# TEXAS FORENSIC SCIENCE COMMISSION

FINAL REPORT ON SELF DISCLOSURE NO. 24.32; DNA REFERENCE LAB (FORENSIC BIOLOGY)

**JULY 25, 2025** 



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#### I. BACKGROUND

#### A. History and Mission of the Texas Forensic Science Commission

The Texas Forensic Science Commission (Commission) was created during the 79<sup>th</sup> Legislative Session in 2005 with the passage of HB-1068. The Act amended the Code of Criminal Procedure to add Article 38.01, which describes the composition and authority of the Commission. During subsequent legislative sessions, the Texas Legislature further amended the Code of Criminal Procedure to clarify and expand the Commission's jurisdictional responsibilities and authority.<sup>1</sup>

The Commission has nine members appointed by the Governor of Texas.<sup>2</sup> Seven of the nine commissioners are scientists or medical doctors and two are attorneys (one prosecutor nominated by the Texas District and County Attorney's Association and one criminal defense attorney nominated by the Texas Criminal Defense Lawyer's Association).<sup>3</sup> The Commission's Presiding Officer is Jeffrey Barnard, MD.

#### **B.** Commission Jurisdiction

## 1. Investigations of Professional Negligence and Professional Misconduct Resulting from Laboratory Self-Disclosures

Texas law requires the Commission to "investigate in a timely manner, any allegation of professional negligence or professional misconduct that would substantially affect the integrity of the results of a forensic analysis conducted by a crime laboratory." The term "forensic analysis" includes a medical, chemical, toxicological, ballistic, or other examination or test performed on

<sup>&</sup>lt;sup>1</sup> See e.g., Acts 2013, 83rd Leg. ch. 782 (S.B. 1238) §§ 1-4 (2013); Acts 2015, 84th Leg. ch. 1276 (S.B. 1287) §§ 1-7 (2015), Acts 2023, 88th Leg. ch. 742 (H.B. 3506) §§ 1-2 (2023), Acts 2023, 88<sup>th</sup> Leg. ch. 1149 (S.B. 0991) § 1 (2023).

<sup>&</sup>lt;sup>2</sup> TEX. CODE CRIM. PROC. art. 38.01 § 3.

 $<sup>^{3}</sup>$  Id.

<sup>&</sup>lt;sup>4</sup> TEX. CODE CRIM. PROC. art. 38.01 § 4(a)(3)(A).

physical evidence, including DNA evidence, for the purpose of determining the connection of the evidence to a criminal action.<sup>5</sup> Crime laboratories must self-report professional negligence and professional misconduct, which are defined as follows:<sup>6</sup>

"Professional misconduct" means the forensic analyst or crime laboratory, through a material act or omission, deliberately failed to follow the standard of practice that an ordinary forensic analyst or crime laboratory would have followed, and the deliberate act or omission would substantially affect the integrity of the results of a forensic analysis. An act or omission was deliberate if the forensic analyst or crime laboratory was aware of and consciously disregarded an accepted standard of practice required for a forensic analysis.

"Professional negligence" means the forensic analyst or crime laboratory, through a material act or omission, negligently failed to follow the standard of practice that an ordinary forensic analyst or crime laboratory would have followed, and the negligent act or omission would substantially affect the integrity of the results of a forensic analysis. An act or omission was negligent if the forensic analyst or crime laboratory should have been but was not aware of an accepted standard of practice.<sup>7</sup>

#### 2. Accreditation Jurisdiction

The Commission is charged with accrediting crime laboratories and other entities that conduct forensic analyses of physical evidence.<sup>8</sup> The term "crime laboratory" includes a public or private laboratory or other entity that conducts a forensic analysis subject to article 38.35 of the Code of Criminal Procedure.<sup>9</sup> The Commission may take action against a laboratory's accreditation or decline to renew accreditation under certain circumstances as described in its enabling statute and related administrative rules.

<sup>&</sup>lt;sup>5</sup> TEX. CODE CRIM. PROC. art. 38.35(a)(4).

<sup>&</sup>lt;sup>6</sup> Id. at art. 38.01 § 4(a)(1)-(2) (2019); See also, 37 Tex. Admin. Code § 651.219(c)(5) (2020).

<sup>(</sup>Pursuant to the Forensic Analyst Licensing Program Code of Professional Responsibility, members of crime laboratory management shall make timely and full disclosure to the Texas Forensic Science Commission of any non-conformance that may rise to the level of professional negligence or professional misconduct).

<sup>&</sup>lt;sup>7</sup> 37 Tex. Admin. Code § 651.302 (7), (8), and (10) (2020). The term "would substantially affect the integrity of the results of a forensic analysis" does not necessarily require that a criminal case be impacted or a report be issued to a customer in error. The term includes acts or omissions that would call into question the integrity of the forensic analysis, the forensic analysts, or the crime laboratory as a whole regardless of the ultimate outcome in the underlying criminal case.

 $<sup>^{8}</sup>$  Tex. Code Crim. Proc. art. 38.01  $\S$  4-d(b).

<sup>&</sup>lt;sup>9</sup> *Id.* at art. 38.35(a)(1).

#### 3. Licensing Jurisdiction

Under Texas law, a person may not act or offer to act as a forensic analyst unless the person holds a forensic analyst license issued by the Commission. <sup>10</sup> The law defines the term "forensic analyst" as "a person who on behalf of a crime laboratory [accredited by the Commission] technically reviews or performs a forensic analysis or draws conclusions from or interprets a forensic analysis for a court or crime laboratory." <sup>11</sup>

Pursuant to its licensing authority, the Commission may take disciplinary action against a license holder or applicant for a license on a determination by the Commission that a license holder or applicant for a license committed "professional misconduct" or violated Texas Code of Criminal Procedure Article 38.01 or a rule or order issued by the Commission.<sup>12</sup> If the Commission determines a license holder committed professional misconduct or violated an administrative rule or order issued by the Commission, the Commission may: (1) revoke or suspend the person's license; (2) refuse to renew the person's license; (3) reprimand the license holder; or (4) deny the person a license.<sup>13</sup> The Commission may place on probation a person whose license is suspended.<sup>14</sup> Disciplinary proceedings and the process for appealing a disciplinary action by the Commission are governed by the Judicial Branch Certification Commission.<sup>15</sup>

#### 4. Jurisdiction Applicable to the Disclosure

The disclosing laboratory, DNA Reference Lab, is currently accredited by the American Association for Laboratory Accreditation (A2LA) under International Organization for Standardization (ISO) standard 17025: 2017. The Commission first accredited DNA Reference

<sup>&</sup>lt;sup>10</sup> TEX. CODE CRIM. PROC. at art. 38.01 § 4-a(b); 37 Tex. Admin. Code § 651.201(c) (2018).

<sup>&</sup>lt;sup>11</sup> *Id.* at art. 38.01 § 4-a(a)(2).

<sup>&</sup>lt;sup>12</sup> *Id.* at art. 38.01 § 4-c; 37 Tex. Admin Code § 651.216(a) (2024).

<sup>&</sup>lt;sup>13</sup> 37 Tex. Admin Code § 651.216(a)(1)-(4) (2024).

<sup>14</sup> Id. at (b).

<sup>&</sup>lt;sup>15</sup> TEX. CODE CRIM. PROC. art. 38.01 § 4-c(e); 37 Tex. Admin. Code § 651.216(d) (2024).

<sup>&</sup>lt;sup>16</sup> See, https://fsc.txcourts.gov/AccreditedLabPublic# for a list of accredited laboratories.

Lab for forensic biology/DNA analysis from August 25, 2017, through December 31, 2023, based on the laboratory's A2LA accreditation. On November 28, 2022, A2LA suspended DNA Reference Lab's accreditation. Upon learning from A2LA that it had suspended DNA Reference Lab's accreditation, the Commission also suspended the lab's accreditation effective November 28, 2022.<sup>17</sup>

On February 29, 2024, A2LA reinstated the laboratory's accreditation. However, the Commission has not yet reinstated DNA Reference Lab's accreditation due to the laboratory's failure to timely notify the Commission of either the initial suspension or the reinstatement by A2LA<sup>18</sup> as well as the quality issues identified during this investigation.<sup>19</sup> It is important to note that the Commission's accreditation and licensing jurisdiction is limited to forensic analysis involving a "criminal action," defined as "an investigation, complaint, arrest, bail, bond, trial, appeal, punishment, or other matter related to conduct proscribed by a criminal offense."<sup>20</sup>

The individual who is the subject of the disclosure, Yaireth Castro (Castro), was employed by DNA Reference Lab until shortly before the disclosure was filed. She has maintained a license in good standing in the Forensic Biology/DNA discipline since June 16, 2022. She is currently employed by a different accredited laboratory that performs DNA analysis in Texas criminal cases.

#### C. Investigative Process

The Commission's administrative rules set forth the process by which it determines whether to accept a self-disclosure for investigation as well as the process used to conduct the

<sup>&</sup>lt;sup>17</sup> 37 Tex. Admin Code § 651.11(1).

<sup>&</sup>lt;sup>18</sup> 37 Tex. Admin Code § 651.8(d)(3).

<sup>&</sup>lt;sup>19</sup> 37 Tex. Admin. Code §§ 651.11 and 651.105.

<sup>&</sup>lt;sup>20</sup> TEX. CODE CRIM. PROC. § 38.35.

investigation.<sup>21</sup> The rules also describe the process for appealing final investigative reports by the Commission including possible disciplinary actions against a license holder or applicant.<sup>22</sup>

#### D. Limitations of this Report

The Commission's authority contains important limitations. For example, no finding by the Commission constitutes a comment upon the guilt or innocence of any individual.<sup>23</sup> The Commission's written reports are not admissible in civil or criminal actions.<sup>24</sup> The Commission does not have the authority to subpoena documents or testimony. Information received during any investigation is dependent on the willingness of affected parties to submit relevant documents and respond to questions posed. Information gathered in this report was not subjected to standards for the admission of evidence in a courtroom. For example, no individual testified under oath, was limited by either the Texas or Federal Rules of Evidence (e.g., against the admission of hearsay) or was subject to cross-examination under a judge's supervision.

#### II. SUMMARY OF THE SELF-DISCLOSURE

On August 26, 2024, DNA Reference Lab, by and through its Director, Dr. Ali M. Salih (Salih), filed a disclosure alleging that DNA Analyst Yaireth Castro (Castro) deliberately deleted files and data from her work computer and had an undisclosed conflict of interest due to a personal relationship with an individual employed by a laboratory in San Antonio that Salih considers to be a competitor to DNA Reference Lab. (*See*, Exhibit A: DNA Reference Lab Self-Disclosure).

#### A. Notice and Investigative Decision

On September 17, 2024, commission staff contacted Castro and advised her of her right to respond to the allegations in the self-disclosure. She responded in writing on September 22, 2024.

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<sup>&</sup>lt;sup>21</sup> 37 Tex. Admin. Code § 651.304-307 (2019).

<sup>&</sup>lt;sup>22</sup> 37 Tex. Admin. Code § 651.401 (2024).

 $<sup>^{23}\,</sup>$  Tex. Code Crim. Proc. art. 38.01  $\S$  4(g).

<sup>&</sup>lt;sup>24</sup> *Id.* at § 11.

(See, Exhibit B, Analyst Response). At its January 31, 2025, quarterly meeting, the Commission voted to accept the disclosure for investigation.

#### **B.** Response by the Analyst

In her September 2024 response, Castro strongly denied deleting files from her work computer or having any undisclosed conflict of interest due to a prior personal relationship with an individual employed by another accredited forensic laboratory in San Antonio. While she did acknowledge having a personal relationship with an individual who was employed by another local laboratory, he was not a DNA analyst, and the laboratory performs toxicology and seized drugs testing, not DNA testing. Castro also raised several concerns regarding scientific practices at DNA Reference Lab including proficiency testing that was misleading with respect to who actually performed different components of the tests; inadequate validation of new technology over staff objections; and the use of expired reagents without appropriate documentation.

#### C. Investigative Panel

At its January 31, 2025 quarterly meeting the Commission voted to appoint Commissioners Michael Coble, Erika Ziemak, and Mark Daniel to the investigative panel assigned to investigate this disclosure. On March 3, 2025, staff and Commissioner Ziemak interviewed Castro. On March 24, 2025, staff and Commissioner Ziemak interviewed Salih. On May 8, 2025, staff interviewed Jun Lee, another former employee of DNA Reference Lab who appears to have worked in a technician capacity, though he was not licensed by the Commission as a DNA technician. <sup>25</sup> Staff also reviewed the documentation provided by Castro and Salih in support of their respective

<sup>&</sup>lt;sup>25</sup> During his interview, Lee recounted asking Salih whether he could or should be licensed by the Commission as a forensic DNA analyst or technician. He states that Salih informed him he would need a master's degree to qualify for licensure. This is a misunderstanding of the licensing rules, which do not require a master's degree for either the DNA analyst or the DNA technician categories of licensure.

claims. On May 14, 2025, the investigative panel met at the University of North Texas Health Science Center/Center for Human Identification in Fort Worth, Texas.

#### D. Referral to Accrediting Body (A2LA)

On March 25, 2025, staff referred the original disclosure, Castro's response, and the interviews with Salih and Castro to A2LA. On April 22, 2025, A2LA notified commission staff that the referred information would be investigated by A2LA. On May 7, 2025, A2LA notified the Commission of its decision to close the investigation into alleged wrongdoing by Castro due to lack of evidence and the fact that most of the allegations fall outside the scope of the applicable accreditation standards. However, A2LA committed to following up on the quality issues raised by Castro during DNA Reference Lab's next regularly scheduled assessment.

On May 8, 2025, commission staff notified A2LA of additional information obtained during the interview of Lee. On May 13, 2025, Commission staff met with members of A2LA to discuss technical issues of concern raised by both Castro and Lee, particularly with respect to proficiency testing and validation. As of this writing, A2LA maintains an open investigation into the proficiency testing and validation issues discussed below.

#### III. ALLEGATIONS AGAINST ANALYST

#### A. Deleted Computer Files

DNA Reference Lab performs various types of relationship testing, molecular diagnostics, and a very minimal number of DNA testing for criminal cases. During his interview, Salih shared that in 2009 a DNA Reference Lab employee resigned to open a competing business. He alleged the employee improperly used DNA Reference Lab's proprietary information for this new venture. As a result, Salih appeared to have a heightened awareness regarding potential concerns with departing employees.

According to Salih, after Castro provided notice that she intended to resign, she began arriving to work in the morning earlier than usual. Suspicious of this behavior, Salih began observing her activities. He alleges that on May 14, 2014, he was standing in the doorway to her office and saw her "changing screens" on her computer. He alleges that she "changed screens" six times that day. He decided to investigate his concerns that the changing screens were an indication that she was deleting files from her computer. He sent a backup of her computer to an Austin-based digital forensics firm along with a set of thumb drive "sticks" she had used during her employment.

In a letter dated August 20, 2024, the digital forensics firm identified certain deletions from "USB Device 4," which Salih designated as the memory stick Castro had been using. The letter states that 4,480 files were deleted at some point, and none were recoverable. However, the company also informed DNA Refence Lab that they could not determine when the files were deleted, just that they were deleted at some point after the last file modification date, which ranged anywhere from 2008 to March of 2021. Notably, Castro was not yet employed by DNA Reference Lab for approximately 12 years of that time period. The digital forensics company also performed a file comparison of the two USB hard drives and found nothing was deleted from either hard drive. (See, Letter to Salih re Computer Analysis, Exhibit C). On a separate Excel spreadsheet, the digital forensics company indicated the device was "last connected" in October 2023. According to Salih, the information provided by the digital forensics firm was preliminary, and DNA Reference Lab was awaiting a final report. Commission staff requested a copy of the report but has not received anything to date.

Castro recalled the day that Salih accused her of deleting files. She was surprised by the allegation and denied it immediately. According to Castro, the office door where Salih claims to

have observed her deleting files is a fair distance from her computer screen and she believes it would not be possible for him to have seen what he claims to have seen. She explained that her computer had a single screen, which required her to minimize different windows and move files around frequently in order to perform the tasks required of her. Castro believes Salih misunderstood what he was observing.

When asked about Salih's allegation regarding file deletion, former DNA technician Lee stated he had no firsthand knowledge regarding the allegation but based on his personal experience asserted "there is no way" Castro would delete files for an improper purpose. According to Lee, Castro operated "in good faith" throughout her employment. Lee also informed the Commission that Salih would have had a difficult time observing a computer screen from the doorway of the office space where Castro worked due to vision issues. He further observed that Salih does not have a very good understanding of how computers work and thus may not have appreciated the need to minimize, expand, or move windows in various applications.

#### **B.** Conflict of Interest

Salih also alleged Castro had an undisclosed conflict of interest because she was in a relationship with a person working at a forensic laboratory that is a "competitor" of DNA Reference Lab. Salih identified this laboratory as Quality Forensic Toxicology (QFT) in San Antonio, which is currently accredited by the Commission to perform seized drugs and toxicology testing (limited to blood alcohol). According to Salih, QFT is "trying to establish" a molecular biology unit in an "offshoot laboratory." Salih provided no evidence to support this assertion.

Castro acknowledges she had a personal relationship with an individual employed by QFT at one point but maintains she never shared any DNA Reference Lab confidential information with him. When interviewed, former employee Lee explained he was generally aware that Castro had

a personal relationship with another forensic scientist during the timeframe in question but failed to see any connection between a toxicology/seized drugs laboratory and a DNA laboratory. Lee also expressed his opinion that as a DNA testing laboratory, DNA Reference Lab would not have had any intellectual property that a competitor would not be able to otherwise access in the public domain.

#### IV. COMMISSION FINDINGS REGARDING ALLEGATIONS AGAINST CASTRO

The Commission finds no credible evidence to support the allegation that Castro deleted files from her laptop computer for any purpose outside the ordinary course of laboratory operations. Neither the results of the digital forensics review nor the interviews conducted support this allegation. While Salih's previous negative experience with an employee may have put him on heightened alert, there is no actual evidence to support his allegation that Castro improperly deleted files before her separation from the laboratory.

Similarly, due the broad nature of the allegation that she had an "undisclosed conflict of interest," the disconnect between the forensic disciplines performed by the two laboratories in question, the lack of specificity regarding the so-called "confidential information" or the "conflict of interest" itself, the Commission finds no credible evidence to support the second allegation against Castro.

#### V. PROFICIENCY AND VALIDATION CONCERNS RAISED BY CASTRO AND LEE

#### A. Group Approach to Proficiency Testing

In her response, Castro outlined numerous concerns regarding the laboratory's approach to proficiency testing. Regular proficiency monitoring is a fundamental requirement of accreditation and licensure. It is an important tool in ensuring that each individual employee maintains ongoing proficiency in the areas of analysis for which they are authorized to perform independent casework. According to Castro, the laboratory's practice was to purchase two identical tests for DNA analysis

and interpretation (Test A and Test B). She alleges that she completed both tests from screening through interpretation at the direction of Salih. He then instructed her to input the results of one of the tests under his CTS proficiency account. Castro clarified that sometimes Salih would perform the data interpretation for the sample and sometimes he instructed her to perform the interpretation, and they would "compare results." In some of the tests, Salih did not perform any interpretation or technical review but instructed Castro and/or Lee to input the results as if he had participated in the proficiency. The relative contributions of the individuals who participated in this process, including Castro, Lee, and Salih, were not clearly documented in the record. Castro indicated this issue was raised during an A2LA assessment, and the assessor informed Salih he could either stop extracting DNA evidence or perform the proficiency monitoring independently. The assessor did not interview the analysts outside the presence of Salih and did not cite the laboratory's approach to proficiency monitoring (and related documentation) as a nonconformity.

During an interview with commission staff, Lee confirmed the proficiency-related facts described by Castro. Importantly and even more concerning, Lee explained he was not competency-tested to perform DNA interpretation. He was only qualified to perform extraction, quantification, and capillary electrophoresis. Notwithstanding this and per Salih's instruction, Lee generated reports with statistical analyses for purposes of proficiency testing, which encompasses interpretation. Commission staff showed Lee the laboratory worksheet records for a proficiency test that listed the analyst's name as "Lee/Salih." The worksheets depict notes and observations in Lee's handwriting only. Lee told the Commission he performed the interpretation and drafted the reports used for the proficiency tests. He acknowledged he had never been formally trained or competency tested in interpretation, which are prerequisites for performing this step. However, he felt like he had no choice but to follow Salih's direction in the context of the proficiency tests.

According to Lee, Salih "never" performed a proficiency test independently. If DNA mixture interpretation was required for the test, Salih would discuss the best way to approach the profiles with Lee, but Lee would review the electropherograms, note artifacts, generate statistics, draft the report, and submit it to CTS using Salih's CTS account.

During an interview, Commissioner Ziemak and staff asked Salih to share his understanding of the purpose of proficiency monitoring. He acknowledged the purpose is to demonstrate an analyst's ability to perform casework. He stated that he does not "have sufficient analysts to really handle a proficiency." He shared his view that multiple people can work on a single proficiency test, and he felt like his analysts needed to develop experience in handling data interpretation.

With respect to the proficiency tests listing "Castro/Salih" as the analyst, he explained that Castro performed the extraction and generated the profiles, and he would participate in the interpretation. Salih explained that especially when analysts are new to forensic DNA analysis, he feels he needs to ensure their proficiencies are "done correctly" and the analyst is comfortable with the work. Once he is confident in their abilities, he will "let them do it alone."

Commission staff showed Salih the record of the proficiency test, and he confirmed that the handwriting was Castro's. He explained that Castro would "clean up the artifacts," deconvolute the mixture, and then he would assist with further interpretation. She would write the report, and he would sign it. He explained that they "have a template, and she puts the information in the template." Castro would enter the proficiency test results into the CTS portal on his behalf, but Salih opined that he contributed to "the entire thing."

Salih then revealed that he had a new analyst who was working on a proficiency test at the time of the interview. He asked, "Am I supposed to let her do that all by herself?" He offered that

he would "take her by the hand through interpretation" until she was comfortable doing it by herself. He stated he was uncomfortable with analysts taking a proficiency test initially without his assistance.

When asked what portion of a proficiency test each analyst performed for the test results reported to CTS, Salih stated it depended on the DNA mixture data and the analyst's experience level. "Sometimes it was 90%, sometimes it was 80%, and sometimes it was 50%." According to Salih, "two brains are better than one." In other words, DNA Reference Lab's approach to proficiency monitoring included significant variation from test to test with respect to how much of the work was performed by each participant or group of participants.

#### **B.** Insufficient Validation

Castro also alleged that DNA Reference Lab failed to properly validate a critical reagent and a new extraction and purification kit before utilizing these items in casework. Validation is an essential element of forensic DNA analysis. Allegations regarding improper or insufficient validation must be taken seriously because weaknesses in validation may have a negative downstream impact on casework. The more complex the analytical work performed by the laboratory (e.g., complex DNA mixture interpretation in forensic cases), the more critical robust validation is to the quality of the laboratory's work product.

#### 1. Use of POP-7 Reagent

During the time period in question, DNA Reference Lab performed forensic analysis using Applied Biosystem's 3130 Genetic Analyzer (3130 Instrument). The 3130 Instrument is a capillary electrophoresis system used to perform fragment analysis of forensic samples. The reagent recommended by the manufacturer for use with the 3130 Instrument is the POP-4 polymer, in part because its separation matrix is optimized for forensic and human identification applications. At

some point, Salih indicated to Castro and Lee that the POP-4 was no longer available for purchase, and the POP-7 was a suitable substitute. It is unclear where Salih obtained the information that the POP-4 was no longer available, because as of this writing, it appears to be available for purchase.

Proceeding with the understanding that the POP-4 was not available, DNA Reference Lab purchased POP-7 from Promega Corporation (Promega). According to Castro, when she first used POP-7, she observed various technical issues including "extreme shifting and the ladders would fail." She further observed that the "size standard would not pass, and she could not obtain a good profile from the positive control." Castro consulted with representatives from Promega who advised her that POP-7 is not the reagent normally used with the 3130 Instrument. Promega advised her that the laboratory would need to conduct a validation study to determine whether POP-7 could be utilized effectively in casework. When Castro took this information and her concerns regarding problems with the reagent to Salih, he told her to "keep trying" to process a positive control until it passed quality assurance checks by adjusting the injection and run times on the instrument. Castro stated this approach worked for a while but then would start failing again. According to Castro, Salih did not want to spend the time that would be required to perform a full validation, because this would cause casework to back up. Based on this feedback, Castro and Lee performed a series of performance checks that fell short of proper validation. (See, Performance Check Document, Exhibit D).

Lee expanded on the observations made by Castro regarding the POP-7 reagent. According to Lee, both he and Castro advised Salih against using it based on the manufacturer's recommendation to use POP-4. <sup>26</sup> Lee also believed they needed to perform an in-house validation

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<sup>&</sup>lt;sup>26</sup> The technical manual for the Power Plex Fusion System for Use on the applied Biosystems Genetic Analyzer recommends the POP-4 polymer (p. 21) and further states the Power Plex Fusion System was not developed for use with POP-7 polymer (pps. 52, 55).

before utilizing POP-7 in casework. Lee told the Commission that Salih did not want them to perform a full validation and advised them to "just figure out" the right parameters.

Lee stated that using the POP-7 reagent caused "way more" artifacts than the POP-4 reagent had, and this made it difficult to discern an artifact from a true allele. According to Lee, he raised this issue with Salih many times, but Salih would just advise him to "keep monitoring it." Lee said there were multiple trial and error adjustments to the run parameters while casework proceeded.

Lee also advised the Commission of a recurring issue he observed where an 18-allele would appear at the D10 locus, when it clearly should not have been there. He said this issue occurred multiple times. If the 18-allele appeared at the D10 locus along with two other obvious alleles, he would consider it an artifact (after carefully considering a tri-allelic possibility). In some cases, when he could not discern whether the 18-allele was a true allele or an artifact (for example in a DNA mixture case), he would disregard the D10 locus entirely in his statistical calculations. Lee also observed random artifacts at other genetic markers.

When Salih was questioned about this issue, he acknowledged that validation is important and asserted that he takes the process very seriously. Salih also acknowledged the laboratory had difficulty when switching to the POP-7 reagent. He provided the Commission with the laboratory's performance check documentation for the POP-7. According to Salih, a performance check is "like a validation," only "less good." Notably, the performance check was conducted using data from a limited number of previously analyzed paternity cases, and it confirmed concordance between allele calls without addressing the potential impact of changed injection times or voltages.

Salih acknowledged the analysts were experiencing ladder shifting so they varied the injection times and voltage settings. He denied telling the analysts he did not want to "waste time" performing a full validation of the POP-7 reagent.

#### 2. Monarch Extraction and Purification Kit

According to both Castro and Lee, at one point the laboratory had an instrument out of service, so Salih began using the Bio-Labs Monarch Genomic DNA Purification Kit (Monarch Kit) on casework with no prior validation. Castro was not trained on the kit and never used it, but Salih would use it on paternity casework himself. Salih expressed his view that the validation is a "continuing project." According to documentation he supplied, the validation has not yet been completed. Initially, Salih denied the Monarch Kit was used in casework but then acknowledged having used it in paternity cases. To the Commission's knowledge, these cases were all non-criminal paternity.

#### C. Analyst Concern Regarding Use of Expired Reagents

Both Castro and Lee reported that the laboratory would sometimes use expired reagents. Castro alleges that Salih told her the reagents could be used up to three months after the expiration date. The applicable laboratory procedure prohibited the use of expired reagents, and no written policy deviation authorized their use. Lee also indicated his understanding from Salih that expired reagents could be as long as 3-6 months past expiration. To the extent analysts conducted any performance checks before utilizing the expired reagents, the results of those checks were not documented. Salih denied any use of expired reagents and asserted that checking expiration dates was the responsibility of the analysts.

## VI. COMMISSION FINDINGS REGARDING PROFICIENCY TESTING AND VALIDATION

#### A. Group Approach to Proficiency Monitoring

The approach to proficiency testing utilized by DNA Reference Lab is unsupportable. Once an analyst has been competency-tested in a particular area of forensic analysis and released for independent casework, any proficiency testing specific to that segment of analysis needs to be completed by the analyst independently. Forensic laboratories do sometimes allow different analysts to participate in different elements of a single proficiency test, but their participation in each section of the test must be clearly documented so that the evaluation of their proficiency for that particular section is based on work they performed independently. No such documentation was present in the proficiency test examples evaluated by the Commission.

It is also true that laboratories sometimes use old proficiency tests as a training tool for new analysts. The Commission understands Salih's desire to provide analysts with practical exercises to assist with skill development. However, this should not be done in the context of a proficiency test that is being entered into the CTS system for purposes of complying with the current requirements of accreditation, licensure, or both.

In sum, Salih's efforts to assist new analysts with completing their proficiency tests to ensure they are "doing it correctly" defeats the purpose of proficiency testing requirements, which is to provide an accurate assessment of the independent abilities of qualified examiners. Likewise, if Salih performs DNA analysis and interpretation in the laboratory, he should complete the proficiency tests for each aspect of the work himself. Proficiency testing is not intended to be a collaborative process, and while the maxim, "two brains are better than one," may apply to various aspects of life, it does not apply to proficiency monitoring activities in the context of accreditation and licensing. While A2LA is still investigating these allegations, they have expressed agreement

with commission staff that a collaborative or team-based approach to proficiency testing in this scenario is not fit for purpose and will be addressed at the laboratory's next assessment.

#### **B.** Validation and Use of Expired Reagents

The Commission observes that DNA Reference Lab failed to properly validate both the POP-7 reagent and the Monarch Kit before utilizing them in casework. *The Texas Code of Professional Responsibility for Forensic Analysts and Crime Laboratory Management* states that each forensic analyst shall promote validation and incorporation of new technologies, guarding against the use of non-valid methods in casework (and the misapplication of validated methods).<sup>27</sup> Both Castro and Lee attempted to meet this expectation by raising their validation concerns to Salih multiple times; however, they were overruled.

The use of the POP-7 reagent in casework without proper validation is troubling because by varying the injection times, run times, and voltage settings, the laboratory introduced significant variability that may affect its analytical and stochastic thresholds. Salih should have heeded the input of Castro and Lee by conducting a proper validation of the POP-7 reagent *before* utilizing it in casework. The Commission further observes that while proper validation is important irrespective of case type, it takes on particular significance for forensic samples, which often involve DNA mixtures. With single-source paternity reference samples, the artifacts could be easier for an analyst to identify, but with DNA mixture interpretation, it would be difficult for analysts to discern between artifacts and true alleles.

With respect to the Monarch Kit, the Commission strongly urges DNA Reference Lab to complete a full validation before utilizing the kit in casework, even if the casework is unrelated to any criminal matters.

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<sup>&</sup>lt;sup>27</sup> 37 Tex. Admin. Code Section 651.219 (2020).

The Commission observes the alleged use of expired reagents should be further reviewed by A2LA during the laboratory's next accreditation activity to ensure that any deviation from procedure is both scientifically appropriate and sufficiently documented.

#### VII. CONTINUATION OF ACCREDITATION SUSPENSION

#### A. Status of Accreditation

As previously stated, the Commission has neither reinstated DNA Reference Lab's accreditation after suspension by A2LA nor approved the laboratory's application for renewal of accreditation. A2LA is reviewing the quality matters described in this report with respect to proficiency testing, validation, and the use of expired reagents, and will conduct additional assessment activities in the near term. While this review is pending, the Commission continues the suspension of DNA Reference Lab's accreditation and declines to approve the laboratory's renewal application. This decision is specific to forensic analysis in criminal actions; the Commission has no jurisdiction over non-criminal casework.

The Commission may consider whether to reinstate DNA Reference Lab's accreditation for forensic analysis and approve its renewal application after A2LA reviews the non-conformities related to proficiency testing, validation and use of expired reagents described in this report, and those issues are addressed by the laboratory. DNA Reference Lab will be required to 1) show that it presently meets or exceeds the quality assurance standards required by the laboratory's recognized accrediting body; and 2) demonstrate resolution or pending resolution of all non-conformities or other issues identified by the Commission. Additionally, the Commission must determine that issues identified with respect to the integrity, reliability, or validity of the forensic

analysis, discipline, or subdiscipline for which accreditation was withdrawn or suspended were resolved by the laboratory to the extent possible.<sup>28</sup>

Finally, the Commission observes that in order for any DNA Reference Lab analyst to reactivate their forensic analyst license—which would be required to perform forensic DNA analysis in Texas criminal cases—they will be required to demonstrate compliance with proficiency testing requirements of accreditation as well as satisfy any other applicable criteria for licensure.

#### **B.** Appeals Process

DNA Reference Lab may appeal the Commission's decision to not reinstate the laboratory's accreditation after A2LA suspension and to deny the laboratory's renewal application by appealing to the Judicial Branch Certification Commission (JBCC). A request for a hearing before the JBCC must be received by the Commission or by the JBCC not later than twenty (20) days after the date the Commission provides written notice of its decision to the respondent, or the Commission's decision becomes final and is not subject to further review by the JBCC or the Commission.<sup>29</sup>

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<sup>&</sup>lt;sup>28</sup> 37 Tex. Admin. Code Section 651.105 (2024) (pertaining to reinstatement of accreditation after resolution of nonconformities).

<sup>&</sup>lt;sup>29</sup> *Id.* at Section 651.401(c) (2024).





Attention: Leigh M. Tomlin

Associate General Counsel

Texas Forensic Science Commission

1700 North Congress Ave, Suite 445

Austin, Texas 78701

#### August 26, 2024

RE: Job termination of TFSC Licensee Yaireth Castro based on professional misconduct

Dear Leigh,

Ms Castro was employed by the DNA REFETRENCE Laboratory (DRL) on August 19, 2020. She has a BS from the university of St Mary, San Antonio, Texas and MS from Lubbock university in Toxicology. Prior to her hiring, Ms. Castro signed a legally binding employment contract with DRL based on 2 specific terms. 1. Absolute confidentiality terms as required by national regulatory agencies such as College of American pathologists (CAP) standards, American Association of Blood Banks (AABB), ISO-17025 standards as provided by A2LA and TFSC code of professional conduct. 2. Non-competing clause during and after the end of employment with DRL. Over a period of 31/2 years, Ms. Castro was exposed and handled most of the business aspects and the commercial and scientific documentation at DRL. During this period, DRL covered all Ms. Castro' professional fees to meetings, memberships in professional organizations, attendance of scientific meetings, full training in forensic, relationship and molecular diagnostics. Further, I did my utmost to give her experience in forensic DNA testing by involving her in my technical reviews of forensic cases from other laboratories and making her participate in our CAP inspections in molecular diagnostics. According to her resignation letter submitted on April 19, 2024, acknowledge that she had training and experience that could not have had in any other place. Please see a copy of her resignation letter. The next day after submitting her resignation, I told her there is no problem and we are accepting her resignation. However, as I have promised before the contract in the job offer to her, I ask her if she would stay with us if we would pay her whatever anybody else is willing to pay her and we can change her DNA analyst position to a supervisory position. The next morning, she said that she is sticking with her decision of leaving. I said OK and I wished her good luck and told her I will be here to help her in the future. Three days later, I started seeing abnormal activities with her on the main computer she was using. I kept watching and on May 14,2024 @ 3:00 PM I

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caught her deleting files from her computer. This computer is the main computer for storing all DRL forensic, relationship and molecular diagnostic documents and cases. I passed in front of the door of the computer room, and I saw that every time I passed by, she would change in a frantic way the computer screen. I did this 6 times, and I went in and confronted her on why she is deleting files from this computer. She was very disturbed and told me I do not have evidence that she was deleting files. Second, she said this computer has nothing on it. I said I bought this computer for you to use exclusively for storing all documents and cases and patient cases. I told her I would get the evidence from this computer. Immediately I purchased a 2 TB external drive and the next day I asked the second analyst to come and store all her computer on the 2 TB external drive. Previously, the other DNA analyst was given two 2-TB external drives to back up her computer and the DNA analysis computer in another room. He did backup the DNA analysis computer and she refused to let him back up her computer. She backed it up by herself. I thought this would be a good opportunity to compare both backups. I told her then that I don't trust her anymore and I called a law firm to draft a termination letter for her employment with us. Now, we have started to investigate her activities with us. The followings are findings from this investigation:

1. **Undisclosed conflict of interest.** Ms. Castros' significant partner works for a forensic competitive company, a relationship that she never disclosed to the DNA REFERENCE LABORATORY. Particularly when you consider the fact that she was involved and exposed to all business and technical aspects of the DNA REEFERENCE LAB during her entire 3 and ½ years of employment. Most importantly, we do not know what has been compromised in terms of our client, patient and forensic casework analysis. This is in clear breach of her own signed contract with DNA REFERENCE LAB. It is also a violation of AABB conflict of interest and confidentiality policy where DRL is an institutional member. It is also a violation of ISO17025 version 2017 impartiality policy as well as it is a violation of Texas code of professional responsibility for forensic DNA analysts (37 -TEX. ADMIN. Code # 651.219) as stated and enforced by Texas Forensic Science Commission. She is very much aware and informed about this code of professional conduct and she deliberately held back the information from DNA REFERENCE LAB.





Recently 4 seasoned forensic DNA analysts have been terminated by Houston forensic science center for a similar case related to conflict of interest "abc13.com/houston-forensic-science-center-employees-fired-dna-mayens-ana"

- 2. Deliberate deletion of files and data from her computer. I personally saw her about 6 consecutive times, on May 14, 2024 @ 3:00PM, deleting files from the computer she was working on. This computer is currently under digital forensic analysis by a certified forensic digital company. Further, a copy of the entire computer was copied into an external hard drive immediately after the event to demonstrate the changes she was making compared to the previous computer copy on another external drive she made herself. When caught "she told me there is no data on the computer and she asked me where is my evidence that she is deleting files? I told her I would get the evidence from the computer she was using. All computer evidence was sent out to R3Digital forensics, Austin, Texas. Please see a copy of their last message. We are expecting a final report by next week. Apparently, the file deletion that I witness will be proven and a possible lawsuit is coming. Certainly, we will have no problem with their investigation of the case. To guard against possible future similar cases, the AABB policy for conflict of interest has been completely adopted and implemented by DRL. Please see a copy of the implementation policy in the attachments.
- 3. More than 2 years ago Ms. Castro was given a brand-new Dell computer to use and to store all forensic data. Rather than use this brand-new computer as intended and told to keep all data on, she was using USB flash drives to render tracking and activity follow-up impossible. She said that was misunderstood and that was a mistake on her part.
- 4. Compromised confidentiality of casework and laboratory processes by keeping all our quality system files and standards on her personal computer.







- 5. She was advised several times against the practice but kept doing it even during the last inspection periods for AABB, CAP and A2LA last inspection. I believe that is the reason she does not want to show up and meet with me as you have requested in your last letter to her.
- 6. Following her resignation letter, I found out that she was in constant contact with a previous employee who she knew had breached a similar employment contract with the DNA REFERENCE LAB. I believe the previous employee was advising her on how to do the same now.
- 7. Her contact with previous employees who are currently working in a government crime laboratory is also a breach of the terms of her signed employment contract.
- 8. Consistently and throughout her employment period she used her personal cell phone to record and take pictures of people inside the laboratory and photograph confidential documents. She was advised and warned several times against the practice but never stopped.
- Consistently following and guided by deceptive tactics and false feeling of superiority. Her interactions with all laboratory personnel were never easy and she kept telling them "She is unapproachable". Never a team player or leader.
- 10. I do believe that she has in her possession most of our important documents needed to meet the requirement for ISO 17025, FBI -QAS 2020, CAP checklists and AABB assessment lists on her personal computer because she was using it during all these inspections. I reminded her so many times that cannot use or bring her personal computer inside the lab but to no fail.
- 11. I think sabotaging, manipulating, and deleting highly confidential and significant information related to peoples' lives is criminal in nature. We have done our utmost to provide Ms. Castro with all necessary assistance and guidance to succeed in her future professional career.





#### Please find the following attachments:

- 1. A copy of Ms. Castro resignation letter
- 2. A copy of the last message from the digital forensic company regarding computer deletions.
- 3. A highlighted copy of the professional conduct that was breached

Sincerely,

Ali M. Salih, BVSC, MT (ASCP), MS, PhD

Medical laboratory Director & Forensic Technical Leader



#### Yaireth Castro

September 22, 2024
To: Texas Forensic Science Commission
205 W. 14<sup>th</sup> St., Suite 600
Austin, TX. 78701

Dear Ms. Tomlin,

I am writing this letter to address the claims that were made against me by my former employer regarding misconduct while employed at DNA Reference Lab. I want to start off by saying that I am refuting these allegations just as I refuted them back in May of this year.

I was employed at DNA Reference Lab for over three years. In my entire tenure there, my employee file would show that I was never disciplined, written up or reprimanded for any type of misconduct or inappropriate behavior. In fact, I was told several times by Dr. Salih that I was one of the best analysts he had worked with and that I was one of the few people he completely trusted in his entire time as a lab director. I never gave him any reason to think otherwise. I was a punctual employee, I conducted myself with the utmost professionalism and I always did more than what was expected of me in my position. To be employed at DNA Reference Lab, I was required to sign a restrictive four-year contract that I was not allowed to keep a copy of. I do not have a copy of what I signed to this day. I very naively signed that contract back in October 2020 without truly thinking about the consequences. I was fresh out of college with my master's degree; I was excited to get my foot in the door and I thought to myself: if I'm honest and I do my best, what's the worst that can happen?

My contract was coming to an end in August 2024, and I decided I would no longer be continuing at DNA Reference Lab. I did not believe it was the right place for me and I wanted to seek other opportunities. I was terrified of handing in my resignation. I had witnessed Dr. Salih's behavior towards another employee who had resigned and expected the same behavior towards me. Dr. Salih continuously disparaged this employee in conversations with me, both while she was still employed there and for years after she was already gone. Dr. Salih directly told me that this employee was trying to sabotage the laboratory and that she was taking pictures of "things" in the laboratory (the same accusations he's currently making against me). I thought it was completely inappropriate the way he disparaged employees in front of me, but I was also terrified of being on the receiving end of this disparagement if I were to speak up. For these reasons, I had fears about his reaction to my resignation. But I had been an exemplary employee, and I had hope that things might be different.

I wanted to do as much as possible to avoid leaving on bad terms. I knew DNA Reference Lab would need time to find someone to replace me and I was willing to train my replacement

during the time I had left, so I was courteous with my notice period. I sat down with Dr. Salih and Asia Gaily to discuss my decision in person on April 17<sup>th</sup>, 2024 and sent my official resignation via email on April 19<sup>th</sup>, 2024 with my last day being August 20, 2024 (a four-month notice).

The change in behavior towards me upon handing in my notice was immediate. I knew Dr. Salih would not be happy with my decision, but I never could have imagined what would transpire. Dr. Salih did not speak to me for days after I turned in my notice. I thought this was unprofessional, but I figured if he did not want to interact with me there was nothing I could do. Dr. Salih eventually asked me to meet with him and said that he had needed a few days to "process things" which I assumed was his explanation for ignoring me. In this meeting, Dr. Salih told me that he was disappointed in my decision and that I should have given him a one-year notice. He said he had invested a lot of time and effort. He said he would be willing to do what he could to make me stay. He offered me an increase in salary and a promotion. He said he would give me time to think about it. In the two days he gave me to think about his offer, his behavior was completely different from what it originally had been. He was talking to me normally and he wasn't ignoring me. He said he would support whatever decision I made and that he would help me in any way he could. I truly felt it was genuine at the time and I really believed him.

However, when I sat down with him to discuss my final decision (that I would not be returning), the retaliation resumed and escalated. I knew then that his words had not been genuine, and that he had only said those things in an effort to get me to stay. I began to be treated suspiciously, though I was not acting or behaving in a way that would warrant this. I continued to do my work as usual and remained professional, but Dr. Salih would continuously hover at the doorway to my office while I worked on my computer. He stood at the door of the labs I was working in and would just watch me. I was very unnerved, and my mental health began to suffer as a result. I came home crying several times from the hostility I was experiencing at work (my entire family can attest to this). The thing I feared the most was that his behavior would cause me to make a mistake in my lab work. I had done absolutely nothing to warrant this behavior or to make my employer believe I could not be trusted. Despite this, I tried to remain professional. I continued to say good morning when I passed him in the hall, and he ignored me.

On May 2<sup>nd</sup>, 2024, I went into his office to ask him about the proficiency testing certification form I needed from him to renew my Texas Forensic Science Commission license. He spoke to me in a rude, dismissive and unprofessional manner and told me he didn't want me to take any steps to renew my license. I confronted Dr. Salih and told him I would not allow him to speak to me that way. I could tell he was taken aback at my speaking up. I was not rude in any way, but I was firm and stood my ground. I am a very quiet and reserved person. Standing up to someone in this way is very difficult for me but I knew that I was not being treated fairly and that I could not allow this behavior to continue. I believe this encounter made him angrier and led to further retaliation. He refused to speak to me or even look at me from May 2<sup>nd</sup>, 2024 to May 14<sup>th</sup>, 2024.

I made the decision to seek legal counsel the day Dr. Salih directly accused me of trying to sabotage his laboratory. On May 14<sup>th</sup>, 2024, he came up behind me while I was at my desk working on the CTS interpretation proficiency test. It was the only thing I had been working on all day. He said to me, "Are you cleaning up the computer?" I was confused by his question and had no idea what he was referring to. I answered, "No, what do you mean by that?" He proceeded to say that he

was passing by my office and could see that I was "moving files around". He then got closer to me and pointed at me and said, "you better not be deleting any files." I was completely taken aback. I could not believe what I was hearing. He left my office, but I followed him and told him I needed to speak with him at that very moment.

I immediately refuted his accusations and told him that what he was accusing me of was very serious and there was no basis for his claims. I knew that Dr. Salih was setting me up for a termination out of retaliation for not wanting to continue working there. I told him that I would seek legal counsel to protect myself against these false accusations and I willingly relinquished access to the laboratory by handing over my key. When I did this, Dr. Salih responded by saying, "You don't have to do that." This seemed strange to me because if an employer has genuine concerns that an employee is trying to sabotage their business, logically the first thing they would do is take away the employee's access. I said I didn't want the key because if something happened to the lab over the weekend, I had fears that they would try and pin it on me. I documented this conversation in a follow-up email detailing everything from that conversation (please see attached).

I had been advised by a family friend, who is an attorney and who I had confided in about what I was experiencing, to keep documentation of everything that I could. I kept a diary of what I was experiencing and what days certain events occurred (please see attached). I sent what I could via email. The day I hired my attorney was the day I received my termination letter on May 23<sup>rd</sup>, 2024.

This entire experience has been disheartening. I have never in my life been terminated from a job and I have never been accused of any type of misconduct on a job. I have never been in legal trouble and have always passed every single background check I've been required to undergo. I have several references from several points throughout my life who can vouch for me and attest to my character and my integrity. I was willing to see my contract through at DNA Reference Lab despite not wanting to continue there for long before that. I cannot begin to describe how severely my mental health has suffered, not only in the past few months as a result of my former employer's actions but during the entire three years I was employed at DNA Reference Laboratory. My family, friends, and therapist (who I began seeing as a result of my mental struggles while employed) were witness to this.

I would like to address every single accusation that Dr. Salih has made against me in his fivepage document disparaging me. I have listed the claims, and my response is in red.

#### 1. Undisclosed conflict of interest:

a. It is true that until March 2024, I was in a relationship with someone that also worked in the forensic field in San Antonio. We never worked in the same laboratory. We worked in different areas within the forensic field at two different laboratories. My significant other at the time worked in a forensic toxicology laboratory, and I worked in a DNA laboratory. There was never any reason for our work to overlap. I knew if there ever came a time when something landed on my desk with his name on it, that I could not work on it. I never worked on anything that was associated with him or with his lab at any point while employed at DNA Reference Lab. I am not aware of any standard or law that requires me to disclose that I am dating someone simply because they are working in the same field as I am. I am fully aware that the

Texas Administrative Code of Professional Responsibility states that analysts shall, "(5) Avoid participation in any case where there are personal, financial, employment-related or other conflicts of interest." I never took part in the testing or review of any case my significant other at the time was involved in.

#### 2. Deliberate deletions of files and data from the computer:

- a. I never deleted any confidential information from DNA Reference Lab in an attempt to sabotage the business. This accusation is a blatant lie. I am sure that there is history of deletions on the computer I primarily used, and I can give exact examples what those files might have been: duplicate copies/scans of documents, lists of reagents I made on Microsoft Word as a reminder to myself of things that needed to be ordered, scans that were taken incorrectly (blurry, not scanned in color, words cut off etc.), worksheets for lab work (these were duplicates because official copies of these are kept in the paternity worksheets binder located in the reporting room), copies of my resume or any documentation specific to me that did not need to be on the computer (sometimes I needed to upload transcripts for memberships or for licensing but official copies were kept by Dr. Salih). It is also important to note that Dr. Salih's claim that the computer I used was specifically bought for me is also a lie. The computer that I used was first owned by his wife, Asia Gaily. It was in her office being used by her for over a year before she offered it to me. In the time she also owned that computer, I could not tell you what was deleted from that computer. I was not the only one to use it. If you open up a program like Microsoft Word or PowerPoint, you will see her name as the individual signed in to the account.
- b. It is also not true that my computer is the main computer that has all the data and information in the laboratory. That computer is the one located in the reporting room where the servers are located. This computer is connected to an external hard drive at all times and has been used by every single analyst in the laboratory. This computer contains all paternity reports, data files from the 3130 genetic analyzer, in-house laboratory software, and a wide variety of other documents and files associated with the lab. Comparing the files on the reporting computer to those on the computer I used while employed makes no sense. The things contained in those two places are different and always have been. For example, I did not have the entirety of 3130 genetic analyzer files on my computer because it was not directly connected to the instrument the way the reporting computer was. There is no way for my computer to have all of those files; the reporting computer will have those but mine will not. Every employee had a flash drive designated to them, and this is where we kept everything we worked on. Every single thing I had my hands on while employed at the laboratory is found in at least four places. You can find it in my flash drive, you can find it on the computer I used at work, you can find it on the external hard drive that Dr. Salih keeps in a fireproof safe in his office, and most importantly you can find it in a hard copy in the laboratory. It is important to note that DNA Reference Lab is a paper-based system. It does not have a laboratory

information system. Every single thing is found in hard copy in the laboratory. Every single case I worked on, and the associated data and reports, is located in a physical case file. Every validation I worked on is found in a binder in the screening room of the laboratory. Every change I made to any QA or QC documents is found in binders in the screening room of the laboratory. I documented any updates or changes I made to versions of certain documents. Any laboratory testing worksheets associated with casework can be found in hard copies in binders located in the screening room of the laboratory as well as in the reporting room with all the computer servers. Any reports or statistical data can be found in physical case files as well as on the main reporting computer. All employees were given a flash drive, and all employees have always kept the things they work on these flash drives. Every employee worked on different cases, different validations, and different projects within the laboratory, so you will find that all of our flash drives differ in the contents contained and none of them will have the exact contents found in the main reporting computer. Any deleted files from the main reporting computer could have been deleted by anyone at any point and I cannot tell you for what reason. I never deleted anything.

- c. Dr. Salih's claim that he saw me acting suspiciously and that I was frantically changing my screen are also blatant lies. Once I began to experience retaliatory behavior, I asked my co-worker, **Jun Sheng Lee** (who I believe is still employed there) to please sit with me while I worked on my computer so that I could have a witness sitting with me who could verify that I was not deleting any files (I documented this in a diary entry and he can also corroborate this). Jun Sheng Lee agreed. In fact, I avoided sitting at my computer **at all** unless my coworker was there with me. I also stopped shredding documents that needed to be discarded and told Jun Sheng Lee about this. If I needed to shred anything, I either gave it to Jun Sheng Lee to review and shred or I placed it by the shredder with the words TO SHRED written on them. They were clearly visible and available for the front office, Dr. Salih or Asia Gaily to review.
- d. Dr. Salih is also claiming that I refused to let anyone back up the computer and that I did it myself. This is absolutely not true. When he accused me of deleting files, I refuted the claims and told him he was free to check my computer if he wanted to and that if he had questions about what I was doing, he could come ask me about it. He told me he would back up my computer and I said that was absolutely fine. On May 16<sup>th</sup>, 2024, I arrived in my office and Dr. Salih and Jun Sheng Lee were at my computer (I have a diary entry of this). Dr. Salih was having Jun Sheng Lee back up my computer. I sat down near them and waited. I didn't touch the computer the entire time it was being backed up and Jun Sheng Lee can corroborate this. I never backed up the computer myself; Dr. Salih had Jun Sheng Lee did it. In fact, Jun Sheng Lee was always the one backing up my computer as well as the main reporting computer. I am not very good with technology and Jun Sheng Lee always took care of it for me. I never refused to let anyone back up my computer.

- 3. Compromised confidentiality of casework and laboratory processes:
  - a. The only time I ever used my personal computer for work was during inspections that I conducted with Dr. Salih of other laboratories. He was completely and absolutely aware of this because I specifically asked him for permission so that I could access the checklists we needed to complete the audits for these laboratories. Any time we traveled for inspections, we usually met in the lobby of the hotel to get together and discuss how we wanted to approach the inspection. I had my computer out in front of him when we were meeting, so he knew very well that I was using it, and he never told me I shouldn't be doing that. Of course, now he is trying to make it seem like that was never the case. It is not true that he repeatedly told me not to use my computer at work and that I refused to listen.
  - b. He is claiming I used my phone to take pictures of people. That is very disturbing to me. I have no idea why I would want to take pictures of others in the laboratory and that is a huge invasion of privacy. I also never took pictures of confidential documents. I absolutely never did this and would never do this. I was never accused of this originally and this is exactly what he was accusing my former coworker of doing when she quit. He is also claiming that I was not a team player and was unapproachable. No one who has ever met me would describe me as unapproachable. I have a list of employees who worked at DNA Reference Lab and who worked with me in other jobs who would describe me much differently. I always got along with everyone I work with and still maintain friendships with many of them. I never refused to help anyone, I always took the time to answer questions, and I did my best to keep things running despite constant issues we were running in to.

I fully believe that Dr. Salih has reported these false accusations to the Texas Forensic Science Commission as a form of retaliation. I filed for unemployment with the Texas Workforce Commission (TWC) when I was terminated from the job I was expecting to have for four more months. TWC investigated, and they decided to grant me unemployment benefits. According to the TWC employee I spoke to, my former employer was asked to provide evidence for his claims. They could not provide the forensic analysis report, dates of certain events or any concrete proof of their accusations. Asia Gaily made a further accusation claiming that she saw me walk out of the laboratory "one day" with a big black bag. The building in which the laboratory was located has cameras. I guarantee you that if someone were to investigate this allegation, no one would have ever seen me walk out of the building with anything like what she is describing. I have the official document from TWC granting me benefits which states, "Our investigation found that your employer fired you for a reason that was not misconduct connected with the work."

None of the accusations hurled against me in that five-page document submitted by Dr. Salih are true. I take it as a direct attack on my character and a direct threat to my reputation and my career in the forensic science field. I think the sequence of events that followed my resignation speak for themselves. I worked for DNA Reference Lab for three years with no incident, I decided to resign from the job and suddenly I started getting accused of trying to sabotage the laboratory. That is not a coincidence. DNA Reference Laboratory has a pattern of behavior when it comes to

employees resigning. I am not the first person to deal with this type of retaliation at DNA Reference Lab. Over the years, Dr. Salih and Asia Gaily have continuously accused people of sabotaging their laboratory. I was told by Dr. Salih to specifically "check on" an employee who worked at the front office as recently as the beginning of this year, because he believed that she was doing things she wasn't supposed to be doing. As I've already mentioned, Dr. Salih continuously made disparaging remarks about several employees to me. I knew it was only a matter of time before I was on the receiving end of these remarks.

Should the commission need it, I can provide a list of people who can corroborate what I am saying and can vouch for my character and my integrity. Throughout my time at DNA Reference Lab, I observed and experienced things that were very concerning and disturbing to me. I endured inappropriate, invasive questioning about my health and medical information which I shared with my family, therapist and significant other at the time. During my interview for DNA Reference Lab, I was questioned about my marital status, if I had any kids, and if I was in good health. I hadn't realized it at the time (I was very naïve and didn't have experience interviewing for jobs), but I know now that these questions aren't legal. This should have been a red flag to me. He posed the same questions to people he interviewed while I was present in the room. I had absolutely no one to make a safe report to. Dr. Salih and his wife, Asia Gaily, are the only two people who run the DNA Reference Lab. Asia Gaily is HR for the laboratory. There was no way I could make a report to her. She would have shared my reports with Dr. Salih, and I have no doubt I would have faced retaliation because of it.

I became very concerned early on about DNA Reference Lab's ability to prepare me for a future as a forensic scientist. I did not agree with the way some things were handled and I tried to do my due diligence in speaking up about things that I didn't feel were right. I had several meetings with Dr. Salih to express my concerns to no avail. Below I have described some of the concerning things I encountered and experienced while employed at DNA Reference Lab.

I became very concerned about my preparation for giving expert testimony at DNA Reference Lab, especially after having witnessed Dr. Salih's expert testimony myself. I was put in a very uncomfortable position in court being held over Zoom. The lab case number was PR-280 and I'm sure there is a court transcript available for what I am about to describe. I worked on case PR-280 start to finish but was not licensed at that point because I was still a trainee. I brought up the concern to Dr. Salih about the case possibly going to court and having to testify without being licensed. He said not to worry about that, and he would take care of the testifying. The case ended up going to court and he said he wanted me in the room for training purposes, which I had no problem with. However, right before he joined the court via Zoom, he said to me "If I don't remember something while I am testifying, just jump in and answer". I was baffled that he was saying this to me. I knew this would not be allowed under any circumstances because I was not the one being sworn in. But I knew that he was saying this because he had not properly reviewed the case file beforehand, and he hadn't done the work himself. He did not know the case file and testing process the way I did. I began to feel very unnerved. During his testimony, he was very clearly unprepared. He was visibly flustered and did not know where to find things in the file. He was not answering the questions directly and was asked several times by the court and judge to answer what was being asked. He had only glanced briefly at the case file before the court began and was unprepared and this was clearly coming through in his testimony. I knew that file like the back of my hand because I had done all the work, and I knew the answer to every question, but I was not the one testifying and could not step in. However, at one point Dr. Salih became so flustered at a question because he didn't know it, that he turned to me to provide an answer. I was left uncomfortable and simply nodded. The defense lawyer immediately objected and stated that he thought I was simply there for technical support. I was mortified. The judge told Dr. Salih he was not allowed to refer to me for answers and had to testify only to what he knew. I believe what he asked me to do and what he did during that testimony was extremely unprofessional and it was not okay to put me in that position.

- Dr. Salih never completed the forensic biology proficiency test. The lab receives two of the exact same exams that should be completed by two separate analysts. At that point, Dr. Salih and I were the only two forensic DNA analysts in the lab. He always made me complete both tests and then would make me input the results that I got into his account as well, so it seemed like he was the one who completed it. He would then tell me to write his name on the testing worksheets next to my name, so that "it looked like I worked on it too." I did not do this. If an auditor were to look back at proficiency test files ranging from 2021-2022 (and possibly later) located in the storage and file room of the lab, you can see that it's only my handwriting on the testing worksheets and my own work notes because I was the only one who did the testing on both exams. In a binder labeled proficiency testing log binder (found in the screening room of the lab), I also did not list him as having completed the proficiency tests that he did not truly do himself, even when he asked me to. Doing that would have been dishonest. He was trying to take credit for work he did not do on a proficiency exam that we are required to complete to establish competence. In fact, in the most recent A2LA inspection of DNA Reference Lab, the auditor for the lab (Bill Watson) became aware of the fact that Dr. Salih was not completing the forensic biology proficiency tests and spoke with Dr. Salih about it. Bill Watson informed Dr. Salih that he had two options: either he had to start doing the forensic biology proficiency test or he had to stop extracting in the lab. Dr. Salih agreed to this verbally (this was not a deficiency in the audit), but Dr. Salih did not follow through with it. The lab received a proficiency test in February (after the most recent inspection), and it was not completed by Dr. Salih. Dr. Salih had another unlicensed trainee (Jun Sheng Lee) complete it and then had Jun Sheng Lee report the results on his account, again, to claim the results as his own. Jun Sheng Lee can verify this. Dr. Salih continued to work in the laboratory doing extractions and still was not completing proficiency tests.
- Dr. Salih refused to do a proper validation on the new reagent (POP-7) we started using
  on the instrument, even after being told about the immense problems we were seeing
  with it (samples were not running properly, we could not get the spectral and spatial
  calibration to pass, and the allelic ladder was failing due to extreme shifting). He said
  he did not want to waste time on an entire validation. My former coworker (Jun Sheng

Lee) can also corroborate these events. He was also present and shared my concerns about this. Dr. Salih instructed us to "mess" with the injection time and run time until the allelic ladder passed, and the positive control was typed correctly. He said once this was done, we were fine to keep testing on legal casework. My coworker and I noticed concerning patterns in several samples. We brought this concern up to him and he only said to "keep an eye on it". I did not feel comfortable with this. Due to the tremendous amount of issues we were having with POP-7, I decided to call a meeting with Dr. Salih and Jun Sheng Lee and printed concerning data that I was seeing. A record of this meeting is in the lab meetings binder located in the screening room of the lab. I explained all the problems we were seeing and that we could no longer keep up with the usual 3-5 business days because of how many samples were having to be retested and re-run. He said we would not be changing the turnaround time and that we just had to deal with the problems because there was nothing we could do.

- Dr. Salih began using a new kit called the New England Monarch DNA Genomic DNA
   Purification kit in the lab for legal paternity cases. He was using this new kit on
   paternity casework without any type of validation having been done on it, even though
   it was a completely new method of extracting.
- There were several instances where analysts were made to use expired reagents. I brought up reagents being past the expiration date several times, specifically early in 2024 regarding the PowerPlex Fusion CS7 kit. I told Dr. Salih that we needed a new kit and he refused to buy one. This was used on legal paternity casework on the following dates: 04/23/24 and 05/08/24. Records of this could be found in the paternity worksheet binder located in the server room behind the reporting computer. The lab's worksheets don't make analysts list expiration date of reagents so an auditor can confirm this by looking up the manufacturer expiration date of the lot number listed on the worksheet and see that it was used after expiration. He also refused to buy new DNA extraction maxwell kits and would tell me it was fine to use them up to three months past the expiration date.
- DNA Reference Lab had problems with the 3130 genetic analyzer instrument several times since early 2022. During these times, testing would be down anywhere from two weeks up to a month. This caused a backup of samples more times than I can count. This is reflected in the turnaround times for paternity casework at several points between 2022 and 2024. You will see turnaround times ranging from 10-60 days for several weeks at several points throughout those years. Several of the explanations for these excessive turnaround times will list 'instrument issues' as the reason. DNA Reference Lab turnaround time is 3-5 business days. These excessive turnaround times are documented in a turnaround time binder required to be kept by the laboratory and the concerning turnaround times were pointed out by a CAP inspector. During these sample backups, the front office staff would continuously be advised by Dr. Salih and Asia Gaily to tell clients that results would be out soon when that was not the truth, and they knew the instrument was not working properly. DNA Reference

Lab had several complaints from clients reported to AABB regarding things like this and records of these complaints can be found in the ABBB complaints binder in the screening room of the lab. DNA Reference Lab never reported their instrument being down and resorted to lying to clients about turnaround time. Several of the administrators up front directly complained to me about how they were being advised to deal with clients. I directly spoke to Spanish speaking customers several times who were extremely upset with Asia Gaily due to her handling of their cases, her refusal to provide receipts for their payment, and giving inaccurate information about when their results would be ready. Several times Asia Gaily directly asked me when results would be out for a certain case when she was well aware that our instrument was not functioning properly. I would tell her that there was no way to let her know because our instrument needed to be serviced and that she needed to let clients know there was no turnaround time we could provide at the moment. Asia Gaily would ignore this and tell clients that results would be out soon.

DNA Reference Lab continuously allowed visitors to roam the halls unsupervised and refused to have them sign in on the visitor log. I put the visitor log up front and directly told Asia Gaily we needed to use it and that she needed to stop letting people into the lab area without supervision. I did this because we were cited for not using the visitor log by A2LA. I even took the extra step to post a red sign on the lobby door saying visitors could not pass through the main door to the lab areas without signing in and being accompanied by someone. It's a huge security risk, especially with the forensic casework located in the laboratory. Dr. Salih installed a padlock on the lobby door leading to the storage area but he and Asia Gaily constantly left it open. I would have to walk by and lock it more times a day than I can count. Jun Sheng Lee also had to do the same thing. I would see several people being let into the lab and would go check the visitor log and those people had not signed in. At one point, there was a man roaming around the lab area who ended up at my office asking where Dr. Salih was. He was completely unsupervised. When I went up front, I realized Asia Gaily was at the front office and had allowed this person in without signing in and without accompanying him in the lab area.

I do not make any of these claims lightly. I know the commission will question why I didn't report these things when they happened. While it might not be a sufficient enough explanation, the only truth is that I was scared. I thought about making an anonymous report several times, but I knew anonymity would only go so far. DNA Reference Lab is an extremely small lab with only two forensic analysts working there at any given time. Had I made any type of report, Dr. Salih and Asia Gaily would have easily known it was me and I would have faced the retaliation I am facing now. There was no one who could provide me protection against retaliatory behavior after making a report. I was locked down with a contract and would have been stuck in a hostile work environment for much longer. While it is illegal to retaliate against an employee for making an anonymous report, if an employee does experience retaliation, they are responsible for proving the retaliation. That can be difficult to do. It is also illegal to retaliate against an employee for resigning, but it happened to me anyway. I'm having to gather as much evidence as I can to prove what I experienced and it's not easy. I'm a fairly new analyst in the field and DNA Reference Lab was my first forensic job. Dr. Salih

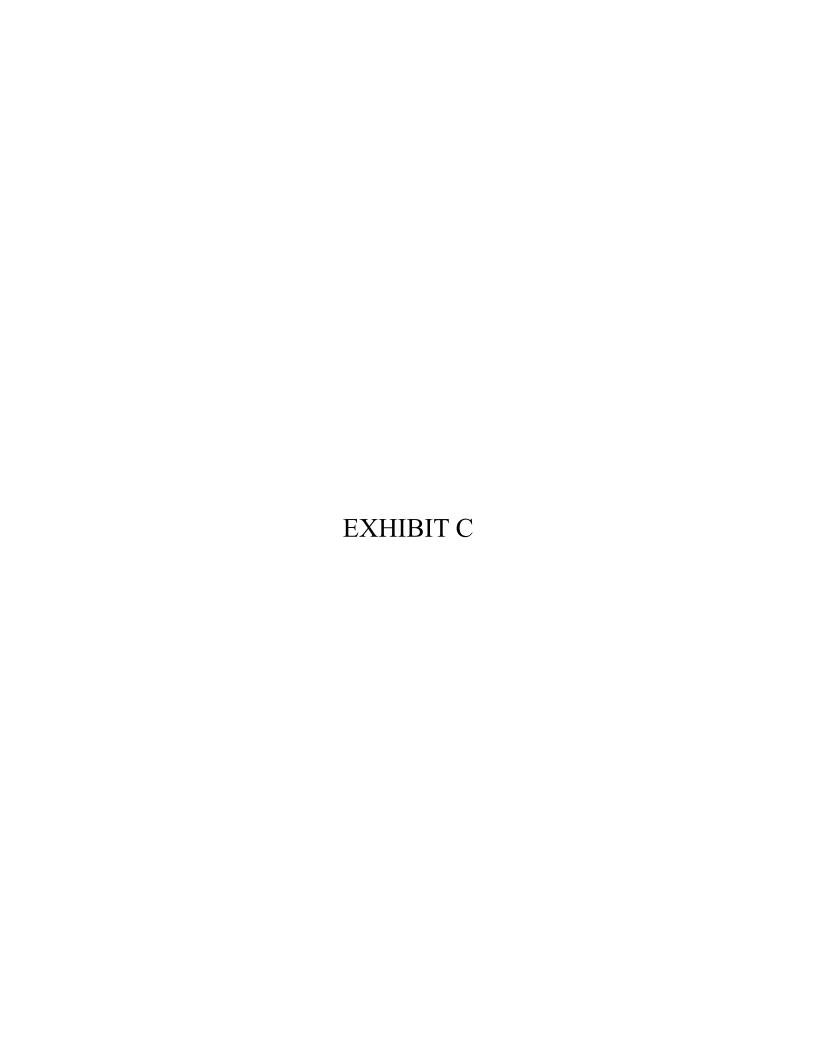
is taking advantage of this and using it to negatively affect my reputation and my career. As a result of the retaliation I faced, I am having to address the commission today.

I am fully committed to making sure that another employee does not have to experience what I went through at DNA Reference Lab. The position I have been put in is difficult, disheartening and has sent me into a very deep depression. I have trouble eating and sleeping. I struggle with severe anxiety. I would like to reiterate that the only thing I did was resign from a job that no longer suited me and I was punished for it. The only thing that has kept me going is that I have a whole community of people who can speak to who I am as a person. I have an incredible support system. I hope that one single voice of a disgruntled employer does not drown them all out. I have always conducted myself in a professional manner and have never been accused of misconduct.

As I stated before, I did seek legal counsel as soon as this retaliation began. I fully believe Dr. Salih is attempting to ruin my career, and I refuse to sit by and watch that happen. I have worked incredibly hard to get to where I am in my life. I would never have chosen to make a decision that could impact the rest of my life, ruin my career and put my reputation in jeopardy. I am not perfect, but I am certainly no criminal. Despite the mental anguish I endured for three years, I tried my best to leave on good terms. This experience has been the most awful thing I've had to endure in my life thus far. I never could have imagined that this was something I could experience in my professional career. The young woman who walked into DNA Reference Lab that day in October almost four years ago to sign that contract was really excited the opportunity to step into the forensic field. I would give anything to go back in time and get her to reconsider. There have been really dark days for me. There have been days when I feel like giving up out of fear that no one will believe what I experienced but rest assured that I will not give up. My reputation and my career are on the line. I appreciate the commission taking the time to read this and I am fully willing to cooperate with anything that the commission might need from me on this matter. I would also like the opportunity to appear before you in person. Thank you for your time.

Sincerely,

Yaireth Castro



------ Original Message ------Subject: Re: Requested information
Date: Tue, 20 Aug 2024 14:43:21 +0000
From: Tyler Rector
To: "M. Ali Salih"
Cc: Ryan Lillie ""Reid Wittliff"
, Roy Rector

Dr. Salih,

We are ready to deliver our findings to you around user activity specifically around deletions. We did a triage of the files on USB Device 4 which you identified as the one she was using. We found that there were 4480 deleted files on that USB drive. None are recoverable. We do not know when they were deleted, just that they were deleted some time after the file last modified date, which range from March of 2021 to 2008.

We also did a file comparison of the 2 USB hard drives as requested. There was nothing deleted from either hard drive, however, out of the 7,516 files on the users drive, all but 315 of them were duplicated on the backup drive. There were an additional 1,066 unique files on the backup USB drive that were not on the users USB drive.

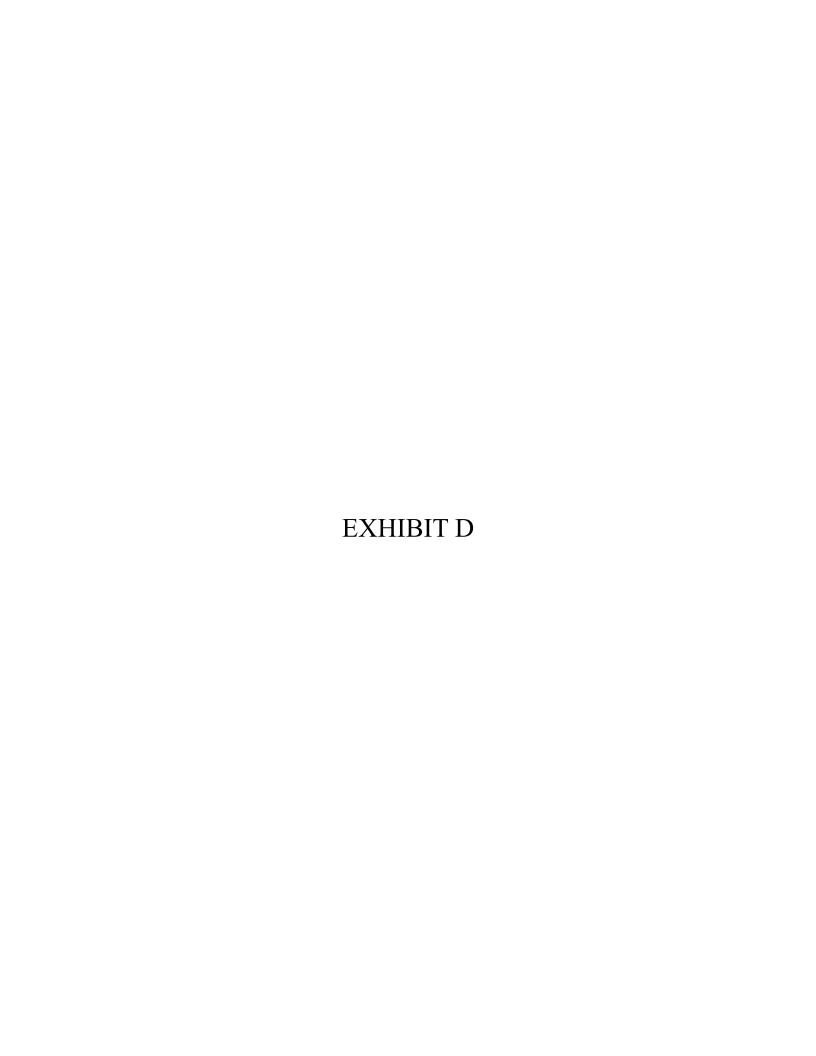
Reid will generate an invoice for the work to date and once that is paid we can send over our examination findings with spreadsheet exhibits to support those findings.

Let us know if you have any questions.

Thanks!

Tyler





DNA Reference Laboratory

#### Performance Check

#### Introduction

On March 09, 2023, DNA Reference Lab replaced POP-4 used on the ABI 3130 Genetic Analyzer with POP-7. The system was cleaned thoroughly with a nitric acid wash and the polymer type was changed using the Change Polymer Type Wizard.

Three performance checks were performed to determine the optimal conditions using POP-7 with the PowerPlex Fusion kit on the ABI 3130 Genetic Analyzer.

#### Methods

#### Performance Check 1

Performed on 03-10-23 with a 5 second injection and a 1200 run time (conditions recommended by Promega for using 5C kit with POP-7). An allelic ladder with three positive controls were run to determine the performance of all four capillaries with a known sample.

#### Performance Check 2

Performed on 03-13-23 using new paternity casework samples that were extracted with FTA card technology. FTA blank, positive control and negative control were included in the run. The samples were run with a 5 second injection and a 1200 run time. Samples whose size standard quality failed were re-injected at 2 sec and 1200 run time as well as 3 sec and 1200 run time to observe success or failure of the size standard.

#### Performance Check 3

Performed on 03-15-23 with old paternity samples and a 5 second injection and 1000 run time. A 5 second injection was deemed the best injection time based on results of performance check 2 where samples were run at 5, 2, and 3 second injections. Because the 5 second injection still had some size standard shifting, the run time was the next variable to be changed. It was decreased from 1200 to 1000 for performance check 3. Results were checked for concordance by comparing results to the original electropherograms obtained from these paternity samples.

#### Conclusion

It was determined that the best conditions for running samples using POP-7 was a 5 sec injection at 1000 and 1200 run time. A 1000 run time still showed some shifting in the size standard so the optimal run time was identified as 1200. If shifting occurred at this run time, it was determined that overloading of DNA (or too much DNA in the sample) was causing the failing of the size standard. When these samples were diluted 1:5, the size standard quality was good, and the sample could be analyzed. In performance check 3, the results obtained for previously analyzed paternity casework were concordant with the profiles originally obtained when the samples were first run.