bedroom before it was found on June 7, 1983. Special Counsel concludes that J-9 was not planted in an effort to frame Cooper, since it was found in the Bilbia bedroom on June 7, 1983, before Cooper was linked to the Lease house. Because J-9 was not DNA tested, however, it has less weight than A-41, the tan t-shirt, and the two cigarette butts in the Ryens' station wagon, each of which had Cooper's DNA on it.

A-3 does not add much weight to the evidence against Cooper, since anyone who committed the murders could have left or dropped the rope in the Ryen's driveway.

6. Detection of Blood at the Lease House

a. The discovery of blood evidence at the Lease house at trial

On the evening of June 8, 1983, Ogino and Stockwell conducted luminol and ortho-tolidine testing at the Lease house. (87 R.T. 3082; 92 R.T. 4298-99.) They concluded that testing indicated the presence of blood.

b. The evidence of blood in the Lease house

At trial, the prosecution introduced evidence that the presence of blood was detected in the shower and sink in the Bilbia bathroom, the rug in the hallway leading to the Bilbia bedroom, and the Bilbia bedroom closet. (87 R.T. 3078-83; *People v. Cooper*, 53 Cal. 3d at 796-97.) The presence of blood in the Lease house supports the theory that

after the murders Cooper returned to the Lease house, where he had been staying to clean himself before departing in the Ryens' station wagon.

c. Cooper's contentions about the evidence of blood in the Lease house

Cooper contends that the luminol testing that was conducted could not distinguish between blood and bleach. Cooper asserts that Kathy Bilbia used bleach in the shower when she was staying in the Lease house, and thus, Cooper concludes, the tests were "'False' Positive[s]," which the prosecution used to falsely accuse and convict Cooper. (Cl. Pet. at 87 ("The State Used a 'False' Positive Luminol Test Against Mr. Cooper at Trial.").) Cooper further asserts that "the [the Sheriff's Department] failed to conduct a secondary test that would have established whether the luminol reactions they obtained were the result of bleach or blood." (Cl. Pet. at 62.) In support of that assertion, Cooper's Clemency Petition cites Judge Fletcher's dissenting opinion in *Cooper v. Brown*, 565 F.3d at 594. (*Id*.) Judge Fletcher's dissenting opinion states: "In order to exclude the possibility that a Luminol reaction is caused by bleach, rather than blood, a two-stage test is required. The evidence suggests that the detectives only conducted a one-stage Luminol test." *Cooper v. Brown*, 565 F.3d at 594. Judge Fletcher's dissenting opinion includes no citation for the statement that only "a one- stage Luminol test" was conducted.

d. Special Counsel's conclusions about the blood evidence in the Lease house

The trial record and discovery materials show the Sheriff's Department did conduct the two-stage test, which included the ortho-tolodine testing that ruled out the possibility that bleach had been detected by the first-stage luminol testing. Stockwell testified both during the preliminary hearing (11 R.T. 78-89) and trial (92 R.T. 4293-4299) that he conducted both luminol and ortho-tolidine testing. Criminalist Ogino likewise testified that both luminol and ortho-tolidine testing was performed. (87 R.T. 3082.) The discovery materials that the District Attorney provided to the Cooper defense counsel during pre-trial discovery contain the October 7, 1983 lab report of Stockwell

and Ogino, which states that, after luminol testing, "[a]ll areas testing positive were screened with an additional chemical test." (Discovery at 2104.)

Special Counsel asked Keel independently to evaluate the evidence to confirm that the testing the Sheriff's Department conducted would distinguish between blood and bleach. Keel confirmed that the evidence reflects that the Sheriff's Department performed "a secondary test"—using ortho-tolidine—that showed the presence of blood, not bleach. (Keel Report at 51-54.)

Cooper has not established that the testing that was performed could not distinguish blood from bleach. Cooper also does not establish, therefore, that the State used "false" evidence of blood in the Lease house to secure his conviction.

The presence of blood in the shower and sink in the Bilbia bathroom, the rug in the hallway leading to the Bilbia bedroom, and the Bilbia bedroom closet after Cooper vacated the Lease house incriminates Cooper.

7. Hair in the Sink and Shower of the Lease House

a. Discovery of the hair at the Lease house

On June 9, 1983, Ogino collected hair from the shower drain in the Lease house. (87 R.T. 3084-86.) He collected more hair from deeper down the shower drain on June 13, 1983. (87 R.T. 3086-87.) He also collected hair from the sink trap on June 13. (87 R.T. 3084; Cl. Pet., Ex. 119 at ER 3185.)

b. The evidence about the hair collected at the Lease house

Charles Morton, a criminalist with the Institute of Forensic Science Criminalistics Laboratory, testified that the hair removed from the bathroom shower on June 9, 1983, had characteristics similar to Doug Ryen's head hair. (96 RT 5017.) Some of the hair collected from the sink had characteristics similar to Jessica Ryen's head hair. (96 R.T. 5018.)

c. Cooper's contentions about the hair

Cooper's Clemency Petition does not make any arguments about the hair collected from the sink and shower of the Lease house.

d. Special Counsel's conclusions about the hair collected at the Lease house

The fact that there was hair in a sink in a bathroom at the Lease house that had "characteristics similar" to the hair of Doug and Jessica Ryen is not particularly probative of Cooper's guilt, nor does it establish his innocence.

8. Leather Strap and Missing Buck Knives and Ice Pick

There was evidence at trial that, when the officers searched the Lease house on June 7, 1983, there was a leather strap in the closet. Kathleen Bilbia testified that a strap had not been there when she cleaned and vacated the Lease house. (86 R.T. 2678.) Lease testified that he did not recognize the strap. (86 R.T. 2783.) Sibbitt testified that the strap looked to him like an "inexpensive knife sheath." (86 R.T. 2862.)

Roger Lang (co-owner of the Lease house) testified at trial that he owned a hunting knife, which he had last seen in late 1982 or early 1983 on the floor of the closet in his bedroom in the Lease house. He also testified that he owned a folding knife, which he had last seen at the Lease house in October 1982. He testified that neither knife was at the Lease house after the Ryen/Hughes Crimes. He also testified that he believed there had been an ice pick in a kitchen drawer, and that after the Ryen/Hughes Crimes, he could not locate any ice pick at the Lease house. Further, he testified he had never seen the strap before the preliminary hearing. (87 R.T. 3002-04.)

Cooper's Clemency Petition does not address the evidence about the strap or allegedly missing items.

Special Counsel concludes that the evidence about one or more knives and an ice pick missing from the Lease house is not very incriminating since the evidence did not show those items were at the Lease house shortly before the crime, and such items were never recovered. There was no evidence at trial suggesting the leather strap in the Bilbia closet came from either of the knives that Lang testified were missing. On the other hand, the evidence about leather strap and missing knives and ice pick does not support Cooper's claims of innocence.

9. Beer Can Found Between Ryen and Lease Houses

a. Discovery of the beer can evidence

On June 5, 1983, Deputy Sheriff Duffy found a six pack of Olympia Gold Beer in the refrigerator in the Ryens' house with one can missing, as well as a red substance on one of the remaining cans and on the inside of the refrigerator, which he believed to be consistent with blood. (88 R.T. 3374-75, 3384.)

On June 5, 1983, Stockwell found an empty can of Olympia Gold Beer in a plowed horse training arena located about halfway between the Ryens' house and the Lease house. (90 R.T. 3800-01.)

b. Evidence at trial about the beer can

Tests confirmed that the red substance on the six pack and refrigerator was blood. The phosphoglucomutase (PGM) enzyme found in the blood on the beer can was consistent with the genetic profile of Doug or Joshua Ryen, but was also consistent with anyone with the same PGM type, which included 70% of the White population. (93 R.T. 4449, 4612.) All other tests were inconclusive. (93 R.T. 4613.)

Stockwell testified that he did not see anything on the can he found in the training arena but there was a small amount of beer left in the can. (90 R.T. 3800-01.)

There was no DNA testing of any material from the refrigerator or beer cans requested or performed.

c. Cooper's contentions

In his Clemency Petition, Cooper points to the Sheriff's Department's failure to collect and test the evidence associated with the beer cans as evidence of their shoddy investigation.

d. Special Counsel's conclusions about the beer can evidence

The beer can evidence is not very probative of Cooper's guilt since anyone who had committed the crimes could have disposed of a beer can between the Ryen and Lease houses, and no forensic test results established that Cooper had handled either can.

Cooper's contention that the Sheriff's Department's investigation was flawed does

not establish innocence. Even if law enforcement failed to properly process the can as evidence, and that failure establishes a pattern of shoddy investigation techniques, it cannot overcome the other physical evidence that incriminates Cooper.

10. Josh Ryen's Testimony and Statements

a. Evidence at trial

Numerous people interacted with Josh Ryen in the days after the crime and attempted to obtain information about the crimes at various times and through different means of communication. The reports of the information that Josh provided were inconsistent.

First, after he was found alive on June 5, 1983, eight-year-old Josh Ryen was flown to the Loma Linda University Medical Center. Although Josh's throat had been slashed, he was heavily medicated, and he was in shock, clinical social worker Donald Gamundoy and Deputy Sheriff Sharp attempted to get some information from him about the crimes, using gestures, hand squeezing, and pointing to letters on a clipboard to allow Josh to convey information. On direct examination by Cooper's counsel, Gamundoy said that he had elicited information from Josh that three White men had attacked him. (99 R.T. 5928-29.) But on cross-examination, Gamundoy said that he had not used the words "attacker" or "attacked" when trying to learn information from Josh; he had asked how many were there. (99 R.T. 5958-59.) Deputy Sharp elicited information from Josh indicating that three White men had been in the house. Later that day, Deputy Sharp further questioned Josh who indicated through hand squeezes that three Mexican men had been at the Ryens' house around dusk. Deputy Sharp testified that he asked Josh if "he *felt* these were the people in the same house the morning when everything went crazy," and Josh Ryen indicated "yes." (99 R.T. 6039 (emphasis added).) The information gleaned from Josh Ryen was imprecise. Neither Gamundoy nor Sharp testified to specifically asking Josh Ryen if he *saw* three men at the time of the crime. (99 R.T. 5928-30 (clinical social worker D. Gamundoy), 6010 (Det. M. Sharp); Discovery at 435-36.)

Second, Detective O'Campo interviewed Josh Ryen on June 14, 1983, when he

was able to speak. A psychologist, Dr. Hoyle, was present during O'Campo's interview. Dr. Hoyle testified that Josh did not state in that interview that he had seen three Mexican men in the house during the attack. (101 R.T. 6371.) Detective O'Campo's testimony at trial and his notes indicate that Josh did not say he saw the person or persons who committed the crime; he said he saw a shadow. Detective O'Campo also testified that Josh Ryen did not state in that June 14, 1983, interview that he had been chased around the house by three Mexican men. Dr. Hoyle wrote in his notes "They chased us around the house." (Discovery at 2344.) At trial Dr. Hoyle testified those were not Josh Ryen's words but were Dr. Hoyle's summary of what Josh said. (101 R.T. 6358.) Josh indicated during the June 14 interview that he "*believed*" it had been three Mexican men who came by the house the day before the murder in a blue pickup truck. (Discovery at 444-45.)

Third, on June 15, Cooper's picture was displayed on the television in Josh's hospital room. It appears that both Josh Ryen's grandmother, Mary Howell, and Reserve Officer Louis Simo were present at the time. Dr. Howell asked Josh if he had ever seen that man before, and Josh replied, "No." Reserve Officer Simo testified at trial that Josh stated, "That wasn't the guy that did it." (101 R.T. 6403.) Reserve Officer Simo testified: "[W]hen [Josh] stated that to me, I asked what he mean[sic], and then that's when he stated that "'the three Mexicans' and 'in the white pick up truck.'" (*Id*.) Dr. Howell testified that Josh Ryen never said to her that he had seen more than one attacker on the night of the crime. (100 R.T. 6217-18.)

Fourth, Josh Ryen's audiotaped and videotaped statements obtained in December 1983 and December 1984 were presented in the prosecution's case. The California Supreme Court summarized that evidence:

> Joshua Ryen did not testify at trial. Pursuant to stipulation, two taped statements made by him were played to the jury—a videotape of a December 9, 1984, interview in which he was questioned under oath by the prosecutor and defense counsel; and an audiotape of a December 1, 1983, interview with Dr. Lorna Forbes, his treating psychiatrist. Josh never identified anyone as the assailant.
>
> In the videotaped statement, Josh said that the evening before the murders, just before the family left for the Blade barbecue, three "Mexicans" came to

> the Ryen home looking for work. Josh had never seen them before. The family then went to the barbecue in the truck and later returned. Josh and Chris Hughes slept in sleeping bags on the floor in Josh's bedroom. Josh's parents slept in their bedroom, and Jessica slept in hers.
>
> At some point during the night, Josh woke up and fell asleep again. He was reawakened by a scream. Josh woke Chris up, and they walked down the hall, stopping at the laundry room. Josh saw Jessica in the hallway. He walked closer to his parents' room, and saw a "shadow or something" by the bathroom. It was dark. Josh could not see what the shadow was or what it was doing.
>
> Josh and Chris "started getting a little scared." Josh started to look around. The next thing he remembered was "[j]ust waking up" surrounded by the bodies of his parents.
>
> In the audiotaped interview with Dr. Forbes, Josh said he heard his mother scream. He walked into her bedroom, and saw someone by the bed "turning his back against me." Josh "just saw his back and his hair." After his mother stopped screaming, and Josh "saw him," he went into the laundry room and hid behind the door. Chris went into the parents' room, and then "was gone." Josh then went into the bedroom and "he knocked me out." He thought the person was a man "because women usually don't do that sort of thing."
>
> Josh remembered talking to a deputy sheriff named "O.C." (Hector O'Campo). He told O'Campo he thought three men had done it because "I thought it was them. And, you know, like they stopped up that night." He did not actually see three people during the incident.

People v. Cooper, 53 Cal.3d 771, 800-01 (1991).

The Supreme Court stated: "The defense also presented evidence of earlier statements of Josh indicating his original belief that the three Mexicans had committed the crimes. Josh never said he saw or otherwise felt the presence of more than one assailant at the time of the murders." *Id.* at 801.

Fifth, in connection with the 2005 evidentiary hearing, Josh was invited by the district court judge to make unsworn remarks at the end of the evidentiary hearing, with no cross-examination allowed. In those remarks, Josh stated that the first time he met Cooper, Cooper was wielding a hatchet in one hand and a knife in the other—an image

that Josh had not described in any earlier proceeding. (Apr. 4, 2005 H.R.T. 129-35.)[7]

b. Cooper's contentions about Josh Ryen's testimony

In his Clemency Petition, Cooper argues that the prosecution presented "false evidence" about Josh Ryen's statements at trial by "manipulat[ing]" Josh Ryen's recollection of the crime. (Cl. Pet. at 82-83.) Determining whether false or manipulated testimony was presented to the jury, and whether the trial outcome might have been different if the jury had heard different testimony, is not our assignment. Special Counsel evaluated Josh Ryen's statements to assess whether they supported Cooper's claim of innocence.

Cooper's Clemency Petition included a declaration from Dr. Kathy Pezdek, an expert on eyewitness identification, who "identified three specific factors that suggest that the early eyewitness memory accounts of Josh Ryen exculpating Mr. Cooper were likely to be correct. First, in the hours, days, and weeks following the attacks, Josh Ryen consistently described his attackers in the plural as 3 or 4 men, not a single man as asserted at trial. Second, during this same time frame, Josh Ryen consistently identified these men as being White or Hispanic, not Black like Mr. Cooper. Finally, upon seeing Mr. Cooper's picture on television, Josh Ryen indicated on more than one occasion that he did not recognize Mr. Cooper and that Mr. Cooper did not commit the crimes." (Cl. Pet., Ex. 9 (Decl. of Dr. Pezdek) at 4.)

c. Special Counsel's conclusions about Josh Ryen's testimony

Special Counsel asked an eyewitness identification expert, Dr. Mitchell Eisen, to help independently evaluate the evidence about Josh Ryen's various statements and whether those statements provided significant evidence of Cooper's innocence.

The statements of Gamundoy and Sharp about the information they believed Josh Ryen conveyed to them at Loma Linda Hospital are too imprecise to be dispositive or

[7] H.R.T. cites are to the Reporter's Transcripts of the proceedings before Judge Huff in 2004-2005.

reliable. There is a great deal of difference between Josh saying he "saw" three men "attacking" his family and himself, versus Josh saying he "believed" that three men were in the house at some point in time. The information that Gamundoy and Sharp thought they obtained from Josh on June 5, 1983, was insufficient to distinguish exactly what Josh meant, and whether he *saw* three men at the time of the crime. Once Josh Ryen was able to speak, he did not state that he saw three men attack his family and himself. Rather, he stated that the three men he had been referring to were men who had come to the Ryens' house earlier looking for work. Special Counsel does not reject Josh's later statements that the three men he was referring to were men who had come to the Ryens' house before the barbeque. Thus, Josh Ryen did not consistently *say* in his initial communications that he saw three men attack his family and himself.

Those same points apply to Josh Ryen's communications regarding the race of the assailant—he did not consistently *say* the attackers were White or Mexican. Furthermore, Josh Ryen's communications were not "consistent," since he sometimes indicated he was referring to White men and at other times to Mexican men.

Regarding Josh's comments when Cooper's face appeared on television, the statement that he did not recognize Cooper is not exculpatory since Josh Ryen never stated that he saw or got a good look at the person or persons who committed the crime. Reserve Officer Simo's testimony that Josh stated "[t]hat wasn't the guy that did it" is more relevant, but Josh Ryen did not state *why* he believed Cooper "[was not] the guy that did it." Josh Ryen did not state, for example, that he believed the person on the television "wasn't the guy that did it" because the person on the television was Black and Josh Ryen had *seen* a White or Mexican man at the time of the attack. Instead, when Reserve Officer Simo asked what Josh Ryen meant, Josh Ryen purportedly made a vague response about "the three Mexicans" and "in the white pick-up truck," apparently a reference to the men who had come to the Ryens' house before the barbeque.

Finally, at trial Cooper's defense elicited these varying statements attributed to Josh Ryen, and the jury did not find them sufficient to create reasonable doubt about Cooper's guilt.

Josh Ryen's statements and other efforts to communicate in the days following the Ryen/Hughes Crime do not establish Cooper's innocence.

IV. COOPER'S ALIBI EVIDENCE

When Cooper took the stand in his defense at trial, he had listened to the prosecution's evidence, including the evidence that a telephone call had been made from the Lease house to Diane Williams, a known friend of Cooper's, and that call did not end until 8:30 p.m.[8] He thus knew that he could not credibly deny that he was at the Lease house until at least 8:30 p.m. on June 4, 1983. Cooper testified that, on the evening of June 4, 1983, he was at the Lease house until it was very dark, he left and walked the opposite direction from the Lease house to a nearby road, where he was picked up by a driver headed toward Mexico, who dropped Cooper off on the side of the highway, and then Cooper caught a second ride from a driver who took him to the bus station in San Ysidro. Cooper testified that sometime after sunrise on the morning of June 5, 1983, he snatched a purse from a woman near the border crossing and kept running over the border into Mexico. Other than his own testimony, Cooper does not have any evidence that corroborates his testimony that he was not at the Ryens' house on the night of the crimes.

Cooper's own trial testimony places him within a few hundred yards of the Ryens' house—a remote location—on the evening when the murders took place. Specifically, the following facts are not subject to dispute:

- Cooper was in the Lease house speaking on the telephone with Diane Williams at 8:30 p.m. on June 4, 1983. (99 R.T. 5825.)
- Cooper did not leave the Lease house immediately after the telephone call ended. Rather, per his testimony, after the call ended, he checked to see how dark it was outside and then changed into his prison clothes. (99 R.T. 5828-31.) His plan was always to wait until it was dark before leaving. (99 RT 5823.) It was attractive to him to wait until nighttime because "it was

[8] Cooper did not make any statements to the authorities when he was arrested so he had not committed to any narrative until he testified at trial.

real dark and the chance of somebody seeing [him] was virtually nil because it [was] pitch black out there." (99 R.T. 5815.) It was dark when he left the Lease house. (97 RT 5437-38.)

- The sun set in Chino Hills at approximately 8:00 p.m. on June 4, 1983.[9] It did not get fully dark (or "pitch black") before about 9:40 p.m. (*Id.*)[10]
- Cooper left the Lease house when it got dark, navigated his way down the hill past a creek, at which time he changed out of his prison clothes in the dark. (99 R.T. 5848-52.)
- Cooper made his way to a street where he stood on the side of the road visible to cars going by for some time, asking passing motorists which direction Mexico was. (99 R.T. 5859, 5861-62.) A male driver who had stopped at a traffic light told him in what direction Mexico was. (99 R.T. 5860.) Cooper then stood on the side of the road and asked a few cars at the intersection if they were headed toward Mexico (99 R.T. 5863-66.) After waiting by the side of the road for about 45 minutes to an hour, a white couple driving in a yellow van picked him up and drove him for about an hour to an hour and a half, letting him off by the side of the freeway. (98 R.T. 5450-52; 99 R.T. 5866-67.) He then walked along the freeway for an undetermined amount of time after no one stopped to pick him up, until eventually a middle-aged white man in a Plymouth stopped and drove him all the way to the bus station in San Ysidro. (98 R.T. 5453-55; 99 R.T. 5868-69.)

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[9] *See, e.g.*, *https://sunrise-sunset.org/calendar?location=Chino+Hills%2C+CA&month=June&year=1983; https://www.almanac.com/astronomy/sun-rise-and-set/CA/Chino%20Hills/1983-06-04*.

[10] The darkness of the sky is often measured by the times at which civil, nautical and astronomical twilight occur. (*e.g.*, *https://lovethenightsky.com/how-long-after-sunset-is-it-dark/.*) The sky is not completely dark until astronomical twilight, when the sun's center is 18° below the horizon. (*Id*.) On June 4, 1983, astronomical twilight occurred in Chino Hills at approximately 9:40 p.m. (*https://www.almanac.com/astronomy/sun-rise-and-set/CA/Chino%20Hills/1983-06-04*).

- Cooper stayed around the bus station until about sunrise. (98 R.T. 5456.) Sometime after sunrise, he ran up behind a woman, snatched her purse, and kept running over the border. (98 R.T. 5457-58.) Once across the border, Cooper took a cab to Tijuana. (98 R.T. 5459.) Cooper walked around and bought breakfast at Woolworth's, and bought some hygiene items, an orange baseball cap, and black shoes. (98 R.T. 5460-61.) He checked into a hotel using the name Angel Jackson.[11] (98 R.T. 5462.)

Cooper did not present any specific testimony or other evidence of the times when many of those events purportedly took place. For example, he could not say how much time elapsed between the time his call with Diane Williams ended and when he left the Lease house, crossed over a creek, and then changed out of his prison clothes:

> Q. How long have [sic] you spent from the time that you hung up the phone with Diane Williams to the time that you arrived at this point in your travels?
>
> A. How long did it take me to get like say from point A to point B?
>
> Q. Yes?
>
> A. I don't know. I don't have a watch.
>
> Q. Hours?
>
> A. I don't know.

(99 R.T. 5859.)

In his testimony, Cooper likewise repeatedly acknowledged he did not know the time at which various events took place after the call with Williams ended (*e.g.*, he did not have a watch on (97 R.T. 5444); he did not know when he was picked up hitchhiking or precisely how long he was in any particular car (97 R.T. 5454, 99 R.T. 5864, 5867)).

Despite extensive media coverage and his own strong motive to find alibi

[11] Other evidence at trial indicated Cooper checked into the Tijuana hotel between 4:30 p.m. (103 R.T. 6899) and 6:00 p.m. on June 5, 1983 (103 R.T. 6747-50, 6754).

witnesses who could place Cooper far away from the Ryens' house at the time of the murders, no witness has come forward in the past 38 years (neither the purported drivers who picked him up hitchhiking nor anyone who saw him with his thumb out) to corroborate Cooper's testimony about hitchhiking to Mexico, much less to provide an alibi that might establish he had left Chino Hills before the murders.

Special Counsel interviewed Cooper and asked questions about his whereabouts on the night of the Ryen/Hughes Crimes. That interview cast further doubts about Cooper's testimony about hitchhiking to Mexico. Because almost 40 years have passed since the night he vacated the Lease house, it is not surprising that there were some discrepancies between what Cooper testified to in 1984 and his statements in 2022 to Special Counsel. However, three specific discrepancies were significant, and undermine Cooper's credibility. First, during Special Counsel's interview, Cooper did not state that he asked a driver in which direction Mexico was and then asked several cars if they were headed to Mexico before getting into the yellow van. Instead, Cooper said that he got in the first car that stopped, and he said he was going to get in the first car that stopped no matter where it was headed. Second, during the interview, Cooper stated that the van that picked him up drove him all the way to his destination at the border. Cooper did not say that the van dropped him off partway there and that he had to get a second ride with a middle-aged white man in a Plymouth-type vehicle who then drove him to the bus station in San Ysidro. Third, during the interview, Cooper stated that he crossed the border when it was dark—not that he waited until the sun came up on June 5, 1983, before snatching the woman's purse and running across the border.

Cooper's statements about his whereabouts at the time of the Ryen/Hughes Crimes were disbelieved by the jury. Cooper has no evidence other than his own statements that support his testimony.

Cooper does not establish that he is innocent of the Ryen/Hughes Crimes because he was elsewhere at the time of the Crimes.

V. COOPER'S THEORY THAT LEE FURROW COMMITTED THE MURDERS

Cooper's Clemency Petition argues that Lee Furrow and his associates committed the Ryen/Hughes Crimes, but the authorities ignored evidence of Furrow's guilt.

Furrow was known to both the authorities and Cooper's defense team at the time of trial. After interviewing Furrow and others, the Sheriff's Department concluded Furrow was not involved in the Ryen/Hughes Crimes. Cooper's defense attorney, Negus, elected not to present any argument or evidence at trial suggesting that Furrow was the true culprit. Negus is deceased so he cannot now explain his reasoning, but it appears that Negus determined that evidence about Furrow's alleged involvement would not have aided in Cooper's defense.

After carefully considering the evidence, and conducting additional investigation, Special Counsel concludes that the evidence does not support, and is inconsistent with, the theory that Furrow committed the Ryen/Hughes Crimes.

A. Diana Roper's June 9, 1983 Statements that She Found Coveralls in Her Closet and Did Not Know Where They Came From

The genesis of the theory that Furrow committed the Ryen/Hughes Crimes was a report on June 9, 1983 made by Diana Roper, a woman who lived in Mentone, California, about 40 miles from the Ryens' home. On June 9, 1983, Roper contacted the San Bernardino County Sheriff's Department, and Deputy Sheriff Eckley from the Yucaipa substation went to Roper's home to interview her and collect evidence. Roper reported that, when she "cleaned her house," she "found a pair of green coveralls in her closet with blood stains, horse sweat and horse hair . . . from an Arabian horse." (By June 9, 1983, there had been extensive media coverage of the Ryen/Hughes Crimes, including that the Ryens owned and trained Arabian horses.) Roper stated she "doesn't know where [the coveralls] came from." (Discovery at 1002.) Roper told Eckley that she "suspect[ed] that her estranged husband,[12] Lee Furrow, a paroled convict, possibly put the coveralls in the

[12] Furrow and Roper were not married.

closet. . . . [and if he] is not responsible . . . , [then] a friend of his, probably is." (*Id*.) Roper further stated that she had had contact with a woman from the Chino area about Roper and Furrow buying a stolen horse, and that "[w]ith this female were four of her male friends, whom [Roper] believes are connected with some sort of gang or mafia." (*Id*.) Roper told Eckley that Furrow had been paroled in connection with a gang-related murder charge involving the strangulation of a woman. Roper stated that she "suspects that the bloody coveralls [were] from the Chino murders" and that she possessed further information but she would only disclose it to a homicide detective. (Discovery at 1002, 2795; 102 R.T. 6549-52.)

Deputy Sheriff Eckley later testified in a pre-trial hearing that it appeared to him that there was some blood ("less than moderate" amount) on the pant legs from the knees down. (42 R.T. 3181-82.)

B. Deputy Sheriff Eckley's Destruction of the Coveralls

Deputy Sheriff Eckley, who was not directly or materially involved in the homicide investigation, forwarded his report to Detective Billy Arthur, a homicide detective in San Bernardino. Despite Eckley following up several times (Discovery at 1002; 102 R.T. 6550-6551), neither Detective Arthur nor anyone else involved in the homicide investigation followed up on the report. (102 R.T. 6549-51.)

On or about December 1, 1983, Deputy Sheriff Eckley threw the coveralls in a dumpster because he believed they were unrelated to the Ryen/Hughes Crimes. (102 R.T. 6551-52.)

C. Roper's Statements to the Sheriff's Department in May 1984

On May 16, 1984, Roper met with Detective Stalnaker. (Discovery at 2767-77.)[13] At that time, Roper told a different story about the coveralls; a story that was inconsistent with her statements to Deputy Sheriff Eckley on June 9, 1983.

[13] According to Cooper, on May 15, 1984, Roper saw a newspaper article that discussed Detective O'Campo's testimony at the ongoing evidentiary hearing in connection with Cooper's case, which allegedly caused Roper to contact the Sheriff's Department at that time. O'Campo did not testify on May 15, 1984; he testified on May 16, 1984.

Roper told Detective Stalnaker that she, her sister Karee Kellison, and Debbie Glasgow went to the US Festival at the Glen Helen Amphitheatre in San Bernardino sometime in the afternoon of June 4, 1983. (The US Festival was a multi-day outdoor music concert/festival, sponsored by Steve Wozniak, that was held from May 28 to May 30, and June 4, 1983 (Country Day). Total attendance for the four-day event was reported to be 670,000. (Wikipedia, *US Festival*, https://en.wikipedia.org/wiki/US_Festival (as of Oct. 4, 2022 02:16 UTC).)

Wiki.))

Furrow, who was living with Roper at the time, was supposed to accompany them but Furrow was not at Roper's house on the morning of June 4, 1983, when she woke up and he did not show up at Roper's house before Roper, Glasgow and Kellison left for the US Festival. Roper told Stalnaker that, while at the concert, someone drugged her, "she was overdosed with narcotics," possibly acid, and "she couldn't move for 10 hours." (Discovery at 2769.) Roper said she never saw Furrow at the US Festival. Roper told Stalnaker that, at about 9:30 p.m. that night Glasgow went missing from the group "and so did Lee [Furrow]." (*Id*. at 2768.) (Given that Roper told Stalnaker that she never saw Furrow at the US Festival, she could not have noticed him "missing" at 9:30 p.m.) Roper stated that she left the concert "without Debbie and Lee," but the report does not state when. (*Id*. at 2769.) Roper stated that she did not go looking for Debbie or Furrow before leaving because "she knew something was going on." (*Id*.) After she arrived at her house in Mentone [about a 30 minute drive from the Glen Helen Amphitheatre], Roper received a telephone call from Furrow asking why Roper left him and Glasgow at the concert and asking her to pick him up. Roper told Furrow "she knew they disappeared together, that she's not dumb and besides that, she couldn't drive. [Furrow] asked her why she couldn't drive and she told him that she had been drugged and he laughed and told her when he got home, he was going to beat her to death." (*Id*.)

During the May 16, 1984, interview, Roper told Stalnaker that Furrow and Glasgow arrived at Roper's house around 1:40 a.m. on June 5, 1983 and "got out of a car. They came into the house and they [sic] had on a pair of coveralls." (Discovery at 2769.)

Furrow went "straight to the closet and got undressed." (*Id*.) "There were two other guys in a car outside." Roper stated, "[a]t that time, it didn't even dawn on her because she wasn't really all the way there because of the drugs." "She said that her little sister [Karee] was there also and saw this too." (*Id*.) Roper claimed that when she saw the news the next day [June 5, 1983] about the Ryen/Hughes Crimes, "she got sick—[s]he just knew. . . . The day after that [which would have been June 6, 1983] she was walking to her closet and felt something real bad and she looked down and saw the coveralls." (Discovery at 2770.) Roper stated that "she picked up the coveralls and looked at them. It was like she was in a tunnel, like she could just feel it. She . . . saw blood on them and horse hair, Arabian, grey and white horse hair. . . There was solid blood where the zipper was. She had been drugged and she thought she was hallucinating and started crying." (*Id*.)

During that May 16, 1984 interview, Roper told Detective Stalnaker:

> [a] few days later, she heard on the news about a hatchet they found. She went to the back porch where [Furrow] hung up his tools at. He had a hatchet hung on two nails and it was gone. The hatchet had an orange handle with the paint scraped off of it. She kept telling herself it was coincidental, that it was all in her head. Diana [stated] the thing that topped it was the other day, she read about a beige t-shirt. Lee had a beige t-shirt on the day of the concert.

(*Id*. at 2770.)

Roper told Stalnaker that Furrow had left Roper and "ran off to Yuma, Arizona about a year ago and got married [to her friend Debbie Glasgow] without her knowing anything about it." (Discovery at 2773.) Roper told Stalnaker about a women she and Furrow knew, Jan Martinez, who purchased or stole horses, who Roper suspected of having knowledge of the Ryens.

During the interview on May 16, 1984, Roper told Detective Stalnaker that Glasgow was 5'4", 135 pounds, and had long brown hair; Jan Martinez was 5'5" or 5'6", 105 pounds, with long brown hair to her biceps.

D. Sheriff's Department's May 17, 1984, Interview of Furrow

On May 17, 1984, Stalnaker interviewed Lee Furrow. When Stalnaker asked if

Roper had an ax to grind with him, Furrow stated that she did because Furrow had run off with Roper's best friend, Debbie Glasgow, and married her. Furrow told Stalnaker that, on the day of the US Festival, Furrow did not accompany Roper, Kellison, and Glasgow to the Festival because he was bailing a friend out of jail, and he arrived at the Festival in the early evening. Furrow stated that at about 12:00 or 12:30 a.m. on June 5, 1983, he telephoned Roper at her home, asked why she left him stranded at the US Festival, and asked her to come pick him up. Roper refused. Furrow and Glasgow then hitchhiked to Roper's home, arriving at around 1:00 a.m. Furrow and Glasgow went inside. Furrow got his leather jacket and said to Glasgow "let's go." Furrow stated that Roper said to Glasgow, "you ain't going anywhere with my old man." Furrow told Stalnaker that he and Glasgow got on his motorcycle and left. (Discovery at 2778-79.)

Stalnaker asked Furrow if Furrow knew anything about some coveralls. Furrow told Stalnaker that, when Furrow returned to Roper's home a couple of weeks after the US Festival to collect his things, Roper said she had found some coveralls in her closet with blood on them and asked Furrow if he knew whose they were. Furrow told Stalnaker that Roper stated she thought Kevin Cooper, who by that time (late June 1983) was wanted for arrest in connection with Ryen/Hughes Crimes, might have come by her home during his escape from CIM [about 40 miles from Roper's home in Mentone] and left them in her closet. (Discovery at 2779-81.) Furrow told Stalnaker that he was not wearing coveralls at the time of the US Festival and did not leave any coveralls at Roper's house.

On May 17, 1984, Roper called Stalnaker to say that Furrow had contacted her because Furrow had learned she was talking to the authorities about him. During that conversation, Stalnaker told Roper that the coveralls had been destroyed. (Discovery at 3386-96.) That same day (May 17, 1984) Roper contacted Cooper's trial counsel. Cooper's investigator interviewed Roper and Eckley over the next few weeks. (May 18, 1984 Interview of Diana Roper by Ron Forbush; May 26, 1984 Interview of Fredrick Eckley by Ron Forbush.)

E. The Kellisons' Statements in June 1984

On June 14, 1984, Detective Woods went to the home of Roper's parents, William

and Kathie Kellison, and interviewed William, Kathie, and their daughter Karee. (Discovery at N3017-21.)

1. June 14, 1984, William Kellison interview

William Kellison told Detective Woods that in June 1983 he received a telephone call from Roper, who was crying, so he went to her home. When he got there, Roper showed him some coveralls with blood on them. William Kellison told Detective Woods that Roper was "into ESP, and that she was having premonitions that Lee Furrow was involved in the murder case that she had read about in the newspapers and seen on TV." (Discovery at N3017.) William Kellison told Detective Woods that there were two spots of blood on the pants, each about two square inches, as if someone had cut a finger and wiped the blood on the pants. (*Id*.) William Kellison also told Detective Woods that his daughter, Roper, was "big on exaggeration, and she explained a story for her own self-serving reasons. He stated that [Roper] was quite upset due to the fact that Lee and her best friend, Debbie [Glasgow], had run off together." (*Id*.) According to William Kellison, it was he who called the Yucaipa substation to report the coveralls. William Kellison reported that in the coveralls he had found a package of cookies, which were "an obsession" of a woman named Jan, who was trying to "make a horse deal" with Furrow, for a "hot" Arabian horse. (*Id.*)

William Kellison also said that Roper had said she had been drugged at the US Festival on June 4, 1983 and had been unable to move for some time. (Discovery at N3018.)

2. June 14, 1984, Kathie Kellison Interview

Detective Woods also interviewed Kathie Kellison, Roper's mother, at their home on June 14, 1984. Kathie Kellison said that she learned about the coveralls when Roper called the day after the US Festival [Sunday June 5, 1983] and told her mother that she had found coveralls "covered with blood" in one of her closets. (Discovery at N3109.) William Kellison went to Roper's home first; Kathie Kellison arrived later, when Deputy Sheriff Eckley was there. Kathie Kellison described the blood on the pants as two or three

spots, each about two or three square inches on the right pant leg and a third one may have been on the waist area as if a person wiped their finger there. (*Id*.) Kathie Kellison also told Detective Woods that their daughter Karee Kellison had seen Furrow with Glasgow at the US Festival on June 4, 1983 but Karee did not tell Roper that she had seen Furrow and Glasgow together at the US Festival because she did not want to hurt Roper's feelings. Kathie Kellison told Detective Woods that her daughter Roper was "using drugs heavily" at that time of her life. (*Id.*)

3. June 14, 1984 Karee Kellison interview

Detective Woods next interviewed Karee Kellison, who was 22 in 1984. Karee stated that she, Roper, and Debbie Glasgow (Roper's "best friend") were at the US Festival together on June 4, 1983. Karee Kellison told Detective Woods that she saw Furrow and Glasgow together at the Festival at 12:30 a.m. on the morning of Sunday, June 5, 1983, and it did not appear that Furrow and Glasgow "were there together as [just] friends." (Discovery at N3020) Karee Kellison stated that Furrow and Glasgow ended up going away together and getting married. (*Id*.) Karee Kellison further stated that she and Roper left the Festival around 1:00 a.m. on June 5, 1983, and arrived at Roper's home at 1:40 a.m., with the telephone ringing as they entered Roper's house. (*Id*.) Roper answered the telephone; it was Furrow. Karee told Detective Woods that she could hear the conversation between Furrow and Roper. Furrow asked Roper to return to the US Festival to pick up him; Roper replied that she would only return to the Festival if Karee accompanied her, which Karee refused to do. (*Id*.) Karee Kellison said she specifically recalled that the telephone call occurred at 1:40 a.m. because she remembered looking at her watch when she got to Roper's home. (*Id*.) Regarding the green coveralls, Karee Kellison admitted seeing the coveralls before Roper turned them into the Sheriff's Department, but she did not recall where she had seen them before. Karee Kellison stated that when she saw the coveralls there were "little spots [of blood], as if someone had killed a chicken there on the lower portion of the pantlegs." (*Id*.)

F. June 14, 1984, Roper Interview

After leaving the Kellison home on June 14, 1984, Detective Woods then went to Roper's home to interview her but Roper stated she did not want to speak to anyone from the Sheriff's Department about the incident. (Discovery at N3022.)

G. Testimony About Furrow and the Coveralls at Trial

Cooper's counsel elected not to call Roper, Furrow or any of the Kellisons to testify as part of Cooper's defense. Cooper's counsel did, however, elicit testimony at trial from Eckley that he had collected a pair of coveralls from Roper which had some blood on them and Eckley destroyed them after no one followed up on his report about the coveralls. (102 R.T. 6546-51.) No mention was made of Lee Furrow at trial.

H. Later Declarations Obtained by Cooper

In November 1998—fifteen years after the Ryen/Hughes Crimes—Roper signed a declaration ("Roper's 1998 Declaration") prepared by an investigator for Cooper. (Cl. Pet., Ex. 91.) Roper's story evolved further.

Roper's 1998 Declaration states that, on the afternoon of June 4, 1983, she was home with Furrow and saw him put on a beige t-shirt, jeans and tennis shoes. [Roper's 1998 Declaration contradicts her earlier statements that Furrow was not at her home on June 4, 1983 and that Roper did not see Furrow at any time on June 4, 1983.] (*Id*. at 2.) Roper's 1998 Declaration further states that about 1:30 to 2:00 a.m. on the morning of June 5, 1983, Roper and Karee Kellison were home from the US Festival when Furrow walked in wearing coveralls splattered with blood; he was not wearing the beige t-shirt. (*Id*.) [Roper's 1998 Declaration is inconsistent with Roper's statement on June 9, 1983, that she found a pair of coveralls in her closet that day and did not know where they came from.]

In May 2018—thirty-five years after the events—Karee Kellison signed a declaration ("Kellison's 2018 Declaration") which was also prepared by an investigator for Cooper. Kellison's 2018 Declaration states that she saw Furrow and Glasgow together at the US Festival at a time she could not recall; Furrow was wearing a tan t-shirt

identical to the one the investigator showed her from Cooper's trial. Kellison's 2018 Declaration states that Glasgow was wearing a blue t-shirt. (May 6, 2018 Decl. of K. Kellison at 5.) Kellison's 2018 Declaration further states that at about 3:00 or 4:00 in the morning of June 5, 1983, Furrow and Glasgow walked into Roper's home, and Furrow was wearing coveralls with blood all over them. Kellison's 2018 Declaration further states that Kellison looked out the window and saw a white station wagon with wood paneling, with one or two persons in it. Furrow and Glasgow got on Furrow's motorcycle and drove off, and the station wagon drove off as well. Kellison's 2018 Declaration states that sometime later Furrow told her that he had done "something really bad" and needed to see a minister "to get the devil out of him." (*Id*.) Kellison's 2018 Declaration states that she is terrified of Lee Furrow. (*Id*.)

In July 2018, Cooper procured a declaration signed by Nikol Sue Giberson (the "Giberson Declaration"), which was also prepared by Cooper's investigator. The Giberson Declaration stated that she was at Roper's home on June 4 and June 5, 1983; she did not go to the US Festival with the others. The 2018 Giberson Declaration states that Roper returned home from the US Festival around midnight. (July 15, 2018 Decl. of Nikol Sue Giberson at 3.) At around 2:00 a.m. Furrow returned to Roper's home. Roper, Karee, and Giberson were all awake. Giberson hid in a back bedroom so Furrow would not see her. After Furrow left, 15-20 minutes later, Giberson came out of hiding and was told by Roper that Furrow came home to change clothes. Giberson noticed a pair of coveralls on the floor in Roper's bedroom. (*Id*. at 4.) The 2018 Giberson Declaration further states that, later that day or the next, while Roper was gone, Giberson returned to Roper's house; she examined the coveralls more closely and noticed "many blood stains." (*Id*.) The 2018 Giberson Declaration further states that Giberson immediately telephoned William Kellison, who came over, and confirmed the stains were blood. When Roper returned home, William Kellison telephoned the Sheriff's Department, and an officer came out and took possession of the coveralls. (*Id*.)

I. Special Counsel's Interviews

Special Counsel could not interview Diana Roper; she died in 2003. Special

Counsel interviewed Karee Kellison and Nikol Giberson.

Karee Kellison was shown the report of her May 14, 1984, interview which stated that she saw Furrow and Glasgow at the US Festival at 12:30 a.m. and that Furrow telephoned Roper at 1:40 a.m. asking to be picked up at the US Festival. Karee confirmed that her memory of the events was better in 1984 than in 2018 or at the time of Special Counsel's interview, and that she said she had no reason to doubt times she reported to Detective Woods in May 1984 were accurate. Karee Kellison told Special Counsel that she spoke with Furrow and Glasgow in or near the Beer Garden at the US Festival when she saw them there, and did not notice anything unusual about them or their behavior. She stated that Furrow did not have on coveralls and that neither of them had any blood on them. Karee Kellison told Special Counsel that Furrow arrived at Roper's home at around 3:00 a.m.; Karee was asleep on the floor of Roper's living room. Roper was not in the living room and was presumably in her bed. Karee Kellison said it was dark and that Furrow only passed through the living room on his way into and out of the bedroom, but she saw that he was wearing coveralls with what appeared to her to be blood on them. Karee Kellison stated that she did not know what Furrow meant when he said later that he had done something "really bad" and she speculated that he might have been talking about leaving Roper to marry Roper's best friend Glasgow. Karee Kellison said that, immediately before our meeting,[14] Cooper's counsel and investigator had shown her her 2018 Declaration and that the statement in the Declaration that she was terrified of Furrow was not true. She stated that she did not review the 2018 Declaration before she signed it in May 2018.

Special Counsel also met with Giberson, whose statements were markedly different from what appears in the 2018 Declaration she signed. Contrary to the declaration that Cooper's representatives obtained, Giberson stated that she was not at Roper's house on June 4 or 5, 1983, and was not present when Furrow returned to the

[14] Cooper's counsel and the investigator who had prepared the Kellison and Giberson Declarations accompanied Kellison and Giberson to the interviews with Special Counsel.

house after the US Festival; she did not see blood-stained coveralls on the morning of June 5 or thereafter; she did not telephone William Kellison to ask him to come to Roper's house to confirm the presence of blood on the coveralls; and she was not present when any officer came to collect the coveralls. Giberson stated that she did not read the 2018 Declaration before signing it.

J. The Evidence Does Not Support Cooper's Proposed Timeline of When Furrow Could Have Committed the Ryen/Hughes Crime

Special Counsel asked Cooper's representatives to explain their theory of when Furrow could have committed the Ryen/Hughes Crimes. In response, they proposed the following timeline:

- Furrow went to the US Festival in the afternoon/evening of June 4, 1983;
- Furrow left the US Festival and traveled to the Canyon Corral Bar (approximately 40 miles away), where he was seen along with two other men until around 9:30 p.m.;
- Furrow was actually at the Canyon Corral Bar with Glasgow, who was mistaken by witnesses for a man, and perhaps Jan Martinez, who was likewise mistaken for a man;
- Furrow and his companions left the Canyon Corral bar and returned to the US Festival (40 miles away), possibly to pick up Furrow's friend Mike Darnell;
- Furrow and his companions left the US Festival and drove back to Chino Hills (another 40 mile trip) where they committed the Ryen/Hughes Crimes;
- After the crime, Furrow and his two companions returned to the Canyon Corral Bar, where they were seen from 11:30 p.m. until 1:45 a.m.;
- Furrow, Glasgow, and one or two other people arrived at Roper's house in Mentone (another 40 miles trip) in the Ryens' white station wagon sometime between 1:00 a.m. and 4:00 a.m., before Furrow and Glasgow left on Furrow's motorcycle.

Cooper acknowledges that "a couple of hours" after the US Festival ended, Furrow telephoned Roper and asked her to pick him up at the US Festival, but Cooper speculates that Furrow might not actually have been at the US Festival when he made that call. (*Id*. at 4.)

Cooper's proposed timeline does not mention, and is inconsistent with, Karee's statements in May 1984 that she saw Furrow and Glasgow at the US Festival at approximately 12:30 a.m. (after the time Cooper contends the Ryen/Hughes Crimes occurred and during the time Cooper contends Furrow and his associates were 40 miles away at the Canyon Corral Bar). Cooper's timeline is also inconsistent with the evidence that Furrow telephoned Roper at her home from the US Festival at 1:40 a.m. on June 5, 1983. Cooper's speculation that Furrow was not actually at the US Festival at that time is unsupported. Cooper's proposed chronology is also inconsistent with Karee's later statements that, when she saw Furrow at the US Festival, he was wearing a tan t-shirt and not wearing bloody coveralls. If Furrow had committed the Ryen/Hughes Crimes and then returned to the US Festival where he was seen by Karee Kellison, he would presumably not be wearing the tan t-shirt (which was recovered between the Canyon Corral Bar and the Ryens' house), and he would have been wearing the green coveralls with blood stains on them. As stated, Cooper contends that Furrow was at the Canyon Corral Bar between 11:30 and 1:45, after having committed the murders, not that Furrow returned to the US Festival after the murders.

Special Counsel finds no reason to doubt Karee's statements to the Sheriff's Department in May 1984 that she saw Furrow and Glasgow in the Beer Garden at the US Festival around 12:30 a.m. on June 5, 1983, which statements were made near in time to the events and when Karee had no motive to lie or provide false information. When Special Counsel interviewed Karee Kellison in February 2022, she did not retract her statements about the chronology of events on June 4 and June 5, 1983. She agreed that her memory of the events was clearer in 1984 than when she signed the May 2018 Declaration or when Special Counsel interviewed her. Furrow's statements in May 1984 that it was about 12:00 or 12:30 a.m. when he telephoned Roper seeking a ride home

from the US Festival are not far different from Karee's statement that Furrow called around 1:40 a.m. from the US Festival, which would likewise make it impossible that Furrow was at the Canyon Corral Bar in Chino Hills from 11:30 p.m. until 1:45 a.m.

Although Cooper has not suggested that Karee Kellison may have seen Furrow and Glasgow at the US Festival at 12:30 a.m. ***after*** committing the murders, no evidence would support that alternative theory either. During our interview, Karee stated that she did not see any signs that Furrow and Glasgow had just committed multiple murders; neither Furrow nor Glasgow was covered in blood; Furrow was not wearing coveralls; and neither was acting oddly.

Summing up, the evidence refutes the theory that Furrow could have committed the Ryen/Hughes Crimes.

K. The Evidence Does Not Show that Furrow or His Acquaintances Knew the Ryens, Much Less Had a Motive to Murder the Family

Cooper also fails to establish any motive for Furrow to murder the Ryen family. Cooper does not have any evidence that Furrow even knew the Ryens.

Cooper has proposed two theories about why Furrow had reason to kill the Ryens. One theory is that a friend of Furrow's, Jan Martinez, intended to buy or steal an Arabian horse from the Ryens, but the acquisition fell through, which so angered Martinez that she enlisted Lee Furrow and Glasgow to get even with the Ryens by going to their home on June 4, 1983, to kill the Ryen family. Cooper's theory that Martinez knew the Ryens, did business with the Ryens, and had a failed transaction with them is speculation, and lacks any evidentiary support. Despite extraordinary media coverage of the Cooper case for approximately 40 years, no one has come forward with any evidence that Martinez was involved in the Ryen/Hughes Crimes, and enlisted Furrow and Glasgow or someone else to carry them out. And even if there were some evidence of a connection between Jan Martinez and the Ryens, for all the reasons stated above, Furrow and Glasgow have an alibi that refutes the theory that three men seen at the Canyon Corral Bar before and after the Ryen/Hughes Crimes were actually Furrow and two women who had long hair.

Cooper's second theory is that Furrow committed the murders on orders of

Clarence Ray Allen (a convicted murderer who was executed in 2006) because Allen's wife allegedly purchased a horse from the Ryens that the Ryens allegedly repossessed, which allegedly angered Allen (who was in state prison at the time) so much that he ordered Furrow and others to kill the Ryen family. Cooper does not establish that highly speculative theory. Cooper has not pointed to any evidence that Allen or his wife transacted or attempted to transact any business with the Ryens. Nor does Cooper point to any evidence that the Ryens repossessed a horse from Clarence Ray Allen or his wife.

Further, the theory that, in 1983, Furrow would do a favor for Clarence Ray Allen, or that Clarence Ray Allen would ask Furrow to do him the favor of killing the Ryens, is highly implausible, because at that time Allen was on death row after having been convicted in 1982 of ordering Furrow, among others, killed. *People v. Allen*, 42 Cal.3d 1222 (1986). As the Ninth Circuit stated:

> Furrow had previously been convicted of strangling Mary Sue Kitts in 1974, on the orders of Clarence Ray Allen. Furrow had been a member of the "Allen gang," and he testified for the prosecution at Allen's capital murder trial. Allen was executed in 2006. In return for his testimony, Furrow was allowed to plead guilty to second degree murder. He served four and a half years in prison.

Cooper v. Brown, 565 F.3d at 585-86.

Although Furrow was not killed on Allen's orders, others were, and Allen was convicted of those murders, sentenced to death, and executed. There is no evidence to support the highly speculative, and implausible, theory that in 1983, Allen asked Furrow to commit a murder for Allen who, at that time, was on death row in connection with a scheme to murder Furrow. Likewise, it is implausible that Furrow, who had been convicted of second-degree murder because he carried out Allen's instructions in 1974, would have been willing to commit more murders for Allen (and after Allen had ordered that Furrow be killed). There is no evidence that Furrow and Allen had any dealings with one another around 1983, or for many years before.

L. Furrow's Alleged Confessions

In January 2020, Cooper's representatives wrote a letter to Governor Newsom

stating that Cooper had obtained declarations from witnesses who allegedly heard Furrow confess to the crime. Those declarations were given to Special Counsel. In April 2022, Special Counsel interviewed the declarants, James H. Cameron and his son James D. Cameron, separately.

The Camerons worked construction with Furrow in Pennsylvania around 2018. They each stated they were present when Furrow at a job site stated something to the effect "Me and my boys, we butchered a whole family. We even killed the f***ing pets." (The Ryens' pets were not killed when the murders occurred. (88 R.T. 3194.)) Each witness stated that Furrow made the statement out of the blue, without prompting. The declarations they signed, which were drafted by an investigator, state under penalty of perjury that James D. Cameron asked if the family deserved to die, to which Furrow allegedly responded "yes." Neither person repeated that alleged exchange during our interviews. Rather they both said that after Furrow's alleged statement, no one said anything.

Special Counsel does not find those statements by the Camerons to be substantial or compelling evidence of Furrow's guilt and Cooper's innocence. Both Camerons stated that, before they heard Furrow make the statements, they had seen an episode of 48 Hours about the Ryen/Hughes Crimes, Cooper's claim of innocence, and the theory that Furrow had committed the murders. The Camerons also stated that Furrow had commented to them about the 48 Hours broadcast and the fact that the 48 Hours episode implicating Furrow in the Ryen/Hughes Crimes had been a source of frustration and trouble for Furrow. Both witnesses said that, after hearing Furrow's alleged confession, they did not contact the authorities, even though they knew that Cooper had been sentenced to death for the Ryen/Hughes Crimes. Sometime later, the Camerons said they saw another 48 Hours episode that mentioned the name of Cooper's investigator, and at that time they contacted that investigator.

Furrow was interviewed as part of Special Counsel's investigation, and he denied confessing to the Camerons that he had "butchered" a family or had otherwise confessed to the Ryen/Hughes Crimes.

Given all the other evidence and facts referenced in this report incriminating Cooper, and all the evidence that refutes the theory that Furrow committed the murders, the Camerons' disputed statements about what they allegedly heard Furrow say are not reliable, and they do not undermine Special Counsel's determination that the evidence of Cooper's guilt is conclusive.

Cooper's representatives stated during this investigation that Furrow would likely confess to the Ryen/Hughes Crimes if Special Counsel were to interview him. One of Special Counsel's experts had several meetings with Furrow, and Furrow did not confess. To the contrary, he stated that he did not know the Ryens, he did not know anyone who knew the Ryens, he never went to the Ryens' house, he was at the US Festival in San Bernardino at the time of the murders in Chino Hills, he did not own the coveralls that Roper found in her closet, and he never told anyone that he was involved in the Ryen/Hughes Crimes. He stated that Diana Roper was furious with him for running off and marrying Roper's best friend, Debbie Glasgow. He denied confessing involvement in the Ryen/Hughes Crimes to the Camerons or anyone else.

M. Alleged Confession of Kenneth Koon and His Alleged Implication of Furrow

Cooper's Clemency Petition asserts that a "jail house confession of Kenneth Koon . . . confirmed that Furrow had been involved in the murders and had left the bloody coveralls at Roper's house." (Cl. Pet. at 49.) Cooper further asserts that Koon confessed that he and two other men committed the Ryen/Hughes Crimes. The record evidence indicates the following:

In December 1984, while Cooper's trial was ongoing, an incarcerated person at the California Medical Facility at Vacaville, Anthony Wisely, told an officer there that his cellmate, Kevin Koon, had said that Koon had driven two other men to the Ryens' house, where those two men went inside and committed the crimes. (Cl. Pet., Ex. 73.) Detective Woods went to Vacaville to interview Wisely, who was in custody there for two years under the "psychotic and remission program." (*Id*. at 3.) Detective Woods' report of his interview of Wisely stated:

> [Koon] was with two other guys that were in the BRAND or [Aryan] Brotherhood and they driven to the Chino area to collect a debt. [Koon] also stated that they had driven to a residence in Chino and that the two guys got out and that they were in for about ten or fifteen minutes and that one of the guys was carrying two axes or hatchets. That he [presumably the man carrying the weapons] also had gloves on, and that one of them made the statement that the debt was officially collected and that the first guy that came out turned around and said who was that, and then again stated "Who the f*** is the n****r?" [Koon] said that the man that made the statement was looking in the direction of the window and he saw a [B]lack subject through the window and that the one subject told him to get out of there. [Wisely] states that KOON was dropped off in San Bernardino somewhere, he does not know where. [Wisely] stated that KOON went to his old lady's house and changed his overalls and that KOON also made the statement that one of the guys that came out with the axes was very upset because they apparently had left one kid alive. He then stated that later one of the axes was turned into the police department at Yucaipa P.D. by his old lady, and states that KOON told him the name of this girlfriend or old lady but he cannot remember the name. He states later the hatchet was either lost or destroyed by the police department it was turned in to. . . .
>
> He also stated that KOON thinks that they hit the wrong house for the collection[.]

(*Id*. at 1-2.)

After hearing Wisely's story, Detective Woods asked to see Koon's prison records at Vacaville, which revealed that Diana Roper and Karee Kellison were listed as Koon's emergency contacts. At that point, Detective Woods recalled that Roper had turned in coveralls to the Yucaipa station, so Detective Woods asked to meet further with Wisely, who then confirmed that Roper was Koon's "old lady." Detective Woods' report of his interview of Wisely notes that Wisely had been trying to inform on another incarcerated person for a contract killing in Santa Clara.

Immediately after interviewing Wisely, Detective Woods interviewed Koon. (Discovery at 3904-05.) Koon told Detective Woods that Roper was his girlfriend, and that the two started living together shortly after Furrow moved out. Koon told Detective Woods that Roper had said she had "found some bloody coveralls in a house apparently belonging to [Furrow]" and "apparently the cops destroyed them or lost the coveralls."

(*Id*. at 3904.) Koon also told Detective Woods that he was in the Gorman, California area (100 miles away from Chino Hills) at the time of the US Festival. (*Id*.) Detective Woods' investigation into the possibility that Koon was involved in the Ryen/Hughes Crimes ended.

The State provided the information on Detective Woods' interviews to Cooper's attorney on January 2, 1985, the morning Cooper was to take the stand in his trial, and his counsel was given time to review the new information to determine how to proceed. (97 R.T. 5323-5326.) Cooper's investigator interviewed Wisely on January 12, 1985. Cooper's counsel did not seek to call Wisely or Koon to testify at trial.

The evidence about Wisely's allegation that Koon confessed to him does not support Cooper's claim of innocence. First, Wisely's claim that Koon confessed to being involved in the Ryen/Hughes Crimes is extremely weak, which may explain why Cooper's counsel elected not to call Wisely to testify at trial. Not only was Wisely in custody under the psychotic and remission program, he admitted that both he and Koon were "wasted" at the time Wisely allegedly heard Koon "confess." Further, it appears that Koon was telling Wisely a story Koon had heard from his then-girlfriend, Roper, about the Ryen/Hughes Crimes, not that Koon was confessing that he (Koon) was involved in the murders. It is unclear whether Wisely was simply confused about what he had heard because of Wisely's mental condition and use of drugs, or whether he intentionally misstated what Koon said with the hope that Wisely's assistance to the authorities might improve his own custody situation. Regardless, Wisely's statements have little probative value to support the theory that Koon was actually involved in the Ryen/Hughes Crimes as a driver. Furthermore, Wisely's statements about what Koon allegedly said about the three men driving to and from the Ryens' house would be inconsistent with the theft of the Ryens' station wagon.

Second, Koon did not incriminate Furrow or "confirm[] that Furrow had been involved in the murders and had left the bloody coveralls at Roper's house," as Cooper claims in his Clemency Petition. (Cl. Pet. at 49.) Wisely did not tell Detective Woods that Koon even mentioned Furrow during the alleged conversation between Wisely and Koon

around Thanksgiving 1984, much less that Koon told Wisely that Furrow was involved in the murders or left bloody coveralls at Roper's house. To the contrary, according to Wisely, it was *Koon* who allegedly left coveralls at Roper's house immediately after the murders.

In short, Wisely's statements about what Koon allegedly said are not credible evidence that Koon and Furrow—not Cooper—committed the Ryen/Hughes Crimes.

N. Furrow's DNA Has Never Been Found on Any Evidence Related to the Crimes

In early 2020, Cooper's investigators procured a DNA sample from Furrow, with the belief that it would match with the further DNA testing Bode conducted in 2019 of A-41, the tan t-shirt, the orange towel, the cigarette butts recovered from the Ryens' station wagon, VV-2, and the hair recovered from victims' hands. (Aug. 27, 2020 SBDA Letter re Cooper Reply at 2-3; Apr. 7, 2020 SBDA Letter to Gov. Newsom at 8 & Ex. 1.) None of the DNA test results matched Furrow. (*Id.*)

O. Special Counsel's Conclusions Regarding Furrow and the Bloody Coveralls

Taking all the evidence and facts together, Cooper has not established that Furrow was involved in the Ryen/Hughes Crimes, and Special Counsel concludes that Furrow was not.

Although Roper (after May 16, 1984) and Karee Kellison (after 2018) claim to have seen Furrow wearing coveralls with blood on them in the early morning hours of June 5, 1983, at Roper's house in Mentone, Special Counsel does not find those statements persuasive or credible. On June 9, 1983, just a few days after the crime, Roper told the authorities she found those coveralls in her closet and that she did not know where the coveralls came from or whose they were. Special Counsel do not see a plausible motive for Roper to have lied about those facts at that time. Roper also did not tell her father or mother that she saw Furrow wearing bloody coveralls on the night of June 5, 1983; she told her father she thought the coveralls were connected to the murders based on her "premonitions." The more reasonable inference from the evidence is that

Roper did not see Furrow wearing the coveralls on June 5, 1983.

Likewise, when the authorities interviewed Karee Kellison in June 1984, she also did not claim to have seen Furrow wearing the coveralls in the early morning hours of June 5, 1983. It was not until the 2018 Declaration she signed that Karee Kellison first indicated that, on the morning of June 5, 1983, she saw Furrow in coveralls that appeared to have blood stains on them. Given her statements to Special Counsel that she was asleep on the living room floor of her sister's house at about 4:00 a.m. on June 5, 1983, when she allegedly saw Furrow walk through the room, Special Counsel concludes Karee Kellison's later statements about her observations 35 years earlier are unreliable.

Special Counsel also concludes that any blood on the coveralls that Roper found did not come from the Ryen/Hughes Crimes. The physical evidence is inconsistent with the theory that Furrow committed the Ryen/Hughes Crimes while wearing the coveralls. As described in this Report, the evidence is conclusive that Cooper committed the Ryen/Hughes Crimes. There is no physical evidence that ties Furrow to the Crimes. Further, Special Counsel's expert concludes that the person who committed the Ryen/Hughes Crimes would have been covered in blood. (Delhauer Report at 12.) The small bloodstains that several eyewitnesses observed in June 1983 on the pant legs of the coveralls are inconsistent with the other crime scene evidence.

Cooper makes the indisputable point that, now that the coveralls have been destroyed, it is impossible to prove that blood on the coveralls might have come from the victims. Although the coveralls should not have been destroyed, Special Counsel does not conclude that they were destroyed because of a concern that the evidence would undermine the case against Cooper, nor that there is any reasonable possibility the coveralls had the blood of the victims of the Ryen/Hughes Crimes.

First, for all the reasons discussed in this Report, the evidence does not support the contention that the coveralls that Roper found in her closet on June 9, 1983, might have had blood on them from the Ryen/Hughes Crimes. Special Counsel finds the evidence of Cooper's guilt to be conclusive, and finds there not to be any substantial evidence that Furrow committed the Ryen/Hughes Crimes.

Second, based on what Deputy Sheriff Eckley and others knew as of December 1, 1983 (Discovery at 1002), when the coveralls were destroyed, there would have been almost no reason for anyone to believe that those coveralls would have undermined the case against Cooper. Even if one accepted the assertion that the authorities would have wanted to destroy evidence inconsistent with their theory that Cooper was the murderer, Roper's report to the authorities in June 1983 would not have caused anyone to believe that those coveralls needed to be destroyed because of their possible exculpatory value to Cooper. At that time, the Sheriff's Department knew only that Roper found some coveralls in her closet with a few smears of blood on them and she did not know whose they were or where they came from. She did not provide any support for her speculation that the coveralls might have been placed there by either her boyfriend or his friends, and that they might have some connection to murders that occurred 40 miles away of persons that Roper did not claim she or Furrow knew. Based on what Roper told Deputy Sheriff Eckley, Eckley could not reasonably have believed that the coveralls would have undermined the case against Cooper, so a conspiracy to frame Cooper is not a reasonable explanation for why Eckley threw them away. The evidence does not support the theory that someone at the Sheriff's Department viewed those coveralls as such a threat to the case against Cooper that they ordered Eckley to destroy the evidence.

Roper's statement in May 1984 that she noticed a hatchet missing at her home shortly after the Ryen/Hughes Crimes is likewise unreliable. The statements Roper made in May 1984 were so different from what she reported on June 9, 1983 that the May 1984 statement as a whole is unreliable. In May 1984 she claimed that she saw Furrow (and Glasgow) wearing the coveralls when they returned to Roper's home in the early morning hours of June 5, 1983, Furrow then undressed, and then he left with Glasgow. Roper stated that on June 6, 1983 she found the coveralls on the floor near her closet. Roper also stated that, "a few days later," she heard on the news that a hatchet was used in the Ryen/Hughes crime, at which time she went to look for a hatchet that Furrow owned and she noticed it missing. Roper's May 1984 statement is inconsistent with her report on June 9, 1983 that she found coveralls in her closet on June 9, 1983 and she did now know

whose they were or where they came from. Roper did not mention a missing hatchet to Deputy Sheriff Eckley and she did not make any further report to the authorities about a missing hatchet. Roper's statements in May 1984 that she noticed shortly after the Ryen/Hughes Crimes that hatchet was missing at her home is unreliable. In all events, even if a hatchet was not at Roper's home after the Ryen/Hughes Crimes, it would not constitute any substantial evidence that Furrow used the hatchet in connection with the Ryen/Hughes Crimes and left the hatchet near the Ryens' house.

For all these reasons, Special Counsel concludes that Cooper's theory that Lee Furrow (and not Cooper) committed the Ryen/Hughes Crimes is refuted by the evidence.

VI. COOPER'S CONTENTION THAT EVIDENCE ABOUT THE REAL CULPRITS WAS IGNORED

A. The Evidence Does Not Support the Claim that the Sheriff's Department "Rushed to Judgment" or Had "Tunnel Vision"

Cooper has argued that the Sheriff's Department had "tunnel vision" and improperly and erroneously narrowed its focus to Cooper, and thus ignored evidence that showed someone else committed the Ryen/Hughes Crimes.

Special Counsel reviewed the Los Angeles Times and San Bernardino Sun articles related to the Ryen/Hughes Crimes to assess what officials were saying at the time about their investigation. None of those articles references Cooper as the Sheriff's Department primary suspect until June 10. For the reasons stated above, it was appropriate for the Sheriff's Department to identify Cooper as the prime suspect by June 9, 1983, when they determined that Cooper had been staying at the Lease house until shortly before the Ryen/Hughes Crimes were committed nearby, and they found evidence connecting the Lease house to the Crimes. Below is a brief timeline of notable suspect developments in the days following the Ryen/Hughes Crimes.

Media reports on June 6: On June 6, 1983, the Los Angeles Times reported an all-points bulletin had been issued for the Ryens' station wagon and three young men who might be driving it, because three men were seen at the Ryens' house "yesterday

(Saturday) afternoon."[15] A Sheriff's Department spokesperson said no incarcerated persons from the nearby prison (CIM) appear to be involved. Sheriff's Deputy Amos Jackson says, "At the prison, they tell us that everyone's accounted for; haven't been any escapes for some time." Sheriff Floyd Tidwell stated, "more than one person" appeared to have taken part in the murders.

A second Los Angeles Times article that day reported that Tidwell said investigators are searching on June 6, 1983, for three suspects for questioning in the murders—Michael Fast Horse Martinez, David Troutman,[16] and Alboro Kanori[17] — escapees from CIM and a separate juvenile detention facility (Boys Republic).[18] Tidwell declined to call the men "'good' suspects." Tidwell said they were investigating a report that three White or Latino men drove up to the Ryens' house on the afternoon of June 4, 1983. When Tidwell was asked whether these three men could have been the escapees, he said "I have no idea" and "I do not believe they (the men seen at the Ryen home) are connected (with the escapees)."

Media reports on June 7: Tidwell also said investigators were looking into a burglary that occurred at the Ryens' Santa Ana chiropractic office "last May 7." Santa Ana police identified the three men charged with the burglary as Charles Fernando Murray, Lee Charles Mayfield, and Lyrie English. While Mayfield and English were in custody at the time of the murders, Murray was not.

San Bernardino County Sheriff's Captain Phil Schuyler said that Kanori was captured on June 6, 1983.[19] The other escapees (Martinez and Troutman) were still at large. Tidwell said on June 6, 1983, that investigators were looking for the men, but that

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[15] Wesley Hughes & Ted Thackrey, *4 Brutally Murdered in Chino*, LA Times, June 6, 1983.
[16] While Cooper used the alias Trautman, articles vary in their spelling, using "Troutman" or "Trautman."
[17] Articles vary in their spelling, using "Kanori" or "Knori."
[18] Eric Malnic & Richard West, *Escapees Sought in 4 Murders*, L.A. Times, June 6, 1983.
[19] *Man Sought for Quizzing in Chino Deaths Captured*, L.A. Times, June 7, 1983 (reprinted from A.P.).

there was nothing to link them directly with the murders.

Media reports on June 8: Articles that ran on June 8, 1983, reported that, at a press conference late on June 7, 1983, Tidwell said that the Sheriff's Department investigators found evidence that the killer or killers stayed in a nearby empty house before or after the murders.[20] (Tidwell's statement further undermines the theory that the Sheriff's Department had concluded by June 7, 1983, that Cooper specifically, or an escapee, had been in the Lease house.) Schuyler said "strong physical evidence" found there might "tie someone in" with the murders, while Tidwell reported deputies found bloodstains and clothing in the Lease house, and lab experts were also checking fingerprints found. He also said the Sheriff's Department had questioned a robbery suspect in the custody of Costa Mesa police (identified by Costa Mesa police as Milton A. Bulau), because he was staying at a motel where a car similar to the Ryens' vehicle was found. Tidwell said there was no evidence linking this man to the stolen car, and identified him as a "fair" suspect without elaboration. Tidwell stated that Kanori (in custody), Martinez, and Cooper (who had been incarcerated at CIM under the false identity of Trautman) were not considered prime suspects in the murders, and that investigators had nothing to connect them to each other or the murders "other than that they are escapees from institutions in the area." He also said that reports that three men had driven to the scene of the murder hours before the attack were probably unfounded.

The San Bernardino Sun similarly reported Tidwell said at a press conference late on June 7, 1983, that clothing (trousers and perhaps a shirt), and other undescribed evidence were found at the Lease house.[21] Tidwell explained that the clothing appeared to belong to one person, but that investigators believed there was more than one killer given the number of weapons used and number of victims. Costa Mesa Police Sergeant Tim Holbrook said on Tuesday night (June 7, 1983) that Bulau was not a suspect in the

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[20] Wesley Hughes & Eric Malnic, *New Links in Killings at Chino Home*, L.A. Times, June 8, 1983.
[21] Jan-Christian Sears, *Blood-Spattered Chino Home May Help Trace Killers*, San Bernardino Sun, June 8, 1983.

Ryen/Hughes Crimes, but he had claimed to have information about the Ryens' vehicle.

A second article in the San Bernardino Sun states that Pennsylvania authorities stated on June 7, 1983, that Cooper had been using the alias David Trautman and had escaped from a Pennsylvania mental institution.[22] Tidwell said there appeared to be no evidence tying Trautman to the murders; nonetheless, investigators wanted to question him. The article stated that Chino prison officials were notified about Trautman's identity in May, according to Pennsylvania officials.

Media reports on June 9: Reports on June 9 indicated that Tidwell had stated on June 8 that investigators were moving more to the theory of a single murderer at the Ryens' house, although Tidwell did not explain the reasoning.[23] Schuyler stated that detectives had no clue as to the ownership of the men's clothing found in the Lease house. Tidwell said Bulau had refused to answer questions about the murders, but was "not looking as good to [them]," because the vehicle he was connected to at a motel was not the Ryens'. He also said that Kanori "doesn't look responsible" and that neither Cooper nor Martinez was a prime suspect.

The San Bernardino Sun reported that Cooper was being sought for questioning and was "considered a potential suspect in the case."[24] Investigators had not yet matched the "numerous" fingerprints left at the crime scene and at a nearby home where the killer was believed to have been hiding, to any possible suspects. Specifically, Tidwell said that none of the fingerprints that had been analyzed matched Cooper, stating "[i]f we had fingerprints to tie him in with the case, he'd be our 'A-number-one' suspect. But we don't have that." He also said that no evidence had been developed that might tie Kanori or Bulau to the crimes, although both had been interviewed.

Media Reports on June 10, 1983: Articles reported that the day prior, June 9, the

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[22] Art Wong, *Clerical Error Let Chino Inmate Escape*, San Bernardino Sun, June 8, 1983.
[23] Wesley Hughes & Eric Malnic, *Massacre Victim Buried as Investigation Intensifies*, L.A. Times, June 9, 1983.
[24] Mark Lundahl, *Chino Hills Takes on Air of Caution*, San Bernardino Sun, June 9, 1983.

District Attorney filed charges against Cooper for four counts of murder, one count of attempted murder, and one count of escaping from state prison. At a late afternoon press conference on June 9, 1983, Tidwell said "[w]e have evidence in our possession that places Kevin Cooper at the crime scene, and we have other evidence that leads us to believe that Kevin Cooper is responsible for the murders."[25] Neither Tidwell nor District Attorney Dennis Kottmeier elaborated on the evidence that connected Cooper to the crimes nor did they "pinpoint the portion of the crime scene from which the evidence had been taken." According to unconfirmed reports referenced by the San Bernardino Sun, however, "at least a portion of that evidence involves a telephone call made to the Pittsburgh area from the victims' home [sic] on the night of the slayings." Tidwell also said that "[o]f the victims and the number of weapons involved . . . it is now believed that there was only one assailant and that 'one weapon was used at a time.'"

It was also reported that, on June 9, law enforcement personnel were searching for Cooper in the Mexican border area, based on "reliable information that [led them] to believe that he is in that area" and that "there have been a number of sightings (of the car), many of which have led us this way." Authorities also reported that Michael Fast Horse Martinez and Alboro Kanori had been cleared as suspects, and while Milton Bulau refused to talk to investigators, there was "no evidence to link him" to the Ryen/Hughes Crimes.

As discussed above, the findings on June 9, 1983 (only four days after the murders) that Cooper had been in the Lease house, on June 4, 1983, close in time to the murders, and then in Mexico on June 5, 1983, understandably changed the investigation. The media reports confirmed as much—they stated that an arrest warrant had been issued for Cooper and that substantial evidence tied him to the crimes. The claim that the Sheriff's Department focused too quickly on Cooper, and in so doing ignored evidence that would have led to the true killers, is not supported by the evidence.

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[25] Mark Lundahl & Art Wong, *Fugitive Prison Escapee Charged in Chino Killings*, San Bernardino Sun, June 10, 1983.

Furthermore, Cooper has not identified any other substantial evidence that existed that would have pointed to the "real" killers, which the authorities allegedly ignored. (The evidence relating to Furrow is addressed above.)

B. The Evidence Does Not Support the Argument that Sheriff Tidwell Was Under Such Political Pressure to Solve the Crime that He Was Motivated to Frame Cooper

The evidence does not support Cooper's theory that the Sheriff's Department needed to announce the solving of the crime because Sheriff Tidwell felt some political pressure due to an impending election. Tidwell was elected in 1982 to a four-year term as Sheriff; he would not stand for re-election until June 1986, three years away at the time of the Ryen/Hughes Crimes. (Rene Ray De La Cruz & Matthew Cabe, *Retired County Sheriff Floyd Tidwell Dies, Age 90*, Victorville Daily Press, Feb. 25, 2020; *California Election Results*, L.A. Times, June 5, 1986.) Those facts do not establish that Tidwell felt it necessary to identify a suspect by June 9, 1983, without adequate evidence, due to an election that far in the future. As stated, there was ample evidence by June 9, 1983 tying Cooper to the Ryen/Hughes Crimes.

VII. COOPER'S CONTENTION THAT ONE PERSON, ACTING ALONE, COULD NOT HAVE COMMITTED THE MURDERS

Cooper has suggested that it would have been impossible, or at least highly implausible, for one person, acting alone, to have murdered Doug Ryen, Peggy Ryen, their daughter Jessica Ryen, and Chris Hughes and gravely injured Josh Ryen, in light of the crime scene evidence. (Cl. Pet. at 5.) If the evidence showed that one person acting alone could not have committed the crime, it would support Cooper's claim of innocence since there is no evidence to suggest that Cooper conspired with others to commit the murders together.

Cooper points to the fact that the victims sustained at least 140 separate wounds, caused by different weapons, in a very short period. Cooper argues one person could not readily have wielded multiple weapons to inflict those wounds. Cooper also points to the facts that Doug and Peggy Ryen were very fit and kept weapons in the bedroom where

they were murdered. (Cl. Pet. at 36-37, 39; 90 R.T. 3987-88.) In support of his argument that Cooper alone could not have committed the crime, Cooper relies on statements in a 2013 report by Gregg McCrary, a retired FBI agent, and a report in 2000 from Dr. John P. Ryan, a Forensic Pathologist, both of which were obtained on Cooper's behalf. (Cl. Pet. at 191, 194.)

McCrary's report states:

> Based on the totality of the evidence reviewed in this case it is my opinion that, in all probability, multiple offenders murdered Mr. and Mrs. Ryen, their daughter Jessica, Christopher Hughes and attempted to murder Josh Ryen. While the motive remains unknown, the method and manner in which this crime was committed in conjunction with the empirical data noted above, render motivations such as burglary, robbery and motor vehicle theft highly unlikely.

(Cl. Pet. at 15, Ex. 4 [McCrary Report at 11].)

Ryan's report states "[i]t would be virtually impossible for one person to have accomplished this" (Cl. Pet. at 39) based on the number of wounds inflicted and the coroner's testimony at trial regarding the length of time the attacks lasted.

Special Counsel finds the evidence does not support the theory that one person could not have committed the crime. Neither McCrary nor Ryan opine that the evidence precludes the possibility that only one person committed the crime. An independent expert Special Counsel engaged to help evaluate this issue, Paul Delhauer, a certified Criminal Investigative Analyst with more than 28 years of law enforcement experience with the Los Angeles County Sheriff's Department and 16 years with the Sheriff's Homicide Bureau, concluded that the evidence does not preclude the possibility that one person, acting alone, committed the Ryen/Hughes Crimes. Moreover, in Delhauer's opinion, the evidence indicates it is much more likely that one person, not multiple people, committed the Ryen/Hughes Crimes.

Based on the location of the bodies and blood evidence in Doug and Peggy Ryen's bedroom, it appears Doug and Peggy Ryen were both attacked on the bed and were likely sound asleep when they were attacked. (Delhauer Report at 10.) The coroner who

testified at Cooper's trial estimated that the murders likely occurred between approximately 9:30 p.m. and 12:30 a.m. on June 4, 1983. Although Doug Ryen was strong and fit, the evidence shows that at the time he was attacked, he was highly intoxicated with an elevated blood alcohol level of 0.24%. (Discovery at 558.)

One of the first wounds Doug Ryen suffered, if not the very first, was a stab wound to his neck that severed his left carotid artery and cut into the trachea. (90 R.T. 3858.) This wound would have immediately bled massively and would have quickly cut off half of the supply of blood to the brain. That wound could have been inflicted while Doug Ryen was sleeping and in any case would have quickly immobilized him.

With Doug Ryen attacked and subdued first, the murderer could have then incapacitated Peggy Ryen, although she too was fit and strong. Peggy Ryen also had been drinking (though not as much as Doug Ryen) and she would undoubtedly have been disoriented when awakened as her husband was being attacked and mortally injured in their bed. Thus, once Doug Ryen was immediately incapacitated, a single assailant could have attacked, and incapacitated, Peggy Ryen. The murderer had only to incapacitate the adults, not kill either of them, before attacking each child as they appeared in the bedroom later and separately, allowing each to be incapacitated in succession. (Delhauer Report at 10.)

Ten-year-old Jessica Ryen was found in the doorway of her parents' bedroom, suggesting that she went to her parents after hearing that they were being assaulted. (*Id*.) Blood evidence found inside Doug and Peggy Ryen's bedroom shows Jessica made it into the room a short way before being attacked. (*Id*.) Jessica suffered stab wounds to her right internal jugular vein, which would have caused massive bleeding, rapid unconsciousness and death within minutes. (90 R.T. 3903-04.) She also suffered a series of about 20 very shallow puncture wounds in the chest area caused by an instrument such as an ice pick, most likely after she was already dead. (90 R.T. 3910-11.) Jessica's final position of rest indicated that her body was manipulated after she died. (Delhauer Report at 11.)

The evidence reflects that Josh Ryen and Chris Hughes were also roused from

sleep by the sounds of the attack and likewise went into the master bedroom, one at a time. (*Id.* at 11.)

All of the victims sustained injuries consistent with two distinguishable sharp-force implements, consistent with the use of two weapons simultaneously. The autopsy findings indicate no evidence that would typically be present if multiple offenders had attacked the victims from multiple positions, and the wounds on all five victims exhibited evidence of convergent wound tracks consistent with separate implements in either hand of a single offender. Only wounds inflicted postmortem suggest possible use of a third implement. In addition, there was no physical evidence of more than one offender in the Ryens' house; in fact there was a conspicuous lack of other evidence that would be expected had there been multiple offenders, such as other footwear impressions, blood from incidental wounds to additional offenders, or transfer of relevant evidence elsewhere in the house. (Delhauer Report at 3-6.)

As McCrary states, his opinion that multiple offenders probably committed the crime is based on his presumptions about Cooper's lack of motive. Motive is discussed below, but Cooper's purported lack of a logical motive cannot overcome the physical evidence and other evidence discussed in this report inculpating Cooper.

Thus, having considered the crime scene evidence and coroner report, as well as the statements by McCrary and Ryan, and the opinions of independent expert Paul Delhauer, Special Counsel concludes that the evidence does not support an argument that one person could not have committed the crime. Rather, the evidence is consistent with the conclusion that one person acting alone committed the crimes.

VIII. COOPER'S CONTENTION THAT HE LACKED ANY MOTIVE OR PROPENSITY TO COMMIT THE CRIMES

Cooper has argued that he had no motive to commit the Ryen/Hughes Crimes. While he does not admit to stealing the Ryens' station wagon, he argues that he would not have needed to commit murder to steal it because he was an accomplished car thief (and the Ryens kept the keys in the station wagon), and he did not steal money from the Ryens. Regarding his propensity for violence, Cooper has asserted that, although he had

been arrested and in custody numerous times in Pennsylvania and then in California before the Ryen/Hughes Crimes, he is not a violent person and had not previously committed a violent crime.

The evidence indicates that Cooper had a strong motive not to be recaptured after escaping CIM because of his aversion to incarceration and the consequences he knew he would face if recaptured. Cooper's criminal history shows the following:

- Between the ages of 13 and 16, Cooper was arrested three times in Pennsylvania for auto theft, the third time resulting in his being committed to a youth development center.[26] After he walked away from that facility three separate times, he was committed to Camp Hill, a juvenile detention center. He remained there until April 20, 1976, when he was 18 years old.
- Ten days after his release from the juvenile detention center, Cooper was arrested again for another attempted car theft, resisting arrest, and possession of a weapon. He was placed on probation, which was later revoked.
- In December 1976, Cooper was arrested for burglarizing a building and stealing electronics and jewelry. Following his conviction and incarceration, Cooper escaped from Greenberg Correctional Institution. Cooper was arrested again in July 1977 and sent back to the Greenberg Correctional Institution.
- Cooper was paroled in April 1978, but arrested on new charges and remanded to custody, until he was released in October 1978.
- In November 1978, he was arrested for robbery after entering a house and taking a TV set, and for receiving stolen property, auto theft, and burglary. He was sentenced to Pennsylvania state prison and paroled in November 1979.

[26] (San Diego County Probation Dept. Adult Services Probation Officer's Report at 7-9, No. CR 72787 (San Diego Cnty. Super. Ct. May 1, 1985).)

- In December 1979, Cooper committed additional burglaries in Pennsylvania while on parole. He was arrested in February 1980 but no detainer was lodged against him at that time. Cooper was arrested again in March 1980 and a detainer was lodged against him. In April 1980, after pleading guilty, Cooper was committed to Mayview State Hospital, a psychiatric hospital for evaluation. He was deemed competent and returned to prison. Cooper served the maximum time and was released in February 1982.
- In August 1982, Cooper was arrested for several more burglaries. During the proceedings, he was committed to Mayview State Hospital again. He escaped on October 7, 1982.
- On October 8, 1982—the day after escaping from Mayview State Hospital—Cooper broke into a house in Pittsburgh, Pennsylvania while the residents were away from home. LS, a 17-year-old friend of the daughter who lived in the house, came to the door. When Cooper opened the door, LS asked for her friend. According to LS's testimony at Cooper's trial, Cooper invited her into the house and then assaulted her. (107 R.T. 7960.) LS further testified that, although she gave Cooper the keys to her car, Cooper forced her into her car and drove them to a secluded spot where Cooper made her remove her pants and raped her while holding what LS believed was a screwdriver to the back of her neck. (*Id*. at 7962-66.) LS testified that Cooper threatened to kill her multiple times and eventually stole her car and abandoned her. (*Id*. at 7962, 7964, 7966.) LS reported the rape, and the ensuing examination confirmed semen in her vagina and on her pants. (Discovery at 109-110.) Cooper stipulated at his trial that he kidnapped and raped LS. (107 R.T. at 7982.) After Cooper was convicted and sentenced to death for the Ryen/Hughes Crimes, he was not charged by Pennsylvania for the kidnapping and rape.

When Special Counsel interviewed Cooper, he stated that he and LS had a

confrontation because he wanted her car keys and she did not want to give them to him. He denied raping her, and observed he had not been tried or convicted of rape. He said that he stipulated to raping LS because his trial counsel failed to explain the significance of the stipulation.

Immediately after the rape and vehicle theft, Cooper fled Pennsylvania and made his way to Las Vegas, Nevada, and then Los Angeles, California, where he was arrested for burglary on January 3, 1983. He told the authorities his name was David Anthony Trautman. "Trautman" was sentenced to four years in state prison on April 29, 1983. On June 1, 1983, he was transferred from jail to the minimum security facility within CIM. On June 2, 1983, he walked away from CIM and took refuge in the Lease house.

Cooper testified at trial that by June 4, 1983, he knew he could not stay in the Lease house much longer, since someone had come by the house earlier that day. His calls to his friends had not resulted in any help. (97 R.T. 5405-06, 5408-09.) Thus, he had a strong motive to leave the Lease house and try to flee further. Indeed, Cooper's claim that he was hitchhiking to Mexico is premised on his desire to flee and escape recapture, although he denies he was fleeing because of the Ryen/Hughes Crimes.

Special Counsel concludes that Cooper had a motive to commit the Ryen/Hughes Crimes. Cooper realized he had to leave the Lease house, and the area, to evade recapture. The Ryens' house was nearby, it was relatively secluded, and there were vehicles there. Further, whether or not Cooper entered the Ryens' house with an intent to kill, once there, he had reason to take actions to avoid recapture.

Special Counsel also do not find that the evidence and record supports the claim that Cooper had shown no propensity for violence such that the Ryen/Hughes Crimes were out of character for Cooper. In addition to the facts stated above regarding Cooper's criminal history, including his violent assault on LS which he stipulated to at trial, Cooper was accused of committing another violent rape shortly after the Ryen/Hughes Crimes. As discussed above and discussed in more detail below, the rape was reported to the Santa Barbara County Sheriff's Department on July 30, 1983, which resulted in

Cooper's arrest for the Ryen/Hughes Crimes later that same day.[27]

After Cooper fled to Mexico, on around June 9, 1983, Cooper (who was using the name Angel Jackson at the time) met a couple (the Handys) in Ensenada, Mexico. The Handys owned a boat they planned to sail to Central America to purchase drugs for resale. Cooper agreed to join them and help on their boat. Bad weather forced a change in plans, and the Handys and Cooper sailed north. On July 29, 1983, while anchored off Santa Cruz Island, Cooper was on a neighboring boat with a husband and wife.[28] After the husband passed out drunk, Cooper allegedly raped the wife. (Discovery at 1749-50.) When the husband woke up in the early morning hours of July 30, 1983, he learned of the attack and contacted the Coast Guard. (*Id.* at 1751.) When the woman was interviewed, she reported that, when she resisted Cooper, Cooper put a knife to her throat, threatened to kill her and her husband, raped her, sodomized her, forced her to orally copulate him, attempted to orally copulate her, and lightly traced his knife into her abdomen and neck, leaving marks or light cuts on both areas. (*Id*. at 1750-51.)

After her husband contacted the Coast Guard, Cooper was arrested trying to flee from the Handys' boat. (*Id.* at 1772.)

The woman was transported by helicopter to the mainland. (*Id.* at 1751.) While at the Santa Barbara County Sherriff's Department, she saw Cooper's photograph on a "Wanted" poster, and alerted the authorities that Cooper was the man who had raped her. (*Id.* at 1752.)

When Special Counsel interviewed Cooper, he stated he had "made love" to the woman on her and her husband's boat, but denied raping her. Cooper pointed out that he was not tried or convicted of that rape and had not had the chance to confront the victim, his accuser.

Although Cooper was not tried or convicted of the alleged rape off Santa Cruz

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[27] The information in this section regarding the rape off the coast of Santa Cruz Island is based on discovery materials produced by the District Attorney in 1983/1984.

[28] While their names were disclosed in pre-trial hearings, they have been omitted from this Report.

Island,[29] Special Counsel finds the victims' statements about being raped with the use of a knife to be more credible than Cooper's statements that they had consensual sex.

Cooper has asserted that the husband beat and abused his wife, so the husband (not Cooper) was responsible for some of her injuries. The fact that the husband allegedly beat his wife does not mean that Cooper did not rape her. Nor is there any evidence that the knife marks on the woman were caused by her husband.

The evidence of Cooper's sexual assaults in Pennsylvania and California, which included threats to kill the rape victims, close in time to the Ryen/Hughes Crimes, are inconsistent with Cooper's claim that he had no propensity for violence.

IX. THE ALLEGEDLY "MISSING" BLUE SHIRT

Cooper asserts that a bloody blue shirt was collected from near the Ryens' house by officers on June 6, 1983, and suggests that the Sheriff's Department destroyed it because it was inconsistent with their theory that Cooper, acting alone, committed the crimes.

At trial, Deputy Sheriff Field testified that, on June 7, 1983, he was assigned to search Peyton Road, and that, during his search, he found the tan t-shirt (along with an orange towel), which he photographed, marked with his initials, dated, tagged with a sheriff's evidence tag, and placed in evidence at the West End Substation. (101 R.T. 6508-11.) A June 10, 1983, "Recovered Evidence Report" reflects those facts. (Cl. Pet., Ex. 64.) Deputy Sheriff Field did not testify that he searched the area on June 6, 1983; he did not testify he found a blue t-shirt; there is no "Recovered Evidence Report" reflecting that a blue t-shirt was photographed, marked with Field's initials or anyone else's, tagged with an evidence tag, or placed in the evidence locker at the West End Substation or elsewhere; and the documentation showing all the evidence that was collected and sent to the crime lab for testing does not refer to a blue t-shirt.

In 2004, in connection with the evidentiary hearing before Judge Huff, the State

[29] It is Special Counsel's understanding that prosecution of the rape cases did not go forward because Cooper was convicted of and sentenced to death for the Ryen/Hughes Crimes.

produced documents not previously produced in discovery during Cooper's 1984 trial. One page produced was a San Bernardino West End Daily Log book for June 6, 1983 (the day before Deputy Sheriff Field's search of Peyton Road), which contained an entry that a woman named Laurel Epler telephoned the Sheriff's Department and reported that while driving she had seen a blue shirt, which possibly had blood on it near the Canyon Corral Bar and the Ryens' house. (June 29, 2004 H.R.T. 50-53, Ex. UUU-2; Cl. Pet., Ex. 67; 9th Cir. No. 05-99004, 16 E.R. 3703.) That Daily Log identified Deputy Sheriff Field as the "deputy assigned" at 2:41 p.m. and the Log further indicates "evidence picked up" at 3:06. (*Id*.) Other than the one page June 6, 1983, Daily Log, Special Counsel has not seen any evidence about a blue t-shirt being picked up, logged, or tested in any way. Special Counsel asked the District Attorney if there were any log books for Deputy Sheriff Field for June 6, 1983, and was told there were none.

At the time of the 2004/2005 evidentiary hearing, Deputy Sheriff Field was deceased. Because the log concerning the blue t-shirt was not produced at the time of Cooper's 1984 trial, Field was not questioned about it at trial in 1984. However, he was questioned in depth at Cooper's trial about his involvement in the investigation, including questions which would have elicited testimony about his finding a blue shirt on June 6, 1983, in addition to the tan t-shirt he testified about finding on June 7, 1983—unless Field was committing perjury at the time of Cooper's trial by omitting any reference to finding a blue t-shirt on June 6, 1983. (101 R.T. 6510-15.)

San Bernardino County Assistant District Attorney John Kochis testified during the 2004/2005 evidentiary hearing that "none of the documents logging the evidence at the San Bernardino Crime Lab show a 'blue shirt.' (8/13/04 RT 198-201.)" *See Cooper v. Brown*, 2005 U.S. Dist. LEXIS 46232, at *270.

Epler also testified during the 2004/2005 evidentiary hearing, twenty years after the Ryen/Hughes Crimes. Judge Huff had this to say about Epler and her recollection:

> Ms. Epler was contacted on August 3, 2004 about the shirt. In the recorded statement, Ms. Epler stated that she does not remember calling law enforcement regarding the shirt, she does not recall the color of the shirt, and she does not remember where the shirt was found. (04-CV-656, NOL filed

> August 18, 2004, Doc. No. 187 at 5, 12-13, and 20.) Ms. Epler testified before this Court that her statements at that interview were true and correct and were to the best of her best recollection. (8/26/04 HRT 124.)
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> At the evidentiary hearing, Ms. Epler testified that she vaguely remembers finding the "blue shirt" when she was driving home. (8/26/04 HRT 133-34.) She testified that she could not recall exactly where the shirt was found and that she could not recall driving and seeing the shirt on the side of the road, although she believes that it must have been close to Peyton and Glenridge because that is where she regularly drove her car. (8/26/04 HRT 133-34.) She also testified that her memory of the shirt was very vague and it was only after referencing the log that mentioned the "blue shirt" and speaking to Petitioner's defense investigators that she recalled anything about the shirt. (8/26/04 HRT 123-24, 149.)
>
> Finally, Ms. Epler testified that she had been influenced by letters shown to her by Petitioner's attorneys regarding alleged suppression of evidence and law enforcement cover-ups in this case. (8/26/04 HRT 179-80.) She stated that she did not think Petitioner committed the murders after reading the materials sent to her by Petitioner's attorneys. (8/26/04 HRT 179-80.) Due to Ms. Epler's previous statements where she did not recall the T-shirt, its color, or the location or time it was found and given the passage of many years and failure of recollection, the Court questions whether Ms. Epler actually recalls a blue shirt.

See Cooper v. Brown, 2005 U.S. Dist. LEXIS 46232, at *268-69.

Cooper's theory about how the blue t-shirt could point to Cooper's innocence seems to be as follows: a blue t-shirt was found on June 6, 1983, (Cl. Pet. at 216, Ex. 67); that blue t-shirt would have yielded blood evidence tying it to the crimes; there were thus two bloody shirts found near the Ryens' house, which supports Cooper's theory that Furrow and two others who had been at the Canyon Corral Bar committed the murders and then presumably threw their t-shirts on the ground near the Ryens' house after the murders (Cl. Pet. at 9); that all the evidence, including the DNA evidence, pointing to Cooper was therefore either planted or insubstantial (Cl. Pet., Ex. 14); that the authorities destroyed or at least failed to provide any record of the blue t-shirt because they knew it would exculpate Cooper; that the prosecution committed a *Brady* violation by failing to turn over exculpatory information to Cooper's defense; that Field perjured himself at trial

because he failed to testify about finding the blue t-shirt; and that Assistant District Attorney Kochis perjured himself during the 2004/2005 evidentiary hearing by falsely testifying that no evidence of a blue t-shirt was logged into evidence. (*Id*.) Special Counsel concludes that the conflicting evidence about a blue t-shirt does not support Cooper's claim of innocence.

First, whether a blue t-shirt was seen near the Ryens' house on June 6, 1983, is highly uncertain. Epler's testimony in 2004 does not clearly establish that she saw a blue t-shirt, much less one with blood on it, near the Ryens' house, while she was driving in her car. (Aug. 26, 2004 H.R.T. 122-124, 134.) Judge Huff observed Epler testify and concluded that it was uncertain that Epler actually saw a blue t-shirt by the side of the road while she was driving near the Ryens' house. Independently reviewing the transcript of her testimony at the evidentiary hearing, it is obvious that she had no clear recollection of seeing a blue t-shirt on June 6, 1983, near the Ryens' house. (Aug. 26, 2004 H.R.T. 133-134.)

Second, as detailed in this Report, the evidence linking Cooper to the Ryen/Hughes Crimes is conclusive, which undermines the theory that there was a *second* bloody t-shirt linked to the Ryen/Hughes Crimes discarded in a nearby field.

Third, the theory that Furrow and others committed the murders –and left behind a bloody blue t-shirt and a bloody tan t-shirt—is also not credible or plausible, for the reasons set out in Section V.[30]

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[30] Special Counsel notes that the 2018 Karee Kellison Declaration that Cooper's representatives prepared, and which Karee Kellison said she signed without reading, stated that Debbie Glasgow was wearing a blue t-shirt when Kellison saw her at the US Festival—the suggestion being that Glasgow was wearing a blue t-shirt at the time of the Ryen/Hughes Crimes and discarded it in the field near the Canyon Corral Bar. Given that Kellison said she saw Furrow and Glasgow at the US Festival at 12:30 a.m. on June 5, 1983, it is inconsistent with Cooper's theory that Glasgow committed the Ryen/Hughes Crimes, discarded her blue t-shirt in the field near the Canyon Corral Bar, then returned to the US Festival where Karee Kellison allegedly saw her wearing a blue t-shirt. Nor is it feasible that, at 12:30 a.m., Kellison saw Furrow and Glasgow at the US Festival with Glasgow wearing a blue t-shirt and Furrow wearing a tan t-shirt, then Furrow and Glasgow somehow made their way to Chino Hills, committed the murders, left their tan

Fourth, the suggestion that the authorities determined that the existence of a blue t-shirt would undermine the case against Cooper and thus they destroyed or buried all evidence of the blue t-shirt—until for some reason producing evidence of the blue t-shirt in 2004—is based only on inferences that are not plausible. A suggestion that Field truly found a blue t-shirt on June 6, 1983, and decided not to log it into evidence at that time—because it did not fit with the alleged conspiracy to frame Cooper— would conflict with the chronology. There could not have been a plot to frame Cooper on June 6, 1983, because Cooper was not tied to the Lease house until June 9, 1983; thus the evidence does not support the theory that evidence about a blue t-shirt was not logged in and then later destroyed because it did not fit with the plot to frame Cooper. Furthermore, no one could have had a reason to think at that time that a blue t-shirt would be inconsistent with Cooper's guilt or a plan to frame him for the crimes.

Thus, Special Counsel concludes that if Deputy Sheriff Field truly had found a blue t-shirt on June 6, 1983, he would have photographed it; marked it with his initials; tagged it with an evidence tag; placed it in the evidence locker, and written up a "Recovered Evidence Report" reflecting those things. Which means that one or more persons thereafter would have had to decide to destroy or conceal the photograph, the evidence tag, the blue-shirt itself and the Recovered Evidence Report, and that Deputy Sheriff Field and Kochis would have then perjured themselves. On its face, such an elaborate plan involving so many persons over so many years is implausible.

Fifth, there would have been no basis for anyone to have decided that the alleged blue t-shirt would undermine the case against Cooper unless the shirt was not only collected, but also subjected to testing. There is also no indication that any blue t-shirt was sent to the crime laboratory for any blood testing.

The single entry in a log book about a blue t-shirt does not establish Cooper's innocence, or undermine confidence in our judgment that Cooper has failed to establish

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and blue t-shirts in the field, then went to the Canyon Corral Bar before making their way to Mentone. According to Cooper, the three men seen at the Canyon Corral Bar were there from 11:30 p.m. until 1:45 a.m.

his claim of innocence. As Judge Huff concluded, the more plausible explanation is that Epler's report of seeing a blue t-shirt while driving in her car was mistaken, and when Deputy Sheriff Field went to the location to collect evidence, he collected the tan t-shirt and an orange towel which were properly logged. The DNA evidence and other evidence connecting Cooper to the Ryen/Hughes Crimes is substantial and conclusive. Thus, even if there was a blue t-shirt that was not properly maintained, it would not undermine the conclusion that the evidence of Cooper's guilt is conclusive.

X. THE ORANGE TOWEL

In 2019, Bode Technology conducted DNA testing of the orange towel that Deputy Sheriff Field collected on June 7, 1983. A clear and robust DNA profile of one male was obtained from a generalized sampling of the towel, but that DNA was so recent that it could not have been connected with the 1983 crime. (Keel Report at 41-44, Exs. 14-15.)

XI. CONCLUSION

After investigating Cooper's claims that he did not commit the Ryen/Hughes Crimes, Special Counsel concludes that Cooper has not established his innocence, and that the evidence of his guilt is conclusive.

Appendix A - Chronology of Cooper's Habeus Petitions

APPENDIX A

CHRONOLOGY OF COOPER'S HABEAS PETITIONS

On August 11, 1994, Cooper filed his first petition for writ of habeas corpus in the United States District Court for the Southern District of California. *See Cooper v. Brown*, No. 04-cv-656H, 2005 U.S. Dist. LEXIS 46232, at *5 (S.D. Cal. May 27, 2005). Cooper argued that trial counsel had been ineffective for failing to object to the prosecution's untimely production of the confession of Calvin Booker, who had purportedly confessed to the Ryen/Hughes crimes. *See Cooper v. Calderon*, 274 F.3d 1270, 1272 (9th Cir. 2001). On April 12, 1996, Cooper filed an amended petition for writ of habeas corpus in the Southern District of California, and on June 20, 1997, he filed a supplemental petition for writ of habeas corpus. *See Cooper v. Brown*, 2005 U.S. Dist. LEXIS 46232, at *5.

United States District Judge Marilyn Huff conducted an evidentiary hearing from July 29, 1997 to August 13, 1997. On August 25, 1997, Judge Huff denied Cooper's first federal petition for writ of habeas corpus as amended and supplemented. *See Cooper v. Calderon*, 255 F.3d 1104, 1108 (9th Cir. 2001). Cooper appealed that ruling to the Ninth Circuit. In December 2000, a three-judge panel of the Ninth Circuit issued a memorandum decision affirming Judge Huff's denial of Cooper's first petition for writ of habeas corpus. *Cooper v. Calderon*, 246 F.3d 673 (9th Cir. 2000), *opinion vacated and superseded on reh'g*, 255 F.3d 1104 (9th Cir. 2001).

On April 4, 1996, Cooper filed his first state habeas petition in the California Supreme Court. *See Cooper v. Brown*, 2005 U.S. Dist. LEXIS 46232, at *5. On February 19, 1997, the California Supreme Court denied Cooper's state habeas petition. *Id.*

On September 12, 1997, Cooper filed his second state petition for writ of habeas corpus in the California Supreme Court. *Id.* at *6.

On April 26, 1998, during the pendency of his appeal to the Ninth Circuit from the Southern District court's denial of his first federal habeas petition, Cooper filed a second

petition for writ of certiorari in the United States Supreme Court in case number 97-8837 regarding the Southern District's denial of his first federal petition for writ of habeas corpus. *Id.* On June 26, 1998, the United States Supreme Court denied the petition. *Cooper v. Calderon*, 524 U.S. 963 (1998).

On April 30, 1998, Cooper filed a second federal petition for writ of habeas corpus that raised a new ineffective assistance claim. *See Cooper v. Brown*, 2005 U.S. Dist. LEXIS 46232 at *7. Cooper asserted that, while Cooper's trial was underway, he learned that, according to a statement from inmate Anthony Wisely, another inmate (Kevin Koon) had confessed to the murders. *Cooper v. Calderon*, 274 F.3d 1270, 1272 (2001). He further alleged that Cooper's counsel took one hour to read Wisely's statement and then proceeded with trial. *Id.* Cooper claimed that his trial counsel was ineffective for not adequately investigating Wisely's statement and for not calling Wisely to testify. On June 15, 1998, Judge Huff dismissed this second petition for writ of habeas corpus as impermissibly successive under 28 U.S.C. § 2244(b)(1) and denied Cooper a certificate of appealability ("COA"). *See Cooper v. Brown*, 2005 U.S. Dist. LEXIS 46232, at *7. On June 25, 1998, Cooper filed a motion in the district court to alter or amend the judgment dismissing the second habeas petition, which the district court denied on June 30, 1998. *Id.* On August 14, 1998, Cooper filed a petition for a COA in the Ninth Circuit. *Id*. The panel issued an order to show cause why the petition should not be construed as a request for authorization to file a second or successive petition and denied. *Id*. On December 21, 2001, the Ninth Circuit vacated the district court's order denying Cooper a COA and denied Cooper's motion for leave to file a second or successive petition because his petition raised a new claim that did not fall within a recognized exception under Section 2244(b)(2). *Id*. Cooper sought rehearing and rehearing en banc, which the Ninth Circuit denied on October 18, 2002. *Cooper v. Calderon*, 308 F.3d 1020 (2002). On November 21, 2002, the Ninth Circuit denied Cooper's motion to reconsider or vacate the order denying his motion to stay the mandate pending the filing of a petition for writ of

certiorari and request for en banc review regarding the denial of authorization to file a second federal habeas petition. *See Cooper v. Brown*, 2005 U.S. Dist. LEXIS 46232, at *9.

On December 23, 1998, Cooper filed his third state habeas petition in the California Supreme Court. *Id.* at *7. In that petition, Cooper argued: (1) his previous appellate counsel breached his duty to bring a habeas corpus claim based on hair found in Jessica Ryen's hand, and (2) DNA testing could cast doubt on the accuracy and reliability of the proceedings and establish Cooper's innocence. On March 15, 1999, Cooper filed a supplemental state habeas petition in that action. *Id.* On March 26, 1999, while Cooper's third habeas petition and supplemental state habeas petition were still pending, he filed his fourth state habeas petition. *Id.* On April 14, 1999, the California Supreme Court denied Cooper's third and fourth state habeas corpus petitions. *Id.*

On July 9, 1999, Cooper filed a third petition for writ of certiorari in the United States Supreme Court in case number 99-5303, challenging the denial of his third state habeas petition by the California Supreme Court. *Id.* at *8. On October 4, 1999, the United States Supreme Court denied Cooper's third petition for writ of certiorari. *Cooper v. California*, 528 U.S. 897 (1999); *see also Cooper v. Brown*, 2005 U.S. Dist. LEXIS 46232, at *8.

On July 9, 2001, the Ninth Circuit affirmed the denial of Cooper's first federal habeas petition. *Cooper v. Calderon*, 255 F.3d 1104 (9th Cir. 2001). On August 29, 2001, Cooper filed a petition for rehearing and rehearing en banc. On January 8, 2002, the Ninth Circuit denied that petition.

On November 4, 1999, Cooper filed a motion to file a successive (third) federal habeas corpus petition under 28 U.S.C. § 2244 (b)(3)(A). "Cooper sought DNA testing on the drop of blood found in the hallway outside the Ryen family master bedroom [A-41)], saliva from the hand-rolled and manufactured cigarette butts [V-12 and V-17] found inside the abandoned Ryen station wagon, blood smears on the T-shirt found near the

Canyon Corral Bar, and hairs found in the hand of victim Jessica Ryen." *Cooper v. Calderon*, No. 99-71430, 2003 U.S. App. LEXIS 27035, at *1-2 (9th Cir. Feb. 14, 2003).

In 2001, the State agreed to have certain DNA testing performed, and the state and Cooper (who was represented by counsel and "two nationally recognized DNA experts") entered into a Joint Post-Conviction DNA Testing Agreement ("JTA"), which specified the items of evidence to be tested: the drop of blood found in the hallway (A-41); the hand-rolled (V-12) and manufactured cigarette butt (V-17) found inside the Ryen station wagon after it was recovered in Long Beach; a hatchet found near the Ryen house shortly after the crimes; the tan T-shirt found near the Canyon Corral Bar; a button found in the Bilbia bedroom; and hair recovered from the hands of the victims. *Cooper v. Brown*, 2005 U.S. Dist. LEXIS 46232, at *49-50. "The Agreement provided that STR Profiler Plus DNA testing be performed by the [Cal DOJ lab] on the specified items of evidence in two stages: 'blind' STR Profiler Plus DNA testing was to be performed on the specified pieces of crime scene evidence, followed by STR Profiler Plus DNA testing on the known exemplars from Petitioner and the victims. The 'blind' test results from the crime scene evidence would then be compared with the results obtained from the known reference samples from Petitioner and the victims. Petitioner's own post-conviction DNA expert, Dr. Blake[1], identified the drop of blood (A-41) and the two cigarette butts recovered from the stolen Ryen station wagon as 'the most relevant biological evidence' in the case." *Id.* at *49-50.

The DNA testing was completed by the end of September 2002. Judge Huff summarized the results:

> Those results provide strong evidence of Petitioner's DNA from blood inside the Ryen residence (one in 310 billion), from saliva on two cigarette butts recovered from the stolen Ryen station wagon (one in 19 billion and one in 110 million), and from a T-shirt found on the side of a road that

[1] Cooper was also assisted by Christopher Plourd, "a nationally recognized DNA expert."

> contained Petitioner's blood (one in 110 million) and victim Doug Ryen's blood (one in 1.3 trillion). (Supplemental DOJ Physical Evidence Exam Report dated Sept. 24, 2002.) In addition to the DNA evidence inculpating Petitioner, DNA profiles of blood taken from a hatchet that was taken from the house where Petitioner hid after his escape from prison matched that of several of the victims including Doug and Jessica Ryen and Chris Hughes. (Supplemental DOJ Physical Evidence Exam Report dated Sept. 24, 2002.)

Id. at *2. On February 14, 2003, based on the results of the DNA tests, the Ninth Circuit denied Cooper's motion to file a successive habeas petition. *Cooper v. Calderon*, No. 99-71430, 2003 U.S. App. LEXIS 27035, at *2 (9th Cir. Feb. 14, 2003) ("These [DNA] tests provide 'strong evidence' that the DNA found on all of the items of evidence belongs either to Cooper or one of the victims. Contrary to his predictions of exculpation, the DNA test results inculpate Cooper and support his conviction. Cooper has failed to present newly discovered facts establishing his innocence. The Motion is DENIED."). On April 7, 2003, the Ninth Circuit denied Cooper's petition for rehearing and rehearing en banc from the denial of authorization to file a third federal petition for writ of habeas corpus. *Cooper v. Calderon*, No. 99-71430, 2003 U.S. App. LEXIS 27036 (9th Cir. Apr. 7, 2003).

On April 18, 2002, Cooper filed his fourth petition for writ of certiorari in the United States Supreme Court. This fourth petition challenged the Ninth Circuit's affirmance of the denial of Cooper's first federal petition for writ of habeas corpus. *See Cooper v. Brown*, 2005 U.S. Dist. LEXIS 46232, at *9. On October 7, 2002, the United States Supreme Court denied the petition. *Cooper v. Calderon*, 537 U.S. 861 (2002).

On June 24, 2003, Cooper filed his fifth state petition for writ of habeas corpus in the California Supreme Court. On October 22, 2003, the California Supreme Court denied the petition. *See Cooper v. Brown*, 2005 U.S. Dist. LEXIS 46232, at *11 (S.D. Cal. May 27, 2005).

On February 11, 2003, Cooper filed another petition for writ of habeas corpus in the United States Supreme Court. *See id.* at *9. On April 21, 2003, the United States Supreme Court denied that petition. *In re Cooper*, 538 U.S. 976 (2003).

On February 20, 2003, Cooper filed a fifth petition for writ of certiorari in the United States Supreme Court regarding the Ninth Circuit's denial of authorization to file a second federal habeas petition in the district court. On April 21, 2003, the United States Supreme Court denied the petition. *Cooper v. Calderon*, 538 U.S. 984 (2003).

On May 15, 2003, Cooper filed his second petition for writ of habeas corpus in the United States Supreme Court. *See Cooper v. Brown*, 2005 U.S. Dist. LEXIS 46232, at *10. On October 6, 2003, the United States Supreme Court denied the petition. *In re Cooper*, 540 U.S. 808 (2003).

On October 22, 2002, Cooper filed another motion in the San Diego County Superior Court action seeking *mitochondrial* DNA testing of approximately 1,000 hairs recovered from the victims' hands, because the hair was found not to be appropriate for *nuclear* DNA testing. Cooper also renewed his motion for an evidentiary hearing regarding his claim of evidence tampering or contamination. (July 2, 2003, Order Denying Mot. for Mitochondrial DNA Testing, Claim of Evidence Tampering, and Request for Post-Conviction Discovery ("Kennedy Order"), *People v. Cooper*, No. CR72787 (San Diego County Superior Court, July 2, 2003), 2:23-3:6; *see Cooper v. Brown*, 2005 U.S. Dist. LEXIS 46232, at *11.) On June 16, 2003, Cooper filed another motion in the San Diego action, seeking further testing of the tan t-shirt to determine if EDTA was present, which Cooper argued would show whether Cooper's blood had been planted on the t-shirt. (Kennedy Order at 3:13-20); *Cooper v. Brown*, 2005 U.S. Dist. LEXIS 46232, at *11.

Judge Kennedy held an evidentiary hearing on June 23-25, 2003. (Kennedy Order at 3:27-4:1); *Cooper v. Brown*, 2005 U.S. Dist. LEXIS 46232, at *11. At the conclusion of the evidentiary hearing, Judge Kennedy denied Cooper's motions relating to evidence

tampering, his requests for EDTA testing of the tan t-shirt, and his request for mitochondrial DNA testing of the hairs found in Jessica Ryen's hand. (Kennedy Order at 11:19-22); *see Cooper v. Brown*, 2005 U.S. Dist. LEXIS 46232, at *10-11. On October 22, 2003, the California Supreme Court rejected Cooper's challenge of Judge Kennedy's ruling. *See Cooper v. Brown*, 2005 U.S. Dist. LEXIS 46232, at *11-12.

On December 17, 2003, the San Diego Superior Court set an execution date of February 10, 2004. *See Id*. at *12.

On January 20, 2004, Cooper filed his sixth petition for writ of certiorari in the United States Supreme Court, in case number 03-8513, challenging the California Supreme Court's denial of his fifth state petition for writ of habeas corpus and an application for a stay. *Cooper v. California*, No. 03-8513. On February 9, 2004, the United States Supreme Court denied the petition and the application for a stay. *Cooper v. California*, 540 U.S. 1172 (2004); *Cooper v. Brown*, 2005 U.S. Dist. LEXIS 46232, at *12.

On February 2, 2004, Cooper filed a complaint in the United States District Court for the Northern District of California, pursuant to 42 U.S.C. § 1983, seeking a temporary restraining order, preliminary injunction, and expedited discovery on a claim that California's use of lethal injection violates the Eighth Amendment. *Cooper v. Rimmer*, No. 04-436, 2004 U.S. Dist. LEXIS 1624 (N.D. Cal. Feb. 6, 2004). On February 6, 2004, the district court denied Cooper's motions for temporary restraining order, preliminary injunction, and expedited discovery. On February 8, 2004, the Ninth Circuit panel affirmed the district court's order. *Cooper v. Rimmer*, 358 F.3d 655 (9th Cir. 2004).

Also on February 2, 2004, Cooper filed his sixth petition for writ of habeas corpus and an emergency application for a stay of execution in the California Supreme Court. *See Cooper v. Brown*, 2005 U.S. Dist. LEXIS 46232, at *13. The California Supreme Court denied the petition on the merits on February 5, 2004. *Id.*

On February 6, 2004, Cooper filed a seventh state habeas petition in the California

Supreme Court, which the Supreme Court denied on the merits on February 9, 2004. *Id.* at *14.

Also, on February 6, 2004, Cooper filed an application for authorization to file another petition for writ of habeas corpus in the Ninth Circuit Court of Appeals. *Id.* at *14. On February 8, 2004, a three-judge panel denied Cooper's application for authorization to file a successive petition. *Cooper v. Woodford*, 357 F.3d 1019 (9th Cir. 2004).

On February 7, 2004, Cooper filed his seventh petition for writ of certiorari with the United States Supreme Court. *See Cooper v. Brown*, 2005 U.S. Dist. LEXIS 46232, at *14. On February 9, 2004, the United States Supreme Court denied Cooper's petition and application for stay. *Cooper v. California*, 540 U.S. 1172 (2004).

On February 9, 2004—the day before Cooper was to be executed— the Ninth Circuit sua sponte agreed to hear Cooper's application for authorization to file a successive petition en banc. *Cooper v. Woodford*, 357 F.3d 1054 (9th Cir. 2004). The en banc Ninth Circuit that same day granted Cooper authorization to file his third habeas corpus petition with the district court in San Diego. *Cooper v. Woodford*, 358 F.3d 1117 (9th Cir. 2004). The opinion stated:

> This case centers on Cooper's claim that he is innocent. No person should be executed if there is doubt about his or her guilt and an easily available test will determine guilt or innocence. Cooper has asked specifically that two tests be done.
>
> First, Cooper asks that the blood on the t-shirt be tested for the presence of the preservative EDTA. The presence of such a preservative would show that his blood was not on the t-shirt at the time of the killings, but was rather placed there at some later time.
>
> Second, Cooper asks that the blond or light brown hair in Jessica Ryen's hand be subjected to mitochondrial DNA testing. Such testing, if favorable to Cooper, would exclude

> other members of the Ryen family and Chris Hughes as sources of the hair. It could also positively identify Lee Furrow, and perhaps others, as the killer or killers, if those men can now be located.
>
> In his brief to us, Cooper states, "Through readily available mitochondrial testing of blond hairs found in one of the victim's hands, and testing for the presence of the preservative agent EDTA on a T-shirt[] the State belatedly claimed contained Mr. Cooper's blood, the question of Mr. Cooper's innocence can be answered once and for all."

Id. at 1124. On March 2, 2004, the Ninth Circuit issued its mandate authorizing Cooper to file a successive habeas petition. *Cooper v. Brown*, 2005 U.S. Dist. LEXIS 46232, at *15.

On April 2, 2004, Cooper filed his third petition for writ of habeas corpus in the Southern District of California. As Judge Huff summarized: "Between April 2, 2004 and April 1, 2005, the Court ordered mitochondrial DNA testing, EDTA testing, heard testimony from forty-two witnesses, and reviewed numerous exhibits and extensive briefing. On April 22, 2005, the Court heard final argument on the successive petition and denied the petition on the merits, and alternatively, denied the petition on procedural grounds." *Id.* at *15. Cooper appealed.

On December 4, 2007, a three-judge panel of the Ninth Circuit affirmed Judge Huff's ruling. *Cooper v. Brown*, 510 F.3d 870 (9th Cir. 2007). Cooper filed a petition for rehearing and for rehearing en banc, which were denied on May 11, 2009. *Cooper v. Brown*, 565 F.3d 581 (9th Cir. 2009). Although the Ninth Circuit refused to rehear the matter en banc, four judges wrote dissenting opinions, including Judge William Fletcher, who wrote a very lengthy dissent, writing: "There is no way to say this politely. The district court failed to provide Cooper a fair hearing and flouted our direction to perform the two tests." *Id.*, at 583.

On August 12, 2010, Cooper filed a motion in Superior Court under California

Penal Code section 1405 seeking more DNA testing of three items: (1) the tan T-shirt; (2) item VV-2 (a vial of blood drawn from Plaintiff in 1983); and (3) item A-41 (the drop of blood on a paint chip from the victims' house). *See Cooper v. Ramos for Cnty. of San Bernardino*, No. CV 11-3942 SVW (OPx), 2011 WL 13193322, at *1 (C.D. Cal. Nov. 10, 2011). Cooper alleged that prior DNA testing revealed DNA from an unknown individual on these items. *Id.* He alleged that re-testing these items using current DNA technology could allow him to identify the source of this foreign DNA, thereby providing support for his longstanding claim that incriminating DNA evidence was planted at the crime scene. *Id.* On January 14, 2011, the Superior Court issued an order denying Cooper's Section 1405 motion. *Id.* at *2.

On May 6, 2011, Cooper filed a civil complaint in the Central District of California, alleging violations of 42 U.S.C. § 1983 on the theory that he was the target of a long-running conspiracy, involving Michael A. Ramos (then-District Attorney for the County of San Bernardino), Daniel Gregonis, Fred Eckley, William Baird, Hector O'Campo, Gale Duffy, David Stockwell, and Steven Myers (Senior Criminalist with the California Department of Justice), all of whom Cooper alleged had conspired to manipulate evidence in order to prevent Cooper from proving that he was framed for the Ryen/Hughes crimes. *Id.* On November 10, 2011, the court granted the defendants' motions to dismiss for lack of subject matter jurisdiction. *Id*. The Ninth Circuit affirmed. *Cooper v. Ramos*, 704 F.3d 772 (9th Cir. 2012).

Report of Alan Keel

Forensic Analytical Crime Lab

January 13, 2023

Mark McDonald, Esq.
Morrison & Foerster
LLP 707 Wilshire
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Re: Peo. (CA) v Kevin Cooper

Assessment of Defense Claims surrounding the1983/1984 San Bernardino County Laboratory Conventional Serological testing, the 2002/2004 CA DOJ Bureau of Forensic Services DNA testing, and the 2019/2020 BODE Technologies DNA testing.

Dear Mr. McDonald:

You asked me to conduct a fresh and independent assessment of the various claims advanced by the defense as the result of several rounds of genetic testing of biological evidence in this case. You advised me at the outset there was no expectation on your part of any particular opinion on my part on any aspect of my review. To that end I have reviewed not only the published reports but also the detailed contemporaneous bench notes and analytical data supporting those reports. This review includes both the presumptive screening testing and conventional serological (phenotypic) analyses conducted by the San Bernardino County Sheriff's Department Crime lab (SBC lab) that were the state-of-the-art at the time of this crime and trial and the more recent PCR-DNA based genotypic analyses conducted by the California Department of Justice Bureau of Forensic Services laboratory (Cal DOJ lab) in Richmond, CA and BODE Technologies (Bode lab) in Lorton, VA. A list of the specific documents and files reviewed is attached as Exhibit 1.

I. My Qualifications

I received a B.S. from Texas A&M University in Zoology in 1978. I have been examining and testing physical evidence for human body fluids in an effort to eliminate or discriminate potential sources of those body fluids since 1982. At the time of this crime, I was conducting the very same conventional serological tests at the North Louisiana Crime Lab as were conducted by the SBC lab in this case. I continued conducting conventional serological investigations with the Oakland, CA Police Department Crime Lab (OPD) from 1984 through the incorporation of PCR-based DNA testing there in 1990. My police investigative work utilizing these conventional serological techniques while with OPD is the subject of California case law.[1]

[1] *Peo v. Frank Smith, Jr*., 215 Cal.App.3d 19 (1989).

Later in my career as a forensic scientist with the San Francisco, CA Police Department Crime lab (1996-1999) I implemented the same STR-based DNA analysis techniques used by the CAL DOJ lab in this case; and from 1999-2011 I continued to use those very same DNA analysis procedures in private practice with Dr. Edward Blake, a defense expert in this case, at Forensic Science Associates (FSA) in Richmond, CA.

From July 2011 through December 2021, I was the Forensic Biology/DNA Analysis Unit Supervisor and DNA Technical Lead Analyst for Forensic Analytical Crime Laboratory, Inc. (FACL) in Hayward, California, where I conducted the very same current state-of-the-art STR-based DNA analysis techniques as were conducted by Bode lab in this case in 2019-2020. The majority of the work done at FACL is for the defense community.

I am certified by the American Board of Criminalistics in Molecular Biology. I am a member of the American Academy of Forensic Sciences and California Association of Criminalists. I am licensed by the Texas Forensic Science Commission to conduct testing in Texas cases. I have over 39 years of experience in performing forensic serology and over 31 years of experience in performing forensic DNA analysis in both law enforcement and private sector labs.[2] I have testified in state courts in twenty-three states and federal courts in Texas, North Dakota, and Washington, DC. Over the course of my career, I have conducted conventional serological and DNA testing in hundreds of cases on thousands of samples from across the country on behalf of prosecutors and defendants from over 36 states. Presently, I am self-employed as a consultant in forensic serology and DNA analysis, and I continue to work with FACL in my cases with continuing litigation. My resume is attached as Exhibit 2.

I have personally conducted DNA testing in well over 100 post-conviction cases from across the United States, most of which were joint investigations between the state and defense in the same fashion as the testing ordered by Governors Brown and Newsom in this case. That testing provided clear and convincing DNA profiles considered dispositive as to the guilt or innocence of the convicted defendant in over 95% of these cases, many in which previous labs failed to obtain meaningful or even any result. My work in 2002 in Peo. (CA) v. Albert K. Johnson led to the first post-conviction exoneration investigated in California under Penal Code §1405, which also led to the identification of the actual assailant via CODIS.

In many other cases, the convicted defendants had been sentenced to death. For example, in 1983 Nicholas Yarris was sentenced to death for rape and murder in Pennsylvania. Yarris had been eliminated as the source of semen in the victim's vagina, but the relevance of the semen was not clear. My work in 2003 in joint testing of gloves (foreign to the victim's milieu) found in her car and the victim's fingernails clippings revealed DNA from the same male as the semen in the victim's vagina, establishing the relevance of the semen. Yarris was exonerated. In 1995 Ricky McGinn was sentenced to death in Texas for the rape and murder of his twelve-year-old stepdaughter. On the day of his scheduled execution, a stay was granted for DNA testing. My work in 2000 in joint testing proved the semen recovered from the victim's vaginal swabs originated from McGinn, and he was executed in September 2000. The testing results and judicial outcomes of a representative sampling of my post-conviction investigations is attached as Exhibit 3.

[2] Additionally, I have training in blood spatter interpretation and advanced crime scene reconstruction from the California Criminalistics Institute and have collected body fluid evidence from many crime scenes.

II. Claims by the Defense

Several claims regarding the reliability of physical evidence, the genetic testing of bloodstains, and the competence and truthfulness of SBC lab criminalist Dan Gregonis who conducted the conventional genetic testing in this case have been debated since the testing began in 1983. This debate has continued through post-conviction DNA testing in 2002 and 2004 and through the most recent round of DNA testing in 2020. These claims have been succinctly articulated in Mr. Cooper's February 17, 2016 Petition for Clemency and the responses and replies to responses to former Governor Brown's July 3, 2018 letter and December 24, 2018 Executive Order and current Governor Newsom's February 22, 2019 Executive Order prescribing several rounds of testing various evidence specimens at Bode lab, which concluded in 2020. Primarily, these claims revolve around the testing conducted on blood drop A-41, the vial and dried stain of Cooper's reference blood both numbered VV-2, a tan t-shirt CC (DOJ J-6, a.k.a. CC and Bode E01), a green button J-6 (DOJ J-4 and Bode E04), an orange towel BB (Bode lab E14), and two cigarette butts (V-12 and V17). Also, my review includes the presumptive testing for blood using Luminol at the Lease house. The following discussion presumes familiarity by the reader of the alleged facts of the crime and the collection of the physical evidence.

A. Blood drop A-41 and the Cooper reference blood vial and stain VV-2

Blood drop A-41 is a bloodstain on painted drywall collected from the wall of a hallway in the Ryen house that was packaged in a tin pill-box canister. This specimen was collected by SBC lab criminalist David Stockwell. This bloodstain is shown in Figure 1 as photographed at the scene, and cropped for magnification.

Fig. 1: Bloodstain A-41 on the hallway wall of the Ryen residence. [SBC photo]

Mr. Stockwell described this bloodstain very vividly in cross-examination testimony in a hearing before Judge Kennedy in 2003:

> Q. And did you collect A-41?
> A. Yes
> Q. Did you see it?
> A. Yes
> Q. And no one pointed it out to you. You just saw it and believed it was important?
> A. At this point I don't recall if anyone pointed to it, but I obviously saw it. It was obvious evidence in the case, because there were many bloodstains.
> Q. Was there any other blood in the immediate proximity of A-41, if you recall?
> A. No. That was one of the features of A-41 that was so peculiar, is that it was a bloodstain by itself, outside the master bedroom. It was in an adjoining hallway to the master bedroom. However, there were no other bloodstains in that vicinity.
> Q. Did it seem to be a large drop of blood or a tiny one, or do you recall?
> A. The way that I would refer to it is it was a low energy blood droplet, that is, blood that would be shed off an object simply due to gravity. So in the sense of sizes of bloodstains, it's rather large in terms of that particular droplet.
> Q. It appeared that it somehow was cast off and landed on the wall and just dripped down to the bottom?
> A. Well, I wouldn't use the term "cast off." What I would say is that it struck the wall at an angle because it was dropping due to gravity, and when it impacted the wall, it created the elliptical appearance that a stain like this one often makes.
> Q. But it had some horizontal component of the drop before it hit the wall, right?
> A. Most likely it had to have some horizontal component in order for it to have reached the wall. Otherwise, it would have fallen on the carpet. If it was truly falling vertically like a plumb bob, it would not have struck the wall. So it must have had at least a minor horizontal component to it.

(June 24, 2003, E.R.T. 234-236.) Later in that same hearing, Mr. Stockwell testifies that he used a razor blade to cut out all of the painted wallboard that contained this blood drop. (*Id*. at 242-45.)

The defense claims several issues in regard to A-41 demonstrate the blood on the drywall chip was planted by law enforcement, specifically by Mr. Gregonis, including 1) Mr. Gregonis waited to test A-41 "until he knew what he had to match," 2) Mr. Gregonis' testing of A-41 was not blind in that he tested a sample from A-41 and Mr. Cooper "side by side on the same slide," 3) Mr. Gregonis altered his erythrocyte acid phosphatase (EAP) testing records of A-41 to match Mr. Cooper's type, 4) portions of A-41 were inappropriately consumed with duplicative and uninformative testing, 5) "all the usable blood" associated with specimen A-41 was "consumed" prior to trial yet blood sufficient for DNA testing inexplicably appeared for DNA testing in 2002 and 2020, 6) notwithstanding apparent conflicting results by Bode lab, the presence of a mixture profile from the 2002 DOJ lab testing proves the nefarious nature of A-41 as the blood in the pill box in 2002 had to have been planted in 1999 using blood from the parent Cooper blood tube VV-2 that had been "topped off" with blood from another person.

1. a) The defense claims Mr. Gregonis waited to test bloodstain A-41 until he knew what he had to match. This claim refers to the assumption that authorities reliably assumed semen on a blanket at the Lease house was Cooper's and thus the SBC lab could type the semen and use that genetic information to concoct evidence from the Ryen house against Mr. Cooper. This claim is also based on the fact that authorities in Pennsylvania informed the SBC lab that Mr. Cooper was PGM subtype 1+ and PepA type 2-1. The bench notes produced by Mr. Gregonis contemporaneously with his testing prove this claim is false.

   b) Although not nearly on the scale of current DNA technology, in 1983 conventional polymorphic genetic markers were capable of discriminating between different sources of blood left at crime scenes and could provide highly discriminating profiles provided there was sufficient blood for several typing attempts. This discrimination potential was enhanced by the advent of the "MultiSystem" methods – the ability to determine two to four conventional genetic marker phenotypes from one sample, and by the fact that some conventional genetic marker phenotypes were highly associated with a particular ethnic group. Nevertheless, it was standard operating procedure in the conventional genetic marker typing era to type as many persons of interest, including victims and suspects, as possible **before** typing evidence specimens so that one would know which genetic marker(s) to attempt to type from the evidence that could possibly **eliminate** potential sources. Every crime lab in the country operated under this principle in that era. That is precisely how Mr. Gregonis proceeded with his investigation.

   c) The discrimination potential with conventional genetic markers in this case was complicated by the presence of blood from at least five different persons known to have shed blood at the scene and that four of the victims were closely related. In order to determine whether there was blood at the scene foreign to the five victims Mr. Gregonis had to, first, type the victims to determine which single or combination of tests could discriminate between all five.[3] The ABO types of the five victims include all four ABO types: A, B, AB, and O. Concurrent ABO testing of multiple evidence specimens including A-41 on June 12, 1983 revealed the A-41 drywall bloodstain was type A blood, which eliminated Peggy, Jessica, Christopher, and Doug as possible sources. Concurrent EsD and nominal PGM testing of multiple evidence specimens from the scene on June 13, 1983 including A-41 revealed the A-41 drywall bloodstain was foreign to all of the victims. The case file records document the genetic discrimination between all five victims was accomplished by June 13, 1983 with the combination of the ABO, esterase D (EsD), and nominal PGM systems.

   d) Then, during concurrent screening of multiple items of evidence on June 13, 1983 Mr. Gregonis discovered semen on the Lease house blanket J-13. On June 14, Mr.

[3] Reference blood from Joshua was not provided until June 22, 1983; Mr. Gregonis relied upon blood from the scene presumed to originate from Joshua for his initial round of testing.

Gregonis determined the semen on the blanket originated from a person who was peptidase A (PepA) type 2-1, which also reveals that male is likely of African American ancestry. Armed with this knowledge Mr. Gregonis proceeded to further type the semen on the Lease house blanket for EsD and PGM and to type the foreign A-41 blood at the Ryen scene for PepA to determine if there was a genetic consistency between the two. The case file records reveal that on June 16, 1983 Mr. Gregonis determined the semen on the Lease house blanket was PGM type 1; on June 29, 1983 Mr. Gregonis determined the A-41 drywall bloodstain was PepA type 2-1. These findings considerably narrowed the field of possible sources of the A-41 bloodstain.

e) Mr. Cooper's blood was drawn on August 1, 1983. Contrary to the defense and Ninth Circuit Court Judge Fletcher's claim, the test records prove that Mr. Gregonis did not wait to screen multiple evidence bloodstains from the scene looking for blood foreign to the victims until he had a partial profile from semen alleged to be that of Mr. Cooper on blanket J-13 from the Lease house. Rather, my review of the test records reveals a thoughtful, systematic, and effective investigative approach by Mr. Gregonis that discovered a likely vital clue in solving this crime. I can only hope my approach would have been comparable had I been investigating such a crime scene in Oakland. Mr. Gregonis' bench notes that document the testing of the A-41 drywall bloodstain before Mr. Cooper's blood was available and demonstrating that blood is foreign to the five victims, are attached as Exhibit 4. These records and test results also prove the A-41 bloodstain could not have been planted by the state as it was collected and highly genetically discriminated before Mr. Cooper's reference blood was available.

f) Additional proof that the bloodstain A-41 could not have been planted at the scene is provided by Mr. Stockwell's testimony (see page 4, above) wherein he describes noting the "out of place" nature of this bloodstain. This bloodstain was photographed *in situ* before it was collected.[4] Given that 1) the A-41 bloodstain was photographed and collected from the scene on June 6, 1983, 2) it was shown to be foreign to any of the victims by June 13, 1983, 3) it was shown to be compatible with the source of the semen on the green blanket from the Lease house by June 29, 1983, and 4) Mr. Cooper's blood was not available to the SBC lab until August 1, 1983, it is impossible the blood of bloodstain A-41 was planted.

2. a) The defense claims that Mr. Gregonis' procedure in testing bloodstain A-41 and Mr. Cooper's reference blood VV-2 "side by side on the same slide (or rather, plate)" was improper and biased the interpretation of the test results. This claim has no scientific merit.

[4] A photograph of bloodstain A-41was entered as Exhibit 191 at trial. Mr. Stockwell testified at trial he collected bloodstain A-41 at approximately 12:25AM on June 6, 1983. (89 R.T. 3511-12) I do not know if the photograph in Fig. 1 is the same photograph.

b) As was described above in section II.A.1, for conventional serological genetic testing which was the state-of-the-art in 1983-4 it was standard operating procedure to screen persons of interest for marker types that would distinguish between them as potential sources of crime scene samples before typing the evidence. Because the amount of blood available was often limited, blind testing of the evidence could produce results that fail to discriminate between potential sources and negate the value of the evidence. For example, clear results of blind simultaneous EsD and PGM testing of an evidence blood sample in this case that was sufficient for a single test would have failed to discriminate between Peggy, Jessica, and Mr. Cooper as potential sources. The defense attempts to hold the state to a standard of practice that is appropriate for PCR-based DNA testing but not for conventional serological testing. This is because PCR-based DNA testing is orders of magnitude more sensitive than conventional serological testing. A sample sufficient for one conventional test is likely sufficient for several PCR tests. Multiple DNA markers can be typed in a single PCR test and each DNA marker is much more robust than any conventional marker.

c) Simultaneous testing, or the placing of evidence and reference samples on the same typing plate, was also standard operating procedure for conventional genetic marker testing in the 1980s. Again, this is because the low sensitivity of conventional testing precluded the potential contamination issues of PCR-based DNA testing. And, each typing "run" took several hours to set up, run, develop, and document the ephemeral results, so there was considerable practical value in simultaneous testing, especially given the numerous samples tested in this case.

d) The defense mis-characterizes the simultaneous testing of the evidence and Mr. Cooper's reference blood. Mr. Gregonis tests a sample of the A-41 bloodstain on the same electrophoresis plate with Mr. Cooper's reference blood VV-2 on August 2, 1983. But rather than "side-by-side" these samples are actually separated by a control sample. This same approach is taken by the defense's expert Dr. Blake when he visits Mr. Gregonis for joint testing. On October 3, 1983 Dr. Blake and Mr. Gregonis simultaneously test a sample of the A-41 bloodstain and Mr. Cooper's reference blood VV-2 on the same transferrin (Tf) and Group-specific Component (Gc) typing plate, separated by three control samples, which Dr. Blake documents on an FSA laboratory data sheet. On October 4, 1983 Dr. Blake and Mr. Gregonis simultaneously test a sample of the A-41 bloodstain and Mr. Cooper's reference blood VV-2 on the same haptoglobin (Hp) plate, separated only by an empty test slot, which Dr. Blake documents on an FSA laboratory data sheet. Clearly, the case file records document that the defense's own expert utilized the same "side by side" standard operating procedure for which the defense criticizes Mr. Gregonis. The October 3 and October 4, 1983 electrophoresis data sheets documenting the simultaneous testing of bloodstain A-41 and Mr. Cooper's reference blood VV-2 are attached as Exhibit 5.

3. a) The defense claims Mr. Gregonis altered his EAP test records so that his typing result for bloodstain A-41 would "match" Mr. Cooper's EAP type. My review reveals this claim is entirely semantic depending on how one characterizes "altering" records and "matching" outcomes of the same genetic test using different testing methods. This claim is also entirely academic in light of the subsequent DNA testing.

   b) Mr. Gregonis first conducted EAP typing of bloodstain A-41 on June 28, 1983. His data sheet for this test sample result is marked EAP type "B?" Having performed this very same conventional test numerous times myself, this notation means there is some EAP activity present that might be type B, but the result is too weak to definitively assign the type to the exclusion of other EAP types. For example, a weak EAP type BA sample could be mis-interpreted as type B because the A isozyme is naturally weaker and more labile than the B isozyme. The photograph of this EAP plate reveals very little discernible EAP activity for the bloodstain A-41 sample; hence the B? designation is appropriate.

   c) Mr. Gregonis conducted a second EAP typing of bloodstain A-41 on August 2, 1983 for which he assigned a definitive B type. As described above in section II.A.2.d, Mr. Gregonis also included the Cooper reference blood VV-2 on this same plate but was unable to make any determination of EAP type for Mr. Cooper from this test.

   d) Mr. Gregonis conducted a second EAP typing of the Cooper reference blood VV-2 on August 4, 1983 for which he assigned a definitive type B. At this point, all of the conventional genetic marker types for the bloodstain A-41 and Mr. Cooper are compatible, and Mr. Gregonis' report of August 10, 1983 reflects that fact. None of Mr. Gregonis' analytical EAP data sheets reveal any **alteration** of assigned sample EAP types.

   e) When Dr. Blake visited SBC lab in October 1983 for joint testing of bloodstain A-41 that testing involved the conventional genetic markers Gc, Tf, and Hp as described above in section II.A.2.d. The results of each of those tests (see Exhibit 5) further demonstrated compatibility between bloodstain A-41 and Mr. Cooper. In other words, those three additional genetic systems also failed to eliminate Mr. Cooper as the source of bloodstain A-41. The Tf and Hp types determined by Gregonis and Blake for bloodstain A-41 and Mr. Cooper are noteworthy in that, like PepA described above in section II.A.1, these two phenotypes are also mostly restricted to a small percentage of persons of African American ancestry. Taken together, the conventional genetic profile determined for bloodstain A-41 at this point is shared by very few persons in the population. Mr. Cooper possesses these same phenotypes and hence cannot be eliminated as the source of bloodstain A-41. Dr. Jeffrey Morris testified at trial that the complete conventional genetic profile determined from bloodstain A-41 would be expected to occur in approximately 1 in 25,000 persons of

Black ancestry.[5] (94 R.T. 4688.) In other words 99.9946% of the Black population, and for all intents and purposes all persons of other ethnicities, were eliminated as potential sources of the A-41 bloodstain at the time of the trial.

f) Ultimately, it was determined that Mr. Cooper was EAP type RB rather than type B. This analysis was likely conducted at the Serological Research Institute/FSA by Brian Wraxall/Dr. Blake who were provided with a portion of the Cooper reference bloodstain VV-2 in July and/or August 1984. Notwithstanding the ten other genetic correspondences between the two profiles, this revelation had the potential to eliminate Mr. Cooper as the source of bloodstain A-41. In light of this apparent discrepancy, Mr. Gregonis revisited the Cooper reference bloodstain VV-2 several times in August 1984 using a different, or modified, typing conventional procedure. With this modified procedure, Mr. Gregonis determined Mr. Cooper to be EAP type RB. Neither Dr. Blake nor Mr. Wraxall ever complained that Mr. Gregonis' EAP analysis eliminated Mr. Cooper as the source of bloodstain A-41.

g) Mr. Gregonis' records reveal he made no further attempt to type bloodstain A-41 using either his initial conventional method or the modified conventional method. His notes reveal he attempted yet a third EAP typing procedure, isoelectric focusing, on October 17, 1984 without success.[6] At some point after learning Mr. Cooper was EAP type RB Mr. Gregonis *added* the following notation to his summary of his genetic analysis of bloodstain A-41: "EAP type is either B or RB." There is no evidence **any** typing result was altered to maintain compatibility with Mr. Cooper.

h) <u>The initial conventional EAP typing procedure employed by Mr. Gregonis was not capable of detecting the R isozyme</u>. This is because the R isozyme is revealed outside of, or more anodally to, the area of the typing plate developed by Mr. Gregonis. Many labs did not attempt to develop this more anodal area of the plate because of the rarity of the R isozyme and because they were simultaneously developing that part of the plate for a different conventional genetic marker system called ADA. With the initial EAP typing system employed by Mr. Gregonis both the evidence and Mr. Cooper manifest as type B. Using a different development procedure to add a level of discrimination for one test method does not invalidate the other test method. Nor should it cast doubt on the credibility and competence of the tester.

i) An analogous and well documented situation exists today with DNA testing. Several commercial suppliers use slightly different amplification primers in their DNA test kits. Even a single DNA base pair difference at the primer binding site can result in detecting only one allele at a gene with kit X and two alleles with kit Y. However, as long as one uses the same kit, or same method, with both the evidence

[5] It is unclear whether this population frequency includes EAP type BB, RB, or both. My calculation including both EAP phenotypes results in a profile frequency of about 1 in 16,000 Black persons. When a phenotype is ambiguous, one includes all possible types (B or RB) or omits the frequency from the profile calculation.
[6] The testing of bloodstain A-41 on October 17, 1984 was performed jointly with the defense.

and reference specimens, one will get the same result for both samples. Any potentially different results from different kits will not come into play.

4. a) The defense claims Mr. Gregonis inappropriately consumed "a large percentage" of bloodstain A-41 with duplicative testing and ran tests that had a small likelihood of excluding Mr. Cooper." My review of the provided records reveals that Mr. Gregonis conducted ABO testing on bloodstain A-41 on June 6, 1983 and repeated the ABO testing of bloodstain A-41 on June 29, 1983, with similar results. The ABO system is one of the three combined conventional genetic marker systems that first discriminated all five victims and proved the A-41 blood specimen was foreign to the victims. Although I have no independent knowledge of why Mr. Gregonis repeated this test, the ABO absorption-elution test procedure is dependent upon careful wash technique and skillful timed red blood cell agglutination interpretation. Had the initial ABO test failed to detect B antigen actually in the sample, bloodstain A-41 could have originated from Peggy or Jessica. The repeat analysis confirmed this blood was foreign to the victims.

   b) The discrimination index (DI) for the ABO system is about 0.62 and 0.64 for Caucasians and African Americans. This means that over 60% of the time two persons chosen at random will have different ABO types. Of the genetic systems available to Mr. Gregonis for bloodstain A-41 only EAP and Hp offered comparable discrimination potential. The only other repeat testing of bloodstain A-41 by Mr. Gregonis was on one of the best discriminators – EAP, discussed in detail above – to try to definitively determine the bloodstain A-41 type in this valuable system. Hp was not typed on bloodstain A-41 until October 1983. In light of these considerations, the repeat ABO and EAP testing on bloodstain A-41 was prudent rather than wasteful.

   c) The defense claims that Mr. Gregonis ran tests on blood from the A-41 specimen that had a small likelihood of excluding Mr. Cooper as a suspect – apparently as another indication of "suspicious" work on the part of Mr. Gregonis. In support of this claim the defense cites *Hitch* motion transcript pages 56 R.T. 4856-58 and 4863-65 when Mr. Gregonis was under cross-examination by Mr. Negus. My reading of these transcript pages indicates the likelihood of success was in terms of the tests' discrimination potential generally, and complaining that Mr. Gregonis did not employ PGM subtyping or seek out Gm allotyping of A-41 by another lab.[7] Mr. Gregonis conceded he did not attempt PGM subtyping on A-41 because he already had the nominal PGM type. Further, the selection of Tf and Hp in consultation with defense expert Dr. Blake proved to be extremely valuable in discriminating potential sources of A-41. Both of those tests provided rare types for each genetic system and those types are generally restricted to the Black population, similar to PepA. Gm allotyping was not in use at SBC lab. Also as described above, ultimately Mr. Gregonis' conventional serological analyses produced a profile from A-41 shared by only 1 in about 25,000 persons, from which Mr. Cooper could not be eliminated as the source.

[7] The DI for haptoglobin is about 0.66, which compares favorably with ABO and EAP.

In that light, it is difficult to reconcile how the tests Mr. Gregonis' chose to conduct on A-41 can be considered as having provided little chance to eliminate Mr. Cooper[8] as the source.

5. a) The defense claims "all the usable blood" associated with specimen A-41 was "consumed" prior to trial yet *blood sufficient for DNA testing "inexplicably appeared* in the A-41 canister" for DNA testing in 2002 and 2020, and the "appearance of a bloodstain chip in 2002 is shocking." Here, the defense equates quantities of blood sufficient for conventional genetic testing and PCR-based DNA testing, which are orders of magnitude different in terms of the amount of blood necessary to expect a meaningful result. For example, for conventional serological ABO and horizontal gel electrophoretic testing, no quantification of the test blood sample was even attempted – one simply captured as much blood as was available, or sufficient to absorb onto cotton thread approximately 1cm or less in length. For PCR-based DNA testing the amount of DNA recovered from virtually any sample is very accurately quantified in order to optimize the amount of available DNA used for a test. In each test multiple genes of interest are copied a billion-fold at the same time from the same DNA sample, making the most marginal blood sample amenable to meaningful testing. On average, one microliter (one millionth of a liter, or a droplet about the size of a straight pin head) of blood contains 30 - 75 nanograms (ng, or billionths of a gram) of DNA.[9] This amount of DNA is enough for scores of separate robust DNA tests, or amplifications, each of which would include 15 to 20+ different genetic markers. Using the technology available in 2002 and 2020 one often obtained useable data from samples in which little or no DNA was even detected.

   b) Herein, the mysterious appearance of the blood in the A-41 bloodstain specimen in 2001 is unveiled. As was represented to the trial court by Mr. Kochis and testified to by defense expert Dr. Blake, it was unlikely that after all of the conventional genetic testing done on bloodstain A-41 in 1983-4 there was sufficient blood remaining to attempt additional conventional testing – "that evidence was used up." As described above, this was not the case for PCR-based DNA testing. A small amount of blood as staining on a white wallboard/paint chip and blood powder/dust remained in the A-41 bloodstain tin packaging canister, as described and documented by Mr. Myers on July 6 and 10, 2001 during his joint examination with Dr. Blake:

> "A-41 Packaging – **one glassine envelope** … contains one 1.5ml [microcentrifuge] tube … and an ~ 3.8cm diam[eter] pillbox. The pillbox will be labeled sample #A-41A, and the [microcentrifuge] tube labeled #A-41-B."

[8] Some of the conventional genetic markers typed from A-41 by Mr. Gregonis, including AK, ADA, and CAII, resulted in phenotypes that are very common among both Caucasians and Blacks. However, obtaining results for these markers did not consume **any additional** sample – they are typed concurrently from the same samples used for the EAP and PepA typings.

[9] https://www.ucsfhealth.org/medical-tests/wbc-count. DNA content calculated at 0.007ng DNA/white blood cell.

* * * *

> "The pill box was labeled w/CID & 'A-41-A'. The pill box contained one **capless** 1.5ml [microcentrifuge] tube w/ a hole in the bottom, and a chip w/ white material on one side & some [illegible] material on the other. Under the stereo[micro]scope the white side has some reddish-brown staining. Red-brown dust is also seen in the bottom of the tin."
>
> * * * *
>
> "I re-opened Item A-41 to take photos under the stereo(micro)scope of the chip & dust. We took 2 different magnifications of the chip (1 zoomed out, 2 zoomed in), and 3 areas of dust (2 in the bottom of the tin and one on the inside of the lid. The tube also had some reddish-brown (mostly red) dust adhering to it, so I took a shot of that."

(July 6, 2001 DOJ Bench Notes at 4-6.) (Emphasis added.)

> "Sampling – I put the paint chip in a [microcentrifuge] tube and combined it w/ a swabbing of the pillbox bottom and lid. Sample: A-41A."

(July 10, 2001 DOJ Bench Notes at 13.)

> "A-41B: Since I don't know what plastic this tube is, I won't do [phenol extraction] in it. Pelleted white matter, transferred supernatant to new tube."[10]

(July 12, 2001 DOJ Bench Notes at 1.)

c) Mr. Myers does not provide the dimensions of the small wallboard chip; nor is there a photograph with the chip adjacent to a scale. However, from the available photographs it is clear the chip is only about 2 x 4 mm at best. Photographs taken by Mr. Myers documenting the A-41-A packaging and A-41-B specimen and their contents are shown below in Figure 2:

[10] To optimize the amount of available sample, Mr. Myers digested the material that was in the A-41-B tube shown in Fig. 3 *directly in* that tube. But because he did not know whether that tube would be impervious to organic extraction solvents, he transferred the now-digested blood in the liquid supernatant to a new tube for DNA extraction.

Fig. 2: A-41-A glassine paper package, pillbox, and clear capless tube from inside the pillbox. [Cal DOJ photos]

Fig. 3: A-41-B yellow microcentrifuge tube with cap showing debris inside tube. [Cal DOJ photo]

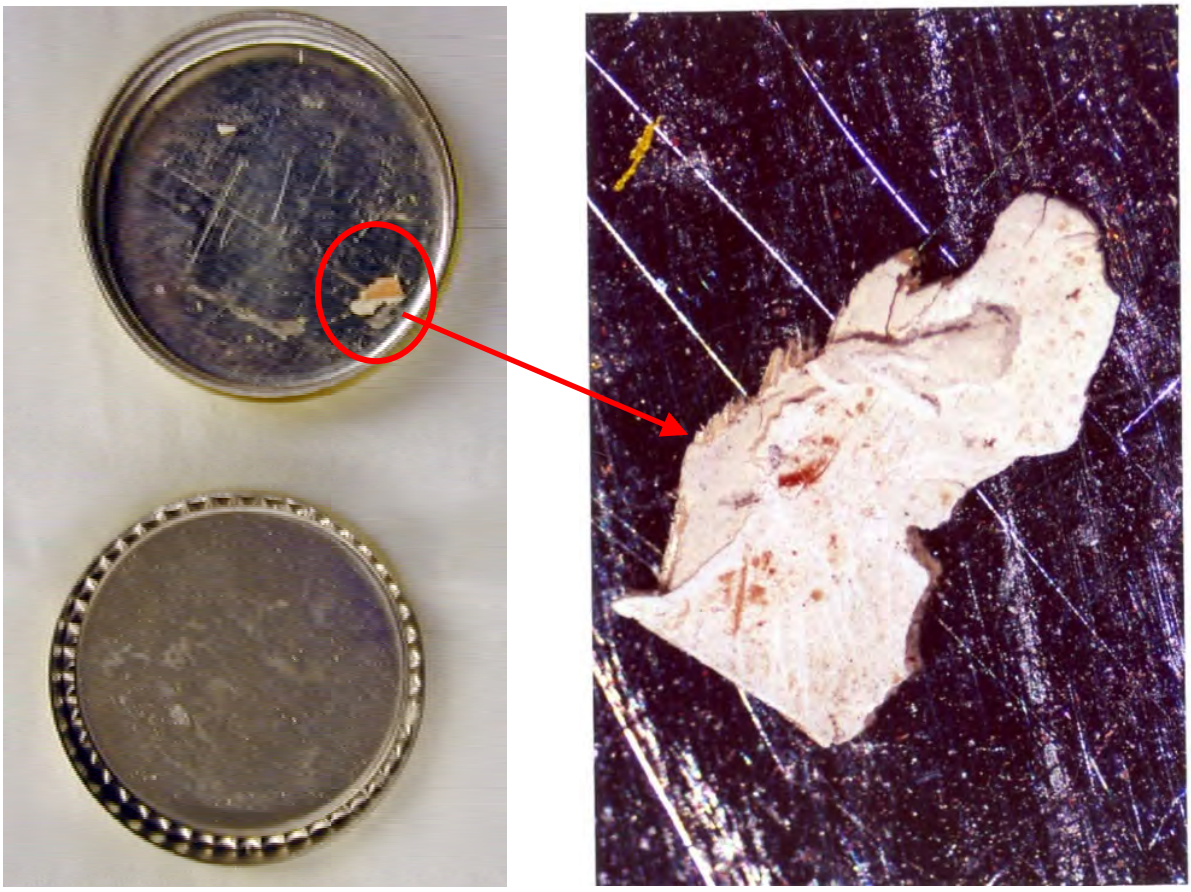


Fig. 4: Close up of debris in the pill box: photomicrograph of tiny drywall chip. [Cal DOJ photos]

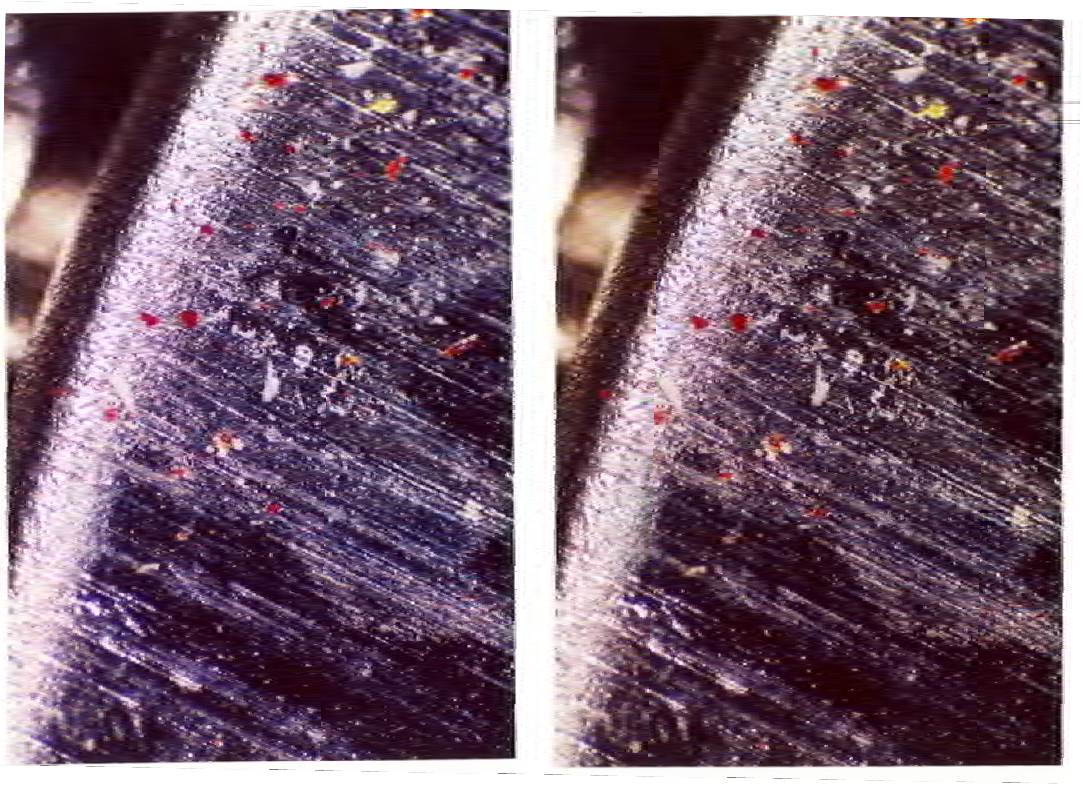


Fig. 5: Blood dust/debris on the inside of the pill box
(same field, slightly different conditions). [Cal DOJ photos]

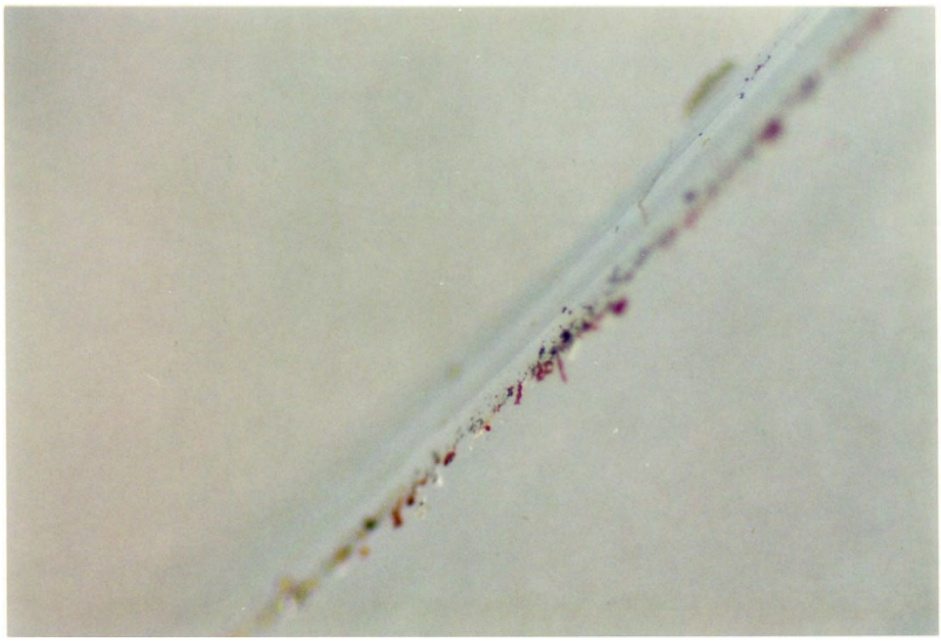


Fig. 6: Stereophotomicrograph of blood debris on the A-41-A capless tube.
[Cal DOJ photo]

d) Only one tiny paint/wallboard chip and blood dust remained. The following table shows the amounts of DNA recovered by Mr. Myers in 2002 from the two A-41 samples and the amounts of DNA amplified using the nine STR gene Profiler Plus kit.

A-41 Sample	DNA extract volume, µl	DNA extract concentration, ng/µl	Amount of DNA amplified, ng	Amount of DNA remaining, ng
A-41A pillbox chip/debris swab[11]	26	0.096	1.25	1.25
A-41B yellow tube debris	27, conc. to 18	0.0074, conc. to 0.01	0.18	consumed

e) Approximately 2.5ng of DNA was recovered from the A-41A pill box chip and interior swab; approximately 0.18ng (less than 1/5 ng) was recovered from the A-41B tube sample. Approximately 13 times as much DNA was recovered from the pillbox as was recovered from the tube. A complete and unique, though somewhat degraded after 18 years, Profiler Plus DNA profile was obtained from the 1.25ng amplification A-41A pillbox sample. Also as would be expected after 18 years from only a 0.18ng amplification, the same, although more degraded but highly discriminating partial Profiler Plus DNA profile[12] was obtained from the A-41B tube sample.

f) These findings are neither inexplicable nor shocking. Having dealt with the "leftovers" in many post-conviction cases, the actual presence of some visible blood on the paint chip, the visual appearance of the blood dust and debris, and the amounts of residual blood debris present in the A-41 bloodstain canister and tube is what one would expect from such a specimen after multiple rounds of previous tests and the passage of 18 years.

6. a) The defense "maintains that Mr. Gregonis planted Mr. Cooper's blood on A-41" and that this planting occurred "likely in 1999." This planting allegation arises from two happenings: 1) Mr. Gregonis checking out specimen A-41 in 1999 to confirm it was present and accounted for and 2) the detection of a mixture, or "another person's DNA" in the 2002 Cal DOJ lab result from the A-41A canister sample. The defense also claims the DNA mixture in the A-41A canister sample result demonstrates that Mr. Gregonis "topped off," or added that other person's blood to the VV-2 Cooper reference blood tube in 1999. Mr. Gregonis checking out specimen A-41 in 1999 provided the opportunity for him to plant some of the VV-2 liquid blood mixture into the A-41 canister. The defense further claims the mixture of bloods in the VV-2

[11] The blood powder on the clear plastic tube was not sampled.
[12] Although not unique to one person, Mr. Myers reported that less than 1 person in 4 million would not be eliminated as the potential source of the DNA of sample A-41-B. Stated another way, 99.99999% of the population is eliminated as the potential source.

Cooper reference blood vial went undetected when the blood in the vial was tested by BODE in 2019 due to natural DNA degradation between 1999 and 2019.

b) This planting claim ignores all of the conventional serological genetic testing described above in Sections A.1-3 performed on A-41 by both Mr. Gregonis and Dr. Blake prior to 1999. The conventional testing placed Mr. Cooper among approximately 1 in 25,000 persons of Black ancestry (0.004%) who were not eliminated as potential sources of the A-41 bloodstain.[13] Given that, why would Mr. Gregonis feel a need to supplement A-41? Also, by 1999 Mr. Gregonis was well versed in the science of PCR-based forensic DNA analysis. He knew the VV-2 Cooper dried reference bloodstain specimen was available for DNA testing. He would have known that adding another person's blood to the VV-2 Cooper reference blood vial would not go undetected in subsequent PCR-based DNA testing of that specimen. Or, if the volume of blood in the vial in 1999 was sufficient to supplement with another person's blood and not reach the mixture threshold of detectability, then what was the point of topping it off? In my opinion, this claim by the defense is irrational. Nevertheless, each of the events necessary to support the defense planting claim is addressed below.

c) The defense claims the Cal DOJ lab testing of the A-41-A pill box debris in 2002 revealed "the presence of another person's DNA" as a minor contributor. This claim is true. **The minor contributor profile consists of a single 17 allele at the D3S1358 gene and a single 13 allele at the D5S818 gene** and perhaps as many as four additional alleles below the Cal DOJ lab analytical threshold. The electropherogram documenting the Cal DOJ lab analysis of the A-41-A sample as described in Mr. Myers' report of September 24, 2002 is attached as Exhibit 6. Based on above-threshold alleles at two loci, the mixture ratio, or Mx, of the amounts of DNA from the major and minor contributor is approximately 38:1.[14] Assuming the mixture ratio is only 30:1 – at about the cusp of detectability, this means that of the 1.25ng of amplified DNA from A-41-A about 0.04ng, or 40pg of DNA[15] comes from the minor contributor. As is revealed by the quantitative peak height data, only a trace amount of the DNA in the A-41-A sample result is foreign to Mr. Cooper. This trace level minor contribution is not compatible with adventitious introduction of recent biology to the sample from Mr. Myers or even the DOJ lab environment. Such contamination would likely reveal itself much more robustly and at more, particular the larger, of the

[13] As previous described in Section II.A.3.a. the presence of three conventional genetic marker phenotypes found almost exclusively within the Black population (Peptidase A type 2-1, Transferrin type CD, and Haptoglobin type 2-1 Modified) demonstrates the A-41 bloodstain originates from a black person.
[14] Even assuming only two contributors, it is difficult to calculate a mixture ratio for samples like A-41-A when only one gene reveals four possible alleles (and both minor alleles are at stutter locations) and the genotype of one of the contributors is unknown due to the potential for allele sharing and dropout. Because of the proportional/competitive nature of PCR, the minor component in two person mixtures is rarely detected in ratios above 30:1.
[15] 40pg corresponds to the amount of DNA in about six white blood cells. There is an average of 4,000 to 11,000 white blood cells per microliter of human blood.

STR genes. This is because recent DNA, even as a marginal amount, would not be degraded to the extent revealed in the A-41-A typing result.

d) For comparison purposes, the electropherogram documenting the Cal DOJ lab analysis of the A-41-B tube debris sample as described in Mr. Myers' report of September 24, 2002 is attached as Exhibit 7. No evidence of DNA mixture was detected in this result. The A-41-B profile is less informative because of the amount of DNA recovered and that DNA is more heavily degraded because the sample was extracted for conventional testing in 1984.

e) The VV-2 Cooper reference blood vial as received by BODE lab [#R23] is shown in Figure 7 below.[16] Although the volume of blood the vial can hold cannot be discerned on the Becton-Dickenson label, the vial appears to be a typical 13 x 75mm glass Vacutainer vial, designed to collect 2-4ml of blood. The vial is empty except for some residual dried blood in the bottom of the tube. It is unknown how "full" the vial was when the blood was drawn in 1983. Much of the blood originally in the vial was consumed/removed by Mr. Gregonis by his conventional testing and the preparation of the dried blood swatch specimen in 1983. There was no "accounting" for volumes of blood removed from a blood vial during this era. The usefulness of blood in liquid form for conventional testing was temporary. This is why reference blood was preserved for posterity by drying it onto fabric swatches. Again, given the availability of a dried bloodstain swatch, it is difficult to reconcile why anyone would need or want to supplement – some 16 years later – the blood that remained in the vial. If this vial was topped off in 1999, what happened to the blood between 1999 and 2020? Cal DOJ lab did not even receive the VV-2 blood vial for testing. Was the vial topped off in 1999, and a minute amount of the mixture then placed in A-41 (as dust), and then the topped-off volume of blood removed from the vial before shipping it to Bode lab? The fact that the VV-2 Cooper reference blood vial is essentially empty when received at Bode lab in 2020 indicates the vial was likely empty by 1984. (Also, see Section II.A.6.p, below)

[16] The defense contends two tubes of blood may have been collected from Mr. Cooper. Mr. Stockwell's handwritten notes of August 1, 1983 describing the specimens he collected from Mr. Cooper list only one tube of blood. Mr. Stockwell lists only tube number 04976 which is clearly visible in Figure 7, his report of August 1, 1983 describes only one tube of blood, and he testifies only one tube of blood was collected.

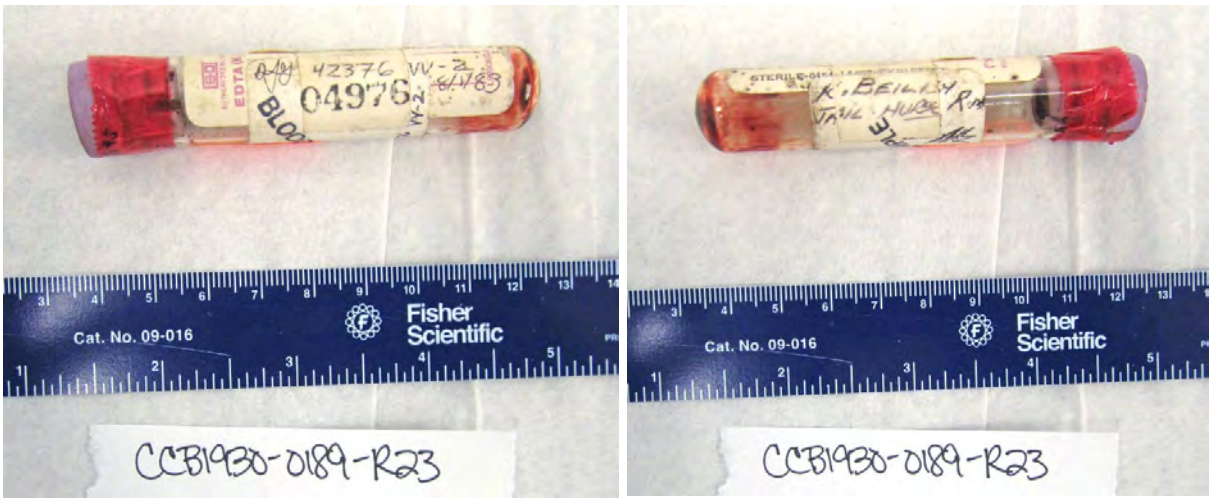


Fig. 7: The VV-2 Cooper reference blood vial as received by Bode lab. [Bode lab photos]

f) It is also unclear how much blood from another person might have been added to top off the vial. However, some hypotheticals can demonstrate how far-fetched this planting theory is. Assume the vial was half full and Mr. Gregonis topped it off. This would result in a mixture ratio of about 1:1. Any less volume in the vial would result in the second person's blood predominating the mixture – Mr. Cooper would become the "minor" contributor! Assume the vial was three-fourths full when topped off. That would result in a mixture ratio of 4:1 to 5:1 at worst – nowhere near the mixture result from the A-41-A pill box sample. That also begs the same question posed in section II.A.6.e: "Why bother topping off the blood in the vial in 1999 when there is plenty of blood in the vial and on the dried swatch for PCR-based DNA testing?" Assume the vial had 1ml of blood in it (about one-fourth full) in 1999. To achieve a mixture of about 30:1 requires about 1 drop (30µl) of the second blood, which again begs the question, why bother? The vial, when received at Bode Lab is empty, except for some dried blood in the bottom of the vial and around the rubber stopper. To produce the amount of blood found in the A-41 pillbox by Mr. Myers would require only a few microliters of blood *at most*. But as stated above, one microliter of blood contains 30+ng of DNA on average. And, it is unclear how that blood would become rendered to a fine powder between 1999 and 2001 when Mr. Myers sampled the pillbox canister.

g) In 2020 Bode lab tested the residual blood in the VV-2 Cooper reference blood vial. To do so, the technician swabbed some of the apparently dried blood from the bottom of the vial. The Bode lab VV-2 Cooper reference blood vial swab, identified as Bode lab #R23a1, and the corresponding void on the sides of the vial is shown below:

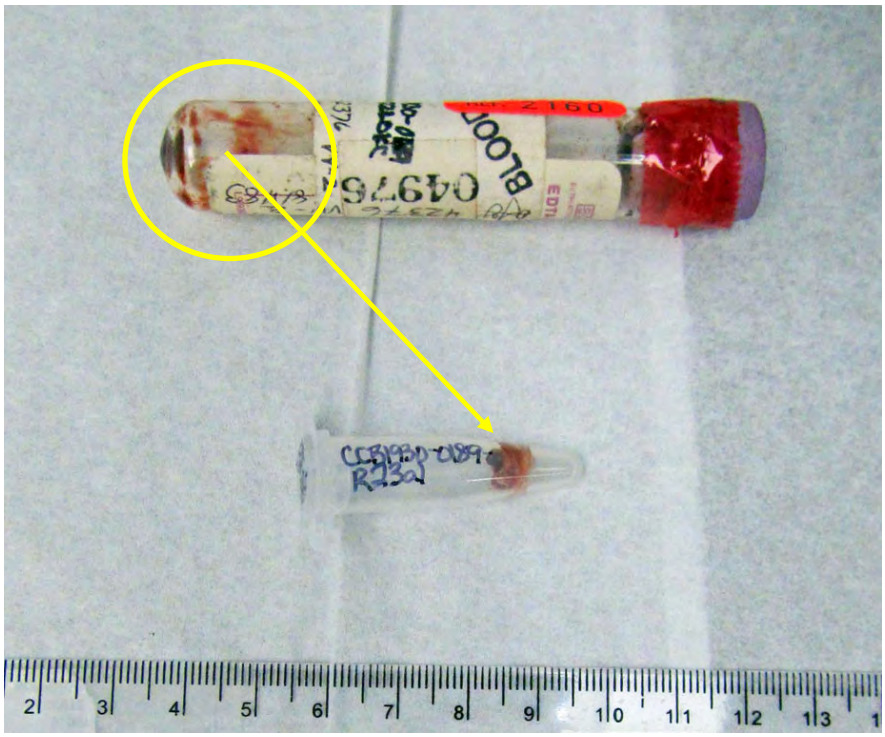


Fig. 8: Bode lab #R23a1 swab sample of the VV-2 Cooper reference blood vial. [Bode lab photo]

h) From the Bode lab #R23a1 Cooper reference blood vial VV-2 swab a technician extracted 14.1ng of DNA of which 1ng was amplified using the 21 autosomal STR gene GlobalFiler kit. The electropherogram documenting the Bode lab analysis of the #R23a1 Cooper reference blood vial VV-2 swab as described in the February 17, 2020 report of Christina Nash is attached as Exhibit 8. This electropherogram reveals a robust and pristine DNA profile for all of the GlobalFiler STR genes, with no evidence of degradation, as expected from an EDTA-preserved blood vial even after 37 years. The undegraded condition of the dried blood in the #R23 Cooper reference blood vial VV-2 **proves** the blood recovered from the A-41 bloodstain pill box by Mr. Myers in 2001 could not have been planted/originated from the VV-2 Cooper reference blood vial in 1999. Were that the case, the A-41-A DOJ lab test would not have displayed the marked level of degradation present in that result.

i) Also, the Bode lab profile for the #R23a1 Cooper reference blood vial VV-2 swab is single source – no evidence of mixture. Since the PCR reaction is proportional and any admixed blood DNA would be equally preserved and amplified, this result proves the trace-level mixture of DNAs from at least two persons in the Cal DOJ lab result from the A-41-A pill box swab sample cannot have originated from mixed blood in the VV-2 Cooper reference blood vial that was then planted into the A-41 pill box. Were that the case, a similar or even more extensive minor profile would have necessarily been revealed in the Bode lab #R23a1 Cooper reference blood vial swab test result. The admixed blood DNA would not degrade preferentially to the native

blood DNA in the vial. The absence of a minor contributor profile in the Bode lab result cannot be accounted for by preferential degradation of "planted" blood in the VV-2 Cooper reference blood vial, as claimed by the defense.

j) In 2019 Bode lab tested the A-41 bloodstain pill box canister as item #E13a. On September 5, 2019 Cassandra Call swabbed the inside "100%" surfaces of the pill box which she described as "containing debris." This swab was consumed in testing. Approximately 0.22ng of DNA, about one-tenth the amount of DNA recovered by Mr. Myers, was recovered from this swab[17] and all of this DNA was utilized in a GlobalFiler amplification on November 11, 2019. The electropherogram documenting the Bode lab analysis of the A-41 Bode lab #13a pill box swab as described in the November 18, 2019 report of Christina Nash is attached as Exhibit 9. Although this DNA profile is highly degraded, with little genetic information beyond 200 base pairs amplifying, there is no evidence of mixture, and the profile is for all intents and purposes, unique to Mr. Cooper, as expected.

k) Clearly, the DNA recovered from the A-41 pill box by Bode lab in 2019 is more degraded than the DNA recovered some 18 years earlier by Cal DOJ in 2001. This is to be expected of the major and any minor component. While degradation may play some role in the failure to detect a mixture in the Bode lab sample of the A-41 pill box, if that blood was planted in 1999, the proportional nature of the PCR is the more likely explanation. All things being equal, this means that about 4 of the 220pg of DNA recovered in the 2019 Bode lab sampling would be expected to originate from the minor contributor. 4pg of DNA is less than the amount of DNA in one white blood cell. The trace amount of DNA foreign to the major contributor simply got overwhelmed in the initial PCR amplification cycles and was not detected.[18]

l) One final observation on the allegation of tampering with the VV-2 Cooper reference blood vial and the A-41 bloodstain specimen is instructive. This observation is also relevant to the CC-1 beige t-shirt fragment, which will be discussed in Section B. Dr. Blake, considered to be one of the foremost forensic serology and DNA analysis experts in the country, was the defense expert through pre-trial testing and the post-conviction testing at Cal DOJ lab in 2002-4. He was present at Cal DOJ lab during the examination and sampling of the physical evidence in this case. Dr. Blake was also provided with the raw DNA testing sample data files of the analysis described in Mr. Myers reports, which he analyzed independently. Dr. Blake published his findings in his July 24, 2001 report to both sides and the court. In that report Dr. Blake described the A-41 bloodstain specimen as follows:

[17] This finding demonstrates that some blood dust remained in the pillbox even after the Myers sampling in 2001as well as the exquisite sensitivity of the PCR DNA analysis method.
[18] Of course, if the blood remaining in the A-41 pill box in 2019 was mostly from planted the VV-2 EDTA-preserved blood, it would be essentially undegraded. This DNA recovered by Bode lab from the A-41 pill box in 2019 is even more degraded than that recovered by Cal DOJ lab in 2001, as expected.

"Item A-41 consists of two samples (A and B) from the Ryen hallway wallboard bloodstain. Item A-41A consists of a small amount of blood powder on the inside surfaces of the original pillbox tin containing this evidence. Item A-41B consists of a small tube containing water extracted wallboard fragments….

"Item CC-1 is a stained cloth fragment from the so-called beige "'bar shirt'"….

* * * *

"If it could be established that the blood on this [beige t-shirt] originated from one or more of the Ryen/Hughes victims, then 'habitual wearer' evidence from the shirt armpits or other appropriate locations could reveal genetic information concerning the Ryen/Hughes assailant(s)….

* * * *

"A complete genetic profile for Unknown Male #1 has been obtained from the blood powder with the A-41A pill box tin. The calculated genotype frequencies indicated that it is unlikely that more than one human being has ever possessed this particular genotype array….

"A slightly less complete genetic profile from Unknown Male #1 was obtained from the second A-41 sample containing the water extracted wallboard fragments, A-41B….

"A complete genetic profile for Unknown Male #2 was obtained from the blood smear on the [beige t-shirt fragment] #CC-1B. The calculated genotype frequencies indicated that it is unlikely that more than one human being has ever possessed this particular genotype array….

* * * *

"It is apparent from the success at this first stage of investigation that most of the outstanding fact issues surrounding the biological evidence can now be answered. Unknown Male #1 either is or is not Kevin Cooper. If Unknown Male #1 is not Kevin Cooper, the State's theory of this case is fundamentally undermined. If, on the other hand, Unknown Male #1 is Kevin Cooper, the State's proof in this litigation is not only undisturbed, it is made more rigorous.

"Similarly, Unknown Male #2 either is or is not one of the male Ryen/Hughes victims. If Unknown Male #2 is not one of the Ryen/Hughes victims, then this beige t-shirt is irrelevant to the Ryen/Hughes murder investigation. If, on the other hand, Unknown

> Male #2 is one of the Ryen/Hughes victims, it will be relevant to pursue "'habitual wearer'" evidence from this garment in an attempt to determine the genetic identity of that individual.
>
> "Based on the analysis described above, it is my judgment that further investigation of the hair evidence should be temporarily terminated in favor of a direct analysis of the Kevin Cooper, Jessica Ryen, Josh Ryen, Peggy Ryen, Doug Ryen, and Chris Hughes reference samples.

(July 24, 2001 Blake Letter to Judge So at 3, 5-7.) (Emphasis added.)

m) Dr. Blake also published his electrophoretic analyses of the A-41 blood drop and CC-1 beige t-shirt fragment bloodstain samples in his July 24, 2001 report. The electropherograms of the A-41A pillbox sample result published in the Blake report reveal the trace level mixture of DNA from a minor contributor as described in the Myers February and September reports of 2002. However, nowhere in his July 24, 2001 report does Dr. Blake <u>even mention</u> the fact that there is a trace amount of DNA from another contributor in the A-41A pill box sample result. The fact that Dr. Blake ignores the minor contributor DNA reveals how insignificant this finding was to Dr. Blake in terms of the probative value of this evidence. Nowhere in his report does Dr. Blake even hint at the possibility the blood in the A-41A pill box tin or on the CC beige t-shirt CC or CC-1 beige t-shirt fragment appeared to be or might have been planted.

n) Neither the presence of a trace level mixture in the 2001 Cal DOJ A-41 test result nor the absence of a mixture in the 2019 Bode lab A-41 test result should be construed to support a claim that the VV-2 Cooper reference blood vial or the A-41 blood drop specimens were deliberately tampered with by Mr. Gregonis or anyone. The most likely explanation for the trace DNA contribution in the A-41-A pill box swab result is the innocuous, unintentional, and unknowing transfer of "touch biology" to the pill box during handling, which is an inescapable feature of the world we all live in.

o) Because of the exquisite sensitivity of PCR-based DNA testing, forensic testing labs around the world must deal every day with "touch DNA" and the inadvertent transfer of minute amounts of biology from place to place. This is why so many quality control measures are now required for DNA testing. Nevertheless, inadvertent contamination is a fact of life within every crime lab. For example, in one California county District Attorney's Office crime lab 19 instances of analyst or sample cross-contamination were documented in 2019-2020. In the overwhelming majority of instances, the contamination was trace level and compatible with the analyst. And in virtually every instance the point of introduction of the contaminant could not be determined and no modification to laboratory procedure was instituted. Further, in none of these instances was the value of the evidence deemed to be undermined.

p) If the foregoing review described in Sections II.A.5 and II.A.6 leaves any doubt that blood from the Cooper reference blood vial VV-2 was not planted in bloodstain A-41 in 1999 and/or that the VV-2 blood vial was not "topped off" in 1999 there is even further proof that neither of these events could have occurred. At the 2003 evidentiary hearing before Judge Kennedy, Mr. Gregonis testified that in 1995 the SBC lab went through an accreditation process during which it was recommended that a seal be placed on each tube of blood. In compliance with this accreditation request, a seal was placed on the VV-2 blood vial cap in 1995. Mr. Gregonis testified that the seal placed on the VV-2 vial in 1995 was **still intact** at the time of the evidentiary hearing in 2003. (June 23, 2003 E.R.T. 126, 128-9, 142.)[19] This evidence in and of itself proves the VV-2 blood vial could not have been "topped off" in 1999 and mixed blood from this topped off vial could not have been planted into the A-41 bloodstain specimen. The red tape seal placed on the VV-2 blood vial top in 1995 appears to be present in the 2019 photographs of VV-2 taken by Bode lab. (See Figures 7 and 8, above)

q) Additionally, the defense claims Mr. Gregonis opened the A-41 bloodstain specimen on August 13, 1999 at which time he could have planted blood in it. Mr. Gregonis testified he checked the A-41 specimen on that date to confirm it was present. Mr. Gregonis documented this visual examination process with contemporaneous hand-written notes, attached as Exhibit 19. These notes reveal the A-41 specimen was listed as one of several items within a tape sealed envelope. Mr. Gregonis necessarily opened the <u>outer</u> envelope and described the pillbox as present within this envelope in a "tape sealed glassine bindle" precisely as it was found by Mr. Myers when he opened the specimen on July 6, 2001. These notes also demonstrate and document that Mr. Gregonis also opened several other specimens on that day for inspection as to their presence.

7. a) The defense claims that contamination detected in the sample of the Cooper VV-2 dried reference bloodstain swatch used by Mitotyping Technologies (MT lab) for mitochondrial DNA (mtDNA) testing also demonstrates that the parent Cooper VV-2 blood vial was tampered with. My review of the history of the use and handling of the dried blood swatch indicates the contamination experienced by MT lab is innocuous adventitious contamination rather than a mixture of blood from Cooper and another person or persons.

   b) As described above, a conventional dried bloodstain swatch was routinely prepared from fresh reference liquid blood in order to preserve the ABO antigens and proteins in the red blood cells and blood serum for future testing. These genetic systems are labile in the liquid state – even when the blood is preserved with EDTA. Once the forward ABO testing and any other testing of antigens on the surface of red blood

[19] See also Deputy Meadows testimony (June 24, 2003 E.R.T. 170-171). He refers to a photo Ex. 10 of the VV-2 blood vial. It would be informative to be able to compare Ex. 10 to the photos taken in 2019 by BODE.

cells (such as the Lewis system) is complete, one typically used the dried bloodstain to conduct the protein-based (such as EsD, PGM, EAP, AK, ADA, CAII, PepA, Gc, Hp, and Tf) genetic testing. This is the process I used with hundreds of reference blood specimens over my career (even for DNA testing). This is the process that was used in virtually every crime lab that conducted conventional genetic testing. This is the process used by Mr. Gregonis in the Ryen investigation.

c) Mr. Gregonis used the dried Cooper VV-2 reference bloodstain swatch several times in the course of his analyses in 1983-1984. This same bloodstain swatch was sent to the DOJ lab in 2002 and then to MT lab in 2004. Photographs of the VV-2 stain swatch as inventoried upon receipt at Cal DOJ lab in 2002, as well as the dried swatch of Doug Ryen's bloodstain for comparative purposes, are shown below in Figures 9 - 13.

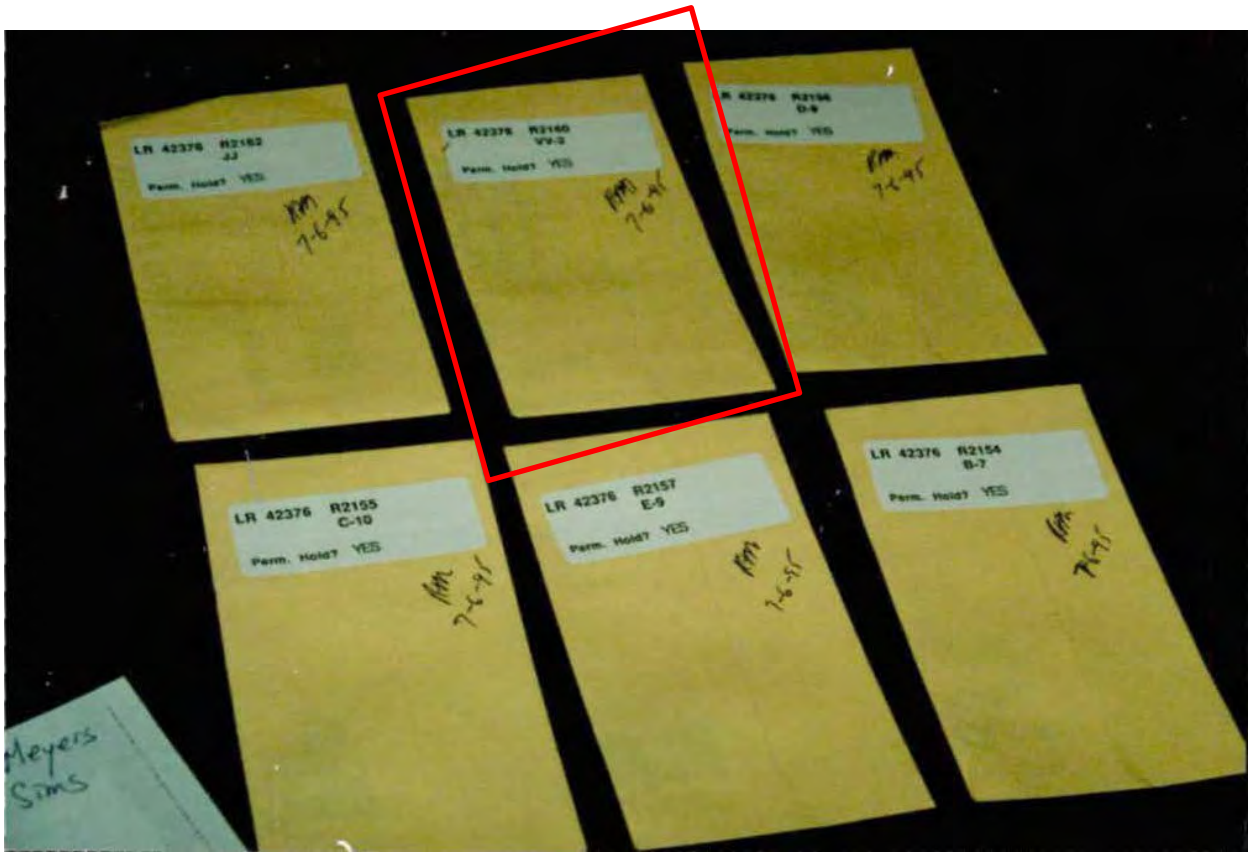


Fig. 9: Reference bloodstain packages as photographed in 2001 [Cal DOJ photo]

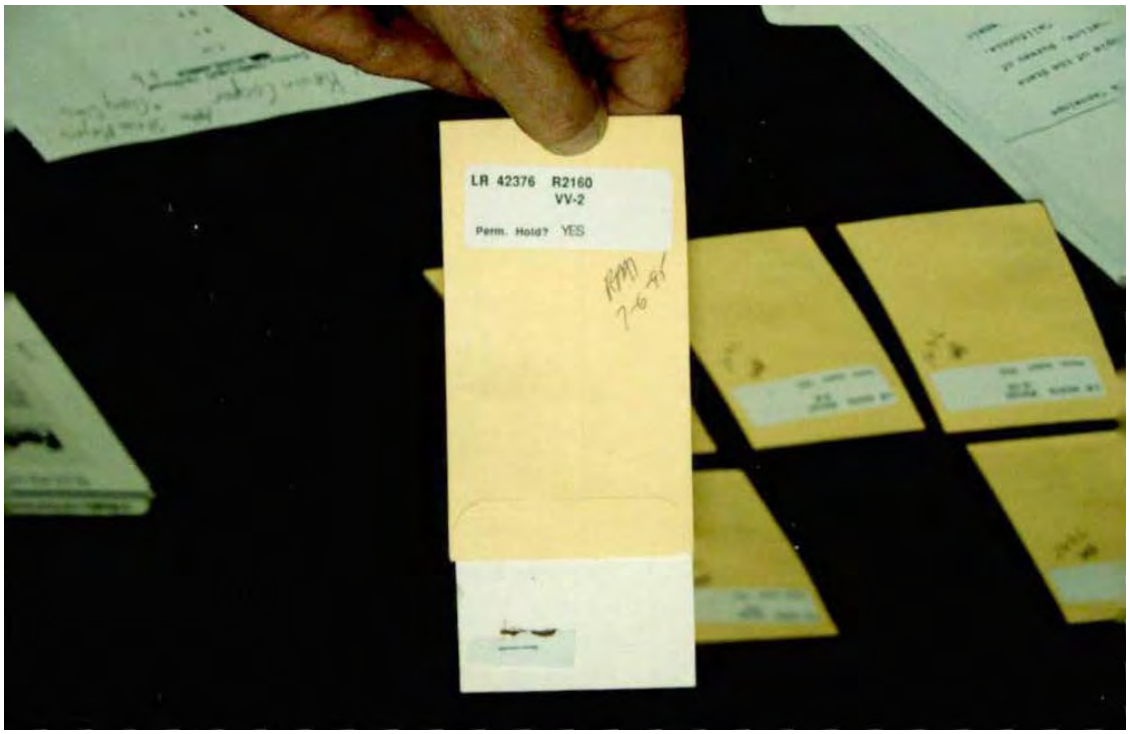


Fig. 10: Cooper reference bloodstain swatch VV-2 as photographed in 2001. [Cal DOJ photo]

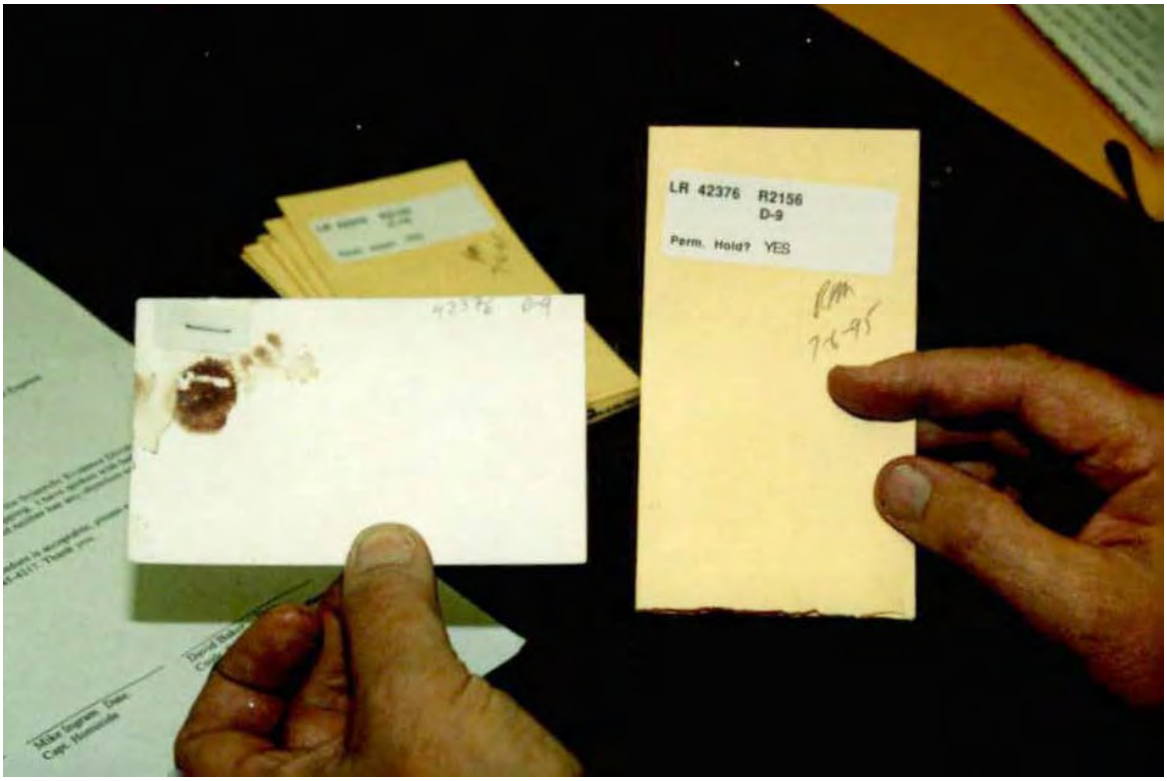


Fig. 11: Doug Ryen reference bloodstain swatch D-9 as photographed in 2001. [Cal DOJ photo]

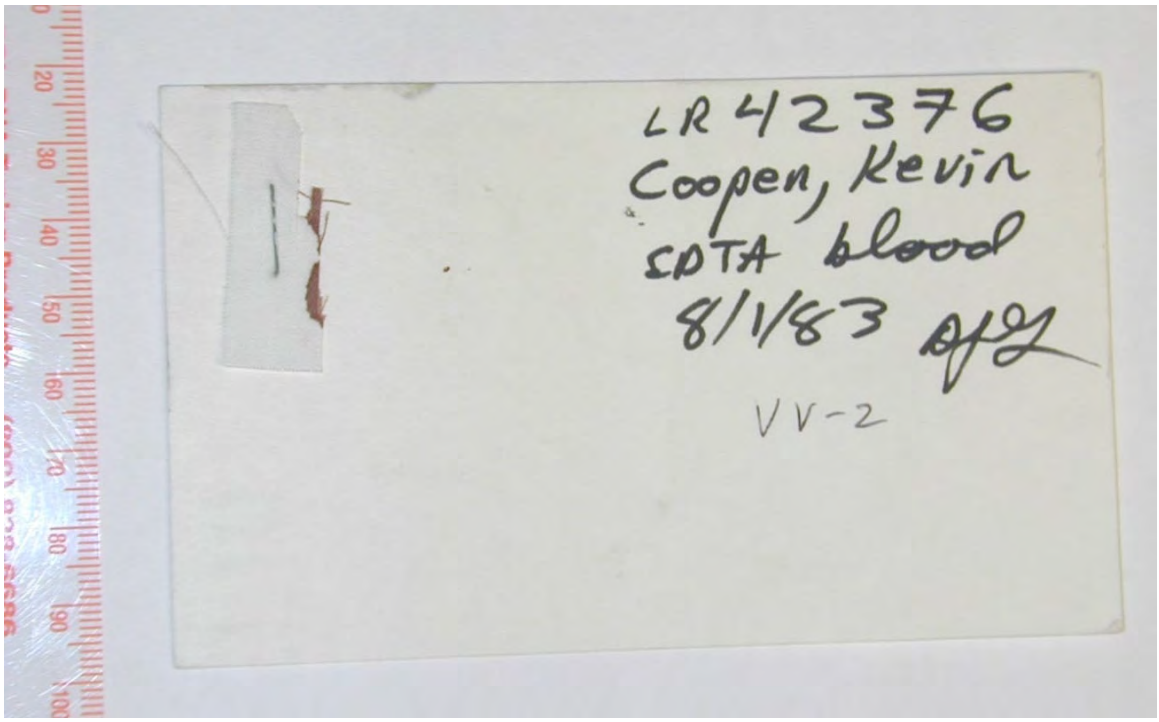


Fig. 12: VV-2 blood stain card as photographed in 2001 showing a small amount of dried blood remaining. [Cal DOJ photo]

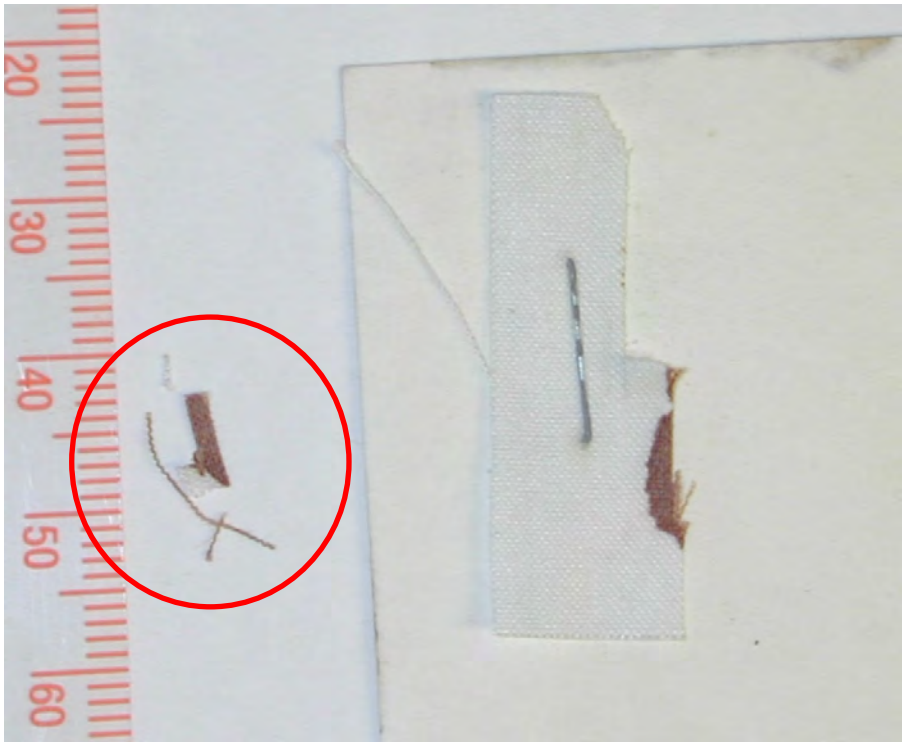


Fig. 13: VV-2 blood stain card as photographed in 2001 showing the cutting used by DOJ (oval) and the remainder that was sent to MT lab. [Cal DOJ photo]

d) Not much of the dried blood on the white cotton swatch remained. Mr. Myers' sample, at least 40% of the remaining stain, is shown above in Figure 13 in the red circle. From this sample Mr. Myers recovered 20.1ng of DNA, of which he used 1.5ng in a Profiler Plus nine STR amplification. Mr. Myers described the results of this amplification in his report of September 24, 2002. A full robust profile was obtained for Mr. Cooper from the VV-2 bloodstain and Mr. Myers makes no mention of any apparent contamination. This profile is shown in Exhibit 10. There is no minor component nor any evidence of contamination in this sample. Clearly, the blood on the VV-2 Cooper dried reference bloodstain swatch is not a mixture of bloods.[20] The *blood* on the VV-2 Cooper dried reference bloodstain swatch cannot be the source of the contamination experienced at MT lab in their mtDNA analysis of the same sample. This contamination is likely from within MT lab (of the nature described above in Sections II.A.6.n-o) or adventitious biology on the bloodstain swatch from handling.

e) I have none of the records that support the MT lab report of August 2, 2004. This report states the VV-2 Cooper reference specimen "had a minimal stained portion remaining" and it "was consumed in testing" as K4. The report states the result from the mtDNA testing of this sample revealed a mixture. This report also describes contamination in three of the reagent blanks that accompanied the various DNA samples. I cannot determine the nature of the contamination in the Cooper reference specimen or the reagent blanks; however, based on the DOJ lab analysis of this same specimen, the blood on the specimen itself is not the source.

B. The beige t-shirt DOJ-6 (Bode lab E01) and cuttings CC-1

The beige t-shirt was collected from a roadside not far from the Ryen house on June 7, 1983, a few days after this crime. There were apparent blood smears and small blood spatter stains on the t-shirt. Initial pre-trial conventional serological testing of blood on the beige t-shirt in area CC by Mr. Gregonis suggested Doug Ryen could not be eliminated as a potential source of some of the blood on the t-shirt. In joint post-conviction testing in 2002 with defense expert Dr. Blake, Mr. Myers tested stains on the DOJ-6 beige t-shirt (and previously removed cuttings from the beige t-shirt CC-1) and determined that Mr. Cooper and Doug Ryen could not be eliminated as the source of several blood/spatter stains on the beige t-shirt. In 2004 samples from the beige t-shirt were tested for EDTA content in an attempt to determine whether EDTA levels in areas of the t-shirt apparently stained with Mr. Cooper's blood might support the claim the blood was planted from the EDTA blood tube VV-2. In 2019 Bode Lab tested multiple sites on the beige t-shirt (their item No. E01) in an attempt to locate habitual wearer biology and

[20] The defense also claims on page 7 in their February 26, 2021 Statement to Governor Newsom that the September 24, 2002 DOJ Supplemental Report describes a mixture of DNA from the VV-2 Cooper dried reference bloodstain swatch. This claim is not true. The report nor Mr. Myers bench notes reveal any evidence of mixture or contamination. The Cal DOJ lab electropherogram of VV-2 bloodstain provided as Exhibit 10 proves this claim is false.

potentially identify the owner/wearer of the t-shirt. The Bode Lab results on the E01 beige t-shirt were reported as essentially uninformative.

1. a) My understanding of the defense statements and responses to the DNA testing of the beige t-shirt is that the defense takes no issue with the outcomes of the DOJ DNA testing; rather, as with the A-41 blood drop the defense contends the blood on the t-shirt, at least the blood that likely originated from Mr. Cooper, was planted. To explore the planting allegation, an investigation of the amounts of EDTA associated with the beige t-shirt was undertaken in 2004, which will be discussed in Section B.2 below. In this section, I focus on what the DNA testing of blood on the t-shirt can tell us about whether the blood attributable to Mr. Cooper might have been planted.

   b) The overall front of the DOJ-6 beige t-shirt as received at Cal DOJ is shown in Fig. 14. The lower front of the DOJ-6 beige t-shirt showing blood sample areas F/G and I/J/K in detail is shown in Fig. 15. The CC-1 cuttings previously removed from the beige t-shirt are shown in Fig. 16.

Fig. 14: Outside front of the DOJ-6 beige t-shirt as received at Cal DOJ lab. [Cal DOJ photo]

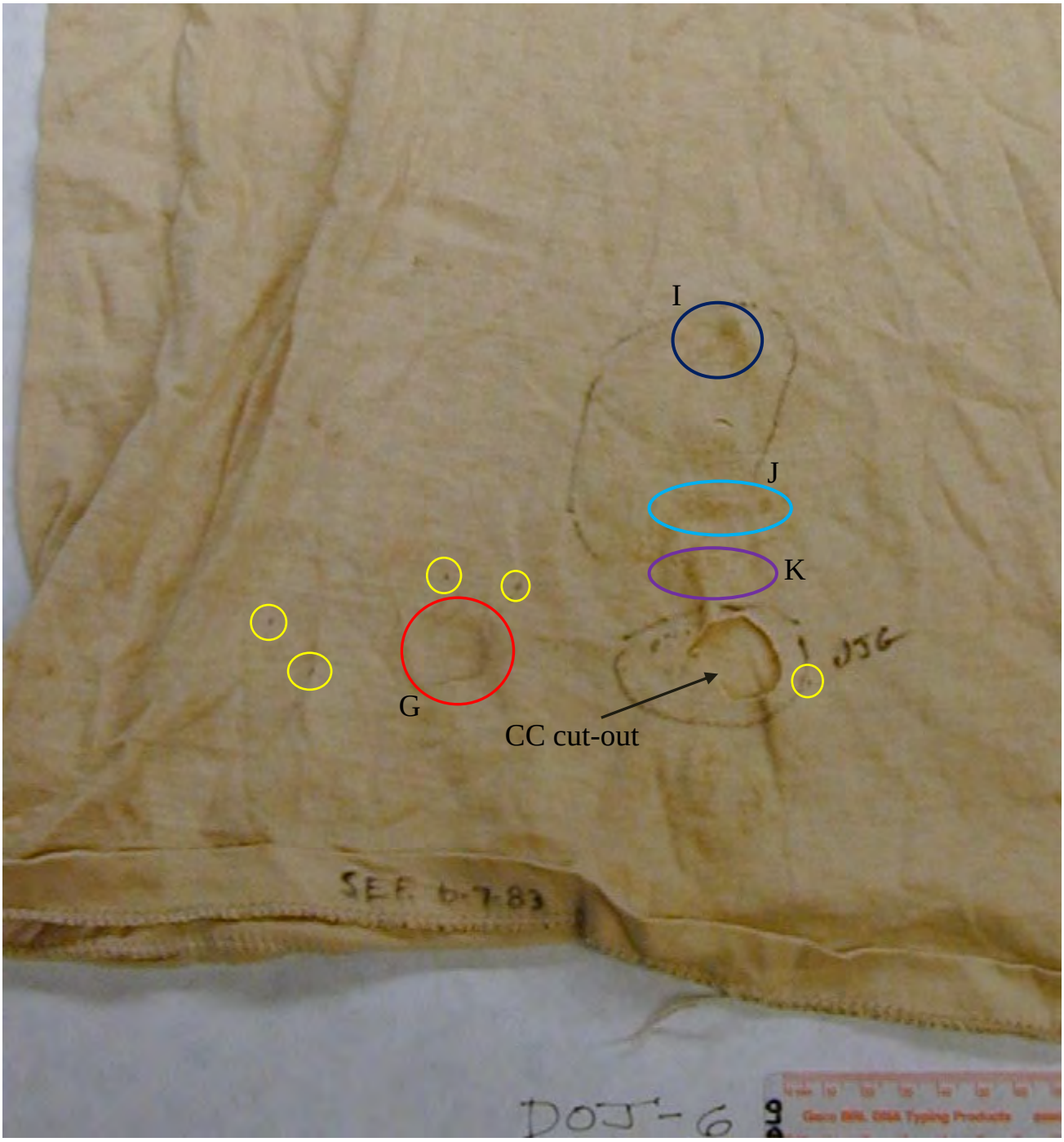


Fig. 15: Lower front of DOJ-6 beige t-shirt showing the pooled blood spatter sample locations F (yellow) and blood smear sample locations G (red), I (dark blue), J (bright blue), and K (purple); and CC cut-out void. [Cal DOJ photo]

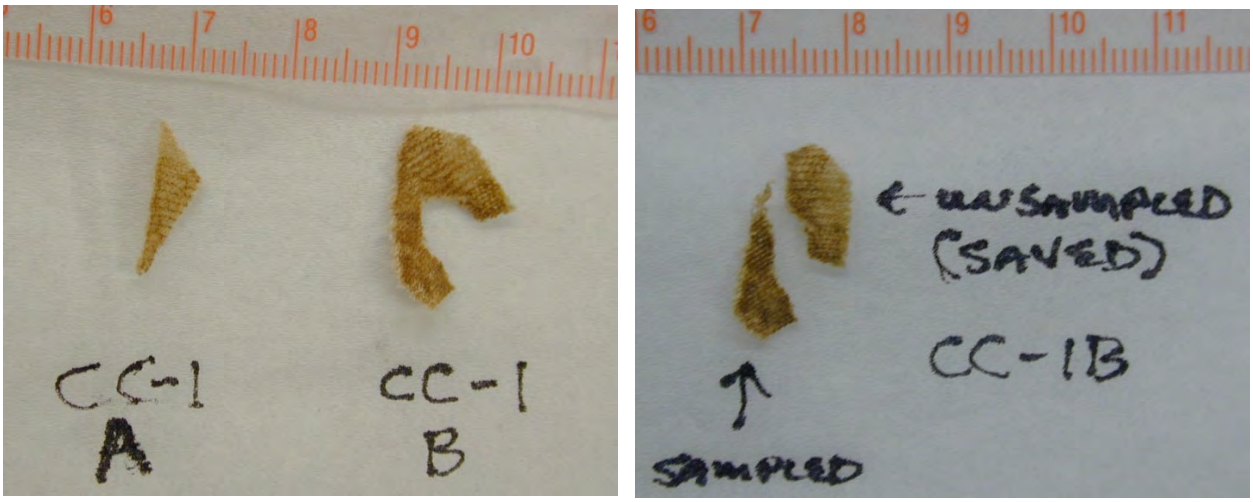


Fig. 16: Beige t-shirt cuttings CC-1 A and B. The CC-1A specimen was not tested. [Cal DOJ photos]

c) Mr. Cooper was essentially identified as the major contributor of the DNA recovered from bloodstain DOJ-6J (the stained area indicated with the bright blue oval), DOJ-6G (the smear area indicated with the red oval), and DOJ-6K (the smear area indicated with the purple oval). Mr. Cooper was also included as a possible contributor to the DNA mixture recovered from the combined spatter stains DOJ-6F (the small stains indicated with the yellow circles, combined) and smear DOJ-6I (the smear area indicated with the dark blue oval).

d) Victim Doug Ryen was essentially identified as the source of the blood on the CC-1B bloodstain cutting (the CC cutting stain is the bloodstain tested by Mr. Gregonis in 1983) and as a potential contributor to the DNA mixtures detected from DOJ-6I, DOJ-6J, and DOJ6-K. In fact, a mixture of DNA between Mr. Cooper and Doug can account for all of the alleles detected in DOJ-6I, DOJ-6J, and DOJ6-K.

e) Victim Peggy Ryen was included as a potential contributor to the DNA mixture recovered from the combined spatter stains DOJ-6F.

f) Looking at the blood spatter and smear stains on the lower front of the DOJ-6 beige t-shirt and in light of the determined likely contributors of this blood, it is difficult to imagine how anyone could have – or would have – planted such a mishmash of minimal and widespread smears and tiny spatter stains. No one could predict if and when any DNA testing might occur[21] and which stains/smears might be selected and potentially combined for DNA testing. The State maintains the main body of the beige t-shirt DOJ-6 was admitted into evidence at trial in 1984 and remained in the custody of the court until the DOJ lab testing in 2001. Mr. Cooper's blood would

[21] PCR-based DNA testing was not invented until 1985 and was not implemented into routine use in crime labs until the early 1990's.

have had to have been planted prior to trial. If such planting was done pre-trial, one would expect the planted blood to have been tested pre-trial. Otherwise, the point of planting Mr. Cooper's blood on the beige t-shirt pre-trial is not logical.

g) The only bloodstain on the beige t-shirt that was amenable to conventional serological testing is the CC smear cutting. This is the stain that was tested pre-trial by Mr. Gregonis. Mr. Gregonis' tests pointed to Doug Ryen as a possible source of this blood – Mr. Cooper was eliminated. Although this testing suggested the beige t-shirt might be relevant to the murders, the defense does not allege Mr. Gregonis planted Doug's blood. The DOJ lab testing in 2001 proved this blood originated from Doug.

h) The DOJ lab DNA profile electropherogram for stain DOJ-6G from the beige t-shirt as reported by Mr. Myers in 2002 is shown in Exhibit 11. This essentially single source profile shows severe degradation. As described above in Section II.A.6.h., this level of degradation proves the blood on the t-shirt, from Mr. Cooper and others, could not have been planted from vial VV-2 after the t-shirt was retrieved from the court in 2001 for DNA testing because the blood in VV-2 is still pristine in 2019.

i) Finally, as described in Section II.A.6.m., had there been suggestion of impropriety with regard to the appearance and amounts of blood on the DOJ-6 beige t-shirt, Mr. Myers and Dr. Blake would have raised that red flag in 2001-2 when they examined the shirt several times and took numerous bloodstain and habitual wearer samples for testing. Based on the foregoing analysis, the allegation that Mr. Cooper's blood was planted on the DOJ-6 beige t-shirt has no merit.

2. a) Cooper claimed "the question of Mr. Cooper's innocence can be answered once and for all" by testing bloodstains on the beige t-shirt for EDTA content. This testing could "show that his blood was not on the shirt at the time of the killings, but was rather placed there at some later time." "Conversely, if the blood is not contaminated by EDTA, the shirt conclusively proves his guilt." In 2004 a double-blind experiment was devised to test the claim that EDTA levels in the bloodstaining on the DOJ-6 beige t-shirt could show the blood had to have been planted. Given that any blood on the DOJ-6 beige t-shirt from Mr. Cooper had to have been planted, and hence would show high levels of EDTA, the experiment was distilled to one bloodstain and a variety of background and negative control samples. Chief Judge Marilyn Huff of the US District Court Southern District of California presided over the EDTA testing.

   b) In September 2004 at Orchid Cellmark Forensics laboratory (Cellmark) in Germantown, MD six samples were taken from the DOJ-6 beige t-shirt by Cellmark analyst Jason Befus under the watchful eye of Mr. Myers: #1) for the blood attributable to Mr. Cooper, the remnant of fabric remaining between areas J and K and to the left of area J;[22] #2 – 5 background control samples from visibly unstained

[22] Area DOJ-6G was, for all intents and purposes, consumed in previous testing.

areas of the t-shirt in an arcing pattern above area I; #6 a background control sample from a visibly unstained area below the previous "control" cut-out and nearer the bottom hem. These sample sites are shown in detail in Figures 17 and 18 below.

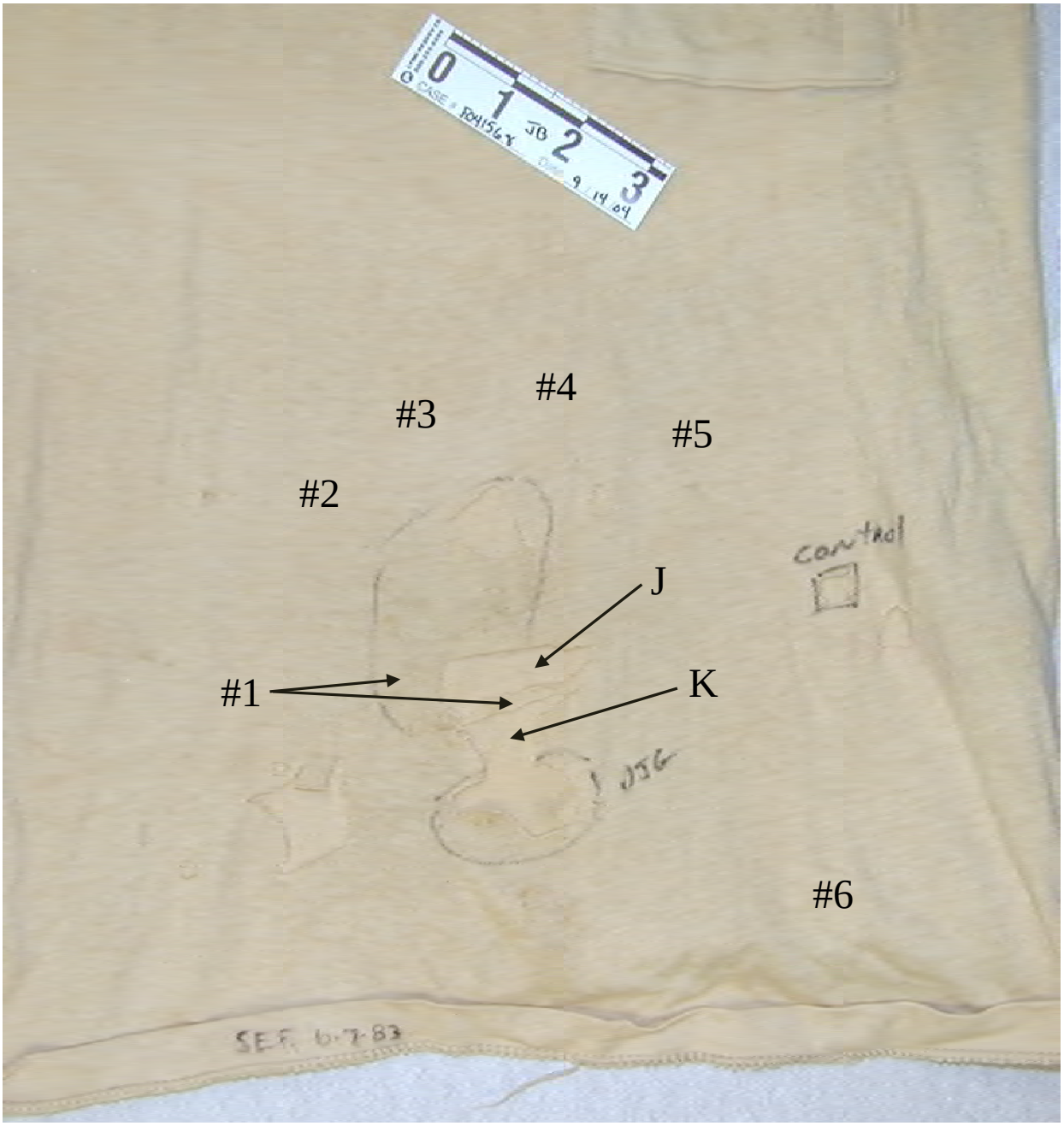


Fig. 17: DOJ-6 beige t-shirt showing EDTA test sample areas #1 – 6. [Cellmark/DOJ photo]

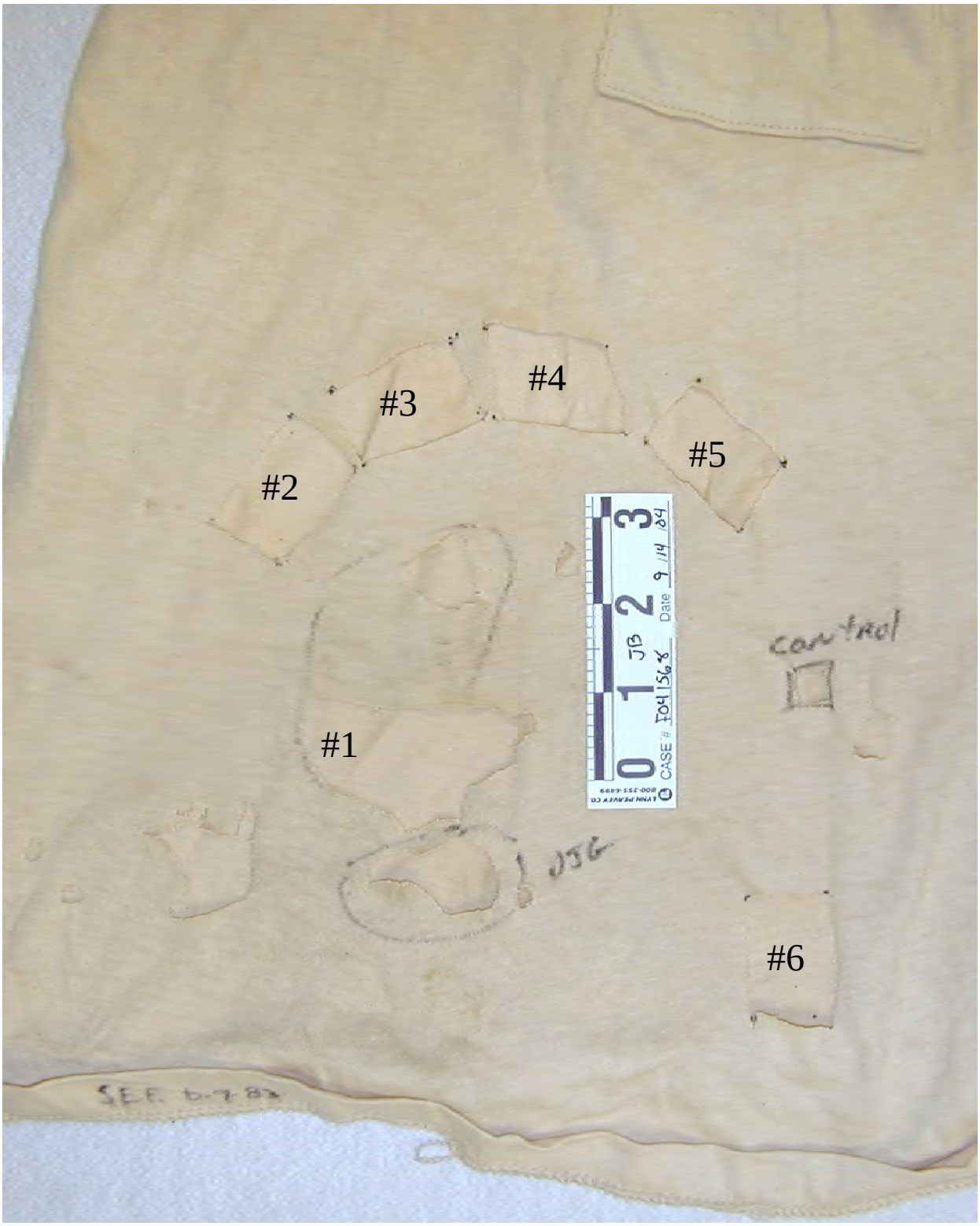


Fig. 18: DOJ-6 beige t-shirt showing EDTA test sample sites #1 – 6. [Cellmark/DOJ photo]

c) From a "control" t-shirt procured by Cellmark, three additional EDTA test samples were prepared. Samples #7 – 9 were prepared by cutting three similarly sized swatches from the back of the control t-shirt. On sample #7, 1µl of unpreserved blood was smeared; on sample #8 1µl of EDTA preserved blood was smeared. Sample #9 was an unstained swatch of the control t-shirt. Finally, sample #10 was a phosphate buffered saline (PBS) reagent blank for preparing aqueous extracts of the nine cloth swatch samples. Control t-shirt sample areas #7 – 9 are shown in Figures 19 and 20.

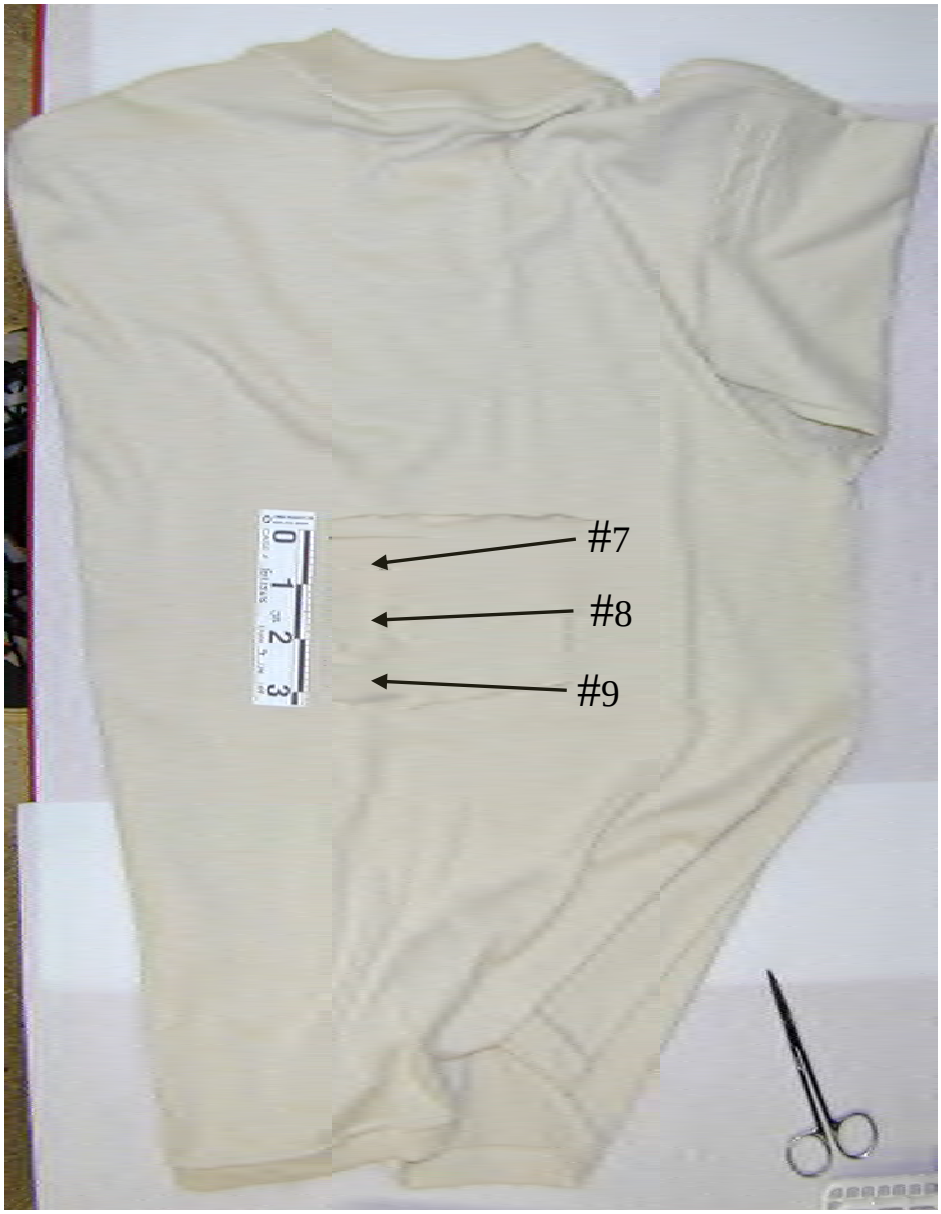


Fig. 19: Control t-shirt samples #7 -9 sites. [Cellmark/DOJ photo]

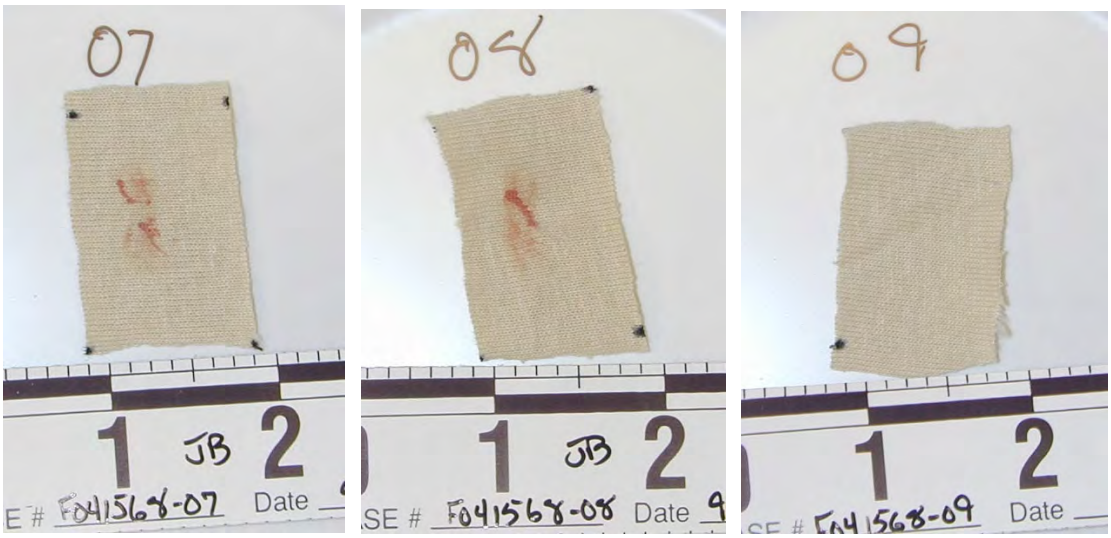


Fig. 20: Control t-shirt samples #7 spiked with unpreserved blood; #8 spiked with EDTA preserved blood; #9 un-spiked cutting. [Cellmark/DOJ photo]

d) All of each sample was cut into small sections, placed in separate tubes identified only by number, and extracted with 650µl of PBS. The sample extracts were split into thirds, with 200µl of each extract going to Dr. Kevin Ballard of NMS, 200µl to Dr. Gary Siuzdak of the Scripps Research Institute, and the remainder preserved. **Prepared in this way, <u>each of the nine sample splits are identical to each other</u>; hence the test results from each corresponding pair of samples should be the same, or at the very least, similar to each other**.

e) Both Dr. Ballard and Dr. Siuzdak conducted EDTA testing on the aqueous extracts of the t-shirt cuttings. Neither was aware of which sample number corresponded to which cutting from either t-shirt. Dr. Siuzdak reported his findings to Judge Huff then, after discovering contamination in his controls, withdrew his report. Dr. Siuzdak's findings were not provided and are not considered here. Dr. Ballard's testing revealed 110ng EDTA for the 01 bloodstain cutting. For the five unstained background beige t-shirt samples, all but one, 06 near front bottom hem, revealed levels of EDTA <u>higher</u> than the 01 bloodstain cutting.

f) From the control t-shirt samples, 1,100ng of EDTA (approximately 84%) was recovered from the 08 sample spiked with EDTA-preserved blood and negligible amounts of EDTA were recovered from the 07 and 09 control t-shirt samples. Based on Dr. Ballard's findings, Judge Huff concluded:

i. EDTA in the DOJ-6 beige t-shirt samples and the control samples was efficiently recovered and accurately measured.
ii. The EDTA level in the DOJ-6 beige t-shirt sample 01, taken contiguous with previous bloodstained areas where Mr. Cooper's blood had been found,

revealed an EDTA level *less than the average* amount of EDTA in the background 02 – 06 samples.

iii. The DOJ-6 beige t-shirt sample 01 result not only undermines Mr. Cooper's claim that his blood on the shirt was planted, it *proves* his blood was *not* planted based on the defense's own theory. All variables considered equal, I agree with these three conclusions.

g) In his dissent, Judge Fletcher stated "The state-designated lab (Dr. Siuzdak) obtained a test result showing *an extremely high level of EDTA* in the sample that was supposed to contain Cooper's blood (01). If that test result was valid, it showed that Cooper's blood had been planted on the t-shirt, just as Cooper has maintained. A careful analysis of the evidence before the district court strongly suggests that the result [from sample 01] was valid."[23] If Judge Fletcher's careful analysis is correct, then the sample tested by the state's expert showing an extremely high level of EDTA and its identical twin tested by Mr. Cooper's expert showing a less than average amount of EDTA **are highly disparate**. Clearly, this disparity demonstrates a flaw somewhere in this investigation. Since there was no apparent or claimed discrepancy with Dr. Ballard's test process and results, and Dr. Siuzdak's test process was clearly flawed by his own admission, then one should rightly presume Dr. Ballard's results to be the more valid. Judge Fletcher and Mr. Cooper's team give that nod to Dr. Siuzdak's result and they appear to discount or completely ignore their own expert's results.

h) Also in his dissent, Judge Fletcher complained "The district court allowed the state-designated representative to help choose the samples to be tested (for EDTA) from the t-shirt" but "refused to allow Cooper's scientific experts to participate in the choice of samples", and "so interfered with the design of the testing protocol that one [Dr. DeForest] of Cooper's scientific experts refused to participate in the testing."[24] In his clemency request, Cooper complains that Judge Huff designed the EDTA investigation and went so far as to personally "incorrectly [choose] the spot on the tan t-shirt to be tested." (Cl. Pet. at 127.) **This is not true**. The court originally selected area 6G – previously shown to be Mr. Cooper's blood – which upon examination for the EDTA test sampling was found to be consumed. As was described above, the EDTA test blood sample from the t-shirt was selected, in consultation with Dr. Lewis Maddox of Cellmark as a replacement for Dr. DeForest, by Mr. Myers, the same expert who, jointly with Dr. Blake, a defense expert, selected the samples including 6G and conducted the DNA testing of blood on the t-shirt. I say, "Who better to select the t-shirt bloodstain sample *that is supposed to contain Mr. Cooper's blood* to be tested for EDTA than the expert who identified those bloodstains – Mr. Myers?" I believe the sample selection for the EDTA testing was thoughtful, appropriate, and

[23] *Cooper v. Brown*, 565 F.3d 581, 583 (9th Cir. 2009) (Judge Fletcher, dissenting) (emphasis added).
[24] *Id*. Dr. DeForest is the same defense expert who selected hairs for mtDNA testing as part of the 2004 DNA testing ordered by the 9th Circuit, two of which turned out to be dog hairs.

comprehensive. I believe the DOJ-6 t-shirt bloodstain sample 01 that was tested for EDTA was the best sample available.

i) The defense's argument and belief that EDTA testing of blood on the beige t-shirt could prove the blood was planted was fatally flawed from the outset. The EDTA testing experiment was, in effect, a one-sided coin – it could only produce damaging results. Consider a loose hair recovered from a crime scene. The defense argues this hair is from the actual culprit and should be tested to determine if the defendant can be eliminated as the source of the hair. Even if the defendant is eliminated, there is no way to prove an unknown source loose hair is relevant – even if the source of the hair is identified; and, there is the possibility the hair actually originated from the defendant and he will be inculpated by the result. Had an amount of EDTA been found in sample 01 "high enough" to suggest more than a background amount of EDTA, given the ubiquity of EDTA in the environment, this finding still could not prove EDTA-preserved blood was planted on the beige t-shirt.

j) The defense had yet another hurdle it likely could not clear: the admissibility of EDTA testing evidence in this context. My reading of Judge Huff's decision indicates EDTA testing in a forensic context has not been generally accepted by the scientific community. And, notwithstanding Dr. Siuzdak whose test method failed, Dr. Ballard appears to be the only scientist in the country performing forensic EDTA testing, his procedure was sealed and not subject to peer review, and he had been discredited in a previous EDTA testing attempt (Pompey). In my opinion, pursuing EDTA testing on the beige t-shirt was poor strategy.

k) Finally, the blood from the DOJ-6 beige t-shirt EDTA test sample 01 was subjected to DNA testing at Cal DOJ by Mr. Myers in December 2004. This testing was observed by Marc Taylor of Technical Associates, Inc. of Ventura, CA. This DNA testing produced a highly degraded, but clear single source profile compatible with Mr. Cooper – **as expected based on the premise of the EDTA testing experiment**. The Profiler Plus electropherograms documenting this result as analyzed by Cal DOJ/Mr. Myers and at a lower detection threshold (50rfu) are attached as Exhibit 12. This DNA test result in and of itself provides additional proof the Cooper blood on the beige t-shirt was not planted as it comes from a sample proved to contain very little EDTA, and it is subject to the same conditions described above in Section II.A.6.h/i.

l) Mr. Taylor, in his December 22, 2004 Report of monitoring the DNA testing performed by Mr. Myers, claims "the biological material (e.g. blood, saliva, urine, etc.) in the '"stain"' cut-out, item 01 which is the source of the DNA detected is not known and no testing has been performed to help characterize this biological material." (Emphasis added.) It is true this sample taken at Cellmark in 2004 was not independently subjected to presumptive testing for blood. However, this claim is misleading at best, and in my opinion unnecessary and unjustified. The beige t-shirt

DOJ-6-01 EDTA test sample was taken from areas of the shirt contiguous with and between areas J and K previously identified as blood by Mr. Myers and Dr. Blake. Both Mr. Myers and Dr. Blake note that areas J and K were "strong positive" upon testing with phenolphthalin. This sample is also contiguous with the continuation of the left end of the area J bloodstain. Hence, by default, the staining that comprised EDTA test sample 01 ***was*** tested for blood, and the DNA from EDTA test sample 01 is from blood, just as is the blood and DNA from areas CC-1B, G, J, and K. This was the premise for the EDTA testing in the first place – to test **blood** on the t-shirt from Mr. Cooper. In the context he presents, Mr. Taylor could argue that any of the previously tested bloodstains might be mixed with another body fluid.

3. a) None of the Cal DOJ lab habitual wearer/owner biology samples from the DOJ-6 beige t-shirt were fruitful. In 2019, the t-shirt was sent to Bode lab for further habitual wearer testing. Bode numbered the beige t-shirt as item E01. The Bode technicians took eleven samples from the E01 beige t-shirt from the armpits (a and b), collar (c), interior and exterior back (d, f, g, h, and i), front pocket (e), and the interior shoulder areas (j and k). The Bode lab reports of September 16 and November 18, 2019 describe the results of these E01 beige t-shirt DNA tests. The Bode lab reports state that either no profile or only a single allele was detected from E01 beige t-shirt samples a, b, c, e, f, g, h, i, j, and k. The report authors Christina Nash and Dywayne Martin state that the beige t-shirt E01d sample from the interior lower back area produced "[a] partial DNA profile", but "[d]ue to the limited data obtained, no conclusions can be made on this partial profile." Neither Cal DOJ lab nor Bode lab were able to develop any meaningful information as to the potential wearer/owner of the beige t-shirt from this set of samples.

   b) In 2020, Bode amplified the remainder of the Cal DOJ lab DNA extract that had been prepared by Mr. Myers in 2002 by combining and concentrating the DNA extracts from habitual wearer sample areas designated b (collar inside back), c (collar inside front), d (right armpit), and e (left armpit). The sample is Bode lab E30. Bode determined there was approximately 0.16ng of DNA in this extract and all of it was used for a GlobalFiler amplification. The result of this analysis was described by Ms. Nash in her June 4, 2020 report as a partial profile consistent with a mixture of at least two individuals including at least one male. She stated that due to the possibility of allelic drop out, no conclusions can be made on this mixture profile. The Bode lab E30 electropherogram for the remainder of the DOJ-6B/C/D/E combined DNA extracts from the beige t-shirt is shown in Exhibit 13.[25]

C. The green button J-6 (Cal DOJ J-4/Bode lab E04)

The green button was recovered on or about June 7, 1983 from the Lease house. It was examined pre-trial by Mr. Gregonis. On June 15, 1983 staining on the button gave

[25] Bode conducted two instrumental analyses (injections) of the E30 DOJ-6B/C/D/E combined DNA extracts PCR product. They are slightly different, as would be expected. Exhibit 13 is the first injection profile.

the presumptive indication of blood. Mr. Gregonis attempted the Group I (EsD, PGM) enzyme isozyme testing on a sample from the green button on June 16, 1983; EsD type 1 activity was detected but no definitive type was reached for the PGM test result. On June 20, 1983 Mr. Gregonis detected ABO type A antigen via absorption-elution testing from a sample of blood from the button. Mr. Gregonis confirmed the blood on the button was human on June 24, 1983 via Ouchterlony double diffusion testing. At this point, similarly to the blood drop A-41, Mr. Gregonis determined any residual blood on the green button was insufficient for further conventional testing. All of Mr. Gregonis' testing of blood on the green button was conducted prior to Mr. Cooper's reference blood being drawn on August 1, 1983.

Mr. Gregonis' findings from the blood on the green button are described in his report of August 10, 1983. Based on the finding of ABO type A antigen and EsD type 1 activity, Mr. Gregonis concluded that among the persons from whom reference profiles were determined and compared to test results in this case that Doug Ryen, Michael Martinez, and Mr. Cooper could not be eliminated as potential sources of the blood.

1. a) The conclusion that Doug Ryen, Michael Martinez, and Mr. Cooper cannot be eliminated as contributors/sources of the blood on the green button is appropriate.[26] This is because all of them are ABO type A and EsD type 1.

   b) Mr. Myers began his examination of the green button (DOJ-4) at Cal DOJ on July 6, 2001 with Dr. Blake observing his work. He noted some "red/brown material" (apparent bloodstain) in the crease, thread holes, and along the rough edge of the top/facing surface of the button. Just as the residual A-41 bloodstain specimen was deemed sufficient to attempt PCR-based DNA testing, Mr. Myers and Dr. Blake deemed the apparent blood on the button sufficient to pursue with PCR-based DNA analysis. And, similar to the A-41B tube sample as described above in Section II.A.5.b., Mr. Myers made no attempt to collect/remove a sample from the button but rather he sampled the entire button biochemically via direct digestion and DNA extraction.

   c) No presumptive testing for blood was attempted "due to the small amount of red/brown material." Approximately 0.1ng of DNA was recovered from the green button; this amount of DNA was deemed insufficient for STR typing. No further work on the green button DNA extract was performed by Cal DOJ.[27]

2. a) The green button (Bode lab E04) was examined on August 26, 2019 by Bode technician Cassandra Call. Ms. Call noted "no visible staining" on the button; she swabbed the button with two swabs which she consumed for DNA testing. No presumptive testing of the button or the swabs was conducted. The green button swabs were extracted on September 3, 2019 and the recovered DNA quantified by

[26] This conclusion presumes the human blood on the green button was single source.
[27] See Mr. Myers' report of July 7, 2002, page 3.

Bode technician Nisha Panikkaveetil on September 5, 2019. No detectable DNA was recovered; however, this sample was concentrated and the entire DNA extract was utilized for a GlobalFiler amplification on October 1, 2019. No alleles were detected.

b) The absence of visible staining on and detectable DNA from the green button in the Bode lab testing is expected given the previous wholesale biochemical digestion of the button by Cal DOJ.

D. The orange towel BB (Bode lab E14)

The orange towel was also recovered on June 7, 1983 from the roadside not far from the Ryen house and not far from where the beige t-shirt was recovered. It was examined pre-trial by Mr. Gregonis and a stain on the towel gave the presumptive indication of blood, but this blood could not be confirmed as human blood. To my knowledge, this towel was not examined at Cal DOJ. The orange towel was sent to Bode lab in 2019 for examination and sampling for contact biology in an attempt to determine if biology from any of the victims, Mr. Cooper, or other known persons of interest might be on the towel.

1. a) On August 1, 2019 the orange towel was photographed at Bode lab for inventory purposes. On September 5, 2019 Bode lab forensic technician Dywayne Martin examined the E14 orange towel for blood and fluorescent deposits. He tested a previously outlined area of faint brown staining for the presumptive present of blood and no evidence of blood was detected.[28] Mr. Martin outlined fluorescent areas on the towel with dotted lines then re-packaged the towel into a new paper bag. The obverse (tag) and reverse sides of the E14 orange towel showing the outlines of fluorescent areas are shown in Figures 21 and 22. On September 29, 2019 forensic technician Cassandra Call marked each corner on each side of the towel to designate quadrants and sampled each quadrant by scraping the surface (avoiding the faint brown stain in quadrant H). Quadrants/samples E14a/b/c/d were on the side with the manufacturer tag and quadrants/samples E14e/f/g/h were on the opposite side of the towel. The faint brown stain area was sampled separately as E14i. Any photos documenting the quadrant markings and the sample scrapings were not provided.

[28] It is unclear which outlined areas were tested by Mr. Gregonis and Mr. Martin.

Fig. 21: Obverse surface/quadrants a-d of E14 orange towel. [Bode lab photo]

Fig. 22: Reverse surface/quadrants e-h of E14 orange towel. [Bode lab photo]

b) The following table summarizes the amounts of DNA recovered by Bode lab from each quadrant scraping sample and the combined E14a/c/b/d as E14a and the combined E14e/f/g/h as E14e extracts:

Sample No.	Orange towel location and sample description	DNA extract (50ul) conc, ng/ul	DNA recovered, ng	DNA test outcome
E14a	Quadrant A scrapings	undetected	low	n/a
E14b	Quadrant B scrapings	undetected	low	n/a
E14c	Quadrant C scrapings	undetected	low	n/a
E14d	Quadrant D scrapings	undetected	low	n/a
E14e	Quadrant E scrapings	undetected	low	n/a
E14f	Quadrant F scrapings	0.0051	0.255	n/a
E14g	Quadrant G scrapings	undetected	low	n/a
E14h	Quadrant H (avoiding stain) scrapings	undetected	low	n/a
E14a-d	Quadrants A-D scrapings, combined DNA	not done	unknown	partial profile
E14e-h	Quadrants E-H scrapings, combined DNA	not done	at least 0.255	robust profile

c) The E14f orange towel sample is the only sample among the other eight samples (including the E14i faint brown stain sample) in which a measurable amount of DNA was detected. The degradation index for the E14f orange towel sample was determined by Bode lab to be 0.91, meaning this DNA is virtually undegraded. The Bode lab E14efgh electropherogram for the combined e/f/g/h towel quadrant scrapings DNA extracts is shown in Exhibit 14. This profile result is described by Ms. Nash in her report of February 17, 2020 as a mixture of three individuals including at least one male contributor. She also states, “This mixture profile was resolved assuming three contributors.” The “was resolved” language suggests this result was analyzed by Bode lab with STRmix and the mixture ratio was calculated, but no STRmix records for the E14efgh orange towel profile were provided. Based on the results at the D3S1358, D2S441, and D19S433 genes the DNA mixture ratio is at worst 80:20 with 80% originating from the major male contributor and 20% originating from the two minor DNA contributors. Only the D3S1358 result provides clear evidence (five alleles) of three contributors.

d) It is clear from the E14efgh orange towel profile electropherogram peak height balance and the DNA degradation index that the DNA from the major male contributor is pristine, and most importantly – ***recent***. This single source male DNA could not have withstood degradation for over 36 years. For comparison purposes, the Bode lab E14abcd electropherogram for the combined a/b/c/d towel quadrant scrapings DNA extracts is shown in Exhibit 15. The absence of any apparent degradation also indicates the major male DNA does not originate from shed skin

cells, because the DNA remaining in dead skin cells is significantly degraded at the time the cells are shed. The amount of DNA in the E14efgh orange towel is compatible with a few nucleated epithelial cells. The fact that the major male DNA recovered from the E14efgh (and likely from E14f) orange towel is recent means this profile is not relevant to this investigation. Even if the orange towel was linked to the Ryen environment, the presence of recent biology on the towel can in no way support the claim by the defense that perhaps the man who is the source of this recent DNA is involved in this crime.

e) As described above in Section II.A.6.o, laboratory misadventures are not uncommon. Bode lab's testing records indicate this profile was searched against their internal database. It is unknown how and when the recent biology reflected in the E14efgh sample was introduced to it. Nevertheless, the pristine nature of the major male profile resolved from the E14efgh mixture should have been recognized instantly by the Bode lab experts and its relevance questioned at that time. In their review in taking ownership of this test data and profile for CODIS purposes, the experts at the San Francisco Police Department who conducted the CODIS investigation should have recognized the incompatibility of the profile with its alleged history.

E. Cigarette butts V-12 and V-17

There appears to be no dispute (in light of the DNA test results) the cigarette butts V-12 and V-17 were smoked by Mr. Cooper. The defense claims a handmade cigarette butt (V-12) and a manufactured cigarette butt (V-17) recovered from the Ryen vehicle were planted in the vehicle after the vehicle was towed back to San Bernardino (Cl. Pet at 86.) This contention arises from the fact that the Ryen vehicle was examined/searched by Michael Hall shortly prior to the search/processing of the Ryen vehicle for blood on June 11, 1983 and Mr. Hall did not collect nor note the presence of these two particular cigarette butts in his report. The defense postulates the V-12 and V-17 cigarette butts from the Ryen vehicle originate from the Lease house which the defense admits were smoked and left there by Mr. Cooper. The defense also claims the handmade cigarette butt V-12 was actually consumed in testing (by Mr. Wraxall) in 1984 but "somehow 're-appeared' in time for DNA testing," had somehow changed color, and almost doubled in size. (Cl. Pet. at 11.) The defense postulates that handmade cigarette butt UU was substituted for V-12 for DNA testing.

1. a) On June 11, 1983 Mr. Craig Ogino and Mr. David Stockwell searched the recovered Ryen vehicle for blood in Long Beach shortly after Mr. Hall made his search of the vehicle and collected various indicia/objects. The records clearly show this search occurred in Long Beach on June 11, 1983, not after the vehicle was towed back to San Bernardino. In the search for blood in the Ryen vehicle a handmade cigarette butt (V-12) was recovered from a crevice in the front passenger seat and a manufactured butt was recovered from the front passenger floor (V-17). There is no real surprise that neither of these two cigarette butts were collected or noted by Mr.

Hall – the search conducted by Ogino and Stockwell was more intensive and focused on specific areas and surfaces, rather than on obvious objects scattered about the interior of the vehicle. Also, the handmade cigarette butt was described as being "in a crevice" of the seat upholstery (where the bench seat back and bottom cushions meet) and the manufactured cigarette butt was found on the passenger floor essentially under/at the edge of the passenger seat. Given their locations, it is also not surprising that Mr. Hall did not see these butts or collect them even if he saw them, since he did not collect other obvious cigarette butts in the vehicle ash tray. Planting cigarette butts in the Ryen vehicle in an attempt to place Mr. Cooper in the Ryen vehicle would have required a premeditated conspiracy to use cigarette butts presumably smoked by Mr. Cooper (apparently such was available from the Lease house?) and transport them to Long Beach.

b) Portions of both of the V-12 and V-17 cigarette butts were tested for amylase/saliva and ABO blood group substances by Mr. Gregonis in 1983, then tested similarly by Mr. Wraxall of SERI in 1984. In each sampling, a portion of the cigarette butt most likely to have contacted the smoker's lips/mouth was utilized for testing. In 2002, remnants from both cigarette butts were shown through DNA testing by Mr. Myers at DOJ lab to have been smoked by Mr. Cooper.

c) Mr. Gregonis conducted his examination and analyses on both of these cigarette butts on June 24, 1983. Each butt is described as packaged in a metal pill box. I can find no bench notes or photographs (among the materials provided to me) that document the original condition, appearance, dimensions of these cigarette butts or the sample size. He detected amylase (from saliva) but no blood group substances via absorption-inhibition testing from either cigarette butt. Mr. Gregonis concluded both butts were smoked by a non-secretor. These results were described in his report of August 10, 1983.

d) Mr. Wraxall at SERI received cigarette butts V-12 and V-17 on July 5, 1984. He began his examinations and testing that same day. His bench notes indicate V-12 was received in a pill box containing loose tobacco and cigarette paper about 0.5cm x 1cm in size. His notes and report state he extracted this paper in 50ul of saline to recover water soluble antigenic material from the smoker. Although Mr. Wraxall detected saliva on the V-12 cigarette butt remnant, he was unable to draw any conclusions from his testing as to the ABO/secretor status of the person who smoked the V-12 handmade cigarette.

e) Mr. Wraxall describes the packaging for V-17 as similar to V-12, containing a filter cigarette butt. A portion of the filter paper had been previously removed. He sampled a portion of both the butt paper and the filter for testing. He determined the manufactured butt V-17 was smoked by a person who is ABO type A. V-12 and V-17 were received back at SBC lab on October 21, 1984 by Craig Ogino.

f) In open court on December 4, 1984 Mr. Stockwell testifies that he went to Long Beach to process the Ryen vehicle. (92 R.T. 4286) Mr. Stockwell identifies the V-12 pillbox canister (Exhibit #584) the prosecutor had removed from a white envelope as the same canister in which he had placed the hand-rolled cigarette butt into on June 11, 1983 at "2130 hours, or 9:30 in the evening." Later during direct testimony, he opens the pillbox canister and describes the contents as loose tobacco "as well as a portion of the paper." (92 R.T. 4291.)

g) On December 17, 1984 Mr. Ogino transferred the contents of items J-28, V-12, and V-15 from their original containers to plastic boxes with clear lids. This transfer was so that the jury could see the loose tobacco inside each container that was the subject of Mr. Ogino's testimony that day. V-12 effectively became Exhibit #584A at that time. The V-12 canister became Exhibit #584. (96 R.T. 5045-47.)

h) Mr. Gregonis' inventory check of August 13, 1999 indicates the handmade cigarette butt V-12 canister was not present within its expected location.[29] This "disappearance" is explained by the fact that V-12 was in the possession of the court as Exhibits #584/584A at that time. Cigarette butt V-17 was present in the envelope at the time of this inventory. (See Section II.A.6.q above) The V-12 handmade cigarette butt specimen was delivered to DOJ lab on June 21, 2001 by Cal DOJ Special Agent Steve Lindley. Apparently, Mr. Lindley received V-12 from the court clerk. The V-17 manufactured cigarette butt specimen was received at Cal DOJ lab on June 22, 2001 via UPS from SBC lab.

i) The V-12/Court Exhibit #584A/DOJ-5 hand rolled cigarette butt packaging as received at DOJ lab in June 2001 is shown in Figure 23. This packaging now reflects the plastic box with a clear lid marked "12-17-84, 1116hrs, CO, V-12 cig Ryen car " into which Mr. Ogino transferred V-12 as a court exhibit. The contents of the square plastic box as received by Mr. Myers at the DOJ lab – a handmade cigarette butt remnant and loose tobacco and a close-up of the remnant of a hand rolled cigarette butt are shown in Figure 24.

[29] The handmade cigarette from the Cooper vehicle QQ canister was also not present.

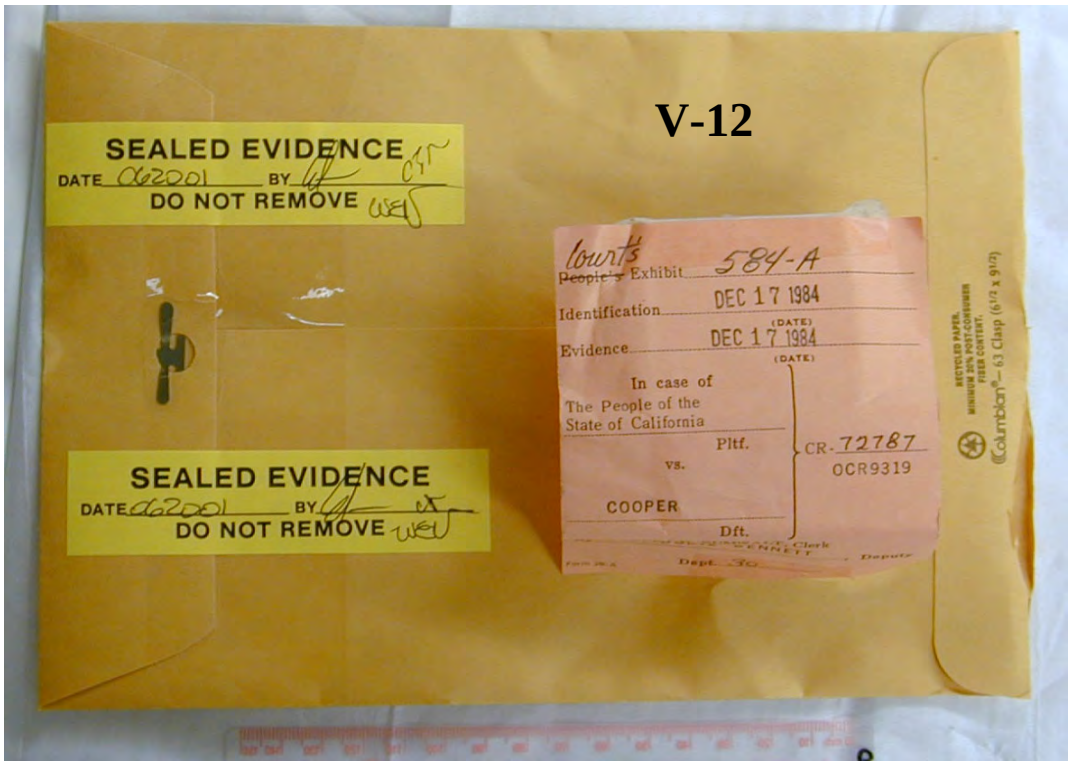


Fig. 23: Packaging for the V-12/Ex. 584A hand rolled cigarette butt from the Ryen vehicle as received at Cal DOJ lab [Cal DOJ photo]

Fig. 24: Hand rolled cigarette butt V-12/Ex. 584A internal packaging and close-up of the remnant of paper used as the DOJ-5 DNA test sample. [Cal DOJ photos]

j) V-12 (DOJ-5/Court Exhibit #584A) was examined on July 6, 2001 by Mr. Myers and Dr. Blake. Mr. Myers bench notes describe the butt as a fragment of burned paper, about 7x7mm. He noted the proximal end (away from the burned end) had been sampled previously. Mr. Myers reasoned the seam of the paper could also have saliva along it from the smoker who rolled the cigarette, so he used the entire paper fragment as his DNA sample. Approximately 1.2ng of DNA was recovered and all of this DNA was consumed in a Profiler Plus amplification. This result was a partial, single source profile compatible with Mr. Cooper and about 1 in 12 million persons chosen at random.

k) V-17[30] was examined on July 6, 2001 by Mr. Myers and Dr. Blake. The V-17 manufactured cigarette butt packaging is shown in Figure 25; the sampling of the butt by Mr. Myers is shown in Figure 26. The paper had been removed from the proximal (mouth) end of the filter in previous testing by Mr. Gregonis and Mr. Wraxall, but the filter itself remained. Approximately 5mm of the end of the naked filter was removed for DNA extraction. Approximately 0.3ng of DNA was recovered from V-17 and all of that DNA was used in a Profiler Plus amplification that produced a partial, but essentially unique single source profile identifying Mr. Cooper as the smoker.

Fig. 25: V-17 Manufactured cigarette butt from the Ryen vehicle packaging as received at DOJ lab, showing top and bottom of the pill box. [Cal DOJ photos]

[30] The SB lab manufactured cigarette butt item number V-17 was carried forward by DOJ (no different DOJ # was assigned.)

Fig. 26: The manufactured cigarette butt recovered from the Ryen vehicle as received at DOJ lab and as sampled for DNA testing. [Cal DOJ photos]

l) The DNA test results from these two cigarette butts are unequivocal and for all intents and purposes demonstrate the two cigarette specimens tested by Mr. Myers were smoked by Mr. Cooper. The V-12/DOJ-5 and V-17 cigarette butt DNA profile electropherograms are attached as Exhibits 16 and 17, respectively.

m) The history/chain of custody of the V-12 handmade and V-17 manufactured cigarette butts is intact. I find no support for the claim that either cigarette butt was planted in the Ryen vehicle.

n) The sampling history of handmade cigarette butt V-12 is also clear. The defense presumes that Mr. Wraxall used all of the available cigarette paper for his testing and that all of the paper was consumed. This is not necessarily the case. Mr. Wraxall may have merely described the portion of paper he used for his testing – not all that was

present; or, he may not have discarded the paper he used for his aqueous extraction.[31] Either way, clearly there was a small portion of handmade cigarette butt present in V-12 when Mr. Stockwell opened the canister in court on December 4, 1984 and when Mr. Ogino transferred the V-12 contents to Ex. 584A on December 17, 1984. There is no reason for anyone to "plant" a replacement handmade cigarette butt into the V-12 canister prior to December 4, 1984. As was the case with the bloodstain A-41 which was also considered to be consumed at trial, whether the V-12 butt paper was consumed in previous testing was of no moment. Nor was there any reason for the jury to visually *see* a portion of a cigarette butt – the repackaging of V-12 was so that the type of loose tobacco present could be visually inspected by the jury. Further, it is ludicrous to presume an agent of the state planted more cigarette paper into V-12 in 1984: 1) there was no way to be sure Mr. Cooper's saliva would be on a handmade cigarette butt used as a replacement; 2) there was no reason to believe there would be any need for future testing of the butt; and 3) there was no way to know that future testing would be capable of providing any better genetic discrimination to incriminate Mr. Cooper.

o) The defense claims that the entire specimen QQ, a handmade cigarette butt from the Cooper vehicle packaged in a black plastic film canister,[32] also "inexplicably disappeared" prior to the DNA testing of handmade cigarette butt V-12. The defense suggests that handmade cigarette QQ from the Cooper vehicle (which the defense apparently concedes *was smoked* by Mr. Cooper) may have been substituted for handmade cigarette butt V-12 before V-12 was sent to the DOJ lab in 2001 for DNA testing. My review of the available records reveal that Mr. Gregonis did no sampling or testing of cigarette QQ. Cigarette butt QQ was examined by Mr. Wraxall in 1984 in conjunction with the V-12 and V-17 cigarette butts. Mr. Wraxall described cigarette butt QQ as presenting in a black plastic film canister and approximately 5cm in length, burned on one end. The cigarette butt QQ in the photograph in Mr. Wraxall's notes as provided to me is not discernible. He does not indicate noting any prior sampling/paper removal of the unburned end. Mr. Wraxall indicates in his notes and his report that he removed a "small amount" of the unburned end and a similar "control" sample for testing (the sample dimensions were not noted by Mr. Wraxall.) Mr. Wraxall detected a "small amount" of amylase activity but none of his genetic testing (ABO and Lewis typing) was informative.

p) The size (particularly lengthwise from the unburned end) of the Wraxall QQ butt samples is unclear. A 1cm section is usual and customary. Assuming Mr. Wraxall removed approximately 2cm (1cm for each of his samples) of the length of the QQ cigarette butt, there should be approximately 3cm remaining. It is clear from the DOJ photographs and Mr. Myers' notes that cigarette butt V-12 is only approximately 0.5cm long. This fact makes it highly unlikely that cigarette butt QQ was a nefarious

[31] Dr. Blake, who worked with Mr. Wraxall during the 1984 testing of the V-12 and V-17 cigarette butts expressed no surprise or alarm at the presence of a remnant of V-12 cigarette butt in 2001 when working with Mr. Myers.
[32] Not to be confused with a tin pillbox-type canister.

substitute for cigarette butt V-12. Both the size of QQ and the previous failure by Mr. Wraxall to develop any genetic link of QQ compatible with Mr. Cooper makes QQ an unwise choice as a V-12 substitute in such a complicated conspiracy. Finally, the planting had to occur before December 4, 1984. DNA testing had not been invented at that time.

q) Handmade cigarette butt QQ may simply have been misplaced in storage. Mr. Gregonis' inventory check on August 13, 1999 failed to locate QQ. Mr. Gregonis looked for QQ in Box C08176. A list of the contents of Box C08176 indicates QQ should be in that box. However, a list of the contents of Box C08181 also indicates QQ is within that box. The records available to me do not indicate whether Mr. Gregonis checked Box C08181 on August 13, 1999.

F. Testing for latent blood with Luminol

The defense contends that indications of the presence of latent blood detected with Luminol in the Lease house bathroom shower were "false positive" reactions due to the presence of bleach on the test areas; and that any subsequent presumptive blood testing with *ortho*-tolidine (o-tol) to supplement the Luminol findings was procedurally flawed[33] or was not even done. I am trained in using Luminol, and over the course of my career I have processed several residential crime scenes and vehicles with Luminol. My review of the available contemporaneous scene/processing notes, reports, and testimony of Mr. Stockwell and Mr. Ogino demonstrate none of the defense's claims of flawed presumptive blood testing have merit.

1. a) Luminol testing[34] for latent blood was conducted in the Lease house on June 8, 1983 and by Mr. Stockwell and Mr. Ogino. Contemporaneous notes in the form of narratives and sketches document the Lease house address, date and time, areas tested, and those present for the testing. Mr. Stockwell's handwritten notes describe "blood found in several areas – front hallway, bathroom, etc. Luminol shows several things – S cleaned up in E bathroom (shower & sink) …." This documentation is attached as Exhibit 18.[35] These notes do not describe any subsequent o-tol testing and the records indicate that samples of luminescent areas were not collected. However,

[33] The defense questions whether "the secondary test that could potentially rule out bleach as the cause of the positive (Luminol) result" was performed, and if so, was it performed in the two-step manner which greatly decreases the likelihood of a false positive reaction.

[34] Luminol is a one-step alkaline chemical aerosol test that produces light in the presence of blood. The heme moiety in blood hemoglobin has catalase enzyme-like activity that will rapidly convert Luminol upon contact to a form that emits light. Under darkened conditions, the observation of luminescence in an area processed with Luminol focuses one's attention for sampling to areas that might contain latent blood. Because of its sensitivity and that it is applied as a fine mist, large areas can be processed efficiently and rapidly. Because of the potential for substances other than blood to cause this reaction, a second two-step presumptive test for blood of blood is conducted on the area or sample from the luminescent area. The second presumptive test, in this case o-tol, is acidic. The profound pH difference and the two-step application provide more specificity for hemoglobin, producing very few false positives. Although both tests are presumptive for blood, a positive reaction with both tests is very highly indicative of blood rather than a non-blood, or false indication.

[35] SBC Sgt. Swanlund's report of June 22, 1983 also documents the June 6, 1983 Lease house Luminol processing.

the October 7, 1983 report signed by Mr. Stockwell and Mr. Ogino states "All areas testing positive [with Luminol] were screened with an additional chemical test." This statement does not describe the nature or the results of the secondary chemical test, however it is scientifically reasonable and logical, based on standard operating practice at SBC lab and generally, that the "additional chemical test" was o-tol, the routine presumptive test for blood employed by SBC lab, and that the listed areas were positive for blood with the additional test.

b) Mr. Stockwell testified both during the preliminary hearing (Nov 29, 1983, Prelim. Hrg. 11 R.T. 78-89) and the trial (92 R.T. 4293-4299) to the fact that secondary o-tol testing was conducted at the scene in each instance/location and that the o-tol testing was conducted in the usual and proper two-step manner. His testimony during the preliminary hearing in regard to the manner in which the o-tol testing was conducted was mistakenly interpreted or mischaracterized by Mr. Negus as having been done as a one-step test. This merely reflects understandable scientific ignorance by the defense. Other than aerosol applications, presumptive blood test reagents are never combined with the hydrogen peroxide as a one-step application. This is because 1) that would defeat the enhanced specificity of the reagent, and 2) the reagent would auto-oxidize so quickly that it would not be useful for more than a few minutes. Further, this two-step application process is merely described in scientific jargon as "the o-tol" test, or the "phenolphthalin/Kastle-Meyer" test, or the "leukomalachite green" test, etc., not as the "two-step" o-tol hydrogen peroxide test.

c) The o-tol reagent is stable for weeks. It is generally prepared in advance as a traceable "lot" from which small aliquots are taken and stored in small dropper bottles for convenience of use at a work bench or in the field over the course of time. Typically, a minute amount of suspected blood is transferred to a clean piece of filter paper or a cotton swab. The o-tol reagent is dispensed from this aliquot one drop at a time, sufficient to saturate the sample. One then waits for a few seconds for any vivid blue-green color development to occur. If color develops at this point, something other than blood is responsible, hence the result may be a false positive. In the absence of color development, dilute hydrogen peroxide reagent, which is also stable for weeks, is then applied in drop-wise fashion. The development of a vivid blue-green color at this point, which will intensity as the reaction (catalyzed by hemoglobin) continues over time, is the presumptive indication of the presence of blood in the sample. In my many years of work as a forensic serologist, I nor any of my coworkers have never combined a catalytic presumptive blood test reagent and hydrogen peroxide as a one-step application during the examination of physical evidence.

d) The common practice of supplementing positive Luminol findings with a subsequent presumptive test (when possible and practicable) is supported by other findings in the Lease house. Mr. Stockwell testified a small *unnoticed* but otherwise visible bloodstain on the floor near the patio window was revealed with Luminol

testing. Mr. Stockwell testified this now readily visible to the naked eye bloodstain gave a positive reaction with o-tol upon subsequent testing. It is illogical that subsequent supplemental testing of luminescent areas, such as the shower and sink, that were *targeted* to help determine whether blood cleanup might have happened in particular location, did not take place when such supplemental testing of other serendipitous findings was conducted.

III. Summary of Conclusions from this Review

A. In regard to Mr. Gregonis' conventional serological testing of evidence, the VV-2 Cooper blood vial and dried reference bloodstain:

1. The claim that Mr. Gregonis waited to test bloodstain A-41 until he knew what he had to match is proved to be false.
2. The simultaneous – even side-by-side – conventional genetic testing of reference and evidence specimen was standard operating procedure in 1983 and in no way compromised the testing.
3. The claim that Mr. Gregonis altered test records to maintain compatibility of evidence test results with Mr. Cooper is proved to be false and now academic.
4. The claim that Mr. Gregonis wasted portions of bloodstain A-41 is shown to have no merit.
5. The claim that blood inexplicably appeared in the A-41 pill box is proved to be false.
6. The claim that Mr. Gregonis supplemented the blood in the VV-2 Cooper reference blood vial with the blood of another person and then planted some of the mixed blood from the VV-2 Copper reference blood vial Mr. Cooper's blood in the A-41 pill box in 1999 is proved to be false.
7. The claim that the mixture result produced by MitoTyping Technologies from their analysis of the VV-2 Cooper reference bloodstain supports tampering of the VV-2 Cooper reference blood vial is shown to have no merit.

B. That blood on the DOJ-6 beige t-shirt was planted by agents of the State:

1. A small bloodstain found on the beige t-shirt was determined before trial to be compatible with victim Doug Ryen. This was the only conventional testing conducted on the beige t-shirt. Planting Mr. Cooper's blood on the t-shirt in 1983 and not testing and advancing it as incriminating evidence at trial is irrational.
2. Blood on the DOJ-6 beige t-shirt found to be compatible with Mr. Cooper was not located until 2001. The minimal amounts of blood and its jumbled distribution defy any notion the blood from Mr. Cooper was planted. Neither Mr. Myers nor Dr. Blake noted even a possibility the bloodstain evidence on the beige t-shirt was contrived.
3. The blood on the t-shirt compatible with Mr. Cooper (DOJ-6J) is highly degraded. Had this blood been planted from the VV-2 Cooper blood vial in 1999/2001 it would have been essentially undegraded, as demonstrated by the 2019 Bode lab analysis of

blood remaining in the VV-2 Cooper reference blood vial, and the mixture ratio would have been much more balanced.

4. The EDTA testing proves the blood from Mr. Cooper on the beige t-shirt was not planted. The degraded nature of the DNA from the December 2004 DNA testing of the EDTA-extracted bloodstain from the beige t-shirt augments the proof that the blood on the beige t-shirt from Mr. Cooper was not planted. Mr. Taylor's contention that the EDTA-extracted bloodstain DNA might not originate from blood has no merit.
5. Both of the Cal DOJ lab and Bode lab investigations of habitual wearer/owner biology on the beige t-shirt were characterized as unsuccessful. However, a probabilistic genotyping analysis of the E30 Bode lab test result from the remainder of the Cal lab DOJ6-B/C/D/E combined beige t-shirt habitual wearer sample DNA extracts, which is a computer analysis Bode lab is capable of doing at any time with their existing data, should prove to be informative.

C. That biology from the orange towel points to the existence of an unknown assailant:

1. The DNA recovered from the Bode lab combined E14efdh orange towel sample is recent. As such, the major male DNA profile developed from this sample is not relevant to the Ryen/Hughes criminal investigation.

D. In regard to cigarette butts V-12 (DOJ-5) and V-17:

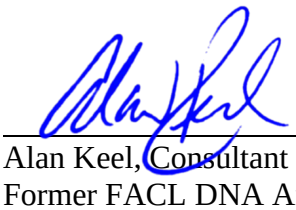
1. The claim that cigarette butts V-12 and V-17 were planted in the Ryen vehicle has no merit. The claim that a replacement handmade cigarette butt was planted in V-12 after the 1984 Wraxall testing and before the specimen was opened in court in November 1984 is demonstrated to be as farfetched as the planting claims alleged of the A-41 bloodstain and the t-shirt.

E. Secondary presumptive blood testing of luminescence

1. The claim that indications of the presence of latent blood detected with Luminol in the Lease house bathroom shower were "false positive" reactions due to the presence of bleach on the test areas has no merit. The suggestion that any subsequent presumptive blood testing of luminescent areas with the o-tol test was procedurally flawed and should not be accepted as further evidence of the presence of latent blood has no merit.

My findings, conclusions, and opinions were in no way influenced by Morrison and Foerster, LLP.

Respectfully submitted,



Alan Keel, Consultant
Former FACL DNA Analysis Unit Supervisor and
DNA Technical Lead Analyst

List of Exhibits

1. List of documents reviewed.
2. Alan Keel resume.
3. List of selected post-conviction cases.
4. Daniel Gregonis' bench notes summary of conventional genetic testing of A-41 before Mr. Cooper's blood was drawn.
5. Joint State and Defense Conventional Genetic Testing Data Sheets showing "side-by-side" test format.
6. Cal DOJ lab item A-41A blood drop pill box swab electropherogram (Profiler Plus).
7. Cal DOJ lab item A-41B blood drop yellow tube debris electropherogram (Profiler Plus).
8. Bode lab item R23a swab of VV-2 Cooper reference blood vial electropherogram [GlobalFiler].
9. Bode lab item 13a swab of A-41 blood drop pill box electropherogram [GlobalFiler].
10. Cal DOJ lab VV-2 Cooper reference dried bloodstain swatch electropherogram [Profiler Plus].
11. Cal DOJ lab item DOJ-6G beige t-shirt bloodstain electropherogram [Profiler Plus].
12. Cal DOJ lab item DOJ-6-01 beige t-shirt EDTA extracted bloodstain, as analyzed by Mr. Myers and at a slightly lower detection threshold (50rfu) [Profiler Plus].
13. Bode lab item E30 remainder of Cal DOJ lab DOJ-6B/C/D/E beige t-shirt habitual wearer sample extracts, combined electropherogram [GlobalFiler].
14. Bode lab item E14efgh combined orange towel reverse surface samples electropherogram [GlobalFiler].
15. Bode lab item E14abcd combined orange towel reverse surface samples electropherogram [GlobalFiler].
16. Cal DOJ lab item DOJ-5/V-12 handmade cigarette butt electropherogram [Profiler Plus].
17. Cal DOJ lab item V-17 manufactured cigarette butt electropherogram [Profiler Plus].
18. David Stockwell's handwritten notes re Luminol processing of the Lease house.
19. Daniel Gregonis' August 13, 1999 handwritten notes of his inventory of Box C08176.

Exhibit 1

List of Documents Reviewed

1. kevincooper.org/people-v-cooper/ Clemency Petition and relevant court transcripts.
2. October 10, 2018 letter to Gov. Jerry Brown from SBCDA.
3. April 4, 2020 letter to Gov. Newsom from SBCDA.
4. August 20, 2020 letter to Gov. Newsom from SBCDA.
5. November 25, 2020 letter to Gov. Newsom from the defense.
6. December 29, 2020 letter to Gov. Newsom from SBCDA.
7. February 23, 2021 letter to Gov. Newsom from SBCDA.
8. February 26, 2021 letter to Gov. Newsom from the defense.
9. March 10, 2021 letter to Gov. Newsom from the defense.
10. May 5, 2021 letter to Gov. Newsom from defense expert Bicka Barlow, Esq.
11. August 23, 2021 memo to Morrison & Foerster from the defense.
12. *Cooper v Brown*, 2005 U.S.Dist. LEXIS46232.
13. November 24, 2004 Protocol for DNA Testing of the Main Stain Fabric Cut-Out and Control.
14. December 23, 2004 Order re Proposed Additional Testing and attachments.
15. Provided SBC lab casefile records.
16. Provided DOJ lab casefile records.
17. Provided Bode lab casefile records.
18. Provided SERI lab casefile records.

Exhibit 2

Alan Keel Resume

BACKGROUND

Mr. Keel conducted traditional serological and DNA analysis investigations and consultation in criminal and civil forensic cases from 1982 through 2021 from 36 US States and has provided expert testimony in 20 state and federal courts. Mr. Keel has particular and extensive knowledge in crime scene processing, evidence examination, human body fluid and cellular material identification, DNA purification, polymerase chain reaction (PCR) based amplification of short tandem repeat (STR) genes, single source and mixture autosomal and Y chromosome DNA profiles, classical population statistics, probabilistic genotyping, and genetic genealogy.

Mr. Keel now assists prosecutors, defense attorneys, and private clients with expert peer review of forensic evidence in pre-trial, post-conviction, and civil litigation, and with recommendations for additional investigation, direct and cross-examination, effective assistance, and client management strategy.

PROFESSIONAL AFFILIATIONS

- American Academy of Forensic Sciences, current.
- California Association of Criminalists, current.
- The American Board of Criminalistics: Certifications:
  - Diplomate, General Criminalistics, 1991-2012; November 2015, current.
  - Fellow, Molecular Biology, 1995-2012; November 2015, current.
- DNA Technical Leader/Manager, pursuant to the 1994 Identification Act and DNA Advisory Board Standard 5.2.1.1, advanced degree waiver conferred 1999.
- Licensed by the Texas Forensic Science Commission in Forensic Biology/DNA, January 2019, current.

EDUCATION

- Bachelor of Science (Zoology), Texas A & M University, College Station, 1978
- Graduate Course Work, Texas A & M University, College Station, 1978-80 in Human Physiology
- Graduate Course Work, University of California, Berkeley, 1993 in Nucleic Acid Biochemistry

PROFESSIONAL EXPERIENCE

- 2011 – 2021 Forensic Analytical Crime Lab, Hayward, CA
  Forensic Biology/DNA Analysis Unit
  DNA Technical Leader/Supervisor/Analyst
- 1999 – 2011 Forensic Science Associates, Richmond, CA
  Criminalist/Consultant in Forensic Biology/DNA Analysis
- 1996 – 1999 San Francisco, CA Police Department
  Forensic Biology/DNA Analysis Unit
  DNA Technical Leader/Supervisor/Analyst
- 1996 Tulsa, OK Police Department
  Forensic Biology/DNA Analysis Unit
  DNA Technical Leader/Supervisor/Analyst
- 1995 – 1996 Consultant in Forensic Science, Shreveport, LA
- 1994 – 1996 Caddo Parish, LA Coroner's Office, Shreveport, Louisiana
  Death Investigator
- 1984 – 1993 Oakland, CA Police Department
  Criminalist III, specialized in Forensic Serology and DNA Analysis
- 1982 – 1984 North Louisiana Crime Lab, Shreveport, Louisiana
  Forensic Serologist

SPECIALIZED TRAINING

- Recombinant DNA Technology, University of California Extension, Berkeley, CA 1986
- Forensic DNA Analysis, University of California Extension, Berkeley, 1989
- The Application of DNA Technology to Forensics, University of California Extension, Riverside, 1990
- PCR/DQA1 Typing Methods, CETUS/California Department of Justice, Berkeley, 1991
- Bloodstain Pattern Interpretation, California Criminalistics Institute, Sacramento, California, 1991
- Advanced PCR Analysis Methods: PM, D1S80, and Quantiblot, Roche Molecular Systems, Alameda, California, 1993
- Advanced Crime Scene Reconstruction, California Criminalistics Institute, Sacramento, CA 1996
- Instrumental DNA Typing and Analysis
    - Capillary electrophoresis 310 instrumentation and GeneScan data collection/Multiplex STR analysis/GenoTyper data analysis, Perkin-Elmer/Applied Biosystems, Foster City, CA 1996
    - Profiler Plus/Cofiler Multiplex STR analysis internal validation SFPD, 1998
    - Identifiler Multiplex STR analysis internal validation FSA, 2001
    - Yfiler Multiplex STR analysis internal validation FSA, 2005
    - Minifiler Multiplex STR analysis internal validation FACL, August 2014
    - ABI Genetic Analyzer CE 3500/Genemapper ID-*X* Multiplex STR analysis: internal vendor training/internal validation FACL, October 2016
    - Investigator 24Plex QS Multiplex STR analysis internal vendor training/internal validation FACL, April 2017
    - STRmix Probabilistic Genotyping: vendor workshop Prague, Czech Republic April 5, 2017; internal validation FACL, January 2018
- Technical Writing for Criminalists, California Criminalistics Institute, May 2021
- FBI Quality Assurance Standards Auditor Training, June 2012

PUBLICATIONS & PRESENTATIONS

- *A Collaborative Study of DQA1 Typing by PCR* presented to the California Association of Criminalists, 1991 Spring Seminar, Berkeley

- *A Collaborative Study of DQA1 Typing by PCR* presented to the American Academy of Forensic Sciences, 1992 Annual Seminar, New Orleans

- *Penile Swab Evidence in the Investigation of Rape* presented at the 1993 International Forensic DNA Analysis Symposium, Quantico, Virginia

- *Sampling Approach and DNA Analysis of Fingernail Evidence Specimens* presented at the Third Joint International Seminar of the Forensic Science Society [United Kingdom] and the California Association of Criminalists, May 2000, Napa, California

- *Finding the Roscetti Stone: a review of the Lori Roscetti homicide investigation and trial transcripts* presented to the California Association of Criminalists, 2005 Spring Seminar, Oakland

- Freedom and Justice Award, presented by the Northeast Council of the Wrongfully-Convicted, Innocence Network Conference, Santa Clara University School of Law, March 2008

- *The Essential Elements of a Forensic DNA Analysis Laboratory Report*; *The Essential Elements of Expert Peer Review of a Forensic Laboratory DNA Investigation*; *The Utility of and Access to CODIS*; and *Some Potential Adverse Consequences of Regulation and Accreditation on Applied Forensic DNA Analysis* presented to the California Public Defender's Association, May 2014, Hayward

- *Adverse Effects of Blanket Quality Assurance Criteria on Sample-to-Sample and Lab-to-Lab Variable Genetic Data*, presented to the Joint California Association of Criminalists/Northwest Association of Forensic Scientists Seminar, October 2014, Rohnert Park, CA.

- *Demystifying "Touch DNA,"* presented to the 2015 National Innocence Network Conference, May 2, 2015, Orlando, FL.

- *The Difference between Low-Level DNA Analysis and Low-Copy Number (LCN) DNA Analysis and Why It Matters to You,* presented to the 2015 National Innocence Network Conference, May 2, 2015, Orlando, FL.

- *The Fundamentals of Forensic DNA Analysis*, presented as training to the Federal Habeas Corpus Resource Center, September 2015, San Francisco, CA

- *A Benchmark for Meaningful Forensic DNA Analysis: Field (Beta) Testing of the Qiagen Investigator Quantiplex Pro qPCR Assay*, presented at the 6th Annual Qiagen Investigator Forum, Prague, Czech Republic, April 5, 2017.

- *The Twenty-six Year Investigation of the Kidnapping, Rape, and Murder of Dana Ireland*, presented at the California Association of Criminalists Seminar, May 2017, San Francisco, CA.

REFERENCES

Prosecution

Rockne Harmon, Esq., Alameda County, CA District Attorney Office, retired.
Cynthia Garza, Esq., Chief, Conviction Integrity Unit, Dallas County, TX District Attorney Office.
Emily Maw, Esq, Chief, Conviction Integrity Unit, Orleans Parish, LA District Attorney Office.
Kurt Mechals, Esq., DDA, San Diego County, CA District Attorney Office.
Kelly Manderino, Esq., DDA, San Luis Obispo County, CA District Attorney Office.
Sean Gallagher, Esq., DDA, San Mateo County, CA District Attorney Office.
Philip Kearney, Esq., Murphy Pearson Bradley & Feeney, San Francisco, CA, former San Francisco County, CA Deputy District Attorney.
Hon. Braden Woods, San Francisco Superior Court Judge, former San Francisco County, CA Deputy District Attorney.

Defense

Hon. Christopher Plourd, Imperial County, CA Superior Court Judge, former defense counsel.
Innocence Project, New York, NY:
Barry Scheck, Esq., Founder and Special Counsel.
Peter Neufeld, Esq., Founder and Special Counsel.
Vanessa Potkin, Esq., Director of Special Litigation.
Nina Morrison, Esq., Sr. Litigation Counsel.
Jane Pucher, Esq. and Susan, Friedman, Esq., Sr. Staff Attorneys.
Jee Park, Esq., Executive Director, Innocence Project New Orleans, LA.
Richard Davis, Esq., Legal Director, Innocence Project New Orleans, LA.
Victor Abreu, Esq., Supervisory Asst. Federal Public Defender/Capital Trial Unit, Eastern District of Pennsylvania.
George Kendall, Esq., Of Counsel, Squire Patton Boggs LLC, New York, NY.
Paul Casteleiro, Esq., Legal Director, Centurion, Princeton, NJ.
Thaddeus Betz, Esq., Criminal Defense Attorney, Bend, OR.

Forensic Serology/DNA Analysis Scientists

Gary Harmor, Laboratory Director and Chief Forensic DNA Analyst, Serological Research Institute, Richmond, CA.

Dr. Edward Blake, Forensic Analytical Crime Lab/Forensic Science Associates, retired.

Dr. George Sensabaugh, Professor Emeritus, Forensic and Biomedical Sciences, University of California at Berkeley.

Exhibit 3

List of Alan Keel Selected Post-Conviction/Unsolved Cold Cases

1. FACL 2021: My work on behalf of a convicted defendant on death row in Alabama eliminated the defendant and co-defendant as the source of semen on the vaginal swab of a 1993 rape/murder victim. The source of the semen was identified via CODIS to another inmate incarcerated for killing another woman sometime after the 1993 crime. This case is currently in litigation.
2. FACL 2021: In 2015, the DNA profile from semen on a vaginal swab and panties of a 1972 rape/murder victim in Illinois was searched in CODIS to no avail. In 2020, 48 years after the crime, on behalf of the State I recovered approximately 360pg of sperm DNA from the perimeter of the stain void in the crotch of the panties. Though highly degraded, via genetic genealogy this tiny bit of sperm DNA led to the identification of the semen source living in Minnesota, who was charged in 2021 with this crime.
3. FACL 2018: Timothy Vail was convicted in 1989 of the 1988 rape/murder of a woman in New York. At trial the State argued the killer was the source of semen in the victim's vagina. Later, it was revealed the State had forged fingerprint evidence against Mr. Vail and in 2018 post-conviction DNA testing was granted. Despite the forged evidence, in joint testing for both sides my work on semen on the vaginal swabs identified Mr. Vail as the semen source.
4. FACL 2013: John Knox was convicted of the 1987 rape/murder of a woman. In 2012 the State of Iowa failed to produce any results from DNA testing of the physical evidence including the rape kit. In 2013 my work in joint DNA testing for both sides identified Mr. Knox as the source of semen on several specimens in the victim's rape kit.
5. FSA 2008: Anthony Caravella was convicted of the rape/murder of a woman in Florida. In 2008 the court granted post-conviction DNA testing. The State failed to produce any results from semen on the victim's vaginal swabs. My work in 2008 on the vaginal swab remnants led to the exoneration of Mr. Caravella and the identification of the actual assailant.
6. FSA 2005: Kennedy Brewer was convicted and sentenced to death in 1995 in Mississippi for the 1992 rape/murder of a three-year-old child. Post-conviction DNA testing in 1995 eliminated Brewer as neither of two sperm sources on the child's vaginal swab. In 2005 my work on the vaginal swabs identified a single semen source, Justin Johnson, who confessed to this crime and a similar crime for which Lavon Brooks had been convicted and sentenced to LWOP. My review of the 1995 DNA testing also revealed that the "second sperm source" was internal contamination of the sample during the testing at the initial crime lab. Both Mr. Brewer and Mr. Brooks were formally exonerated in 2008.
7. FSA 2000: Kenneth Waters was convicted in 1983 of the first-degree murder and armed robbery of a woman in Massachusetts in 1980. My post-conviction DNA work in 2000 on bloodstains left by the killer eliminated Mr. Waters. This case was the first post-conviction exoneration based on DNA analysis of blood stain evidence and was the subject of the major motion picture Conviction.

Exhibits 4 – 19

4. Daniel Gregonis' bench notes summary of conventional genetic testing of A-41.
5. Joint State and Defense Conventional Genetic Testing Data Sheets showing "side-by-side" test format.
6. Cal DOJ lab item A-41A blood drop pill box swab electropherogram (Profiler Plus).
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8. Bode lab item R23a swab of VV-2 Cooper reference blood vial electropherogram [GlobalFiler].
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13. Bode lab item E30 remainder of Cal DOJ lab DOJ-6B/C/D/E beige t-shirt habitual wearer sample extracts, combined electropherogram [GlobalFiler].
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15. Bode lab item E14abcd combined orange towel reverse surface samples electropherogram [GlobalFiler].
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19. Daniel Gregonis' August 13, 1999 handwritten notes of his inventory of Box C08176.

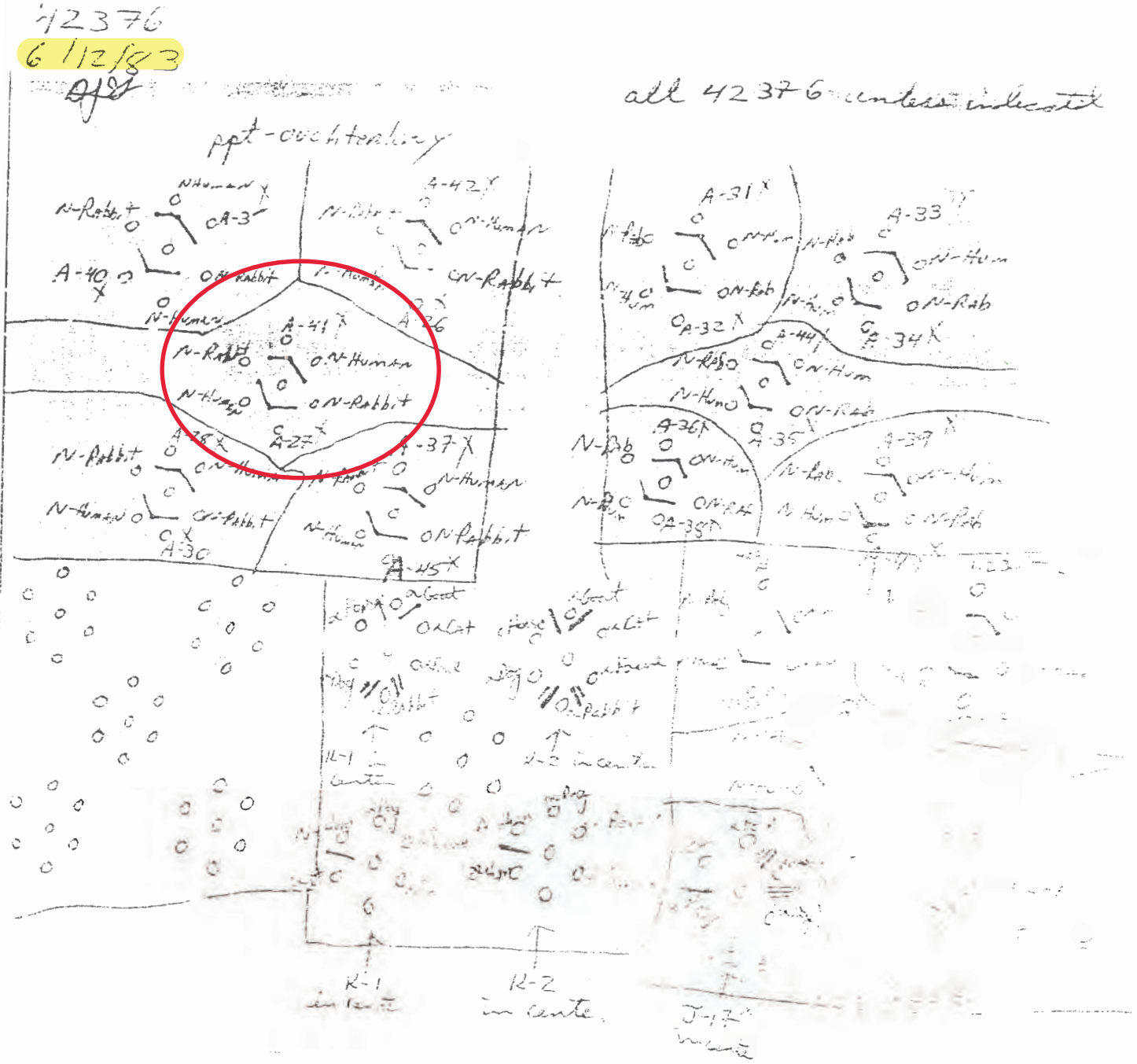
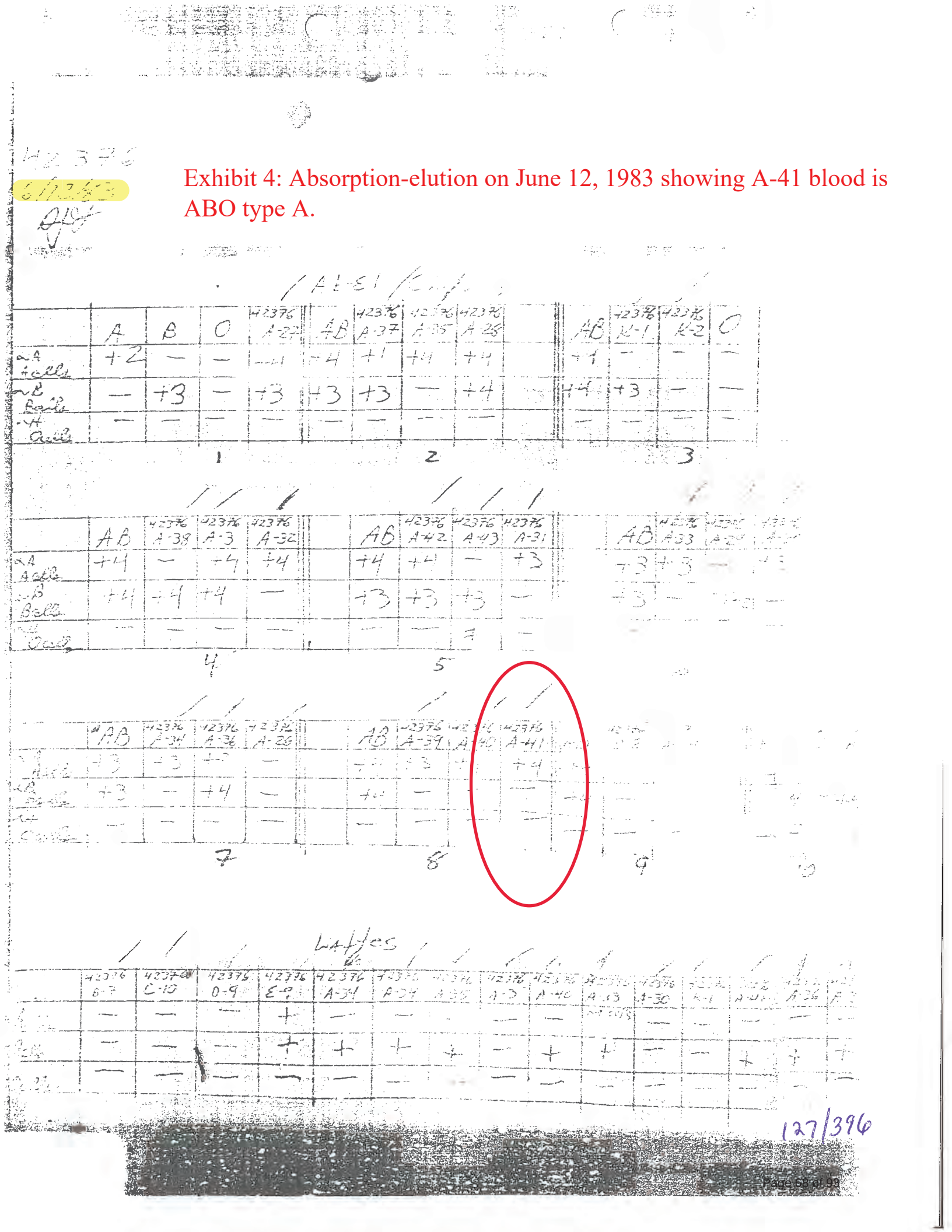


Exhibit 4: Ouchterlony double-diffusion on June 12, 1983 showing A-41 is human blood.

126/396

Exhibit 4: Absorption-elution on June 12, 1983 showing A-41 blood is ABO type A.



B.A.S. GROUP I

DATE 6-13-83 RUN # 258

CRIMINALIST DLH

VOLTAGE START 300 STOP 295

MA START 51 STOP 54

TIME-START 1410 STOP 1705

SAMPLE	EsD	PGM_1	PGM_2
1) 42376 A-38			
2) 42376 A-43	1	2-1	
3) 42376 A-44	1	2-1	
4) 42376 C-8	1	streaked unreadable	
5) 42376 A-35	1		
6) JJ	2-1	2-1	
7) 42376 A-41	1	1	
8) 42376 A-45	1	2-1	
9) 42376 A-34	1	2-1	
10) 42376 C-7	1/2 streaked	streaked	
11) 42376 A-42	1		
12) 42376 A-40	1	2-1	

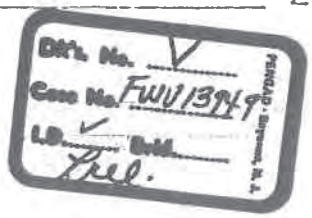
Exhibit 4: Group 1 (EsD, PGM) testing on June 13, 1983 showing A-41 types.

PLEASE READ BY 1) 2) 3)

PHOTOGRAPH # 1 F SE

PHOTOGRAPH # 2 F SE

PHOTOGRAPH # 3 F SE



7/283

B.A.S. GROUP II

DATE 6/28/83 | RUN # 156

CRIMINALIST AJD

VOLTAGE START 150 | STOP 150

mA START 10 | STOP 14

TIME START 1715 | STOP 0920

SAMPLE	EAP	ADA	AK
1) 42391 B-1	B	1	1
2) 42391 A-1	BA	1	1
3) 42374 B	—	—	—
4) BA/2-1/1	BA	2-1	1
5) 42376 A-41	B?	1	1?
6) 42391 C-1	B	2-1	—
7) 42374 C	—	—	—
8) 42376 A-2	BA	1	1
9) CB/1/2-1	CB	1	2-1
10) 42406 A-1	BA	1	1
11) ~~[illegible]~~ 41299 F	BA		1
12) 42406 B-1	BA	1	1

Exhibit 4: Group II (EAP, ADA, AK) testing on June 28, 1983 showing A-41 types

PLATE READ BY 1)_____ 2)_____ 3)_____

PHOTOGRAPH # 1 F_____ _____SEC

PHOTOGRAPH # 2 F_____ _____SEC

PHOTOGRAPH # 3 F_____ _____SEC

PHOTOGRAPH # 4 F_____ _____SEC

Div. No. 2
Case No. FWV 13949
I.D. ✓ Bold
Ziel

39/283

B.A.S. GROUP IV

DATE 6-29-83 RUN #

CRIMINALIST

VOLTAGE START 400 STOP 400

MA START 64 STOP 56

TIME-START 1225 STOP 1425

SAMPLE	CA II (ESD)	PEPA (NEW)	~~PGM Z~~	G
1) PEPA 2-1/CA II 1	1	2-1		
2) 42376 J-9				
3) PEPA 1/CA II 2-1	2-1	1		
4) 42376 A-41	1	2-1		
5) PEPA 2-1/CA II 1	1	2-1		
6) 42376 J-9				
7) PEPA 1/CA II 2-1	2-1	1		
8) 42376 A-2	1	1		
9) PEPA 2-1 CA II 1	1	2-1		
10)				
11)				
12)				

Exhibit 4: Group IV (CAII, PepA) testing on June 29, 1983 showing A-41 types.

FE READ BY 1) 2) 3)

TOGRAPH # 1 F SEC

HOTOGRAPH # 2 F SEC

HOTOGRAPH # 3 F SEC

FSA CASE NO. 83-094

NAME: CD/DG

DATE: 10/3/83

ELECTROPHORESIS DATA SHEET

10/4/83

EXPERIMENT: Tf/Gc

Exhibit 5: Simultaneous Tf/Gc testing of Cooper reference blood VV-2 and A-41 in joint testing with Dr. Blake

SAMPLES:

1.		11.	Tf Gc
2.	Cooper whole blood 42376/VV-2	12.	CD 1
3.	CD / Gc 1-1	13.	CD 1
4.	CB /	14.	CB 2-1
5.	CC / Gc 2-1	15.	C 2-1
6. slot	A 41	16.	CD Shifted anodally??
7.	Tf CD / 1-1	17.	CD 1
8.		18.	
9.		19.	
10.		20.	

BUFFER CONDITIONS:

STOCK G>TTT

TANK

GEL Agarose Type I

RUNNING COND

		END
TIME	14900	15:40
VOLTAGE	400	400
MILLIAMPS	30	30

Buffer 8-24-83

NOTES

Gp III analysis conducted on 10/3/83 + 10/4/83 with Dr. Ed Blake

photos of analysis on back

SA-11

89/283

FSA CASE NO. 83-094

NAME: LB/DG

DATE: 10/4/83

ELECTROPHORESIS DATA SHEET

EXPERIMENT:

SAMPLES:

1.	Bf of Blue	11.	
2.	Hp 1-1 STD 1-1	12.	Cooper STD CHCB ext 2-1
3.		13.	
4.	Hp 2-1 STD 2-1	14.	
5.		15.	
6.	Hp 2-1 M STD 2-1M	16.	
7.		17.	
8.	Hp 2-2 STD leaked out of well over samples 4712	18.	
9.		19.	
10.	A41 CHCB ext 2-1M very weak	20.	

BUFFER CONDITIONS:

STOCK Tris/Borate pH 8.4

TANK

GEL Gradient 4-30%

RUNNING CONDITIONS:

	BEGIN	END
TIME	1729:03	
VOLTAGE	200	
MILLIAMPS	25	

proton to 1428:13

NOTES

Hp run on 4/30% Acrylamide Gel with Dr Ed Blake on 10/4/83 - developed

Exhibit 5: Simultaneous and side-by-side Hp testing of Cooper reference blood VV-2 and A-41 in joint testing with Dr. Blake

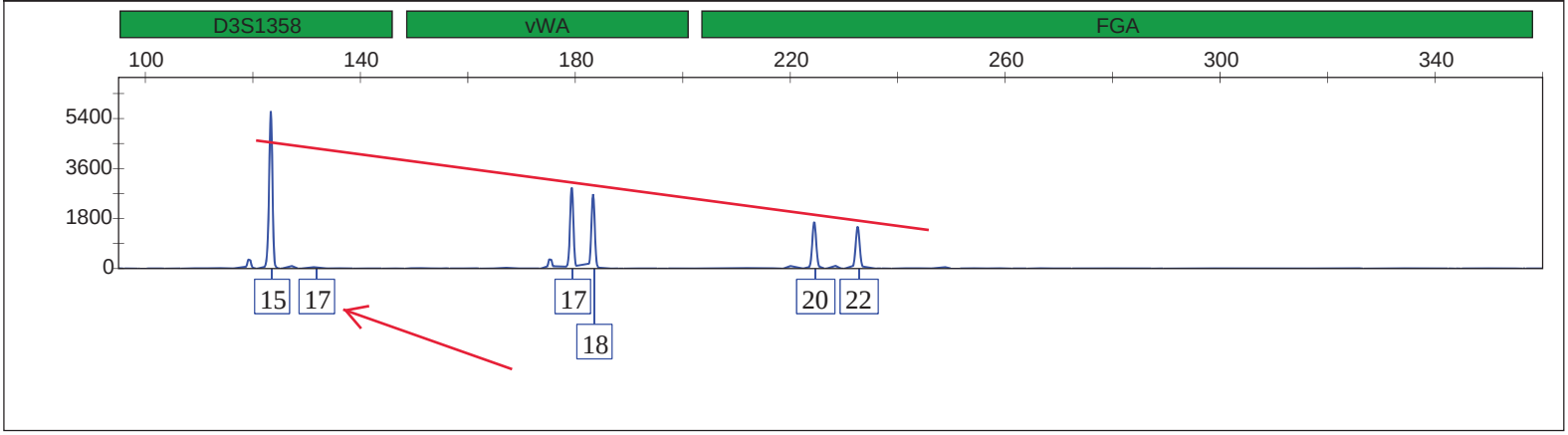
FSA-11

82/283

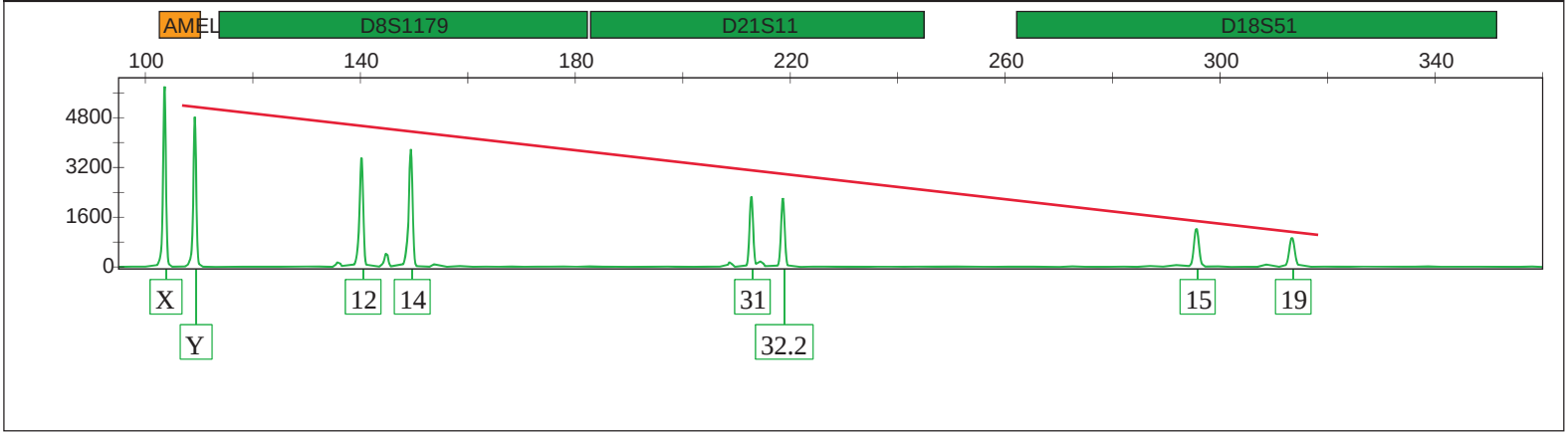
GeneMapper® ID-X 1.5

Exhibit 6: Cal DOJ lab Profiler Plus result of A-41A blood.

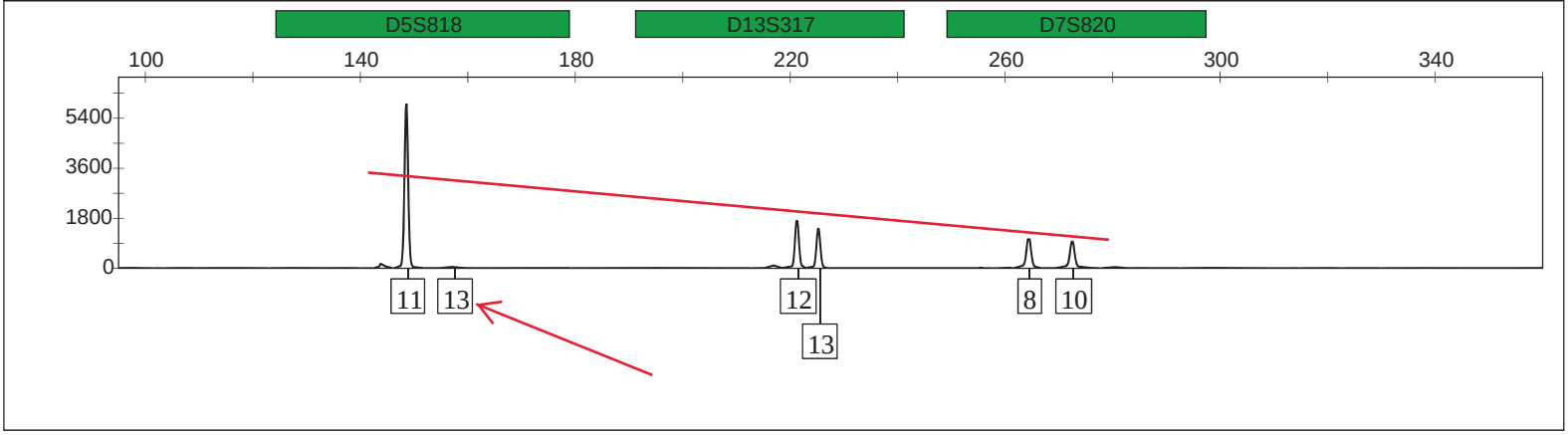
Sample File	Sample Name	Panel	SQ
BK010176P A41A 7_17_01-2.fsa	BK010176P A41A Bloodstain from residence - paint chip in tin and swab of tin combined, 5 sec	Profiler_Plus_v1.4X	



BK010176P A41A 7_17_01-2.fsa	BK010176P A41A Bloodstain from residence - paint chip in tin and swab of tin combined, 5 sec	Profiler_Plus_v1.4X	



BK010176P A41A 7_17_01-2.fsa	BK010176P A41A Bloodstain from residence - paint chip in tin and swab of tin combined, 5 sec	Profiler_Plus_v1.4X	

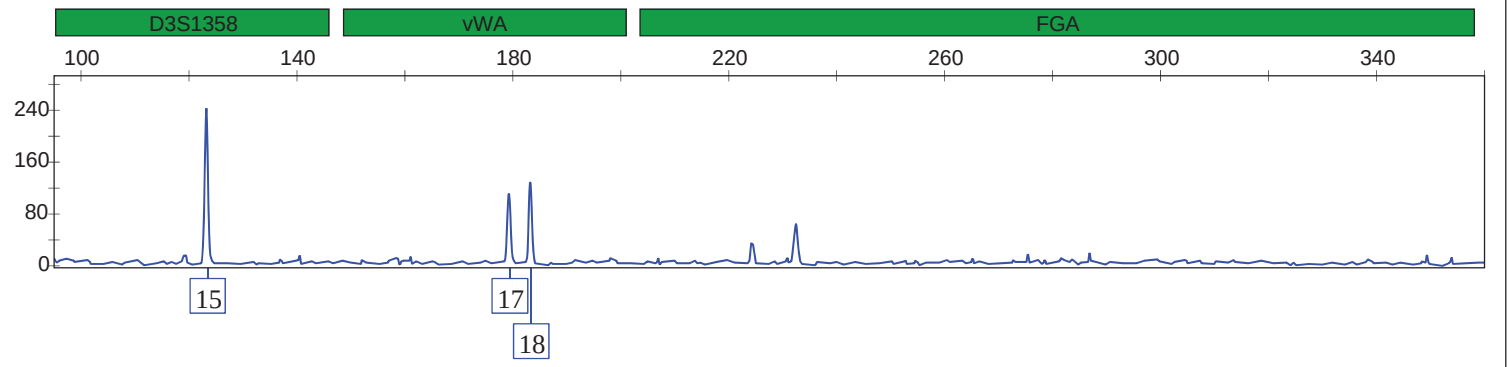


→ indicates detected trace level minor contributor alleles

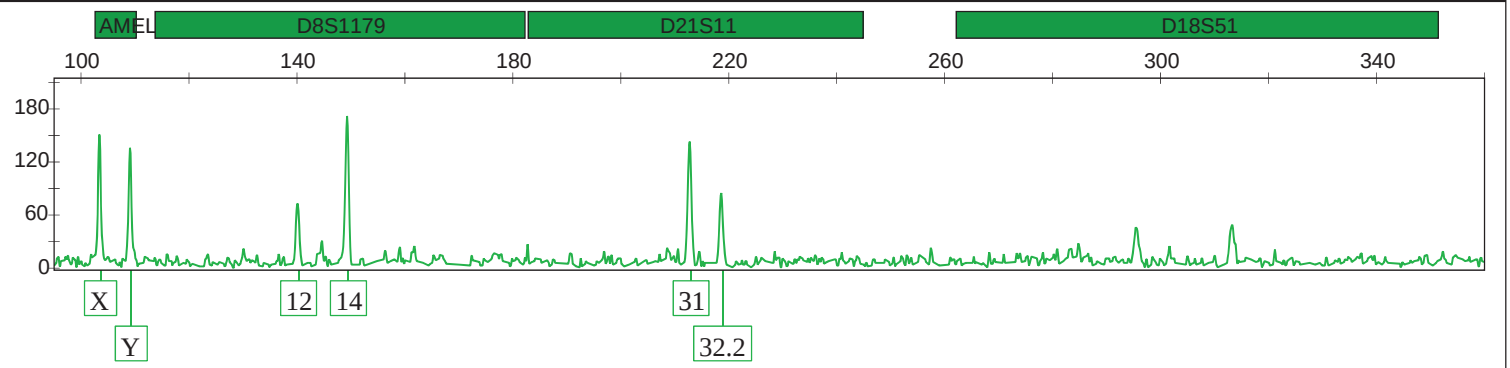
GeneMapper® ID-X 1.5

Exhibit 7: Cal DOJ lab Profiler Plus result of A-41B microcentrifuge tube debris

Sample File	Sample Name	Panel	SQ
BK010176P A41B 7_16_01.fsa	BK010176P A41B Bloodstain from residence - microcentrifuge tube with white debris	Profiler_Plus_v1.4X	



BK010176P A41B 7_16_01.fsa	BK010176P A41B Bloodstain from residence - microcentrifuge tube with white debris	Profiler_Plus_v1.4X	



BK010176P A41B 7_16_01.fsa	BK010176P A41B Bloodstain from residence - microcentrifuge tube with white debris	Profiler_Plus_v1.4X	

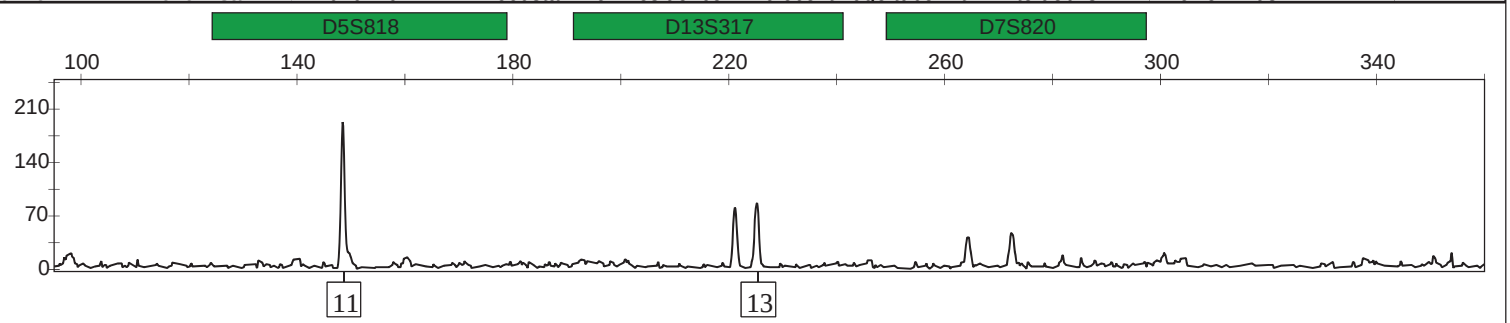
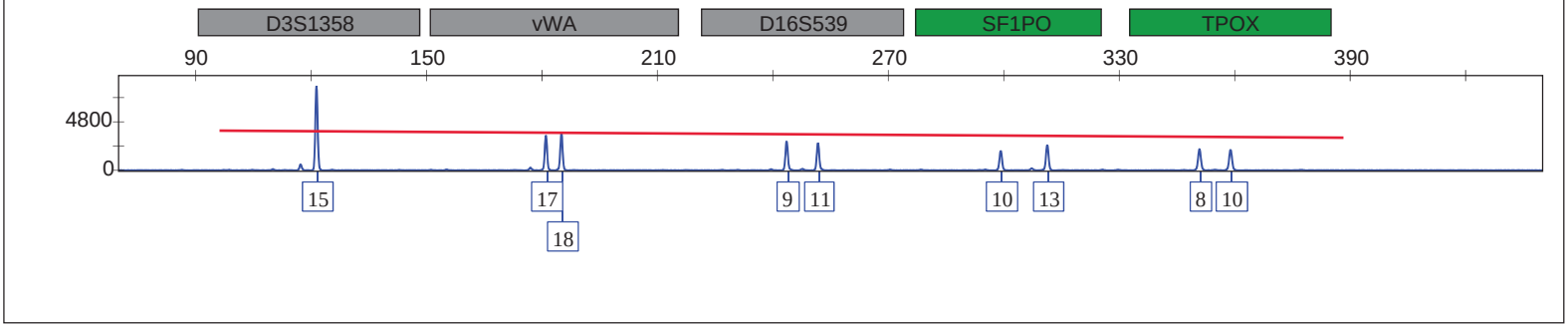
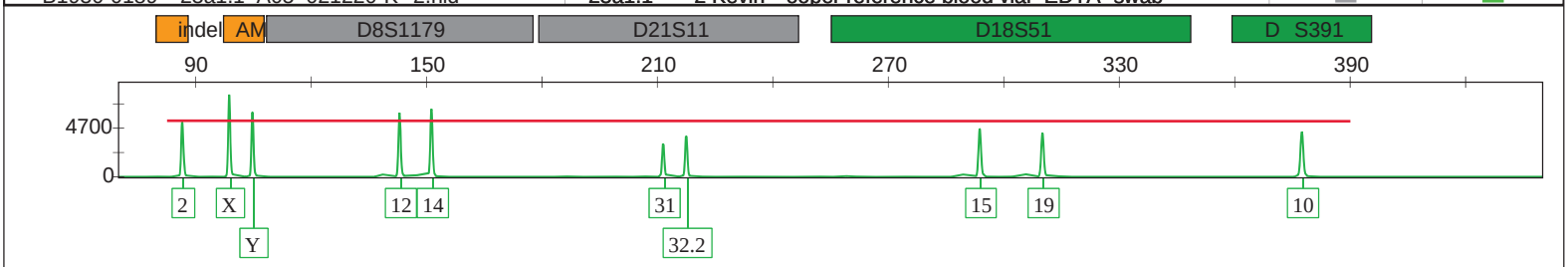


Exhibit 8: Bode lab R23a Swab of VV-2 Kevin Cooper reference blood vial

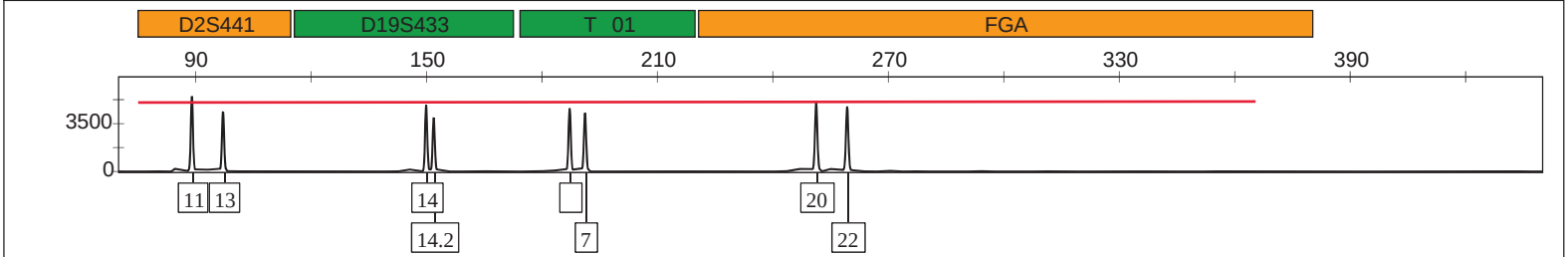
Sample File	Sample Name	SOS	SQ
B1930-0189- 23a1.1 A05 021220-K 2.hid	23a1.1 -2 Kevin ooper reference blood vial EDTA swab		



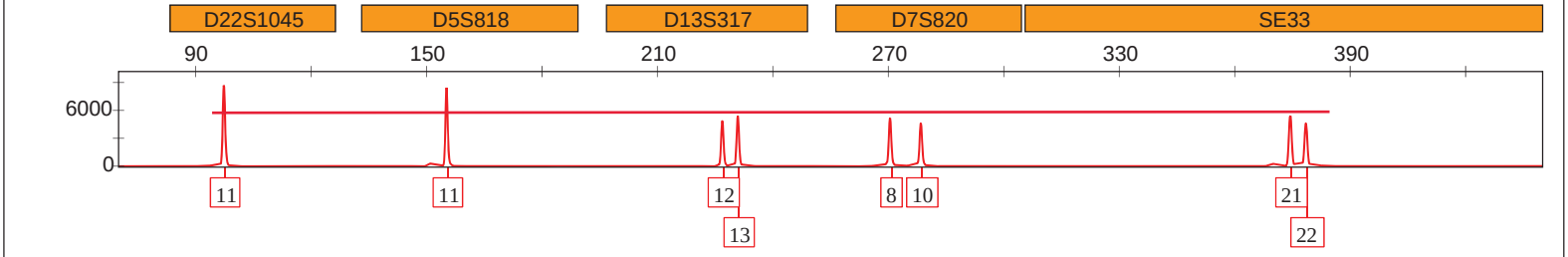
B1930-0189- 23a1.1 A05 021220-K 2.hid 23a1.1 -2 Kevin ooper reference blood vial EDTA swab



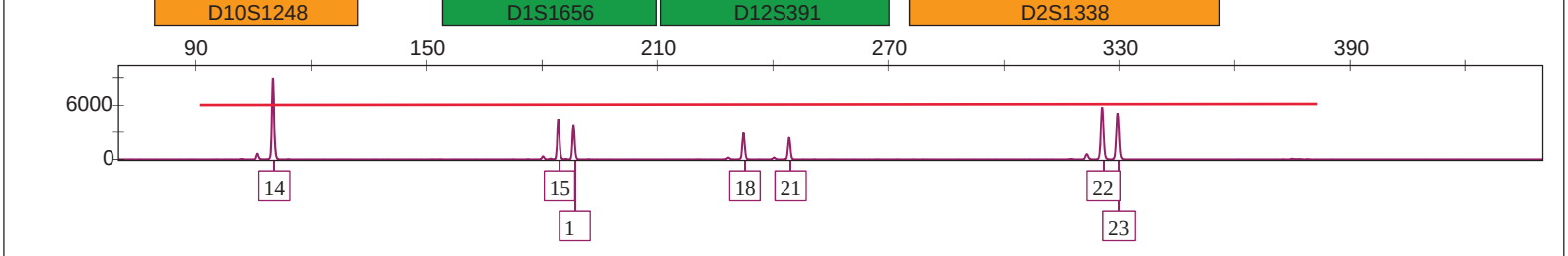
B1930-0189- 23a1.1 A05 021220-K 2.hid 23a1.1 -2 Kevin ooper reference blood vial EDTA swab



B1930-0189- 23a1.1 A05 021220-K 2.hid 23a1.1 -2 Kevin ooper reference blood vial EDTA swab



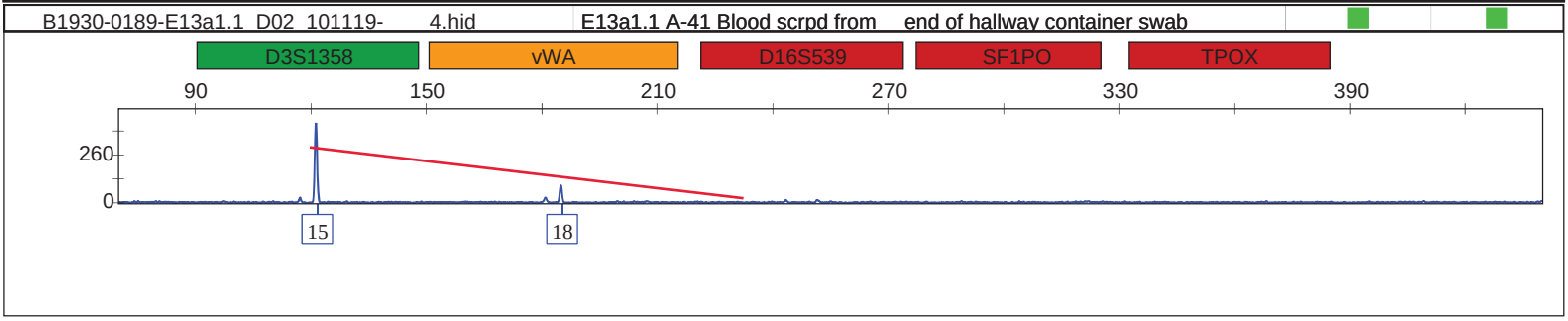
B1930-0189- 23a1.1 A05 021220-K 2.hid 23a1.1 -2 Kevin ooper reference blood vial EDTA swab



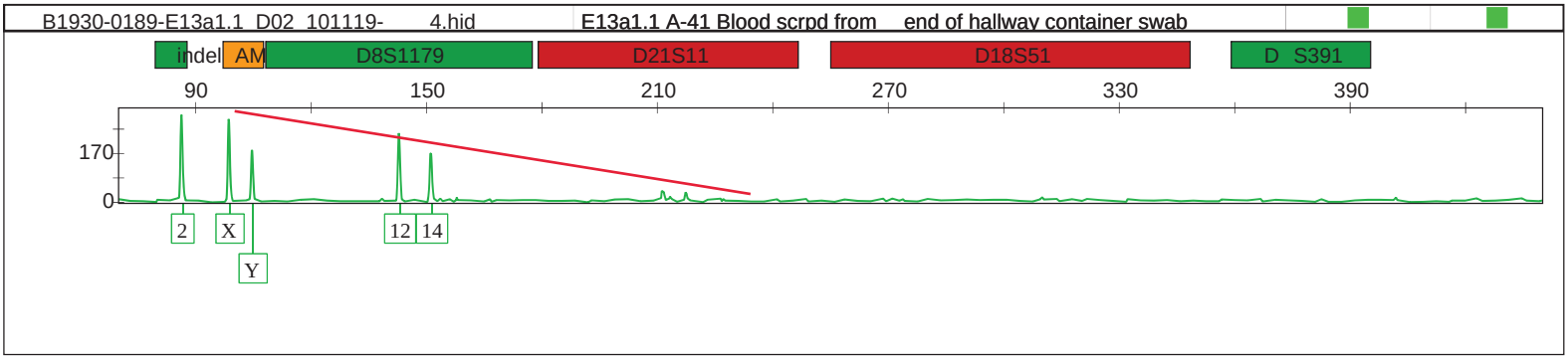
GeneMapper® ID-X 1.5

Exhibit 9: Bode lab Item No. E13a1.1 Swab of A-41 pill box in 2019 [GlobalFiler]

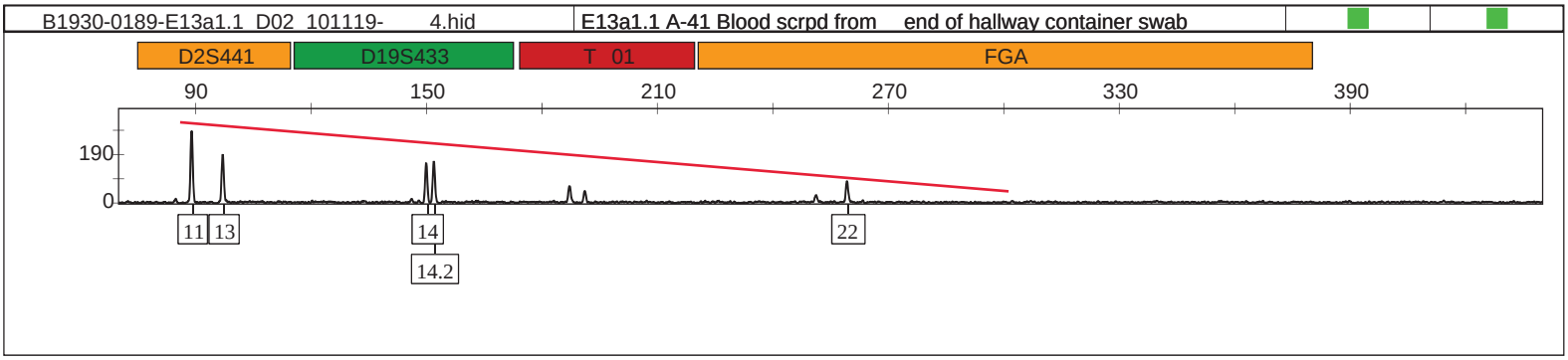
Sample File	Sample Name	S	S	SQ
B1930-0189-E13a1.1_D02_101119-4.hid	E13a1.1 A-41 Blood scrpd from end of hallway container swab			



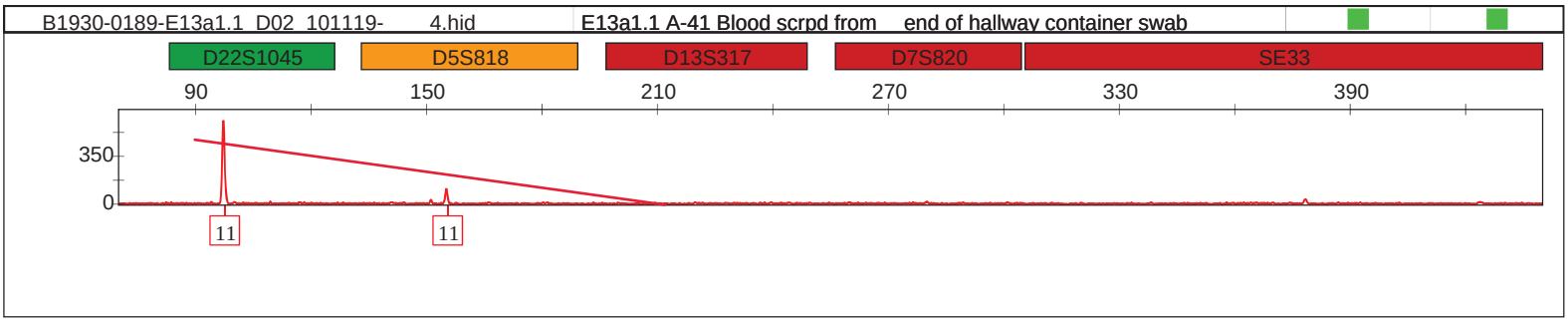
B1930-0189-E13a1.1_D02_101119-4.hid E13a1.1 A-41 Blood scrpd from end of hallway container swab



B1930-0189-E13a1.1_D02_101119-4.hid E13a1.1 A-41 Blood scrpd from end of hallway container swab



B1930-0189-E13a1.1_D02_101119-4.hid E13a1.1 A-41 Blood scrpd from end of hallway container swab



B1930-0189-E13a1.1_D02_101119-4.hid E13a1.1 A-41 Blood scrpd from end of hallway container swab

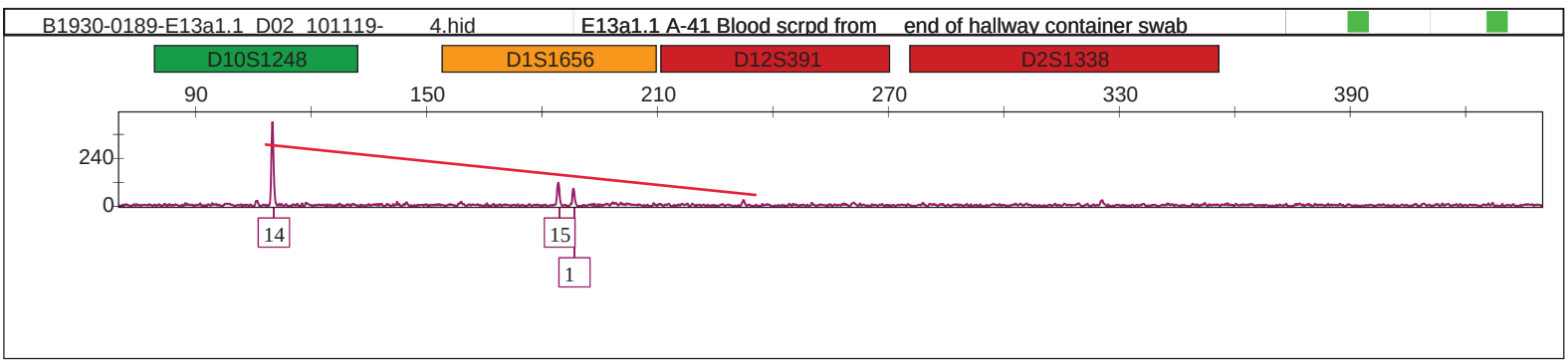
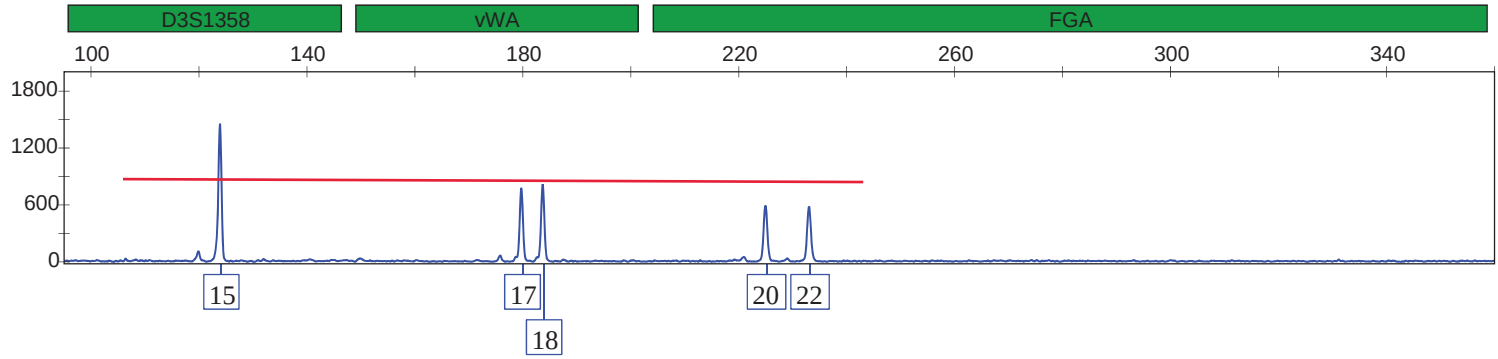
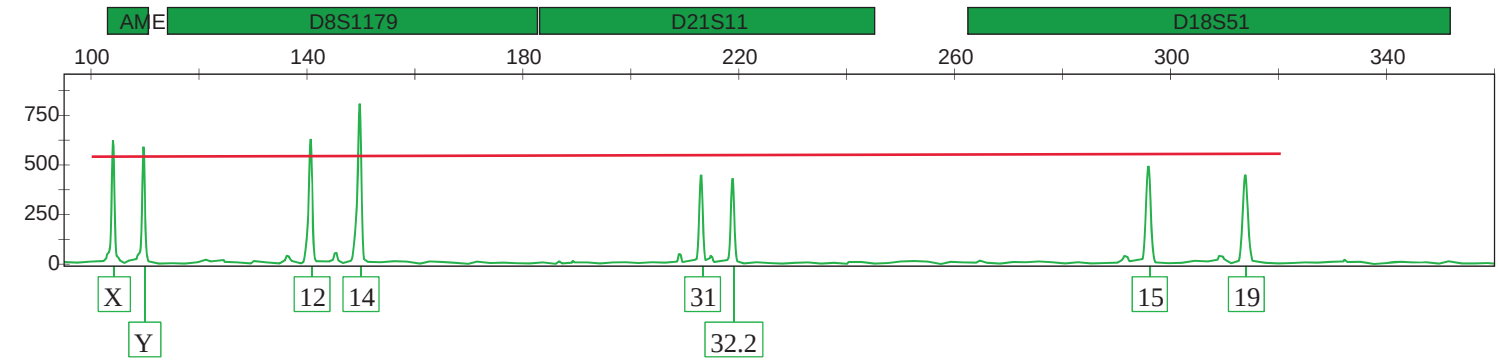


Exhibit 10: Item VV-2 Cooper dried reference bloodstain, 2002 DOJ lab analysis [Profiler Plus]

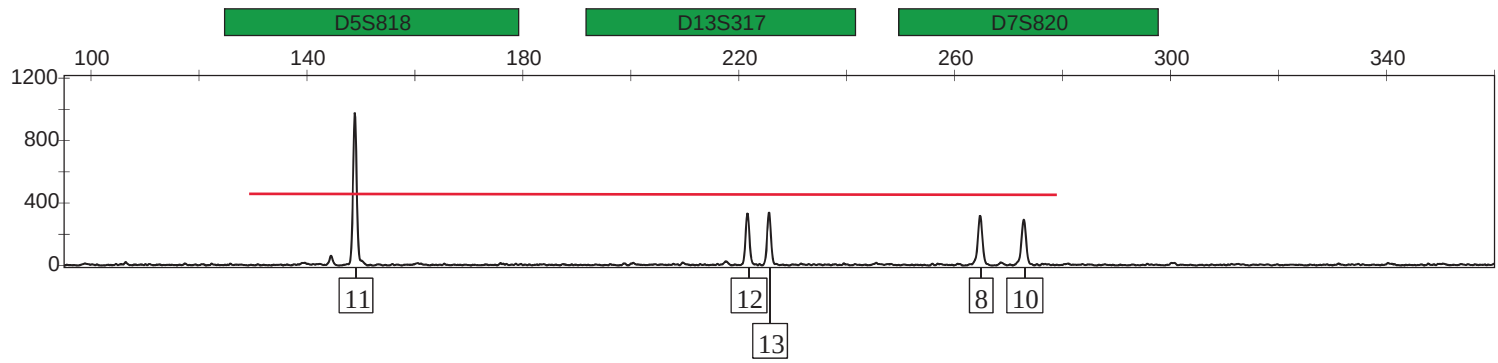
Sample File	Sample Name	Panel	SQ
BK010176P 2-8_14_02.fsa	BK010176P 2 Kevin ooper reference bloodstain dried 8-1-83 sampled 8-1-02	Profiler Plus v1.4X	



BK010176P 2-8_14_02.fsa	BK010176P 2 Kevin ooper reference bloodstain dried 8-1-83 sampled 8-1-02	Profiler Plus v1.4X	



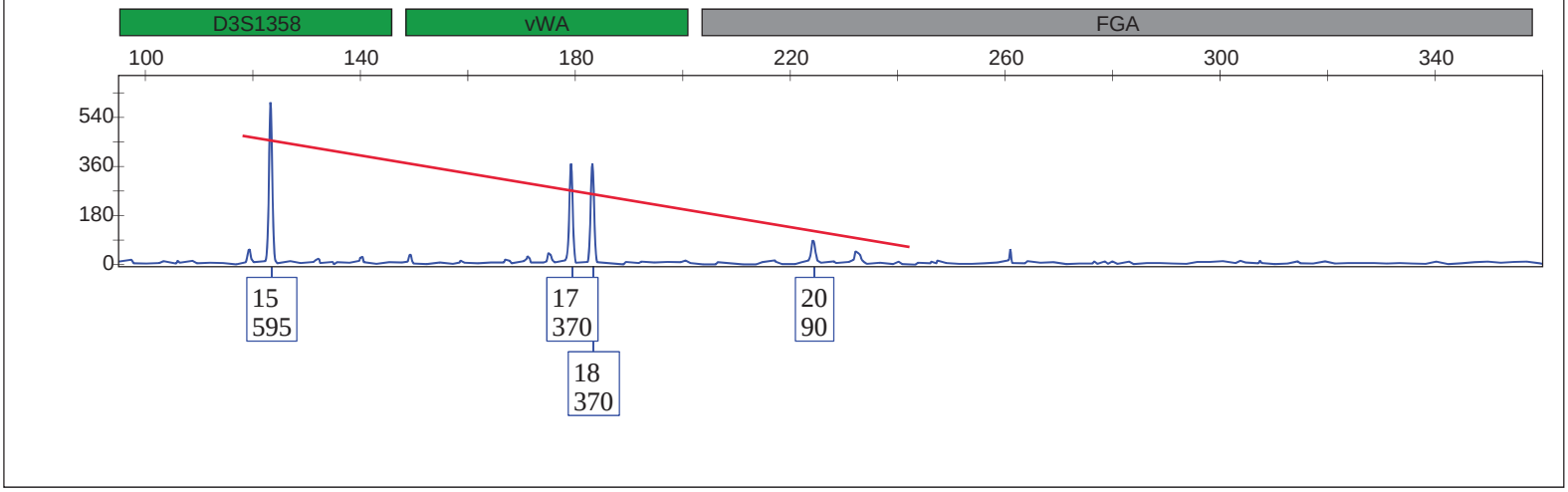
BK010176P 2-8_14_02.fsa	BK010176P 2 Kevin ooper reference bloodstain dried 8-1-83 sampled 8-1-02	Profiler Plus v1.4X	



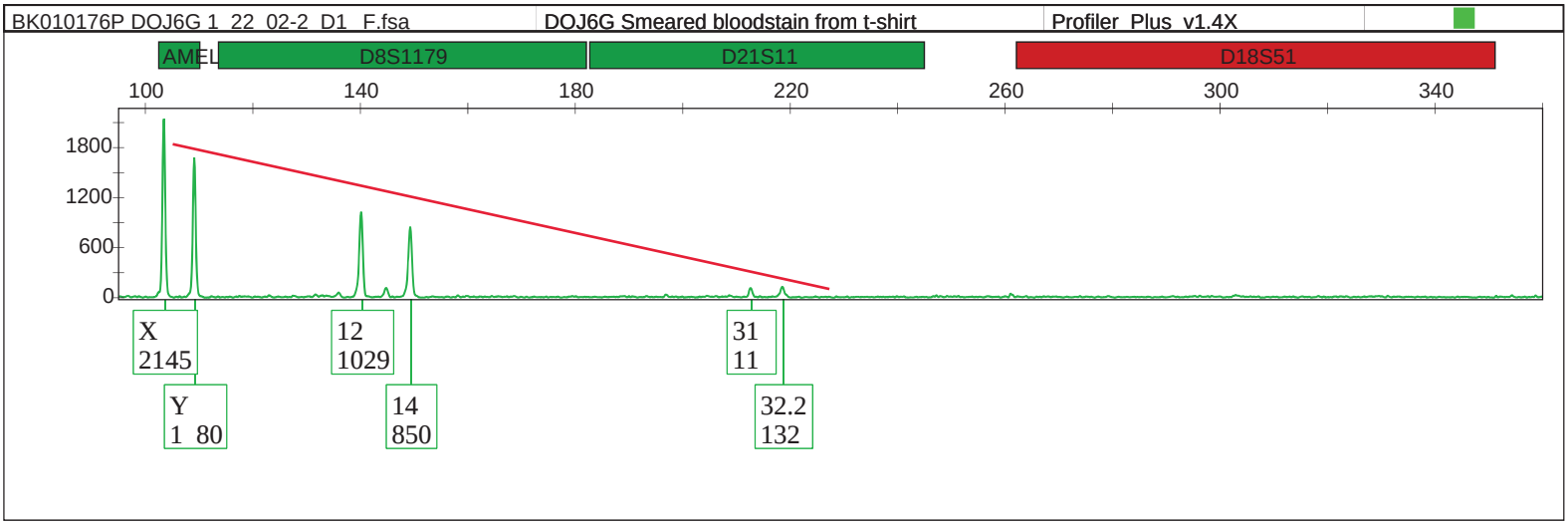
GeneMapper® ID-X 1.5

Exhibit 11: DOJ6-G Bloodstain smear cutting from beige t-shirt [Profiler Plus]

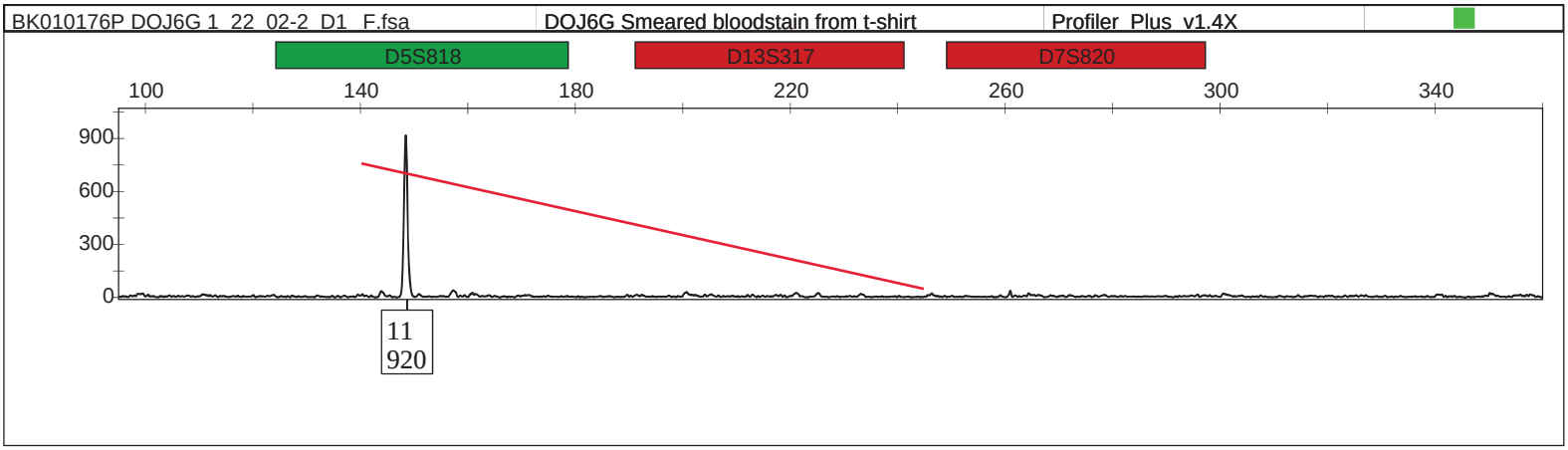
Sample File	Sample Name	a el	SQ
BK010176P DOJ6G 1_22_02-2_D1_F.fsa	DOJ6G Smeared bloodstain from t-shirt	Profiler_Plus_v1.4X	



BK010176P DOJ6G 1_22_02-2_D1_F.fsa | DOJ6G Smeared bloodstain from t-shirt | Profiler_Plus_v1.4X



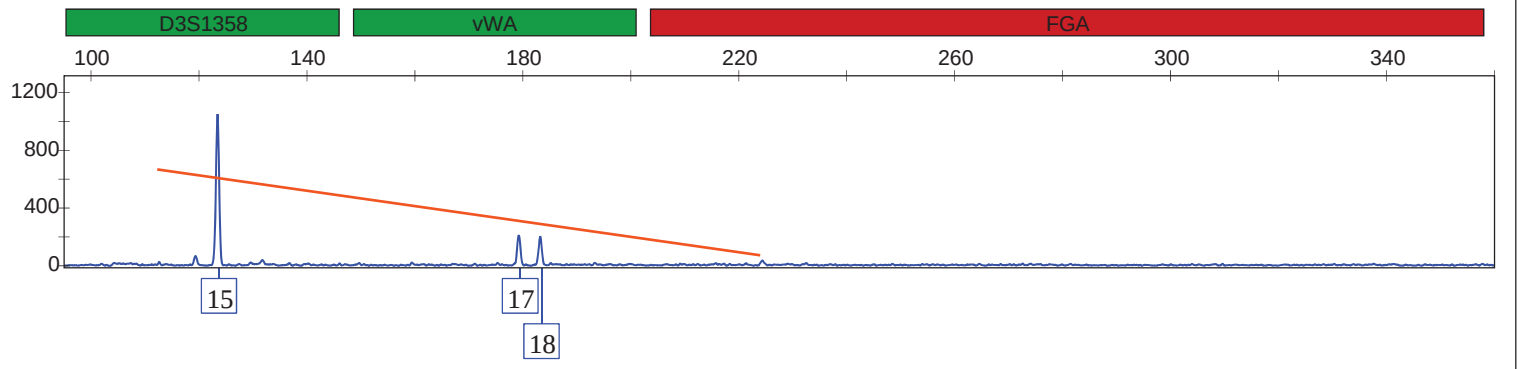
BK010176P DOJ6G 1_22_02-2_D1_F.fsa | DOJ6G Smeared bloodstain from t-shirt | Profiler_Plus_v1.4X



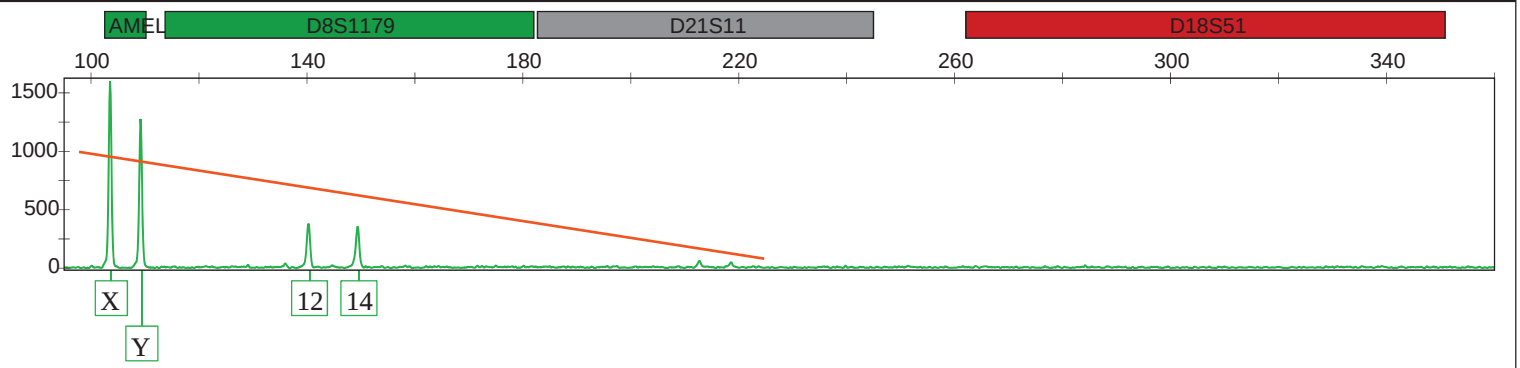
GeneMapper® ID-X 1.5

Exhibit 12: Beige t-shirt cutting DOJ-6G-01 substrate and cell pellet after PBS extraction for EDTA testing, as reported (2014 Cal DOJ lab analysis) [Profiler Plus]

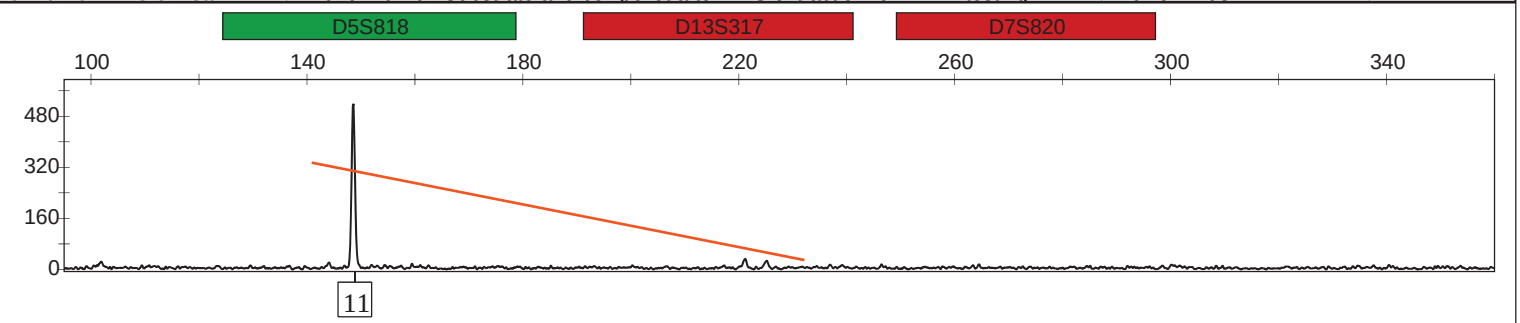
Sample File	Sample Name	Panel	SQ
BK010176P 01 12-8-04.fsa	BK010176P 01 Substrate and cell pellet after PBS extraction for EDTA testing	Profiler_Plus_v1.4X	



BK010176P 01 12-8-04.fsa	BK010176P 01 Substrate and cell pellet after PBS extraction for EDTA testing	Profiler_Plus_v1.4X	



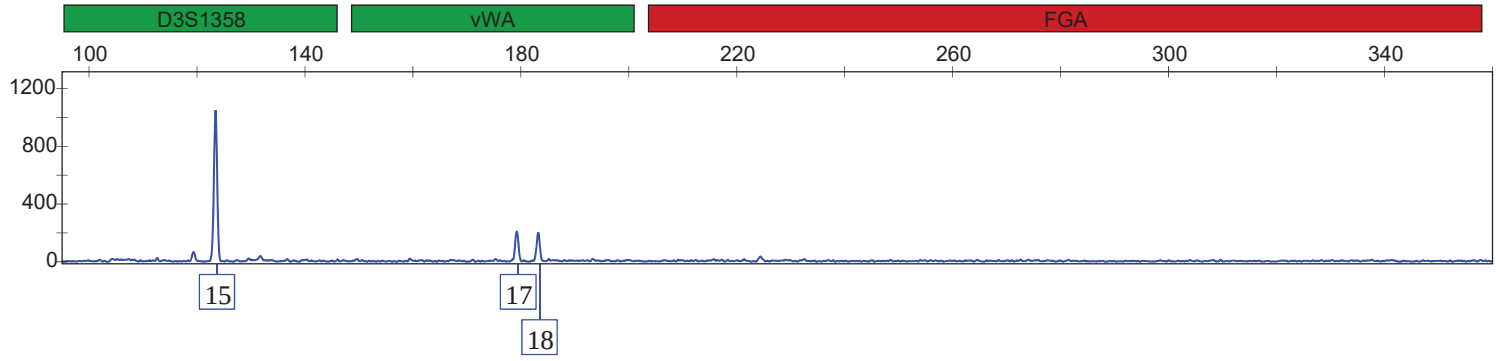
BK010176P 01 12-8-04.fsa	BK010176P 01 Substrate and cell pellet after PBS extraction for EDTA testing	Profiler_Plus_v1.4X	



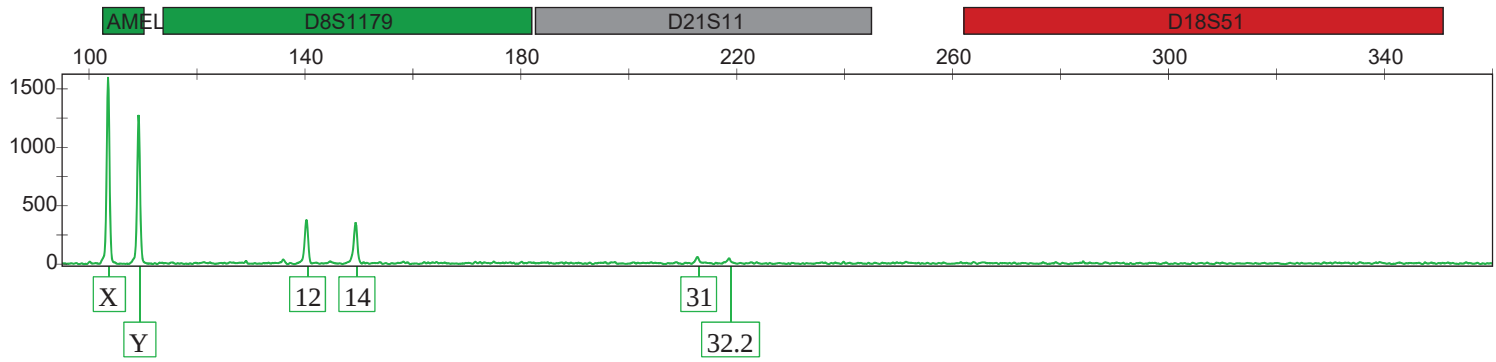
GeneMapper® ID-X 1.5

Exhibit 12a: Beige t-shirt cutting DOJ-6G-01 substrate and cell pellet after PBS extraction for EDTA testing, at 50rfu (2014 Cal DOJ lab analysis) [Profiler Plus]

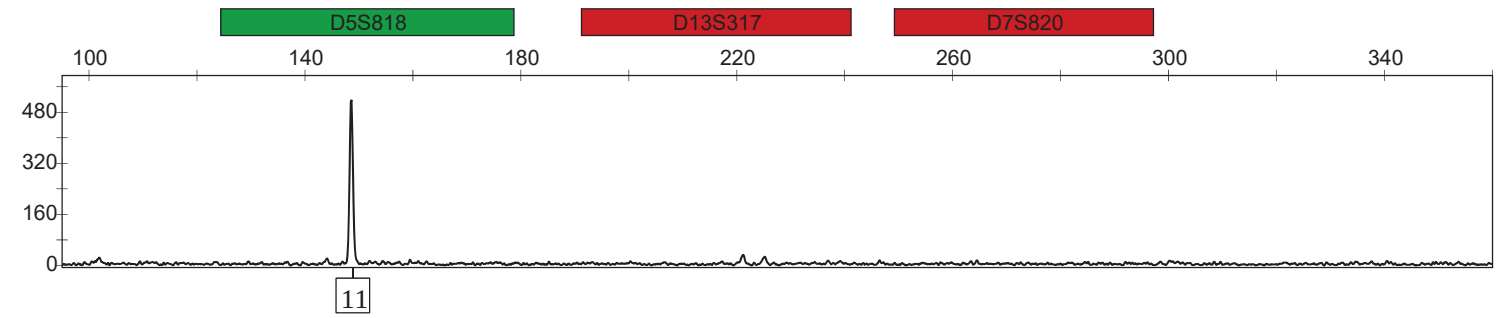
Sample File	Sample Name	Panel	SQ
BK010176P 01 12-8-04.fsa	BK010176P 01 Substrate and cell pellet after PBS extraction for EDTA testing	Profiler_Plus_v1.4X	



BK010176P 01 12-8-04.fsa	BK010176P 01 Substrate and cell pellet after PBS extraction for EDTA testing	Profiler_Plus_v1.4X	



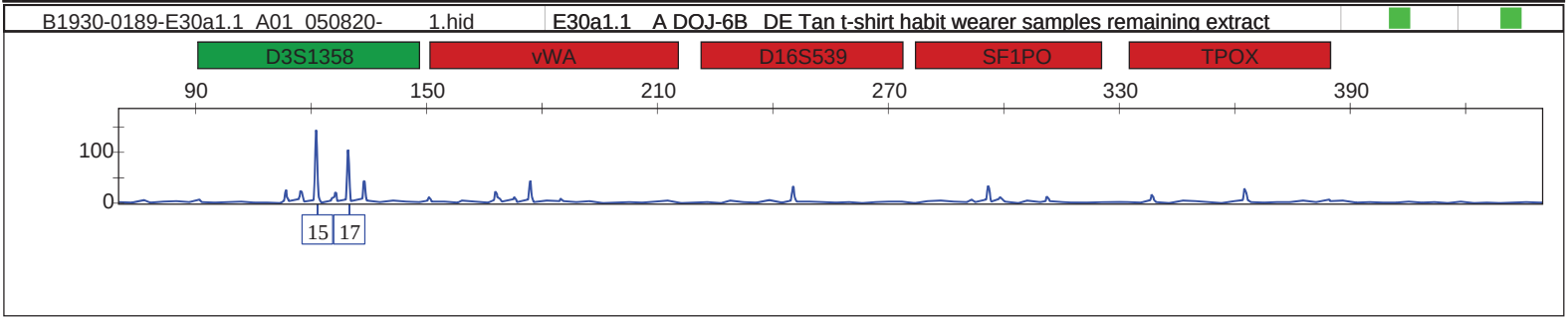
BK010176P 01 12-8-04.fsa	BK010176P 01 Substrate and cell pellet after PBS extraction for EDTA testing	Profiler_Plus_v1.4X	



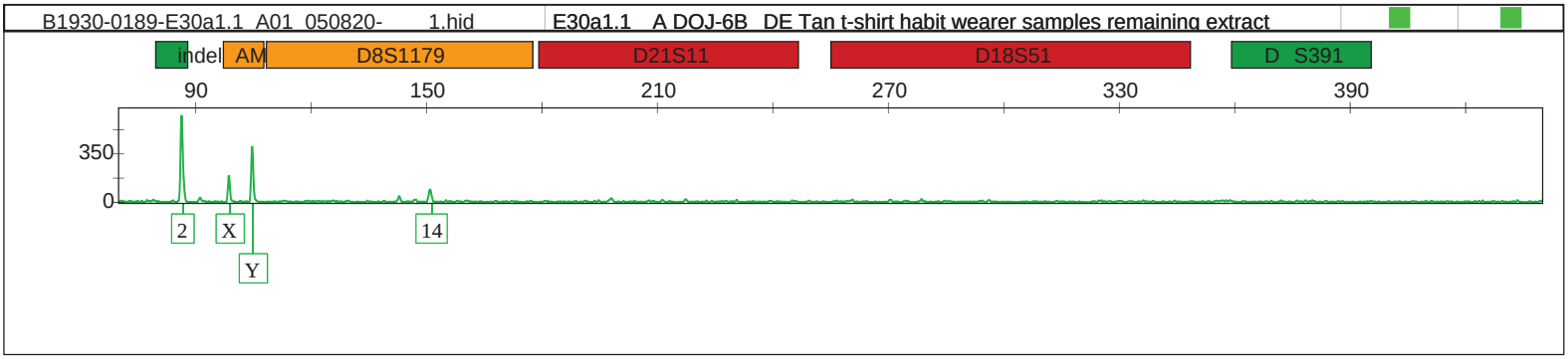
GeneMapper® ID-X 1.5

Exhibit 13: Bode lab analysis of E30a1 (Cal DOJ lab DNA extract J-6B/C/D/E) [Globalfiler]

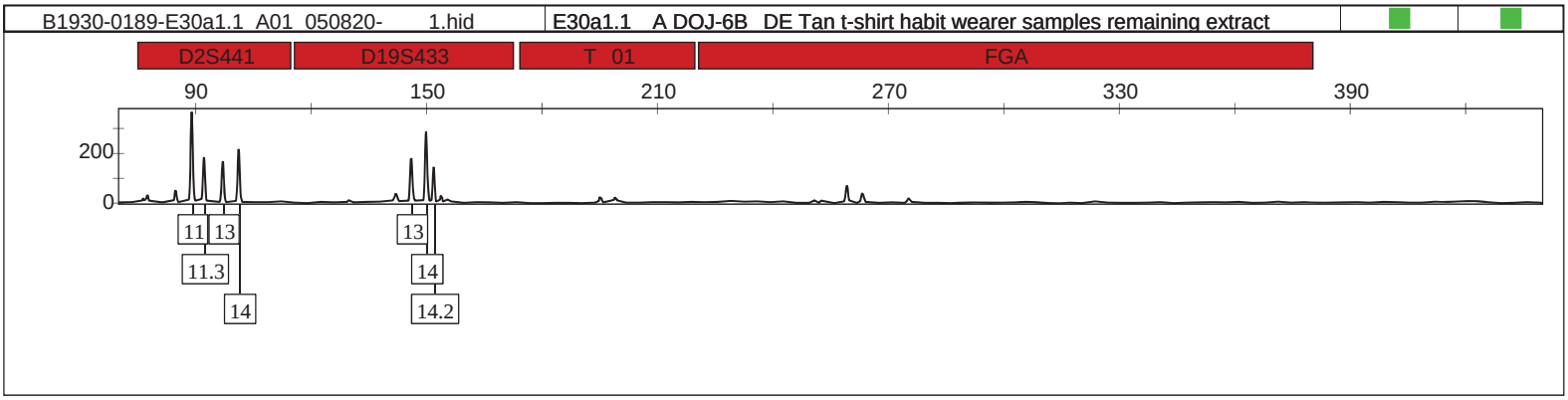
Sample File	Sample Name	SOS	SQ
B1930-0189-E30a1.1_A01_050820-1.hid	E30a1.1 A DOJ-6B DE Tan t-shirt habit wearer samples remaining extract		



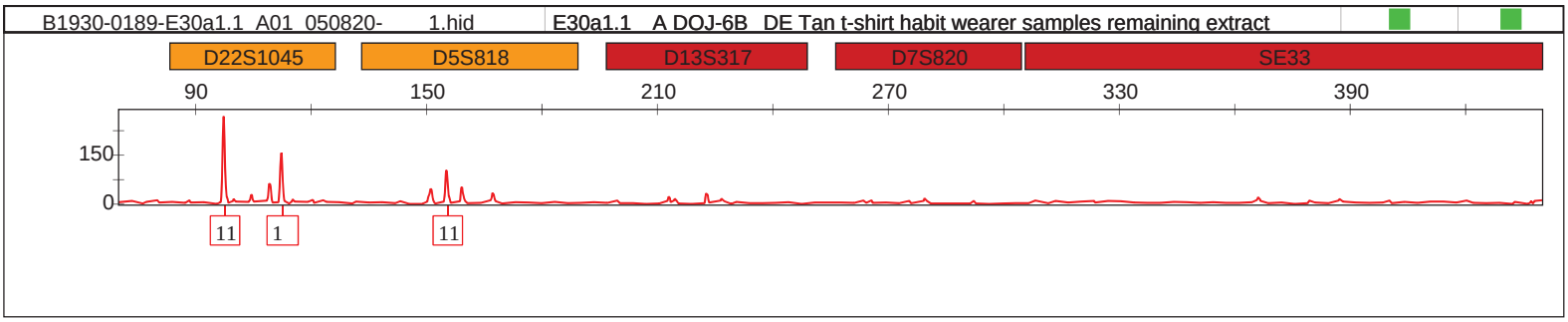
B1930-0189-E30a1.1_A01_050820-1.hid E30a1.1 A DOJ-6B DE Tan t-shirt habit wearer samples remaining extract



B1930-0189-E30a1.1_A01_050820-1.hid E30a1.1 A DOJ-6B DE Tan t-shirt habit wearer samples remaining extract



B1930-0189-E30a1.1_A01_050820-1.hid E30a1.1 A DOJ-6B DE Tan t-shirt habit wearer samples remaining extract



B1930-0189-E30a1.1_A01_050820-1.hid E30a1.1 A DOJ-6B DE Tan t-shirt habit wearer samples remaining extract

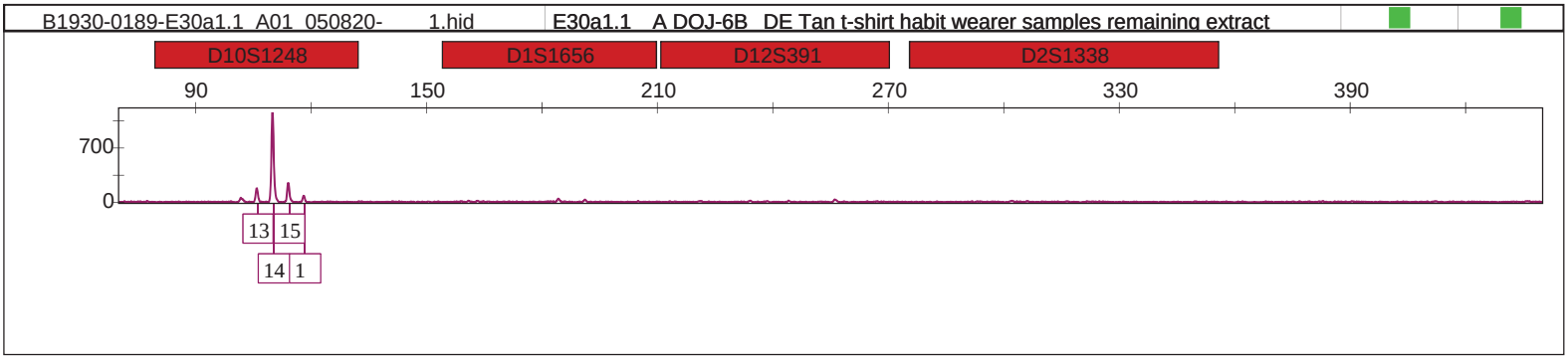
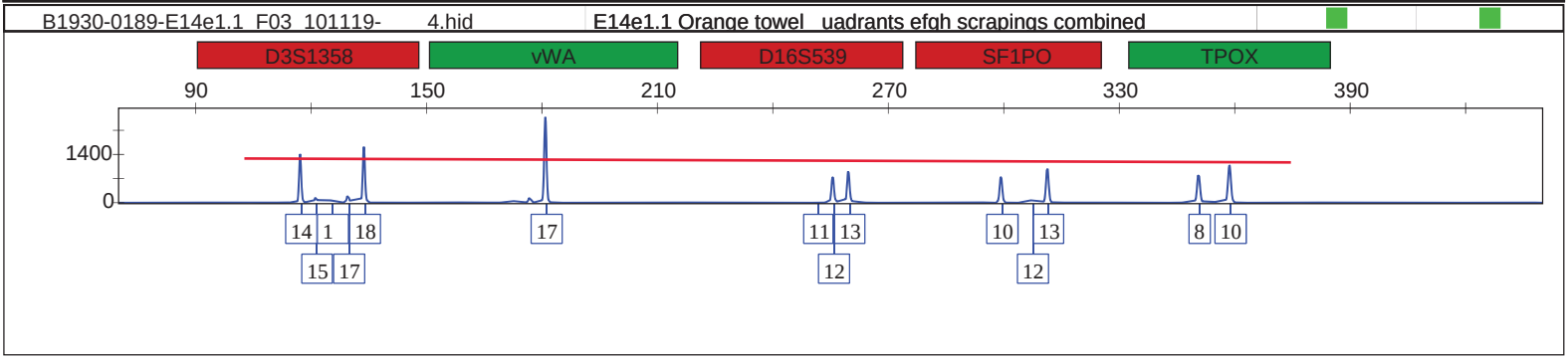
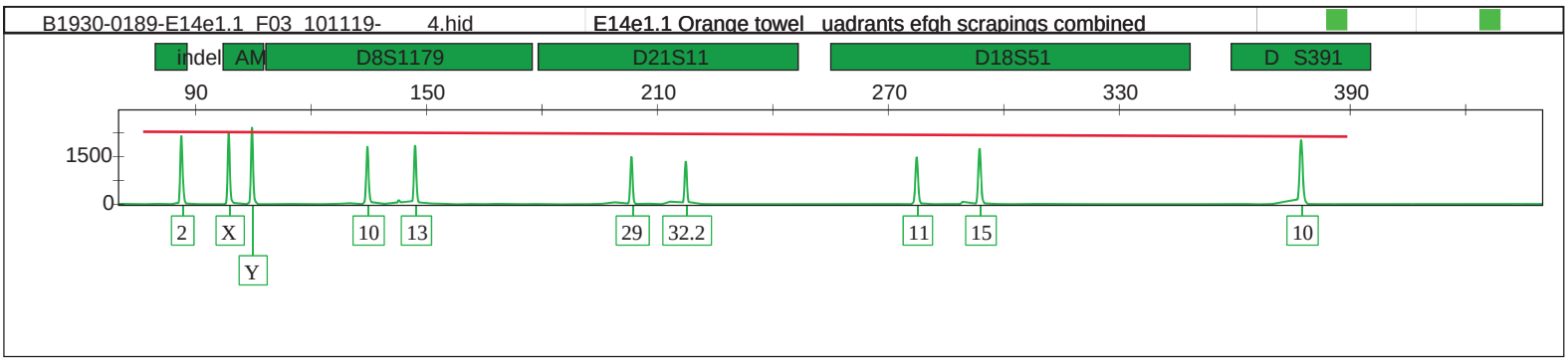
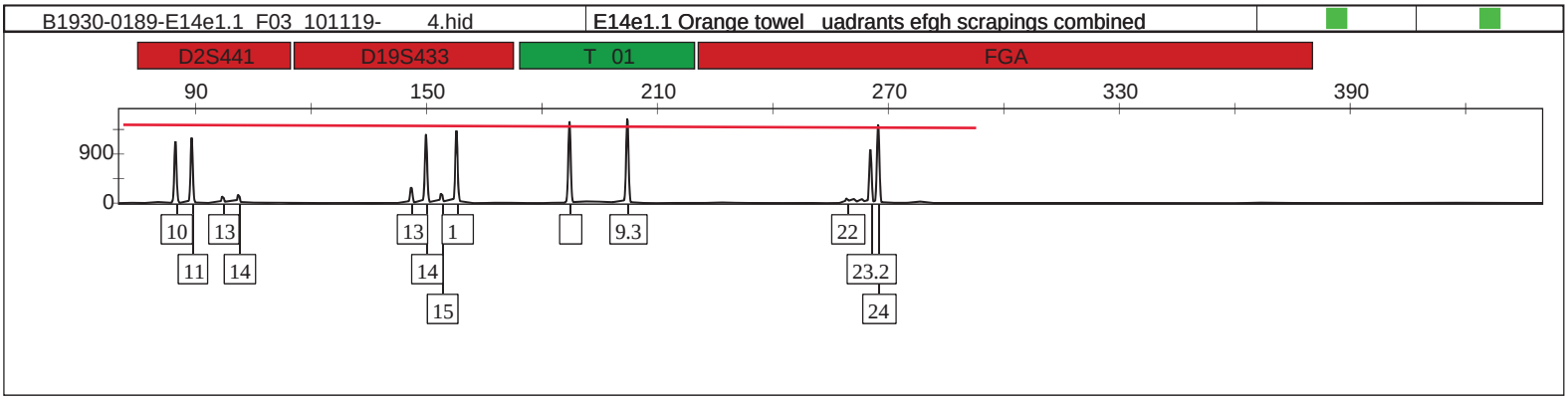


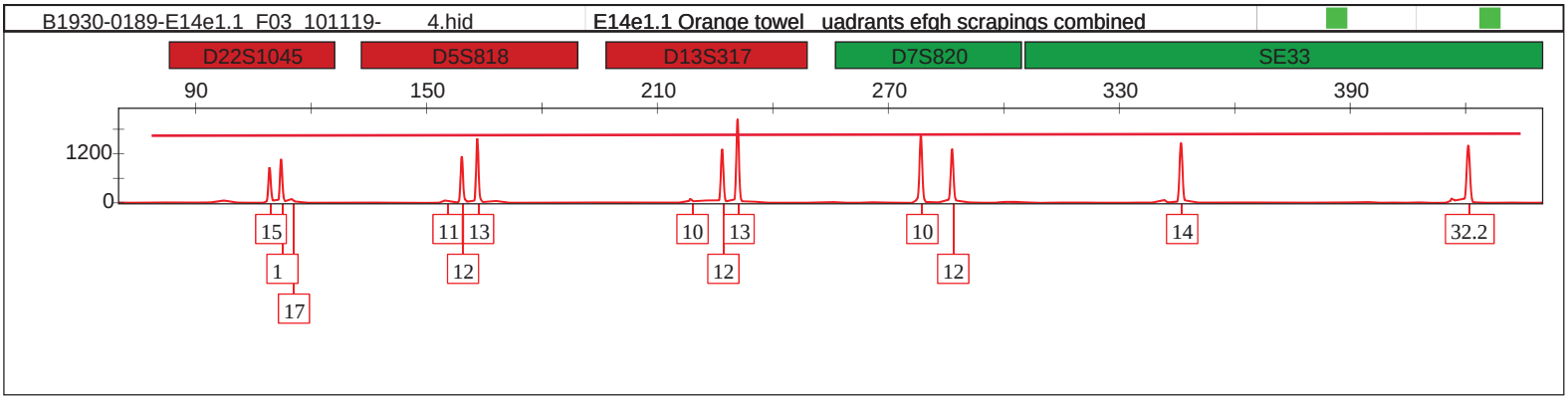
Exhibit 14: Bode lab analysis of E14e1.1 Orange towel scrapings efgh, combined

Sample File	Sample Name	S S	SQ
B1930-0189-E14e1.1_F03_101119-4.hid	E14e1.1 Orange towel uadrants efgh scrapings combined		









GeneMapper® ID-X 1.5

Exhibit 14: Bode lab analysis of E14e1.1 Orange towel scrapings efgh, combined

Sample File	Sample Name	SOS	SQ
B1930-0189-E14e1.1_F03_101119-4.hid	E14e1.1 Orange towel_uadrants efgh scrapings combined		

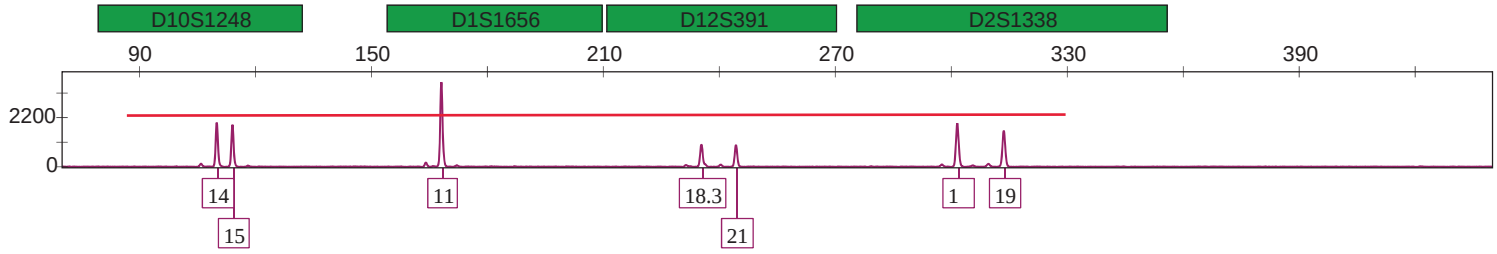
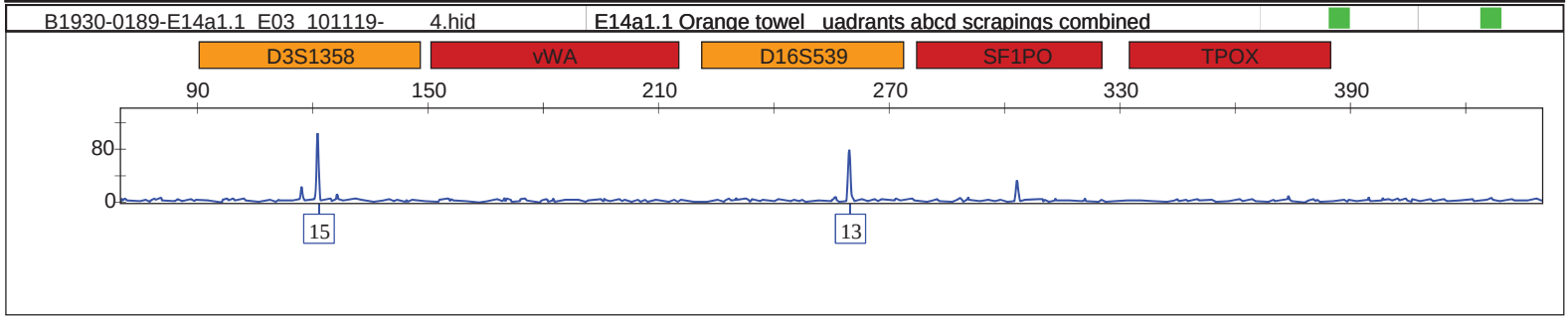
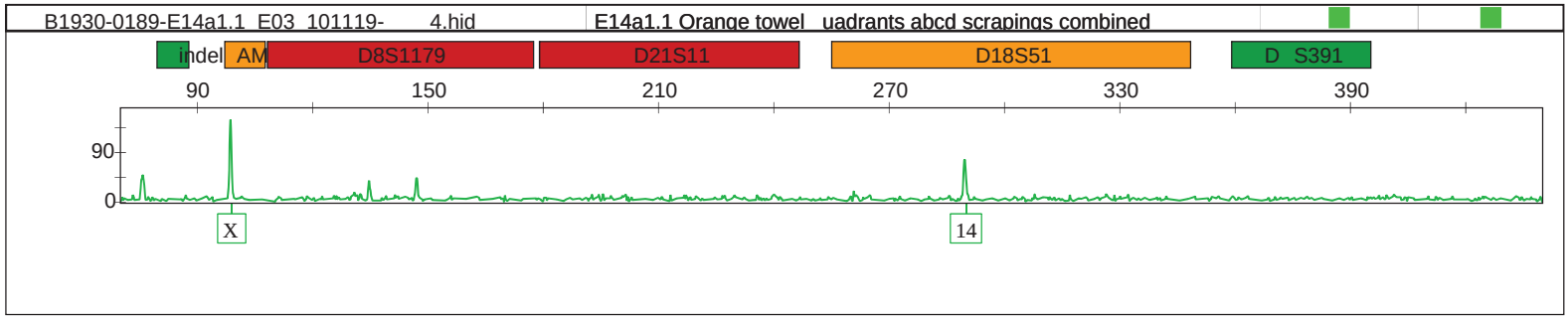
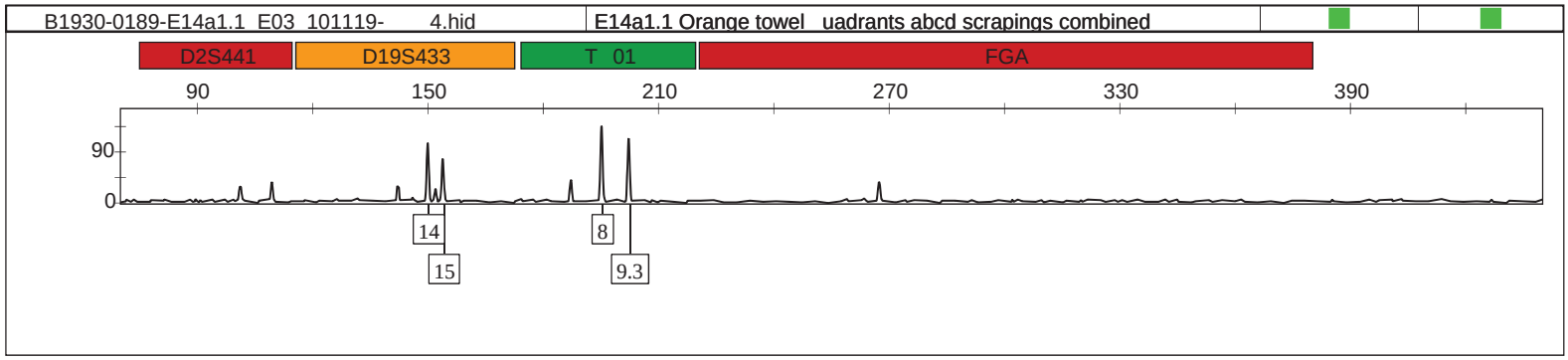


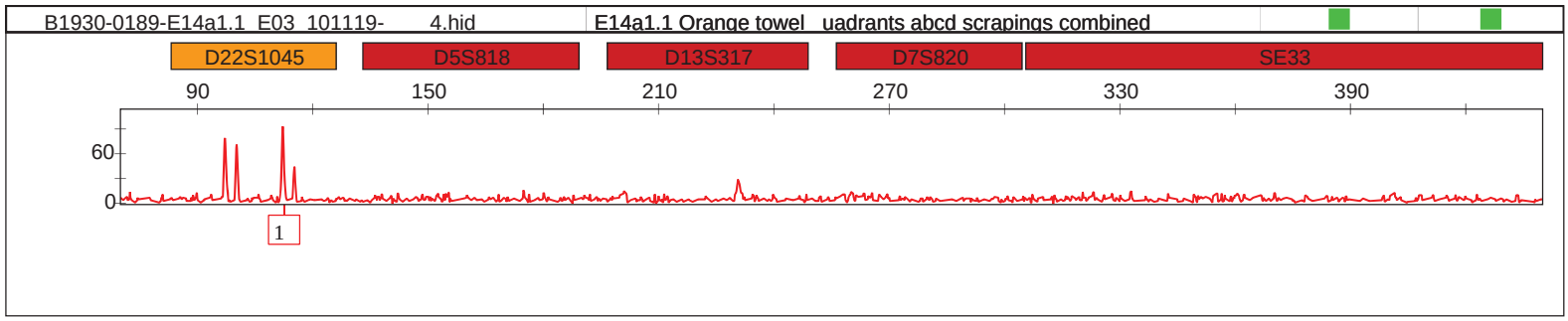
Exhibit 15: Bode lab analysis of E14a1.1 Orange towel scrapings abcd, combined

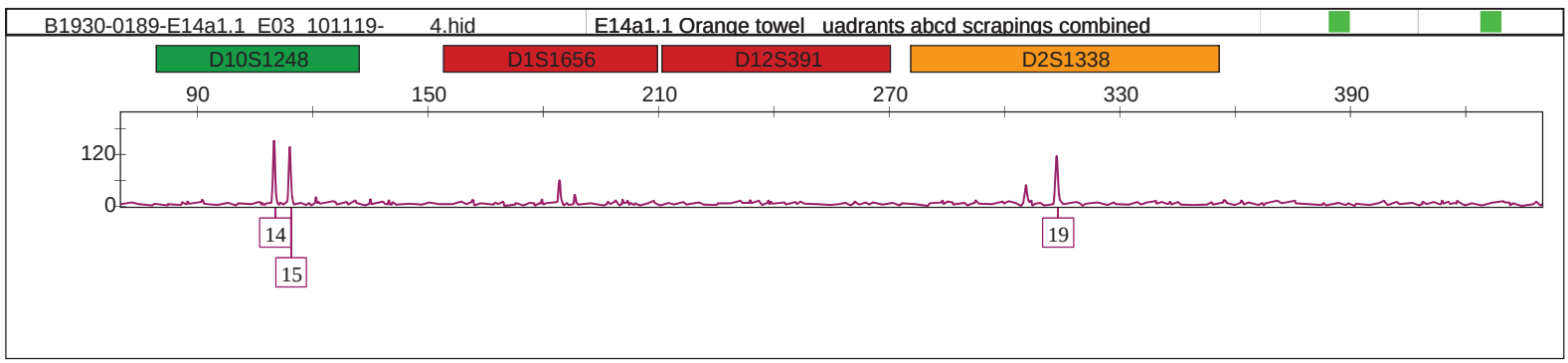
Sample File	Sample Name	SOS	SQ
B1930-0189-E14a1.1_E03_101119-_4.hid	E14a1.1 Orange towel_uadrants abcd scrapings combined		







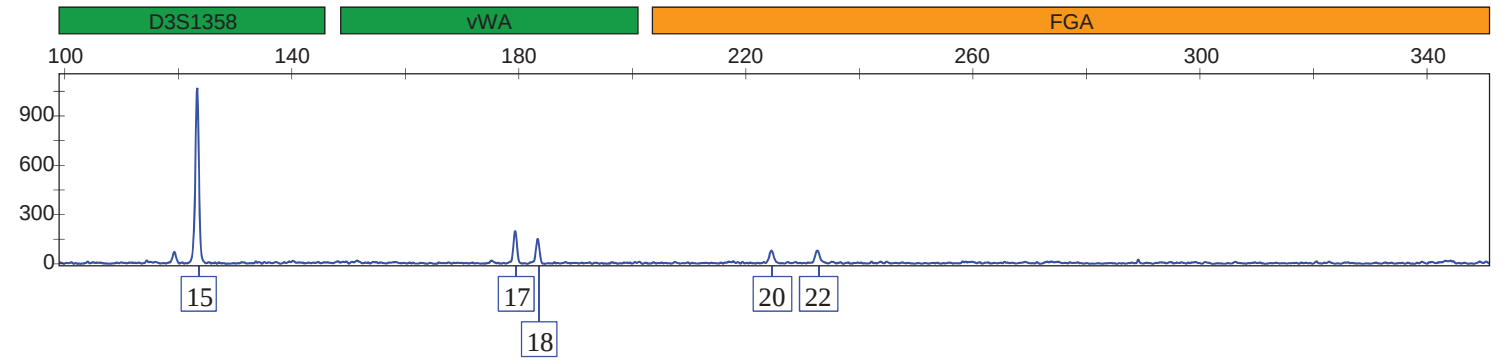




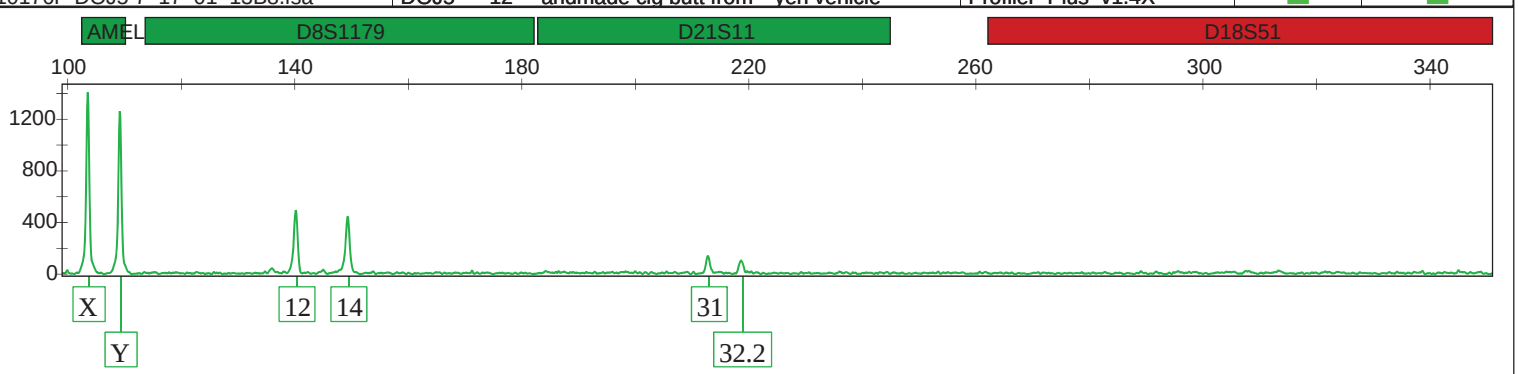
GeneMapper® ID-X 1.5

Exhibit 16: DOJ5 (V-12) Handmade cigarette butt from Ryen vehicle [Profiler Plus]

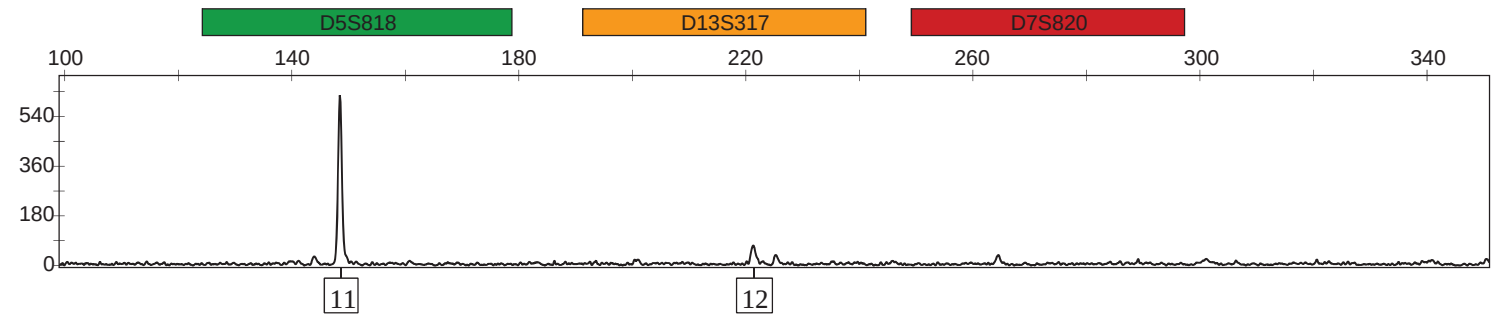
Sample File	Sample Name	a el	SOS	SQ
BK010176P DOJ5 7 17 01 13B8.fsa	DOJ5 -12 andmade cig butt from yen vehicle	Profiler Plus v1.4X		



BK010176P DOJ5 7 17 01 13B8.fsa	DOJ5 -12 andmade cig butt from yen vehicle	Profiler Plus v1.4X		



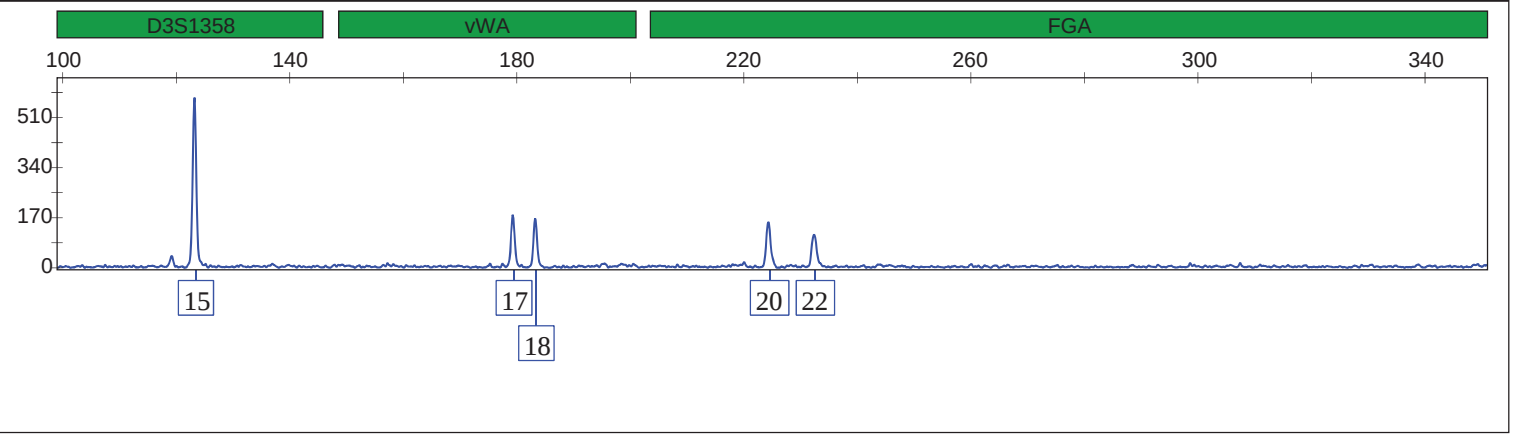
BK010176P DOJ5 7 17 01 13B8.fsa	DOJ5 -12 andmade cig butt from yen vehicle	Profiler Plus v1.4X		



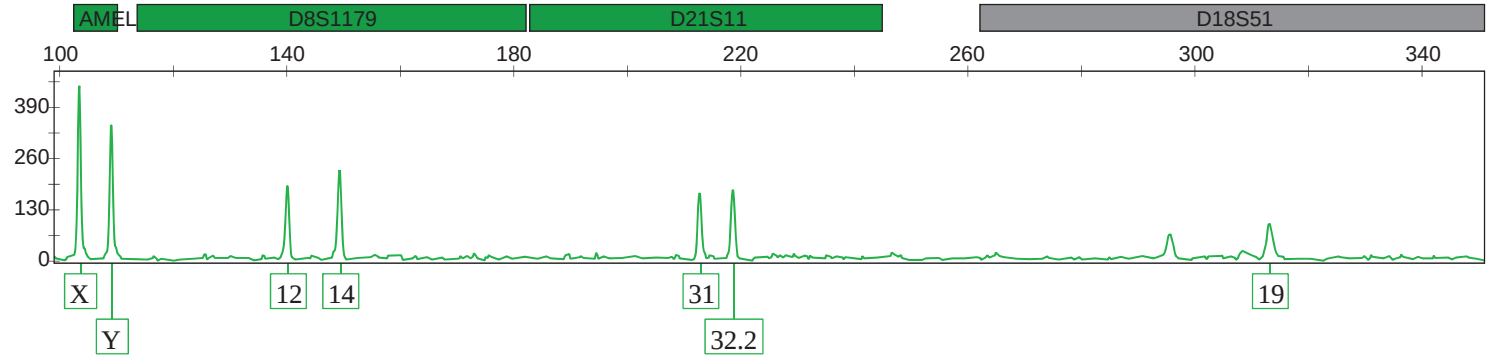
GeneMapper® ID-X 1.5

Exhibit 17: V17 Manufactured cigarette butt from Ryen vehicle [Profiler Plus]

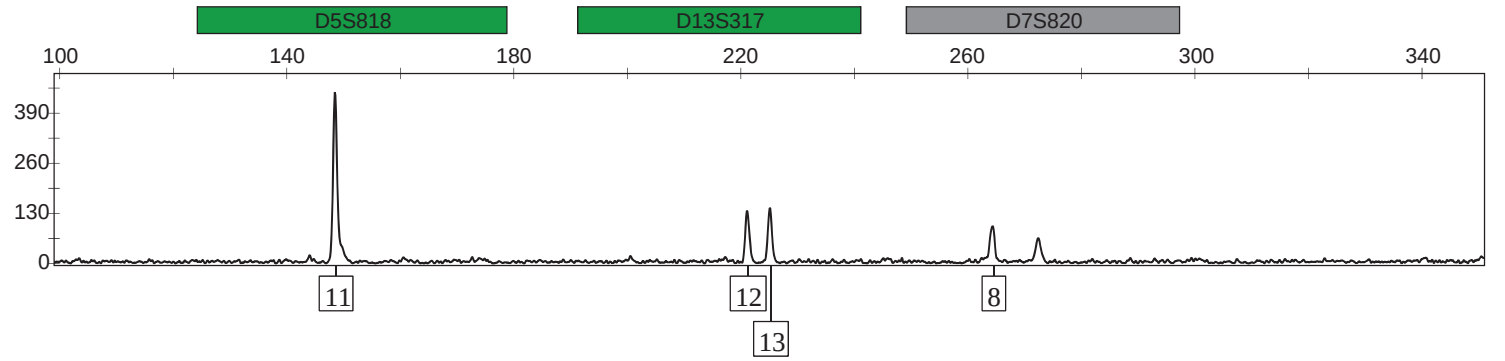
Sample File	Sample Name	a el	SOS	SQ
BK010176P 17 7 16 01 4A10.fsa	17 Manufactured cig butt from yen vehicle	Profiler Plus v1.4X		



BK010176P 17 7 16 01 4A10.fsa | 17 Manufactured cig butt from yen vehicle | Profiler Plus v1.4X



BK010176P 17 7 16 01 4A10.fsa | 17 Manufactured cig butt from yen vehicle | Profiler Plus v1.4X



LABORATORY OF CRIMINALISTIC
County of San Bernardino — Sheriff's Departmen..

OVERVIEW

Owner of this residence, a non-resident, contacted Sheriff upon hearing of murders. States house has been vacant since Wed. 6-1-83 when housekeeper vacated it. Evidence shows it has been inhabited since then; blood found in several areas - front hallway, bathroom, etc. Luminol shows several things - S cleaned up in E bathroom (shower & sink) also several footprints showed up on carpeting consistent w/ shoe prints in dust in the game room. Owner states hatchet belongs to residence - the scabbard was found here w/ blood on it. Nylon rope found in E bedroom closet (where S bedded at night) which may be consistent w/ rope in driveway @ first scene (it also has blood stains).

lec of Verbal Reports by Laboratory:

1. Date	Time	2. Date	Time	3. Date	Time
To		To		To	
How		How		How	
Initialed		Initialed		Initialed	

Exhibit 18: Dated contemporaneous notes and laboratory report documenting and describing Luminol processing of the Lease house by Craig Ogino (CO) and David Stockwell (DCS)

LABORATORY OF CRIMINALISTICS
County of San Bernardino – Sheriff's Department
Room 109 – Courthouse
San Bernardino, California 92415
Phone: 383-3971 Ext. 331

DATE: 6/8/83 | TIME: 04:45 HRS. | DR. NO.: 12/11029-02

V. | S.

THE FOLLOWING WAS ~~RECEIVED~~ collected by lab

FROM: 2991 English Rd, Chino THIS DATE.

~~REC~~ ~~D BY~~: ed CO, DCS

RECEIVED FROM: for SBSO Hom.

LR. NO.: 42376 | 01 Homicide

ADDITIONAL EVIDENCE

(J) (K) physical evidence collected at scene 2 at 2991 English Rd, Chino

2113 14-2341-405

LABORATORY OF CRIMINALISTIC
County of San Bernardino — Sheriff's Departme.

OVERVIEW

There are several blood trails outside residence which may suggest that the suspect was bleeding.

Rec of Verbal Reports by Laboratory:

1. Date	Time	2. Date	Time	3. Date	Time
To		To		To	
How		How		How	
Initialed		Initialed		Initialed	

Exhibit 18: Dated contemporaneous notes and laboratory report documenting and describing Luminol processing of the Lease house by Craig Ogino (CO) and David Stockwell (DCS)

LABORATORY OF CRIMINALISTICS
County of San Bernardino — Sheriff's Department
Room 109 — Courthouse
San Bernardino, California 92415
Phone: 383-3971 Ext. 331

DATE 6/9/83 | TIME HRS. 00:30 | DR. NO 1Z11029

V. Ryen Hughes | S.

THE FOLLOWING WAS ~~RECEIVED~~ collected by lab

FROM 2991 English Rd. Chino THIS DATE

~~RE~~ Co ~~CO BY~~ cted CO, DCS

~~RECEIVED FROM~~ for SBSO Hom. Arthur

LR. NO. 42376 | 01 Homicide

ADDITIONAL EVIDENCE

(K) physical evidence collected from the residence @ 2991 English Rd, Chino

2184 14-2341-405

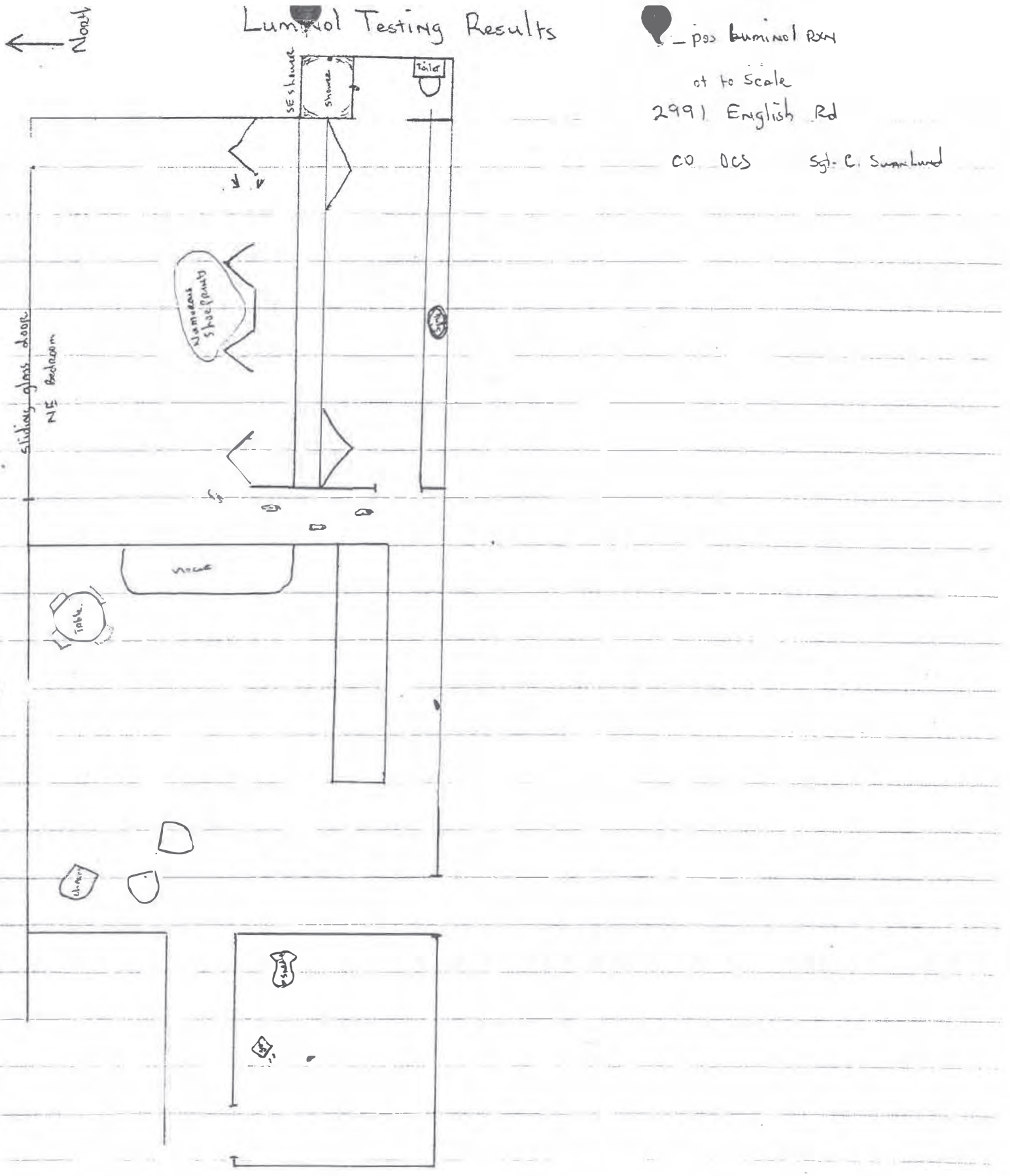


Exhibit 18: Dated contemporaneous notes and laboratory report documenting and describing Luminol processing of the Lease house by Craig Ogino (CO) and David Stockwell (DCS)

LABORATORY REPORT
October 7, 1983 LR 42376

The following was received in the Laboratory from Investigator T. Cordua of the Chino Institution for Men on August 15, 1983:

Item GGG: One pair of "Pro Keds" athletic shoes, size 12

The following was received in the Sheriff's Homicide Division by Criminalist D. Stockwell on October 4, 1983:

Item HHH: Photographs of nine pairs of shoes

RESULTS AND CONCLUSIONS:

Visual and ultra-violet light examinations of the carpeting from the Ryen master bedroom (currently stored at Sheriff's central property) failed to detect the presence of semen.

The garbage (Item U) collected from 2991 English Rd. was examined and found to contain spoiled foods, newpapers, paper towels and facial tissues, several notes, and various household items. Because this contained putrefying material and was insect infested, it was destroyed by the Laboratory on August 16, 1983.

David C Stockwell
David C. Stockwell
Criminalist

The below-listed areas were examined using the luminol chemical test for blood. (Luminol is a chemical reagent which, in the presence of blood and certain other agents, briefly glows in the dark. It is capable of detecting trace amounts of blood which the unaided eye would not otherwise detect). All areas testing positive were screened with an additional chemical test.

1) 2991 English Rd. (the Lease residence): floors, shower areas, sinks, exits, the perimeter grounds, and the driveway
2) 2943 English Rd. (the Ryen residence): floors, shower areas, sinks, exits, patio, sidewalks, and the west driveway
3) the Ryen station wagon: interior, doors, door jambs, and exterior

The examinations revealed the following:

2991 English Rd. (Lease residence):

1) four possible footwear impressions on the semi-shag carpeting in the hallway between the southeast bathroom and the northeast bedroom. These impressions measure approximately 13" long, but no details were discernible
2) several non-descript patterns on the semi-shag carpeting in front of the closet in the northeast bedroom
3) residue in the sink of the southeast bathroom

Exhibit 18: Dated contemporaneous notes and laboratory report documenting and describing Luminol processing of the Lease house by Craig Ogino (CO) and David Stockwell (DCS)

Exhibit 18: Dated contemporaneous notes and laboratory report documenting and describing Luminol processing of the Lease house by Craig Ogino (CO) and David Stockwell (DCS)

LABORATORY REPORT
October 7, 1983 LR 42376

4) residue on the walls of the shower in the southeast bedroom
5) one small non-descript pattern on the tile floor between the south entrance and the southeast bathroom
6) one small non-descript pattern on the semi-shag carpeting of the south central bedroom
7) a trail of spots on the driveway pavement (later determined to be of non-human origin)

2943 English Rd. (Ryen residence):

1) two similar footwear impressions in the hallway northwest of the master bedroom entrance; the impression is approximately 13" long with a "Zig-zag" or "Herringbone" pattern
2) two partial footwear impressions on the tile floor between the trophy room and the livingroom, displaying similar patterns as those in the hallway (see (1) above)
3) two possible footwear impressions on the stairway carpeting between the livingroom and the trophy room, located on the second and fourth steps, respectively, from the bottom
4) residue in the north sink of the master bathroom
5) small specks in the shower of the master bathroom
6) (the master bedroom carpeting was so heavily saturated with blood that no useful information was derived)
7) a streak in the west driveway consistent with the trail formed by the nylon rope (Item A-3)
8) one footwear impression on the patio cement outside the master bedroom; the impression showed as "Vibram" sole pattern

Ryen station wagon:

1) several small smears on the rear threshold and door frame, driver's side
2) several small smears on the front threshold and door frame, driver's side
3) non-descript patterns on the front passenger floormat
4) slight smears on the vertical portion of the front passenger seat
5) smears on the midsection seats, especially concentrated in the crevice, and non-descript patterns on the passenger side of the mid-section floor

Footwear impressions:

1) the footwear impressions in the hallway of the Ryen home were consistent in pattern to the impressions on the file floor; there was insufficient detail in the impressions on the stairway to compare with either those in the hallway or on the tile floor
2) the impressions in the hallway and on the tile floor of the Ryen home are inconsistent with the impression on the patio
3) the impression in the Ryen hallway is consistent in size with the impressions in the Lease hallway; no comparison could be made as to pattern

David C Stockwell
David C. Stockwell, Criminalist

Craig Ogino
Craig Ogino, Criminalist

2105

Exhibit 19: Gregonis' August 13, 1999 handwritten notes of his inventory of Box C08176

LR: 42376 Agency: SBSD-Homicide #: 1211029-02 Offense: 187 x 4

Victim: Ryen & Hughs Suspect: Cooper, kevin

PROPERTY TAG B 68420 : ts bag "42376 DR 1211029-02
susp: Kevin Cooper ... → list of items = ~ several
envelopes - most tape sealed,
1 envelope - tape sealed OPENED TO INSPECT FOR
A-41: A-41 is present in a ts glassene bindle
other envs NE

C08170: beat up ts box blue + white "LR 42376 Evidence
from Court" = ~ several ts me, lts box, ts slide holder
1 ts env id as ~ C-1, 2, 3, 6, 12, 13, 14 opened
~ several items
1 is a ts petri dish labeled "42376 C-2 C-3 Rep. samples =
1 ts white cardboard box "C-2 42376 loose hair from left hand =
1 ts white cardboard box "C-3 42376 loose hair from left hand =

C08176: ts box 1x1x2 ~ numerous ts envs, + bags +
1 blue plastic case "XXX =
1 ts env "LN 42376 (V) V: 2, 5, 11, 12, 14, 16, 17, 20, 21 =
~ envelope ~ SERI sticker "M 1591 '84, V-12, V-17, QQ
~ 1 pill box "42376 V-17 cig. butt DCS = V-12 or QQ not present

171/396

LR: 42376 Analyst: [illegible]G Date: 8/13/99 Page: 1 of 2

Report of Dr. Mitchell Eisen

Mitchell L. Eisen, Ph.D.
Psychologist

Mark McDonald
Law offices of Morrison Foerster
707 Wilshire Boulevard, Suite 6000
Los Angeles, CA 90017-3543

In the Matter of Kevin Cooper's Clemency appeal

1) I was asked by Morrison & Foerster LLP to evaluate the reliability of the eyewitness evidence in this case. In particular, Morrison & Foerster LLP said they wanted my opinion on the reliability of Josh Ryen's statements. Morrison & Foerster LLP asked for my independent evaluation of the evidence and they did not have a result they wanted me to reach.

2) Based on my review of the materials and our discussions to date related to this case, I have identified several factors that are relevant to understanding the eyewitness evidence in this case. Below I describe each of these factors and summarize how the eyewitness evidence should be viewed in context of the available physical evidence.

3) **The change in Joshua Ryen's memory reports**. The main eyewitness issue in this case is that Joshua Ryen, the sole surviving victim of the attack, originally stated that three Mexican men committed the crime but then changed his report to recall seeing the image of a single man. The specific concerns revolve around how his early memory reports are inconsistent with later statements presented at trial.

4) **Retention interval.** All other things being equal, fresher memory reports (those provided closer to the event) tend to be more complete and more accurate than memory reports given after extended delays (particularly major defining features of the event and a person's appearance). Although anecdotal accounts of cases show that many people will say they remember events better after extensive delays than right after and event, research on point demonstrates that this is rarely if ever true (see Deffenbacher, Borenstein, McGorty & Penrod; 2008 for a review).

5) **Joshua Ryen's original memory report: Three white or Mexican males.**
The first attempt to interview eight-year old Josh took place at Loma Linda Hospital, where Josh had been airlifted after being found on the floor of his parents' master bedroom next to his murdered family members and friend. At the time of the interview, Josh was heavily medicated, still in shock, and reportedly had to use signs to communicate because his throat had been slashed and he could not speak. According to the original police report (PR 6/6/83), Josh indicated that he believed the culprits who murdered his family were three Mexican males. It was clear in this initial report that the child believed these were the murderers, although he was

inconsistent about their race at first (White vs. Hispanic/Mexican) and never stated that he **saw** the suspects the night of the attack.

6) **The second interview: Joshua Ryen still remembers three Mexican males**. In the second interview conducted on 6/14/83, records indicate that Joshua Ryen was able to speak. The police report indicated that Joshua did not see the killers on the day of the event, but "believed" it was the three Mexican men who came by the house the day before the murder in a blue pickup truck (PR 6/16/83). However, psychologist, Dr. Hoyle was present in this second interview and his hand written notes indicated that Joshua stated that the three Mexican men chased the victims around the house.

   The discrepancy between the psychologist notes and Officer Ocampo's report: **Potential bias in omitted statements.** According to the available records, on 6/14/83 when this second interview took place, the San Bernardino Sheriff's Department had already focused its investigation on Mr. Cooper. According to his trial testimony, at this point in the investigation, Ocampo believed that Cooper was the killer and no longer put credence in Joshua Ryen's belief that the crime was committed by three Mexican men. This raises potential concern that the clear discrepancies between Ocampo's report and the hand written notes of the psychologist were driven by Ocampo's bias against believing Joshua's Ryen's accounts of the attack. Notably, the psychologist's notes specified that Josh stated that the three assailants chased the family around the house. However, this differs from Ocampo's report, which noted that Joshua *believed* it was the three Mexican men who came to the house the day before who committed the crime, but provided no notation whatsoever on Josh's assertion that the family were being chased around the house or anything like that.

7) **The weight and clarity of Joshua Ryen's statements about three Mexican men chasing the family around the house during the killing**. Even when considering the psychologist's notes, based on that 6/14/83 interview with Officer Ocampo, it does not appear that Joshua Ryen ever stated that he saw any assailants on the night of the attack. What we know from the two first police interviews (including the psychologist notes) and the nurse's notes, is that Joshua stated that he first found his sister dead in the hall, then found his parents dead in their bedroom, then hid in the laundry room. The psychologist notes add that he believed the killer(s) were chasing victims around the house. The nurse's notes elaborate that he said he heard feet stomping around the house, and it was this stomping that led him to believe the killer(s) chased the victims around the house. Regarding his own wounds, he stated that he was attacked from behind.

8) **A change in Joshua Ryen's memory**. By the time the case went to trial, Joshua Ryen changed his report to indicate that he now remembered it was not three Mexican men who committed the crime, but rather he recalled seeing a single dark shadow.

9) **Consistency of memory reports provided over time.** In general, when people are interviewed on multiple occasions about events they have experienced, in the best of circumstances, one would expect that the general content of their memory reports will be consistent, and that various minor additions and omissions will occur (Poole & White, 1995). However, for well-remembered events, one would not expect

contradictions, because when contradictory information is reported, than either the initial report or the subsequent report, are of course inaccurate (as both cannot be true).

10) **The potential for suggestion: The change in memory from three Mexican men to a single male occurred after the police focused their investigation on Mr. Cooper**. Josh Ryen's changed memory report is in concert with the police theory that a single black man committed the crime. If the change in the child's memory report had come before the police theory changed to focus on Cooper that would indicate that the memory change was not being driven by talking with the investigators. However, records indicate that it was only after the police charged Cooper that his memory changed.

11) **Child suggestibility.** There is a robust literature on interviewing children. This literature indicates that children are also quite susceptible to altering their reports when the questioning involves suggestion (Ceci & Bruck, 1993), and school age children and young adolescents tend to be more suggestible than older adolescents and adults (Eisen, Qin & Goodman, 2002; Eisen, Goodman, Goodman, and Davis 2006; Eisen Qin, Goodman & Davis, 1998).

12) In this case, Josh Ryan was only 8-years-old and was of course motivated to help the police apprehend and prosecute the family's killer(s).

13) **Suggestion and memory change**. Decades of research examining the misinformation effect has clearly demonstrated that misinformation acceptance can distort witnesses' memory for the details of an event for children and adults (Loftus, 1979; Hoffman & Loftus, 1989; Loftus, 2005). In this context, when a witness comes to embrace the suggested information, reactivating their memory for the crime while imagining the misinformation could result in that information being bound together with the witnesses' memory for the event; leading them to update their memory to match the suggestions they have now come to embrace.

14) **The strength of Joshua Ryen's memory for the killer(s)**. When considering all reports, it is clear that Joshua's Ryen's memory for the event was weak from the start; particularly when considering elements of his memory related to the perpetrators.

15) **If the event was not well remembered, people are more likely to be more vulnerable to suggestion.** Notably, witnesses are most likely to consider and accept information if they do not detect a discrepancy between their memory for the event and the suggested details (Tousignant et al., 1984; Loftus, 2005), and if they consider the suggestion to be plausible (Berntsen & Rubin, 2007; Pezdek & Blandon-Gitlin, 2009). Thus, when a witness' memory for the event is very weak, they are more vulnerable to suggestive influence.

16) **In this case, Joshua's weak memory for the event made him even more vulnerable to suggestive influence**. Since he did not recall any details of the event related to seeing the assailants well to start with, it is not surprising that Joshua Ryen went from believing three Mexican men committed the crime and that there was a

chase around the house to remembering that he saw the shadow of a single man; and that this updated memory report was now consistent with the investigators' theory that the crime was committed by a single black man.

17) **The potential of developing a false memory for the event**. Although children are more suggestible than adults in general and are more susceptible to following the lead of authority figures during forensic interviews, it has also been demonstrated that even adults may create well elaborated narratives for "false memories," often with little prompting. This can be done by getting the child or adult to imagine the event to them self and carefully consider false information (see Loftus, 2003 for a review). When this occurs, it is often virtually impossible for an outside observer to distinguish false memories from factual accounts based on the quality of the person's narrative.

18) **The weight of Joshua Ryen's orginal memory report.** As noted above, memory reports given closer to the event are generally fresher, more available and all other things being equal the best indication of a person's memory for the event (Deffenbacher et al., 1986). Indeed, in this case Josh Ryen's early reports suggest he believed the culprits were three Mexican men who had come by the day before and that he recalled that they had chased the victims around the house. *Also as noted above, when taken together, Joshua Ryen's memory for the event was weak from the start and this made him particularly vulnerable to suggestive influence*. In this context, the change in Joshua Ryen's memory reports to fall in line with the investigators' theory of the case is not surprising at all.

19) **If Joshua Ryen's original reports had provided clear evidence of him actually <u>seeing</u> the culprit or culprits clearly on the night of the attack, then the weight of this evidence would be much more potent, and could be considered to be exculpating**. Even when considering the psychologist's notes, none of these early reports indicate that Joshua Ryen **<u>saw</u>** the culprit or culprit's clearly on the night of the attack. Indeed, he never actually provided descriptions of any kind of the attackers seen on the night of the attack; only reports of what the presumed attackers looked like the day before the crime when they came by looking for work. This suggests that he never actually saw the killer or killers; or at least did not form a clear memory for seeing the killer or killers on the night of the attack. Considering the extreme nature of the trauma, it is of course possible that he was amnesic for details of the event. That said, since Joshua Ryen's original reports provided no clear evidence of him actually seeing the culprit or culprits clearly on the night of the attack, this evidence should not be considered to be exculpating.

DR. PEZDEK'S DECLARATION ON EYEWITNESS ISSUES FROM THE CLEMENCY PETITION.

20) Dr. Pezdek accurately notes that memory reports given right after an event are the best indications of a person memory and that if an expert were called to testify at trial they would have explained this to the jury. This is undeniably correct. That said, as noted above, Josh Ryen's earliest reports were vague and problematic. As Dr. Pezdek accurately notes, his earliest report using hand squeezing suggested that there were

three to four white assailants. Dr. Pezdek notes that he specifically indicated that they were not Black; suggesting that this excludes Cooper. However, in the very next interview, Josh appeared to change his report of the assailant's race, noting that he did not believe they were white; but rather Hispanic. This did not appear to reflect a change in Josh Ryen's memory, but was more likely a problem with the hand squeezing communications with the severely traumatized child.

21) **Josh never saw three Hispanic men on the night of the crime**. Dr. Pezdek accurately notes that Josh gave detailed descriptions of the three Hispanic men. Indeed, if Josh had been recalling what he had seen the night of the event, that would certainly be considered exculpating evidence for Cooper. However, the record suggests that Josh was not describing what he saw the night of the event, but rather three men who had come to the house looking for work the day before.

22) **The interview of Josh by Detective Ocampo with Dr. Hoyle present**. Dr. Pezdek accurately notes that at the time of this interview Detective Ocampo was "convinced in his own mind" that Cooper was the killer and that his report of how Josh described the event differed from the notes taken by the arguably more objective psychologist, Dr. Hoyle who was also present at the interview. As Dr. Pezdek accurately notes, Detective Ocampo did not write that Josh described multiple assailants, but Dr. Hoyle's notes refer to multiple attackers and attempts to fight them off. However, Dr. Hoyle's notes were not written in the form of a report and were somewhat hard to follow. I would agree that if Josh had actually seen multiple men chasing him around the house this would in fact be exculpating evidence for Cooper. However, Dr. Hoyle clarified in his trial testimony that Josh Ryen did not state in that interview that he had seen three Mexican men in the house during the attack. (101 R.T. 6371). Although Dr. Hoyle wrote in his notes "They chased us around the house", at trial Dr. Hoyle testified those were not Josh Ryen's words but were Dr. Hoyle's summary of what Josh Ryen said (101 RT 6358). Importantly, Josh Ryen indicated that he "*believed*" it was three Mexican men who came by the house the day before the murder in a blue pickup truck (PR 6/16/83). Indeed, the only thing that was clear about what Josh actually remembered about the attacker or attackers was that he was hit by a single assailant which he not see well enough to describe as black, white, Hispanic, or otherwise.

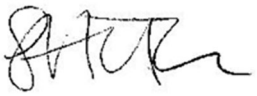
23) **Seeing Cooper's face on television and not recognizing it.** Dr. Pezdek accurately notes that when Josh first saw Cooper's picture on television he did not recognize it, and that he maintained for some time that he did not recall Cooper as the killer. Indeed, this is not surprising, as it appears clear from the reports that Josh never actually saw the killer or killers. Thus, this lack of recognition is not exculpating.

24) **Suggestion and the change in Josh Ryen's memory**. I wholeheartedly agree with Dr. Pezdek's assertion that "Suggestibility is a major factor likely to have influenced Josh Ryen's account of his memory for the perpetrators…". Indeed, the evolution in Josh Ryen's reports from believing it was three Hispanic men, to later saying he remembered seeing a single shadow at trial, to his more recent statements at an

evidentiary hearing stating that the first time he met Cooper he was wielding a hatchet in one hand and a knife in the other, are not credible and likely the result of suggestion, as described earlier in this report.

25) **In my opinion, Josh Ryen's original memory reports are not exculpatory of Mr. Cooper's guilt**, **and carry little weight in this matter**. Indeed, although it is very likely that the change in Joshua Ryen's memory reports was driven by suggestion from the investigators who likely convinced the boy that the crime was not committed by three Mexican men but rather a single black male, I do not see this as an eyewitness case at all. Rather, in my opinion, this is clearly a case based on DNA. In essence, the weak and inconsistent eyewitness evidence does not weigh strongly on determining Mr. Cooper' guilt or innocence.

Sincerely,



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Report of Paul Delhauer

Paul Q. Delhauer
CRIME SCENE RECONSTRUCTION
160 W. Foothill Pkwy. #105, #16
Corona, CA 92882

C: Multiple Murder, 187 P.C. **SBSD DR. 1211029-02**
Attempt Murder, 664/187 P.C.
V1: Ryen, Franklin Douglas ("Doug"), M41 **CC A-608-83**
V2: Ryen, Peggy, F41 **CC A-602-83**
V3: Hughes, Christopher, M11 **CC A-611-83**
V4: Ryen, Jessica, F10 **CC A-606-83**
V5: Ryen, Joshua, M8 **GBI/Survived**
D: BTN Saturday June 4 at 2115 and Sunday June 5, 1983 at 1248
L: 2943 English Road, Chino Hills, CA
S: Cooper, Kevin (AKA Trautman, David A.) **Case No. SD CR72787**

Investigative Qualifications and Experience
I am a consultant and crime scene reconstruction expert who specializes in evidentiary review and analysis of equivocal deaths and incidents of violence including murder and officer involved shootings. I am a certified Criminal Investigative Analyst ("C.I.A.") with over 28 years of law enforcement experience with the Los Angeles County Sheriff's Department and 16 years with the Sheriff's Homicide Bureau. Beginning in 1999 I received training from the International Criminal Investigative Analysis Fellowship and provided case consultations, behavioral analysis, reconstruction and expert testimony for the LASD, LADA, and requesting outside agencies. Since retirement in 2012, I have continued my association with the Homicide Bureau as a Sheriff's Reserve and have worked as an independent consultant on both criminal and civil cases.

Prior to training in C.I.A., I was directly involved in over 6300 widely varied criminal investigations including property crimes ranging from burglary to major fraud, and violent crimes including felony assaults, robbery, sexual assaults, officer involved shootings, and deaths, predominantly involving homicides. In the course of these investigations I conducted well over ten thousand interviews with victims, witnesses, and suspects. My training included Death Investigation with the Los Angeles County Department of Medical Examiner-Coroner, where I worked on loan for six months prior to joining the Homicide Bureau. I have received extensive training in areas of investigation including narcotics, street gangs, sexual assaults, domestic, child and elder abuse, robbery, and homicide as well as interview and interrogation, and statement analysis techniques. I have received advanced training in arson, post-blast reconstruction, stalking, threat assessment, crime scene reconstruction, bloodstain pattern analysis, psychological assessments, and personality disorders. I have devoted hundreds of hours to independent studies of forensic analysis and reconstruction with particular emphasis on the

mechanics of injury, event dynamics and comparisons of wounds to implement characteristics. I have been involved in empirical research and have conducted hundreds of reconstruction experiments.

In this capacity I have consulted on hundreds of cases, provided detailed analyses in scores of cases and have testified in trial over 40 times. Dozens of other cases reached dispositions facilitated by my analyses, including multiple guilty pleas, and many instances in which findings were in favor of the accused. I have taught in the California P.O.S.T. "Presley Institute of Criminal Investigation" and provided training to law enforcement investigators and prosecutors from multiple states, Canada, Europe and South Africa.

Request for Analysis
I was contacted by Attorney Mark McDonald of Morrison Foerster LLP (the "Firm"), who requested that I perform an independent review of crime scene evidence, autopsy findings and other relevant evidence a) to determine whether facts precluded the possibility that a single offender could have committed the combined offenses and b) whether facts supported the likelihood that either one or multiple offenders did so. I was advised that there was no expectation of any particular opinion. The Firm did not seek to influence my analysis or conclusion in any way.

Case Summary:
On June 2, 1983, Inmate David Trautman, AKA Kevin Cooper, escaped from the California Institute for Men in Chino. The surrounding area at that time was largely agricultural. Roughly five and a half miles from the prison Cooper broke into a vacant rental house at 2991 English Road which he used as a temporary hide-out.

During the night of June 4 or early morning of June 5, the above-listed victims were attacked inside the Ryen's residence at 2943 English Road located immediately west of Cooper's hide-out. The four murder victims and one surviving victim all suffered sharp force injuries from at least two of three suspected implements. The only known item of value taken from the Ryen's residence was the family's station wagon. It was found on June 9 in a church parking lot in the city of Long Beach fifty miles away. It was determined that a flyer found on the windshield had been distributed on Sunday morning, June 5.

On July 30, 1983 Angel Jackson, AKA Kevin Cooper, was arrested following an alleged sexual assault. He was identified by fingerprints and booked on the outstanding warrant for the Ryen/Hughes murders.

Cooper was tried and convicted in San Diego County. The jury unanimously voted in favor of the death penalty and he was accordingly sentenced. The conviction and sentence were upheld on appeal. Cooper maintains his claim of innocence. Governor Gavin Newsom ordered an investigation of that claim in response to Cooper's Clemency Petition.

Summary of Opinions:
1. It is my opinion that one person acting alone could have committed all of the reported offenses. Cooper's assertion that the number of victims combined with the number of injuries to

each and use of multiple weapons necessarily indicates multiple offenders is erroneous. Likewise, the contention that a single offender would not be able to control all five victims simultaneously indicates a failure to comprehend circumstances that affect event dynamics and facilitate offender actions. The reasons that one person could very well have committed the crime include:

-The adult victims had been drinking, were asleep and were caught by surprise.
-Both adults were attacked and overwhelmed by an explosively violent blitz on their bed.
-Bedding and possibly the nature of the bed further impaired victim resistance.
-The victims were contained within a confined area.
-Victim movement facilitated deliberate offender efforts to disable them.
-Blood evidence indicates that priority was given to incapacitation of Doug Ryen.
-The children appeared later and separately, allowing each to be subdued in succession.
-All of the victims suffered injuries consistent with two distinguishable sharp-force implements, consistent with use of two weapons simultaneously.
-All of the murder victims suffered peri/postmortem injuries, that is, many of the wounds were inflicted after death.
-The postmortem (after death) activity may have included use of a third implement.

Offender determination, favorable circumstances, available time and a progression of events within a limited space would permit a lone offender to produce the results reported in this incident.

2. It is also my opinion that one person did, in fact, commit these offenses.
The reasons that I believe one person, rather than multiple assailants, committed the crimes are:

-Autopsy findings indicated no evidence of individual target zones, that is, evidence that would typically be present if multiple offenders had attacked from multiple positions.
-All five victims exhibited evidence of convergent wound tracks consistent with separate implements in either hand of a single offender.
-Identical or remarkably similar weapons produced injuries to multiple areas on the front and back of all five victims' bodies.
-Only distinctly postmortem activity suggested possible use of a third implement.
-Blood evidence was consistent with a progression from a single area of onset on the bed to the area north of the bed without any evidence of divergent activity.
-Blood evidence beyond the area of the killings in the master bedroom was limited to traces in a few areas of the house and specific items of evidence found outside the house.
- There was no physical evidence of more than one offender in the Ryen house or more than one interloper in the rental house nearby. There was a conspicuous lack of other evidence of multiple offenders, such as other footwear impressions, blood from incidental wounds to additional offenders or independent activity and transfer of relevant evidence elsewhere in the location.

These opinions are based on the combined evidence, which indicates specific incident dynamics as well as the absence of evidence in support of assertions made by Cooper. The evidence is more fully outlined and discussed in the following sections.

Medical Examinations:
The bodies of the murder victims were autopsied by Dr. Irving Root of the San Bernardino County Coroner's Office between June 6 and June 7, 1983. The below described injuries are numbered according to the wound designations ascribed by Dr. Root. They are not intended to indicate the order in which they were inflicted.

DOUG RYEN suffered four separate stab wounds which could individually be deemed "fatal" (Wound #3- heart, #24- left neck/carotid artery, #32- left lung and #35- right lung). The last of these was described as "slightly hemorrhagic" indicating a perimortem wound. He suffered six separate wounds definitively produced by the hatchet blade and one definitively by its blunt side (#5- right thigh, #6- left thigh, #7- the right forearm through the ulna, #8- right forearm to the ulna, #23- the lower left back of the head through the occipital bone, #25- right upper parietal skull with underlying depressed fracture and #33- through the right scapular spine). Each of these was individually incapacitating, severely impairing his ability to resist, defend or escape. Other wounds were likely associated with the hatchet, however a knife can produce chopping injuries and a heavy bladed knife as described by Dr. Root can amputate digits (Wound #9).

Mr. Ryen suffered a total of 11 injuries to the head and neck, 12 to the torso (2 anterior, 10 posterior) and 2 to the legs – listed above). He suffered 11 defense wounds to the arms and hands. He had 4 wounds including #35 that were consistent with perimortem injuries.

Toxicology revealed a 0.24 % blood alcohol level. Though it was noted that he was in the early stages of decomposition (which produces ethyl alcohol) the actual level in his system at the time of the assault was at least sufficient to impair his ability to respond to it. According to the Ryens' babysitter, Caryn Rheiner, Doug Ryen was typically very difficult to awaken in the morning, especially if he had been drinking before going to bed.

Dr. Root made an addendum to the report on Doug Ryen, describing the weapons used based on characteristics of the wounds. The first was consistent with a sharp edged hatchet which produced broad "chop" injuries as well as blunt force injuries from the squared back side. The second was a "sharply tapered" stabbing implement 4 1/2 to 5 1/2 inches in length with a sufficiently "heavy" construction to perforate Ryen's sternum (A-608-83). The other victims suffered injuries consistent with the same or very similar weapons. Review of the stab wound measurements provided by Dr. Root for all four murder victims indicated a blade approximately 1 1/4 inches (3 centimeters) at its widest.

PEGGY RYEN suffered two stab wounds which could be considered independently fatal (#20- through the right lung, and #21- through the liver). It was not clear whether #20 was an antemortem wound. However both were located on the right lateral side beneath the arm consistent with being inflicted in succession.

She suffered seven chop wounds from the hatchet, at least three of which were antemortem (#5- left side of the face, #6- left jaw and #17- lower left chest). Numbers 5 and 6 were devastating wounds. Number 17 was a chop wound consistent with the hatchet but was later associated with Wounds #18 and 19 (stab wounds) in the description of internal injuries and the question of

which of the three resulted in scoring the anterior wall of the stomach. Wounds #30, 32 and 33 were all chop wounds from the hatchet to the back. Wound #30 was directed right to left, penetrating to the spine. Wound #32 was almost directly over the spine, cutting through ribs and the lateral margin of the spinal body. Wound #33 was to the left back, incising the 11th and 12th ribs, perforating the diaphragm and incising the pleural surface and spleen. Slight hemorrhage was observed in the tail of the pancreas but neither the presence nor absence of hemorrhage was described elsewhere with regard to these wounds. There was no mention of injury to the spinal cord or peripheral nerves, the latter of which was likely.

Mrs. Ryen suffered 14 injuries to the head, 2 to the back of the neck and 14 to the torso (6 anterior, 6 posterior and the 2 fatal injuries to the right side). She suffered 7 wounds which were consistent with perimortem injuries. She suffered a total of six defense wounds, three to the left arm, two (superficial) on the back of the left hand and one on the palmer aspect of the right thumb.

Toxicology revealed a 0.07% blood alcohol content, suggesting she may also have been slow to react to a sudden attack.

JESSICA RYEN suffered two stab wounds that could be considered independently fatal (#6- right lateral neck transecting the internal jugular vein and incising the right inner carotid artery and #10- right side into the right lung). Wound #10 was part of a cluster (#8, 9 and 10) located under the right arm. “Retropleural” hemorrhage was noted in conjunction with these injuries on the posterior left side over ribs 7 through 10. This suggested bruising from a “hammer/anvil” effect during the infliction of Wound numbers 8, 9 and 10.

She suffered four wounds definitively from the hatchet (Wounds #1 and 2 were determined to be a single chop wound to the anterior forehead, #4- right face, #34- upper lateral left back, and #40- anterior right lateral head). Counting #1 and 2 as a single injury, she suffered 12 wounds to the head and neck, 11 to the back and three to the right side under the arm (like the fatal wounds to her mother).

There were 5 sharp force injuries (Wounds #11 through 14 and 16) to the upper right inner arm. This is not an area typically exposed to attack. One of these (#16) was a “punctate” 3 millimeter incision. The wounds described in the cluster designated Wound #7 to the chest included multiple superficial linear abrasions and punctate injuries similar to these. Wounds #33 (an abrasion with a skip pattern), 36 and 39 (superficial incisions) were also similar to wounds described in #7.

Jessica suffered 19 defense wounds (5- hands, 14- arms) and 4 injuries to the legs (also technically “defense wounds” when the victim uses their legs to block/deflect an attack). Nine of the injuries (possibly plus a few of those among the cluster described in Wound #7) were perimortem. A few others may have been postmortem like most of those to her chest.

In regard to Jessica Ryen, Root associated a “cluster” of injuries outlined under “Wound #7” with a third weapon described as a “sharp but not penetrating object” like “an awl, screw driver or ice pick.” According to Root, the cluster included approximately 20 separate wounds created

by poking and dragging the point of the implement horizontally across the skin, pulling the material of her nightgown along without creating substantial defects in the garment. The wounds were described with little to no tissue reaction and were characterized during testimony at trial as postmortem. Similar injuries were noted elsewhere on her body as well as on the body of Christopher Hughes (described below).

CHRISTOPHER HUGHES suffered two wounds that could be deemed independently fatal (#4- right lateral back, entering the right lung, incising the main-stem bronchus and pulmonary artery, exiting the lung and piercing the esophagus, and #25- right back, perforating the upper lobe of the right lung). He suffered 9 wounds definitively made by the blade of the hatchet (#1- face, #6- right posterior arm into the humerus, #12- back of the right wrist through the radius and ulna, and #16 through 21 – likely a fatal combination – fragmenting the right parietal bone with extrusion of brain).

Christopher suffered a total of 10 wounds to the head, 6 to the torso (2 anterior, 4 posterior and one right lateral) and 9 defense wounds (7 to the right arm and 2 to the right hand). He suffered four injuries that were perimortem.

Wounds #8 (right posterior axillary fold) and 24 (right lateral posterior back adjacent to #8) are both superficial postmortem wounds which Dr. Root noted "were very similar in nature, apparently caused by the same instrument and different from any of the other wounds described on [Christopher's] body." This suggested a separate implement similar to that described in association with Wound #7 to Jessica.

JOSHUA RYEN was found alive shortly past 12:30 p.m. on Sunday, June 5, 1983 by William Hughes, Christopher's father. Hughes went to the Ryen residence because Chris had not come home after spending the night with the Ryen family. Responding paramedics found Joshua conscious and responsive, though unable to speak due to a throat injury. They noted head trauma as well as penetrating injuries which they presumed to be gunshot wounds. Joshua was airlifted to Loma Linda University Medical Center.

Lacerations were noted to his throat, the top of his skull and the left side of his neck below the earlobe. Additional wounds were noted to his back and left shoulder. Evidence photos revealed wounds consistent with a chopping as well as a stabbing instrument. There were no gunshot wounds.

Scene Examination and Evidence:
The Ryen house had an irregular geometrically designed floorplan. The rooms were therefore also irregular in shape. The master bedroom was oriented roughly north to south. The bed was against the south wall with a nightstand on the west and dresser on the east.

The body of Doug Ryen was found on the west side of the bed with his legs folded beneath him and his upper torso leaning against the bed frame. The body of Peggy Ryen was supine on the carpeted floor north of the bed with her head to the northeast face directed upward. Her arms were directed outward from the torso. Her right leg was extended with the left bent at the knee and turned out.

Doug and Peggy Ryen were both naked. It was reported that they frequently slept that way.

A dust impression (S-2) on the spa cover outside the sliding glass door in the east wall of their bedroom was consistent with a footwear impression in blood (A-8) found inside.

The body of Jessica Ryen lay twisted on the floor in the open bedroom doorway in the north end of the west wall. Her knees were bent with her left hip and leg against the floor. The lower body filled the doorway. The upper body extended to the southwest into the hall. The upper body was rotated to her right so that her chest was directed upward. Her left arm was extended slightly to the west. Her right arm was extended to the southeast.

The body of Christopher Hughes lay in a semi-fetal position on his left side aligned generally parallel to the north wall. His torso was directed northward, head directed to the west. William Hughes observed the body of Joshua Ryen lying in the center of the room. He did not describe Joshua's position but said he was close to the body of Christopher.

Blood Evidence:
Scene photos depicted multiple projected blood patterns on the south wall ranging from the east side to the approximate midline of the bed. Peggy Ryen did not suffer an arterial breach. The blood patterns were therefore from the stab wound to Doug Ryen's left neck (Wound #24). Hair swipe on the west side of the projected patterns rose only a short way above the headboard. Spatter likely comprised of both castoff and impact spatter overlaid the arterial patterns. Three separate castoff patterns extended beyond the central mass of stains to the east. Castoff stains were also present on the east wall beyond the dresser.

Extensive staining on the west side and front of the dresser on the east side of the bed appeared to be comprised mostly of impact spatter. At least one castoff stain across the front was directed eastward. Stains on the bedding included large areas of saturation, arterial stains, drip trails, impact spatter, wipes and transfer stains. Castoff was directed westward on the west end of the south wall, onto the lamp resting on the nightstand on the west side of the bed and onto the doors of the west closet. Heavier stains on the night stand and closet door were possibly arterial projections. Additional stains in the room included saturation and wipe marks in the carpet and castoff, impact spatter, swipe marks and transfers on elevated surfaces. The bed, bedding, furnishings, sections of the south wall panel and carpet were all booked into evidence.

Blood on the rotary phone and handset (A-2) located on the floor on the east side of the bed was consistent with Doug Ryen. The phone base (displaced from the dresser) rested right-side-up at the foot of the dresser with the handset resting at the east side of the bed. The cord and phone line were both connected and intact but the phone was dormant. The line to the house was also intact. It was related that there had been a fairly recent complaint to the phone company about the Ryens' phone not working. However, merely being off-hook for an extended period would cause the line to cut off.

All of the blood from the south wall, blood from the southeast corner of the bed, the nightstand to its west, the west closet doors and the carpet beneath Doug Ryen's body was consistent with

Doug Ryen (samples A-31 through A-35). The severed middle finger from his right hand was inside the west closet.

Blood from beneath Christopher Hughes (A-26), Peggy Ryen (A-27) and Jessica Ryen (A-28) was all consistent with each victim respectively. A saturation stain was observed in the carpet near the desk west of Peggy's body. Blood wipes consistent with drag stains were seen on the carpet between the foot (north end) of the bed and her body.

A broken tooth with a gold crown subsequently determined to be from Peggy Ryen was found on the fitted sheet approximately three feet from the foot of the bed near the west side. Typing of blood samples from the shelves to the desk unit against the west wall was inconclusive (believed to be a mix).

Blood (A-38) from one of two swipe marks on the lower portion of the bedroom door was consistent with Joshua. A spatter or cast-off pattern (A-37) was located on the wall to the south of the door rising approximately a foot from the floor. This was consistent with Jessica. A sample from a stain (A-42) in the hallway opposite her body was also consistent with Jessica.

A blood-saturated pillow was observed on the floor inside the bathroom against the open bathroom door. Transfer stains coated the inner and outer molding of the west door jamb, extending onto the south-facing west end of the door and westward onto the north wall. Scene photos indicated that these were all consistent with an impact by the pillow in a downward trajectory to the northwest. Blood from the outer molding (A-39) was consistent with Doug Ryen.

Blood spatter (A-40) consistent with Doug Ryen was on the north wall east of the bathroom. This extended west to east between the floor and a height of 78 inches onto the first (west) door panel of the north closet. Blood spatter was also present on an ironing board set up outside the closet. Though consistent with castoff, the disbursal pattern appeared consistent with two or more swings of the blood saturated-pillow (presumably attempting to deflect a weapon or disarm the assailant) before losing control of it.

Blood stains (A-43 through A-45) consistent with Joshua and a saturation stain were located on the carpet inside the master bathroom. Dilute stains were present on the rim of the sink.

A blood sample (A-41) was obtained from a stain near the base of the west wall in the hallway opposite the second (west) entry to the master bathroom. A photo depicting this stain revealed a long downward flow on the wall several inches above the floor with a satellite stain on the top edge of the baseboard directly below. This was consistent with slight acceleration of wet blood dripping from an object in motion. No drip trail was seen in the image. At least one dark spot in a near area of the carpet may have been a drip stain. The sample from the parent stain was determined to be consistent with Kevin Cooper. It was later reported that a possible error raised a question as to the accuracy of one genetic marker. Later (post-appeal) DNA testing confirmed that it was from Cooper. A rectangular stain was observed on the carpet to the east of the drip stain on the wall. It could not be determined whether it represented a partial sole impression.

“Possible bloodstains” (UU-1 – 4) were collected from the lower wall opposite the master bathroom in the area where A-41 was located (not seen in photo). Finger swipes (samples UU-5 & 6) from a single individual were located on the inner surface of the east hallway door leading to the living room. They were described as beginning approximately 32 inches above the floor near the east edge of the door and arcing upward to the west reaching a height of 41 inches. This was just to the north of the west door into the master bathroom. The door opened south to east into the hall. The doorknob (UU-16) also bore possible stains and was collected. No images of the stains on the door or the knob were found. The carpet outside the master bedroom (T-1) had been collected previously.

A one-inch “possible blood” stain (UU-7) was located on the north wall of the hallway across from Joshua’s bedroom on the west side of the house. It was 50 1/2 inches (possibly 60 1/2, the edge of the first digit was not visible) above the floor. “Material” (UU-8) was collected from the wall opposite Jessica’s room.

“Small traces” of blood were observed in the area of the sink in the west bathroom north of Joshua’s room. A presumptive test for blood was reportedly positive but a corresponding evidence number was not found. Blood was also found on an interior wall of the refrigerator adjacent to four cans of Olympic Gold beer.

Two sections of carpet (T-2 and T-3) were cut from stairs leading to the sunken living room. Item T-4 included two boxes of Band-Aids and a wrapper found beneath the north sink of the master bathroom (where the dilute bloodstain was observed). Items T-1 through T-4 were collected on June 10, 1983. Items UU-1 through UU-16 were collected on June 30.

One partial sole impression in blood was found on the patio outside the sliding glass door of the master bedroom. This reportedly belonged to a paramedic.

Nine PDF files were provided containing scans of the contents of separate albums of autopsy, scene and evidence photos. It was noted that the album pages were scanned in their plastic sheet protectors which exhibited cracks, mars and scuffs. Some images contained in the scans appeared to depict stains that were not described in the evidence lists or scene reports.

“Cooper 0005949 -0005992” contained images labeled S1 through S3 (page 37 of 44) which appeared to depict small incidental stains on walls in non-descript areas other than in the master bedroom. It also contained images labeled T-18 and H-8 (page 42 of 44). These were possibly taken in the laundry room based on what appeared to be part of a utility sink. Small widely disbursed stains were visible on areas of the same wall depicted in both. These lacked directionality or any discernable pattern and appeared consistent with “fly spots” (transfers of blood from one area of a scene to another by flies). Images H5 and H6 (page 41 of 44) depicted the living room. Several dark and old appearing stains were seen on the carpet. Image H6 had the word “stains” written on it in red marker. An arc-shaped arrow pointed to a section where no stains were visible, suggesting whatever was supposed to be present was not picked up in that photo and no separate photos depicting the area were found.

"Cooper 0005864- 0005948" contained an image labeled T-14 (page 78 of 85) which depicted a wedge-shaped transfer stain on a wall in a non-descript area. Image T-15 (page 84 of 85) depicted the interior surface of the door between the master bathroom and bedroom (indicated by damage described in the crime scene report). Transfer stains in what appeared to be dilute blood were present on the west side (opposite and slightly above the level of the door knob).

Incident Dynamics:
A blitz style assault is characterized as a sudden indefensible attack. It is rapid, extremely forceful and deliberately intended a) to maximize injury in order to overcome resistance and b) to incapacitate the target in order to preclude escape. The initial assault may or may not be lethal. However, once these objectives are achieved, the offender has the opportunity to better control time and circumstances in furtherance of his/her goals.

Blood evidence indicated that Doug and Peggy Ryen were both attacked on the bed. Doug traversed from one side to the other. Blood matched to him on the north side of the room was deposited by means of transfer from the saturated pillow and cast-off emitted from a distance. Though blood did not individualize Peggy Ryen apart from stains beneath her body, there was no evidence that either escaped the area of the bed prior to reaching their respective points of rest. Root noted small "splatters" (spatter) on the soles of Peggy's feet but no evidence that she was moving on her feet off of the bed.

The immediate incapacitation of at least one of the adults would change the dynamics considerably in favor of the attacker. The extent and placement of injuries to Doug Ryen were consistent with a concerted effort to do exactly that.

Multiple factors contribute to the extent of victim injuries apart from the actions of the offender. Chief among these are containment to a confined area and victim movement. Turning and twisting presents multiple target surfaces to the offender, minimizing effort while maximizing effect. Flailing limbs not only result in defense injuries but increase impact energy of the weapons. Attacking two individuals in close proximity, especially with two weapons simultaneously while the victims were off their feet, would simplify targeting critical areas and increase "incidental" injuries as the weapons skip or bounce from one area (or body) to another. The bed itself may have been a factor as the water-filled mattress could make it difficult to maneuver or escape. The offender may have climbed onto the bed to confront both simultaneously, at least briefly. Displacement of the bedding off the north end, apparent fabric transfers and the bloody sole impression on a portion of sheet (A-8) support this likelihood.

The offender did not have to kill either adult before directing his attention to the intrusion of the children who literally appeared one at a time, beginning with Jessica. Any injury inflicted through Jessica's hair (which included stab and chop wounds to her head and back) would result in cut hair adhering to the bloody weapon(s) in addition to depositing hair on the floor. Hair from the weapons could then be transferred during attacks on other victims as noted with Peggy. The prospect that Jessica reached Peggy resulting in the direct transfer of hair cannot be ruled out. The location of Jessica's body coupled with spatter on the wall inside the doorway indicated she made it at least a short way into the room before being attacked and attempting to escape. Dr. Root noted "some blood smeared about the feet."

As discussed below, a consultant retained by Cooper, SSA Gregg O. McCrary (FBI retired), suggested that Jessica escaped, was apprehended outside the house, and was brought back in, supporting the theory of multiple offenders. This notion was apparently based on the presence of "blood swipes along the walls outside the bedroom," "two burrs" on her nightgown and "an insect found in the body bag" used to transport her from the scene. The physical evidence is inconsistent with McCrary's suggestion. Lack of abrasions and dirt on Jessica's feet confirmed she did not escape outside and get brought back. Her final position of rest, however, indicated that her body was manipulated after autonomous activity ceased.

I do not find any evidence that any of the victims were chased around the house during the attack. Had any of the victims been chased by one or more assailants following the initial attacks, blood trails and castoff from one or more dripping weapons would have been grossly apparent. Blood from injuries inflicted after their capture and drag marks leading back to the master bedroom where all of the bodies were found, would also have been evident. Instead, the evidence described outside the master bedroom was minimal and included no such evidence.

The extent of blood on the walls and finger swipes on the door from the east hall to the living room previously described were not consistent with McCrary's characterization of the evidence. Stains on the wall opposite the bedroom were limited to Jessica (A-42) and Cooper (A-41). There were no "swipes along the walls."

The Ryen family lived on and operated a horse ranch. The sliding door in the wall opposite Jessica's body and its use for admitting paramedics, investigators, criminalists and coroner's personnel was one possible source of such contamination. The offender (who likely crossed a field to approach) was another.

If Peggy Ryen "was able to get out of bed and move close to the doorway," as McCrary reported, preventing her escape did not require the involvement of more than one offender. If the attack on her had occurred away from the bed, cast-off and impact spatter should have been clearly discernable and easily isolated from other deposits of blood. Lack of such evidence reduced that prospect considerably. In any event, her body position, like Jessica's, was manipulated after the fact. The previously described drag marks at the foot of the bed coupled with short dark curls of hair consistent with Peggy's suggested she did not move to her place of rest under her own power.

Like Jessica, Chris Hughes and finally Joshua Ryen entered the room and were waylaid before they could escape. To what degree the offender had to go back to either adult between or following the attacks on the children cannot be determined but he clearly had the opportunity to do so. If not already dead by the time Joshua was subdued, both adults were certainly near death and posed no threat of resistance or escape.

The fatal stab wounds to Jessica occurred with her down on her left side as indicated by the hammer/anvil effect previously related. Once turned into her final positon of rest, the inner right upper arm was accessible to wounds 11 through 14 and16, as was her chest to the cluster of wounds described in Wound # 7. Scene photos depicted her nightgown hiked up about her hips,

suggesting that many or all of the wounds to her chest could have been made beneath the garment rather than from outside as Dr. Root suggested.

In similar fashion, Christopher's final position exposed the areas of wounds 8 and 24 which Dr. Root attributed to a weapon "other" than used elsewhere on his body. Yet wounds 7, 8 and 10 were also accessible and were similar in the characteristics previously described. These injuries were all peri to postmortem. However, they constituted specific offender behavior which time had not previously afforded the offender to indulge. Christopher was attacked after Jessica and Joshua last of all. There was no time for the offender to engage in postmortem activity until after Joshua was attacked and presumed dying or dead.

If a third implement was, in fact, employed as Dr. Root opined, this was the time when it came into use – most extensively on Jessica. Injuries of this type are not typical of assaults with sharp force weapons but are not uncommon in sexual assaults or sexually motivated murders.

Blood in the area of Jessica's upper right sleeve indicated her heart was still beating at the time of the injuries to that area but had stopped by the time of the chest wounds. While the total time spent in the house by the offender could have been no more than 15 to 20 minutes, postmortem activity alone might have taken that much time. However the offender was probably not inside the Ryen residence for more than an hour.

Following the murders, the chest and sleeves of the offender's clothing would have been extensively stained. Castoff stains would be present on the shoulders and upper back of a shirt or jacket. Blood on the pants and tops of his shoes would depend on the length of the upper garment and extent to which his lower body was exposed to spatter (primarily from victims on the floor). There was evidence that the offender did at least a superficial clean-up and took time to find a band aid suggesting he sustained a self-inflicted injury (common in knife assaults even with only one weapon in use).

I have reviewed analyses by two consultants retained to assist Cooper. I do not find either analysis persuasive.

McCrary Analysis:
SSA McCrary began his "Investigative Analysis" talking about the number of wounds, the number of victims and the number of weapons being indicative of multiple offenders. He spoke of "most lone offenders" selecting a single weapon, "rarely" switching them, and the need for a lone offender in this instance "to quickly alternate between two, three or perhaps more weapons" to inflict "so many wounds" in "rapid succession." He declared, "This scenario is most unlikely." This is a gross generalization and misrepresentation of facts.

He claimed a lone offender would have trouble controlling five victims, but went on to relate that all the lights were off, the adults were attacked while asleep in bed, Doug Ryen was a heavy sleeper and both had consumed alcohol. He described the assault as "a sudden and severe attack" to which neither adult could "put up more than the feeblest resistance." Yet he failed to acknowledge the relevance of these facts to the ability of one person to accomplish what he asserts was done by multiple offenders. He presumes without explanation that time was an

integral factor negating the potential for one person to inflict all of the documented injuries to all five victims.

The incident dynamics just described apparently did not occur to him. Neither did the fact that all five victims continued to suffer injuries contemporary to and, in at least two instances, following death. Clearly there was no hurry in the mind of the offender.

Dr. John P. Ryan Analysis

Dr. Ryan, a Forensic Pathologist, reviewed this case in 2000. His report was comprised of two pages including his wound chart. He opined, "It would be virtually impossible for one person to have accomplished this." He referred to testimony by Dr. Root regarding the time required to inflict the total number of injuries sustained by all five victims. Dr. Ryan provided a chart totaling the number of wounds, fractures and amputations for each murder victim. (The number of fractures and amputations was actually included in the total number of wounds so listing them separately did not add to the tally and provided no insight into the number of offenders.)

When multiple offenders armed with sharp force instruments attack someone, each assailant is presented with a target surface (front, back, side) that receives the majority of wounds inflicted by that particular assailant and implement. Often it is possible to distinguish which weapons were used on a victim, but even if the weapons are too similar to tell apart, the localization of wounds and angles of penetration will most often individualize the attackers, that is, identify how many different attackers were involved. Dr. Ryan failed either to recognize, or at least to mention, the lack of individualized target zones. None of the five victims had individualized target zones indicating an attack by multiple attackers.

It is also significant that two remarkably similar weapons were used against all five victims, including Josh Ryen, and that each suffered wounds caused by both weapons to multiple areas of the body. Dr. Ryan made no observations regarding the wounds, implements or incident dynamics.

In forming and expressing his opinions, Dr. Ryan cited Joshua's belief that "there were 3 to 4 persons" responsible. It was apparent that Joshua's statement was equivocal as outlined in Dr. Eisen's report regarded it. Yet Dr. Ryan relied upon the impression of a badly injured, medicated and traumatized child rather than apply his own expertise to the medical evidence.

The question of how long it would take to inflict the total number of injuries suffered collectively by all five victims is irrelevant regardless of how many assailants were involved. If there had been evidence of a specific timeframe, such as a 911 call and the time it took police to arrive and find the same five victims, then the question of time would be a valid issue. No such circumstance is presented here. There was no imperative for the crimes to have been accomplished within a given timeframe and thus no reason to believe any greater or lesser time was relevant to determining the number of attackers. Dr. Ryan states that one person could not have committed the crimes in a total of one to two minutes yet quotes Dr. Root, who testified it might have taken up to 15 minutes to inflict the wounds. The issue here was how long it would take one offender to sufficiently incapacitate the adult victims to overcome their defenses and preclude their escape. Dr. Ryan does not address that issue.

CONCLUSION

For the reasons listed above, it is my opinion that one person, acting alone, could very well have committed the crime. It is my further opinion that one person, rather than multiple assailants, committed the crimes.

Finally, offender generated evidence links the Ryen/Hughes murders to Kevin Cooper. It fails to implicate anyone else. There was no physical evidence of more than one offender in the Ryen house or more than one interloper in the rental house next door.

I have reviewed the Report of Special Counsel evaluating Cooper's claim that he did not commit the murders of the Ryens and Hughes. I agree completely with Special Counsel's conclusions that the evidence of Cooper's guilt is overwhelming. I will not repeat all the reasons laid out in that Report. All of the arguments suggesting that multiple assailants, other than Cooper, committed the crimes were debunked.

SUBMITTED BY PAUL Q. DELHAUER

Report of Mark Lillienfeld

MARK LEE LILLIENFELD
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Re: *Investigation of Kevin Cooper*

Qualifications and Experience

I was a Los Angeles County Sheriff's deputy for 36 years, the last 25 years assigned as a homicide detective.

After retirement in 2016, I was hired on a contractual basis to work as an investigator with the Los Angeles County District Attorney's Office, assigned to the conviction review unit, investigating claims of factual innocence from post-conviction inmates who had exhausted all other appeals.

During that assignment, I assisted in securing findings of factual innocence for three inmates who had filed claims of innocence.

I worked closely on these projects with representatives from Loyola law schools Innocence project.

Request for Investigation

I was contacted by Morrison & Foerster and asked to assist in their investigation and evaluation into Kevin Cooper's claim that he did not commit the Ryen/Hughes crime in 1983.

Among the work I did with the Firm, I was asked to evaluate the claim by Kevin Cooper (and his attorneys) that the part(ies) actually responsible for the Ryen-Hughes murders was Eugene Leland Furrow, (aka Lee Furrow).

I have conducted a review of all the materials provided from the San Bernardino County District Attorney's Office as well as those provided by the Cooper defense team.

I have examined photographs, diagrams, and actual physical evidence presented during the Cooper trial, currently in the custody of the San Diego County Superior Court, Custodian of Exhibits.

I spent over five hours interviewing Lee Furrow in person, as well as an additional several hours on the phone.

In-person interviews have been conducted with Kerri Kellison and Nikki Sue Giberson, (sister and friend of Diana Roper), who first indicated Furrow was involved.

Both had stated that they had information relative to the involvement of Furrow.

Substantial interviews have also been conducted with James D. Cameron and James H. Cameron, a father and son team who worked with Furrow in the construction industry years after the Ryen-Hughes murders.

I have also interviewed Owen Handy, who spent 54 days with Cooper in the immediate aftermath of the murders, as well as Ron Forbush, who was Cooper's defense investigator.

Summary

In 42 years as a peace officer, 37 as a detective, I have presented thousands of cases for criminal prosecution, primarily to the Los Angeles County district attorney, as well as the California Attorney General, and the United States Attorney. These cases have ranged in severity from petty theft to special circumstance murders.

I have made thousands of arrests, with and without a warrant, for the same range of offenses.

I am intimately familiar with the burden of proof needed for a criminal charging, that being beyond a reasonable doubt, as opposed to that required for a simple arrest, that being probable cause.

Upon examining all of the "evidence" that the Cooper defense team has accumulated and presented regarding the involvement of Furrow in the Ryan -Hughes murders, there is not only a lack of a prima facie case presentation to a charging authority, there is not even the slightest invocation or evidence of probable cause, for an arrest or even the minimal amount of information-evidence needed for a search warrant, based on any of the statements, physical evidence, or other materials gathered.

To the contrary, Furrow not only lacks a motive or interest in the murders, but he has a solid alibi based in part on statements from outside parties who don't have an interest or agenda in the inquiry in any manner. Cooper contends that Furrow went to a large music festival, the US Festival, on the evening of June 4, 1983 at the Glen Helen Amphitheatre in San Bernardino, but left the festival to travel about 35 miles away to Chino Hills to commit the Ryen/Hughes murders. In May 1984, Karee Kellison was interviewed by a San Bernardino detective and she stated that she saw Furrow at the US Festival as late as 12:30 a.m. on June 5, 1983. Karee said she spoke to Furrow and Debbie Glasgow in the "beer garden" at the Festival at that time. When I interviewed Karee earlier this year, she reaffirmed her statements and stated she had no reason to doubt the accuracy of her statement. Karee also stated that at 1:40 a.m. on June 5, 1983, when she and her sister Diana Roper arrived at Diana's house in Mentone, California, the telephone was ringing and it was Furrow. She could hear the conversation between Furrow and Roper. Furrow said he was still at the US Festival because Diana had stranded him there, and Furrow asked Diana to come pick him up at the Festival. Diana said she would only go pick him up if Karee went too, and Karee refused to do so.

My understanding is that Cooper has never claimed that Furrow committed the Ryen/Hughes murders and ***then*** went to the US Festival. The evidence does not support that theory in all events. When I interviewed Karee Kellison, I asked her about Furrow's demeanor and appearance at the US Festival when she saw him around 12:30 a.m. on June 5, 1983. Karee said that Furrow was with Debbie Glasgow, Furrow was not wearing coveralls, and neither of them had any blood on them. Her statements indicated Furrow was wearing a tan t-shirt at the Festival. Furthermore, Furrow and Glasgow did not have a vehicle at the Festival, so they had no way to get to Chino Hills, 35 miles away to commit the crime. And if they had committed the murders first and stolen the Ryen wagon, they would not have telephoned Diana Roper asking for a ride to Mentone at 1:40 a.m. as Karee reported.

I have also reviewed the statements that Diana Roper gave at various times to the Sheriff's Department, and her later declarations regarding a pair of coveralls and Lee Furrow. Because Diana's initial report to the Sheriff's Department on June 9, 1983 stated that she did not know where the coveralls that she found in her closet came from, her later reports that she saw Furrow wearing blood covered coveralls in the early morning hours of June 5, 1983 are simply not credible. Likewise, given Karee Kellison's initial statement to the authorities in 1984 that she did not know where the coveralls came from, her much later statements that she saw Furrow wearing them in the early morning hours of June 5, 1983 are not credible. I believe that Cooper's attorneys in 1984 concluded as much, which is very likely the reason they did not ask Roper or Karee to testify in Cooper's defense.

None of the allegations or "evidence" regarding the involvement of Furrow in the Ryen-Hughes murders appeared to be based on fact nor corroborated in any manner, at any time. There was nothing substantive produced to indicate Furrow had any knowledge or information regarding the murders. A thorough investigation of Furrow's past criminal history showed conduct that was contrary to that exhibited by the killer of Ryen-Hughes.

The Furrow allegation raised by the Cooper defense team would not pass a hearing or motion in front of any court regarding third party culpability, which is easily inferred by the fact that this was not even attempted in the original trial held in San Diego County.

If called to testify it would be my opinion and testimony that there was no credible evidence whatsoever to indicate Furrows involvement in the Ryan - Hughes murders.

In my past experiences investigating wrongful convictions, a noticeable pattern or signature emerged during those types of inquiries, indicative of evidence tampering, perjury, inconsistence or conflicting accounts, and other malfeasance.

I failed to find any of that type of conduct or evidence regarding the prosecution of Cooper. If called to testify, I would express that opinion also.

By: Mark Lillienfeld