

TEXAS FORENSIC SCIENCE COMMISSION

Justice Through Science

**FINAL REPORT ON SELF-DISCLOSURE
BY THE FORT WORTH POLICE
DEPARTMENT CRIME LABORATORY
REGARDING AMANDA SCHAFFNER
(FORENSIC BIOLOGY/DNA)**

August 16, 2019





TEXAS FORENSIC
SCIENCE COMMISSION

Justice Through Science

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Austin, Texas 78701*

This memorandum summarizes key facts and conclusions with respect to a self-disclosure by the Fort Worth Police Department Crime Laboratory Forensic Science Division (“Laboratory”) of an incident of professional misconduct by DNA analyst Amanda Schaffner (“Analyst”).¹ The Laboratory concluded the Analyst did not run a performance check (PC) she claimed to have run, denied this mistake, and attempted to convince the forensic biology unit supervisor that she used an unused plate for the PC.

Following is a summary of events surrounding the non-conformity, subsequent investigation and finding of professional misconduct against the analyst:

February 26, 2019: The Analyst was tasked with performing a quantification performance check (PC) on an Applied Biosystems 7500 instrument. Per unit policy, a PC of the instrument must be performed semi-annually. The person performing the check must complete and submit certain documentation upon completion. The responsible analyst is required to perform this process before running casework on the instrument the day the PC is scheduled.

February 27, 2019: The Analyst provided the forensic biology unit supervisor with documentation of the PC she represented she had run the day before. Ms. Johnson noted some missing files during her review of the data, spoke to the Analyst about her observation and asked for the Analyst’s assistance in locating the plate used to perform the PC. Initially, the supervisor and Analyst were unable to find any discarded PC plate after searching various locations in the laboratory, including trash receptacles. The Analyst subsequently presented a plate to the unit supervisor and represented this was the PC plate she had run. The supervisor observed the plate appeared to be unused, and immediately suspected the plate had never been run.

February 28, 2019: The unit supervisor notified the laboratory director and provided supporting information (see attached disclosure) regarding her suspicion that the Analyst did not perform the PC as she stated, and subsequently tried to hide this fact.

March 4, 2019: The Laboratory opened an official investigation into the incident. The Analyst met with the laboratory director, quality manager, unit supervisor and administrative technician. The Analyst was provided an opportunity to explain what had occurred. Though, she denied any wrongdoing, evidence supporting the conclusion of misconduct was overwhelming (see attached disclosure), and included building key card access records, video information, the maintenance record and event log for the ABI 7500 instrument. The event log did not indicate a PC plate was run prior to running a casework plate. Ms. Schaffner was placed on administrative leave.

¹ Self-disclosure of professional negligence and misconduct are required TEX. CODE CRIM. PROC. art. 38.01 § 4(a)(1).

March 5, 2019: The laboratory director contacted FWPD's Internal Affairs division concerning initiation of an administrative investigation into the Analyst. He also provided notice of the incident to the accrediting body ANAB, the Commission, and the Tarrant County Criminal District Attorney's Office.

April 18, 2019: The laboratory director sent the lab's Corrective Action Report (CAR) to the Commission. The Commission opened a self-disclosure file for the incident.

May 3, 2019: The case was accepted for investigation by the Commission at its quarterly meeting.

May 17, 2019: The Commission sent a certified letter to the Analyst informing her that FWPD's disclosure was accepted for investigation and describing possible outcomes.

August 5, 2019: FWPD forwarded a copy of the completed Internal Affairs report to the Commission. This document was included in the materials for the August 16, 2019 quarterly commission meeting.

August 13, 2019: The Analyst emailed Commission staff to voluntarily resign her license.

August 16, 2019: Commissioners voted unanimously to concur with the Laboratory's finding of professional misconduct as described in the self-disclosure and to accept the Analyst's voluntary resignation of her forensic analyst license.

August 20, 2019: The Commission sent a letter to the Analyst through her attorney advising her of the Commission's concurrence with FWPD's finding of professional misconduct and accepting the voluntary license resignation.

The Laboratory's CAR is attached to this memorandum.

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| | | | |
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| CAR #: CAR 19-001 | | | |
| 1. CAR arose from: | a. Audit: | b. Other: X | |
| 2. Date issue raised: February 27, 2019 | | | |
| 3. CAR directed by: Forensic Science Division Manager Michael S. Ward | | | |
| 4. Case file #: This incident did not have a direct impact on casework. | | | |
| 5. Quote Quality Manual Reference and describe the non-conformance or complaint: | | | |
| <p>From the "Biology Unit Equipment, Calibration, and Cleaning/Decontamination" (3135.3) protocol:</p> <p style="text-align: center;"><u>Semi-Annual Maintenance/Performance Checks</u></p> <ul style="list-style-type: none"> • As a performance check, the ABI 7500 requires four calibrations on a semi-annual basis (<i>which must be performed in this order</i>): <ul style="list-style-type: none"> ○ ROI calibration ○ Background calibration ○ Optical Calibration ○ Pure Dye Spectra • Following the four calibrations referenced above, a set of quantitation standards must be run. The standard curve metrics must be deemed satisfactory for the performance check to "pass". • <i>The lab personnel performing the semi-annual maintenance should complete the "Semi-Annual ABI 7500 Performance Check" form to document the necessary maintenance was completed. The completed form will be retained by the Biology Unit.</i> <p>On Wednesday, February 27, 2019, the Analyst involved in this incident provided the Biology Unit Supervisor with the 7500 Performance Check Form and associated quantification documentation (including standard curve metrics), reportedly obtained from her analysis of a 7500 performance check (PC) that she ran the previous day. The Unit Supervisor attempted to review the data and became aware that no .eds file or text import file existed for the quantification PC plate. Per Biology Unit policy (referenced above), the PC plate should be completed following the semi-annual preventative maintenance on the Applied Biosystems 7500 instrument.</p> <p>In an effort to locate the missing files, and to understand what transpired, the Unit Supervisor began to investigate further:</p> | | | |

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1. The Unit Supervisor searched for the original data files on the computer attached to the 7500 instrument. These files are typically copied and transferred to a shared network location so that they can be reviewed by analysts at their desks. No data files were found in either location. The Analyst was present in the laboratory when the Unit Supervisor searched for these files. The Analyst advised the Unit Supervisor that she may have inadvertently used the same file name for the casework plate (run on 02/26/2019) and the PC plate and that the casework plate file must have overwritten the PC plate file.
2. The Unit Supervisor also noted that there was only a short timeframe that the Analyst had to physically run the PC plate. Per the 7500 instrument's maintenance logs, the last calibration run ended at 1229 hours. It takes approximately 61 minutes to run a plate, and the casework plate began running at 1330 hours. Therefore, it seemed implausible that the Analyst would have sufficient time to run the PC plate, return to her desk to review the data, and then return to the Post-Lab to begin running the casework plate in the allotted time.
3. The Unit Supervisor noted that the Excel batch file, which is created prior to running the PC plate, showed that it was created at 1610 hours on February 26, 2019. The PC plate was reportedly run prior to the casework plate, which began running at 1330 hours that same day.

At approximately 1330 hours on February 27, 2019, the Unit Supervisor reviewed the above-mentioned timeline with the Analyst, and subsequently asked the Analyst to assist her in locating the physical PC plate which would have been discarded following the 7500 run. They had just begun searching the biohazard trash when the Analyst had to excuse herself to the biovestibule, indicating that she was going to be sick. The Analyst was very emotional and sat on the floor of the biovestibule and began to cry. The Unit Supervisor attempted to console the Analyst. The Unit Supervisor returned to the Lab to continue searching for the PC plate. Approximately 10 minutes later the Analyst returned to the Lab and assisted in searching for the PC plate in both the biohazard and regular trash. The plate was not located in either trash receptacle. After the completion of their unsuccessful search, the Unit Supervisor asked the Analyst if she believed the search was sufficiently thorough or if they needed to continue to look for the plate. The Analyst indicated that further searching was not necessary and acknowledged that the plate had not been located. Both the Unit Supervisor and Analyst left the Lab.

Just before 1500 hours, the Analyst called to advise the Unit Supervisor that she had located the PC plate inside of an empty glove box in the regular trash in the Post-Lab. It should be noted that this was the same trash receptacle that was jointly

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searched just an hour before. Upon visually examining the PC plate, the Unit Supervisor noticed that the film cover did not have the distinctive appearance that is typical of plates that have gone through the quantification process in the 7500 instrument.

Based on a totality of information gathered thus far, the Unit Supervisor began to question if the PC plate had actually been run. Quantification plates are run one time and are subsequently discarded. The Unit Supervisor contacted the vendor of the quantitation kit and inquired if there was any type of testing that could be done to determine what was in the plate. The Unit Supervisor was advised that the vendor does not have experience running quantitation plates more than once, but that some information may be gained from re-running the plates. Following consultation with the Forensic Science Division Manager, the Unit Supervisor ran the original casework plate that was previously discarded (to act as a "control") and the PC plate that the Analyst stated that she had reportedly run. The standard curve and Internal PCR Controls (IPC) on the casework plate (which was being run for the second time) failed, whereas the standard curve and IPCs on the PC plate exhibited signs of near normal amplification. The Unit Supervisor and the vendor both independently concluded that the Unit Supervisor's run was actually the first time that the PC plate had been run, meaning that the Analyst had likely not run the PC plate as she had indicated. On Monday, March 4, the Unit Supervisor created another experimental plate and ran it three times. This plate passed on the initial run, but failed on the subsequent two runs.

If the Analyst had not run the PC plate as reported, that would mean that she either a) inadvertently transcribed the data from an unrelated quantification plate or b) falsely created the standard curve data provided to the Unit Supervisor. It further appeared that the Analyst may have created a PC plate after the fact to convince the Unit Supervisor that she had run the plate. In an effort to determine if an inadvertent transcription had occurred, the Unit Supervisor reviewed all standard curve data from the 7500 instrument since the Biology Unit began using the Quantifiler Trio quantification kit in early 2017 to determine if the same standard curve metric values had ever been recorded. The standard curve data presented to the Unit Supervisor did not exist in any other unrelated quantification plate records.

At approximately 0715 hours on Monday, March 4, 2019, Laboratory Management met with the Analyst. The Analyst was informed that this meeting constituted the beginning of an official investigation. The Analyst was presented with the above information. During the meeting the Analyst stated that she did not like being accused of inappropriate behavior, denied all wrong doing, and implied that the Unit Supervisor and the Forensic Science Division Manager "had it in for her" because of an incident that had occurred in May 2018 with a Brevard County DA. The Analyst was advised that no one had made any accusations against her, that Laboratory Management had an ethical obligation to investigate this matter, and that

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Management was simply trying to determine what had occurred. The Analyst was advised that the best case scenario in regard to this incident was that she had made multiple mistakes which led to this point. The Analyst admitted that she had made numerous mistakes. After the meeting the Analyst left work and has not returned as of the date of this Corrective Action Report.

Laboratory personnel spent Monday, March 4, 2019, further looking into this matter. Information was discovered that made it appear that the Analyst's account of what occurred was inaccurate. In the March 4th meeting, the Analyst stated that after running the PC plate she "ran to her desk" to check the standard curve data and then returned to the Post-Lab to run the casework plate. The Analyst's key card log was analyzed and the Laboratory's video surveillance system was reviewed. The Analyst entered the Post-Lab at 1325 hours (presumably to transfer the PC plate data to the network drive) and exited the Lab at approximately 1331 hours. In order for the casework plate to run, the Analyst would have to return to the Post-Lab to initiate the run. Video surveillance and key card logs demonstrated that this did not occur.

On the afternoon of March 4, an event log on the computer attached to the 7500 instrument was discovered. The event log showed that the last calibration was completed at 1229 hours, and that the casework plate was run at approximately 1330 hours. The event log does not show any other plate being run prior to or after 1330 hours on February 26, 2019.

Although Laboratory Management sought out information to substantiate the Analyst's account of events, we were unable to do so. Unfortunately, based on the totality of information gathered, Crime Laboratory Management believes that the Analyst intentionally falsified the standard curve metrics and fabricated the PC plate in order to conceal that she did not run the PC plate per Biology Unit policy.

6. Determination of root cause and impact of the discrepancy or nonconformance:

Root Cause

Prior to this investigation, in May 2018, the Analyst was involved with a non-casework incident in which she was dishonest. The Analyst spoke with a Brevard County Florida attorney by telephone in the Crime Laboratory regarding a case she was scheduled to testify in because of work she had conducted for a former employer. The Analyst advised the attorney that she had an emergency family obligation that she had to attend to and could not attend court on Monday, May 7, 2018. The Analyst did not have an emergency family obligation and the statement was untruthful. In reality, she had activities related to her sister's wedding in which she wanted to participate.

Untruthfulness is a violation of the City of Fort Worth's Personnel Rules and Regulations and ASCLD\LAB's Guiding Principles of Professional Responsibility for Crime Laboratories and Forensic Scientists. Untruthfulness is a serious issue for

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Laboratory personnel as it can have an impact on their ability to testify in court and their credibility in court. Per legal requirements, this specific matter was disclosed to the Tarrant County Criminal District Attorney's Office. Since this incident was not related to casework (personal issue) and was believed to be an isolated event, the Analyst was issued a written warning for the incident. It was Laboratory Management's recommendation that she receive a written warning in lieu of a more serious disciplinary action, such as termination.

Following the Brevard County incident, the Analyst was involved in a quality issue which resulted in a non-conformance report (NC18-004). When the error was brought to her attention, the Analyst acknowledged her involvement with the mistake that had occurred. This non-conformance contributed to the Analyst being placed on a Performance Improvement Plan (PIP) on January 14, 2019. A PIP is not considered disciplinary action, but rather a road map to help an employee successfully meet and sustain performance expectations.

The Biology Unit of the Crime Laboratory has six scientists that perform similar job functions. Since 2016 the Analyst has been involved with at least five different quality incidents in the Biology Unit. This represents a disproportional number of Non-Conformances (NC) and Corrective Action Reports (CAR) as compared to other Biology Unit members and the Crime Laboratory as a whole. The disproportional number of quality incidents resulted in the PIP. Until this current incident, Crime Laboratory Management had no reason to question the integrity or truthfulness of the Analyst's work. The following is an excerpt from the PIP:

"I commend you for taking responsibility for the latest incident. The Crime Laboratory must be completely transparent in all of its endeavors. The Crime Laboratory and all of its employees must be willing to accept responsibility for any deficiencies identified. It is imperative that you continue to acknowledge any issues that may develop, and immediately bring them to the attention of Laboratory Management. With that said, continuing errors on your part due to lack of attention/focus cannot be permitted to continue. The above noted errors have cost the Laboratory substantial hours of personnel time, cost the Laboratory additional costs in supplies and delayed the release of laboratory reports. The above mentioned errors also call into question the accuracy of your work."

It is worth noting that previous NCs and CARs had a direct impact on casework, whereas the current incident did not directly impact casework. The current issue centered on a performance check following instrument maintenance. A subsequent casework run, which included quality control standards, demonstrated that the instrument was functioning properly. Based on her response to previous quality incidents, her unwillingness to accept responsibility for her actions in the current incident seemed out of character.

Because the Analyst had previously been forthright and transparent in dealing with deficiencies in her work product, it is the judgment of Crime Laboratory Management that the root cause of the current issue is related to the PIP. It is believed that the Analyst made a simple error in not running the PC plate, but when confronted with the

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error, she attempted to disguise her mistake due to her perception of being under extra scrutiny due to the PIP.

Impact on Casework

As referenced above, the current incident did not have a direct impact on casework. The allegation is that the Analyst failed to run the PC plate, that she recorded standard curve metrics that were not based on data, and then created a false plate in an attempt to disguise her mistake.

7. Corrective Action Options:

1. The Crime Laboratory could re-work any impacted case that the Tarrant County Criminal District Attorney's Office requests. Re-working a case may consist of re-processing the physical evidence (if available), having another analyst independently interpret the DNA results and issue a new report (if the original report was authored by the Analyst in question), or a combination thereof.
2. The Biology Unit could review all batches in which the Analyst was involved dating back to January 1, 2018 (approximately five months before her first known instance of dishonesty) to ensure the results are based on data. The processes in the Biology Unit in which the Analyst is qualified includes: serology, extraction, quantification, dilution, amplification, detection, analysis, dry-down/packaging, and report writing.
 - Serology: In cases where samples proceeded to DNA testing, any results would have been evaluated as part of the Biology Unit technical review process. However, if no samples proceeded to DNA testing (e.g. a 'negative' case) the Biology Unit could verify that the evidence packaging was opened by the Analyst, and/or could re-work the serological testing on a random subset of these 'negative' cases.
 - Extraction: A part of the Biology Unit's standard practice is to review data from extracted samples during analysis and technical review. If there was any concern regarding the quality of the sample extraction, the sample would have been reprocessed. Therefore, Crime Laboratory Management has concluded that no further review of this step of the Analyst's work is necessary.
 - Quantification: The Biology Unit will verify that data files exist on all quantification batches performed by the Analyst. During this review the Unit could confirm the results from casework samples and the standard curve metrics recorded by the Analyst were based on generated data (i.e. data files are present and verifiable).
 - Dilution: A part of the Biology Unit's standard practice is to review data during analysis and technical review. If there was any concern regarding dilution, the sample would have been reprocessed.

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Therefore, Crime Laboratory Management has concluded that no further review of this step of the Analyst's work is necessary.

- Amplification/Detection/ Analysis: The Biology Unit will verify the electropherograms analyzed by the Analyst are based on .hid files. The .hid files are generated when amplified DNA product is electrophoresed on the 3500 genetic analyzer.
- Dry-down/packaging: This process is carried out independently. There are no data files to review and this step in the process does not easily lend itself to a subsequent review process. The Biology Unit could retrieve a random subset of packages from the Property Control Unit and verify that the proper number of dried down tubes are present. In general, the Crime Laboratory does not believe this step has any impact on previously completed casework, but could impact post-conviction analysis.
- Report writing: All casework reports generated by the Analyst are technically reviewed prior to the report being released. The Laboratory's LIMS system, Forensic Advantage, will not allow a Biology Unit report to be released without a completed technical review. The technical reviewer ensures the results and conclusions are scientifically sound and are supported by the data present in the case file. Therefore, Crime Laboratory Management has concluded that no further review of this step of the Analyst's work is necessary.
- The scope of potential rework of the Analyst's processing will be dependent on the initial review of batch work conducted by the Biology Unit. For example, if additional discrepancies are found, the scope of rework will increase.

3. The Biology Unit could modify their current tube/plate check practices to ensure that whoever completes this quality control step immediately signs the batch documentation.
4. The Biology Unit could "spot check" the Analyst's work by selecting one or two samples from each batch and reprocessing them.
5. The Crime Laboratory could request a 3rd party DNA Laboratory to review casework in which the Analyst was involved. Crime Laboratory Management only sees a limited value in this approach, since this process would be more of a check on the Biology Unit's technical review process, and not on the Analyst's actual laboratory processing.
6. The Crime Laboratory could request a 3rd party DNA Laboratory to re-process casework samples in which the Analyst was originally involved. This option may be appropriate if requested by defense council, based on the Biology Unit's backlog, or if warranted by the findings from the Biology Unit's review.

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7. The Biology Unit could rework all evidence from all cases in which the Analyst has had any involvement.

8. Appropriate Action(s) to be taken:

Crime Laboratory Management believes that the appropriate action to take is a reasoned and methodical approach. That is, we will begin with corrective action options 1, 2 & 3 from above. Laboratory Management will review the findings the results from corrective actions 1, 2 & 3 to determine if further investigation/work is warranted.

9. Approvals:

| | |
|---|------------|
|  | 4-18-19 |
| Responsible Supervisor | Date |
|  | 04/18/2019 |
| FDM | Date |

10. Policies that may require amendment:

The Biology Unit Quality Document (3173) will be amended to include the instruction that documentation of tube and/or plate checks should occur at the time the verification was performed.

Name of person to respond: Cassie Johnson **Diary Date:** 06/30/2019

DATE Customer advised: Deputy Kamper advised on 03/01/2019. ANAB, Tarrant County Criminal District Attorney's Office & Texas Forensic Science Commission advised on 03/05/2019.

Enter NA if not required, Initial:

11. Signature of originator and date (mm/dd/yy):

| | |
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|  | 04/18/2019 |
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12. Confirmation that CA was taken:

(FDM or delegate, date mm/dd/yy)

13. Corrective Action Review and verification:

(FDM or delegate, date mm/dd/yy)