



Quality Division Use Only

Quality Tracking #:	2020-033	Classification:	Corrective Action
Non-Conformance Level:	Class I	Section:	Latent Print Section
Date of Discovery:	04/23/20	Date of Incident:	04/06/20

Forensic Case Number(s), if applicable:	Agency Case Number(s), if applicable:
See Appendix A	See Appendix A

Description of Non-conformance:

A latent print examiner did not document his analysis contemporaneously in his notes. Further investigation showed that this examiner and a second examiner's case documentation regarding searches conducted on Automated Fingerprint Identification System (AFIS) did not correlate with the data preserved in the AFIS software's transaction manager.

Additional Information/Follow-Up:

Due to the COVID-19 pandemic, the Latent Print section transitioned to working remotely. The day that Examiner 1 began working case 2016-07377 the JusticeTrax LIMS was experiencing technical issues so he was not able to document his analysis and notes in the dynamic user interface (DUI) like normal. He documented his work on the Additional Notes Worksheet, which is an approved and controlled latent print section document. The examiner determined there to be three latent prints of value in this case and proceeded to conduct his searches in the state AFIS system. The normal latent print section procedure is to search latents in the state system first and then in the federal system. Since he intended to search all three latents in both AFIS systems, state and federal, he pre-populated his notes in a table format which contained columns for the date, the item number, the latent of value number, the AFIS system name, and if the latent was registered or not. However, he annotated in his notes that there were no hits within the state system and then listed the three prints as registered in the federal system even though these searches had not yet taken place.

The search of one of the latents came back as a hit in the state system which resulted in a preliminary AFIS association. A preliminary AFIS association (PAA) is the result of searching an image of a latent print impression in AFIS and a preliminary conclusion is reached by the examiner, based upon the observed corresponding characteristics between the latent and the candidate image, to conclude they may have originated from the same source. The PAA results are intended to be investigative leads and not considered an official identification. The hit



in the state system for this latent meant that a search in the federal AFIS system was not necessary, however the examiner's notes at this point indicated that the federal AFIS search had taken place.

Later that day when JusticeTrax was accessible, the examiner opened the case to resume working. At this point he did not see his notes in the DUI and believed that his documentation of analysis did not save, not remembering that his documentation was made on the Additional Notes Worksheet. The examiner then proceeded to fill out the DUI fields using the accurate information and documentation made on the evidence captured in the digital imaging software as well as the search information maintained in the AFIS systems.

When this case was being administratively and technically reviewed by a supervisor, the supervisor reviewed the Additional Notes Worksheet that was saved in the digital imaging software file for this case. The supervisor discovered that the search information on the worksheet was not consistent with the search information in the DUI.

After speaking with the examiner, it was apparent to the supervisor that the examiner began his note taking on the worksheet but had completed his notes in the DUI, forgetting about the notes worksheet, which explained why the worksheet was incomplete regarding the results of the searches.

When interviewed he stated that he did not believe the latents would hit in the state AFIS and therefore he would then need to search in the federal AFIS. This was the reason why he had pre-filled his worksheet based on his previous experience with how these systems operate. He also stated that he pre-populated his notes in an attempt to be efficient and acknowledged that he did not take his notes contemporaneously when using the notes worksheet.

The examiner gave conflicting interviews. The examiner stated to the quality specialist that this was not his normal procedure, but since JusticeTrax was inaccessible, he was limited to using the notes worksheet to document his case. However, in other separate interviews with latent print management, the examiner stated that he had documented his notes in this manner in other cases.

As part of the root cause analysis for this event, this was forwarded to the Human Resources Division and the examiner was placed on a progressive corrective action plan with the intent of improving his comprehension surrounding note taking. The following action items were assigned to this examiner as part of his internal learning plan:

1. The examiner was required to present to latent print management and executive staff on the importance of case documentation, why it must remain accurate from initiation through closure, how his actions did not comply, and his intent in conforming to the Quality Manual and SOPs.
2. The examiner was required to develop a detailed set of instructions that followed the technical workflow where he would then be required to follow when conducting casework. This was completed with the assistance from his supervisor and technical lead.
3. The technical lead was going to conduct all technical reviews of the examiner's casework for three months.



4. The examiner was required to complete a moot court prior to testifying in court, since that requirement had been waived during his original casework authorization. This was in part due to interviews and discussion with the examiner, that raised concerns about his ability to directly communicate.

On July 22, 2020, the examiner gave the presentation listed in item 1, however a follow up meeting was held with the examiner and latent print management because his presentation did not meet the defined criteria. A second follow up was scheduled but did not occur because the examiner took an approved leave beginning on August 26, 2020.

A detailed set of instructions was developed as listed in item 2, however when the technical lead performed a review on the first case the examiner completed following these instructions, they discovered that the examiner did not take notes contemporaneously. The technical lead was able to see within LIMS and his notes that he had conducted his analysis the day before documenting it in his notes. The examiner's assigned and in progress cases were reassigned to other examiners. The examiner did not return to work and eventually resigned from HFSC on January 1, 2021.

The documentation issues in these two cases led management to further investigate. After the examiner resigned, the latent print manager (formerly the technical lead) reviewed the software transaction manager which stores data regarding AFIS searches such as search dates, date the search returned, date the search was reviewed, etc. The software transaction manager information is only available on the examiner's computer, which was inaccessible until the time of his resignation since the latent print section had been working remotely due to the COVID-19 pandemic. However, the number of cases on this computer were limited because the examiner had received a new computer in approximately mid-2019. There were only 55 cases available to review on this computer. Upon review, discrepancies were discovered in 11 of the 55 cases.

Six cases: 2019-10103, 2019-13029, 2019-18916, 2019-09763, 2016-03166, and 2019-10453 had blank lines of data which indicated to the manager that the search was either never launched or that the search results were not reviewed. In addition, the case documentation was not consistent with the AFIS database in these six cases. These cases were reanalyzed and are categorized below in Appendix A based on the results.

Since the remaining 49 cases did not have any blank lines of data, they were reviewed with the corresponding case documentation to determine if the transaction manager information was consistent. Five cases: 2016-07548, 2017-05161, 2019-08071, 2019-09245 and 2019-13194 were discovered to have inconsistent documentation. These cases were reanalyzed, and none resulted in any additional associations to individuals.

This examiner began working at HFSC on December 1, 2014. Over the course of his employment, he served as the primary examiner on 1,013 cases. In addition, he performed 155 technical reviews. The examiner performed 78 verifications in JusticeTrax LIMS.

The number of cases where he served as the verifier is not obtainable from Porter Lee LIMS. However, there is no evidence to suggest that a technical review or a verification was not performed correctly. All the comparisons that were performed were subsequently verified by a second qualified examiner and there is no reason to believe that any comparisons were affected. The issue appears to be specific to the searching and documentation of these



searches which means that the potential technical impact is that there may have been additional associations that were never discovered due to these errors by the examiner.

A statistically significant audit of the AFIS transaction manager information was completed for each examiner to determine if this was a systemic issue. As a result of this audit, a similar issue was discovered with cases completed by another examiner (Examiner 2). Examiner 2 resigned from HFSC on August 2, 2021, prior to this audit, and therefore was not available to be interviewed about this nonconformance. Prior to her resignation she had been on extended leave. Of the 113 cases available in the Examiner 2's transaction manager, 14 cases had discrepancies in the documentation.

Examiner 2 began working at HFSC on April 28, 2014. Over the course of her employment, she served as the primary examiner on 997 cases. In addition, she performed 170 technical reviews. The examiner performed 128 verifications in JusticeTrax LIMS. The number of cases where she served as the verifier is not obtainable from Porter Lee LIMS. However, there is no evidence to suggest that a technical review or a verification was not performed correctly. All the comparisons that were performed were subsequently verified by a second qualified examiner and there is no reason to believe that any comparisons were affected.

Summary of Root Cause Analysis:

Note: Incidents are documented for tracking purposes and trend analysis. Root Cause Analysis is not required for incidents.

There were several factors that contributed to the nonconformance related to examiner 1: the examiner's lack of understanding the importance of contemporaneous note taking and the introduction of bias from his previous casework experience with the AFIS systems. These factors in combination with the conflicting statements given by this examiner were determined to be personnel related and this was forwarded to the Human Resources Division in accordance with HFSC policy.

The root cause related to the AFIS transaction manager nonconformance was attributed to the review process. It was not a normal practice to include the review of the AFIS transaction manager as a part of the technical or administrative review process. According to latent print management, this is not something included in the general review process within the latent print community. This information is only available on the individual examiners' computer and therefore it is not readily available to the reviewer.



Actions Taken:

The Harris County District Attorney's office (HCDAO) was notified on February 5, 2021, of the AFIS transaction manager issues concerning Examiner 1. They requested 126 of his cases to be reworked in which he was the primary examiner. The cases were classified as either "pending", "disposed with defendants in custody", or "disposed" cases. A new report was released for each case that was reworked and the HCDAO was notified of the results for each case.

The HCDAO was contacted again on August 12, 2021, about the AFIS transaction manager discrepancies discovered as part of the audit related to Examiner 2. Similarly, the HCDAO requested 111 of her cases to be reworked in which she was the primary examiner. The cases were also classified as either "pending", "disposed with defendants in custody", or "disposed" cases. A new report was released for each case that was reworked and the HCDAO was notified of the results of each case.

There were four potential outcomes for the reworked cases: associations to new individuals, additional associations to individuals previously named in the case, no new associations but other changes made in the case, and no new associations or changes to previously reported conclusions.

Refer to Appendix A for the list of cases reworked for each examiner, their classification and outcome categorization. The reanalysis results are available in each case report. The reports can be requested via the Client Services Case Management Division at triage@hfctx.gov.

It should be noted that there are several factors that could have attributed to the differing results (new associations, etc.) in these reworked cases. These factors include changes to the algorithm used by these systems, possible differences in how each examiner marked up the latent prior to searching, and when the record prints were entered into AFIS. Therefore, in some instances the differing results do not necessarily indicate that the search was not done correctly, rather that searching a prints multiple times may possibly produce different results.

The total of Examiner 1's cases that fell into each category are listed below.

Category for reworked cases	Total number of cases
Associations to new individuals	29
Additional associations made to individuals previously associated in the case	14
No new associations, but other changes were made to the previously reported conclusions	48
No new associations or changes to the previously reported conclusions	35



The total of Examiner 2's cases that fell into each category are listed below.

Category for reworked cases	Total number of cases
Associations to new individuals	27
Additional associations made to individuals previously associated in the case	2
No new associations, but other changes were made to the previously reported conclusions	54
No new associations or changes to the previously reported conclusions	28

There are four additional cases that were requested by the HCDAO to be worked but are not included in the reworked list in Appendix A. The chain of custody for all four of these cases showed that the latent print evidence items were transferred for court purposes. The HCDAO was contacted to assist with locating the evidence in these cases. The latent print evidence for case 2013-23083 was not able to be located by the HCDAO. The evidence in case 2014-15501 was destroyed in accordance with a court order. The two remaining cases, 2015-00246 and 2015-11876 are currently in the custody of the Harris County District Clerk's office. A court order is required before HFSC can obtain these evidence items. This quality report is being closed prior to the receipt of the evidence in these two cases. Once the cases are received and reworked, a follow up report to this corrective action will be issued.

In April 2021, to ensure that the data within the AFIS transaction manager is consistent with case documentation, a review of this data was incorporated into the post-mortem reviews of latent print comparison cases. This will allow for real-time performance monitoring and to prevent a recurrence of this type of nonconformance.

Section Manager: Rebecca Green Date: 02/23/23
Division Director: Amy Castillo Date: 02/24/23

Incidents or Corrective Actions that involve the Biology/DNA section are reviewed by the Technical Leader and CODIS Administrator.

Technical Leader: Jeniffer Molina Date: 2/23/23
CODIS Administrator: N/A Date: N/A

Quality Director: Jackeline Moral Date Closed: 02/27/23

Appendix A

Examiner 1:

Associations to new individuals were made as a result of rework	
Forensic Case Number	Agency Case Number
2019-10103	071827319
2019-13029	098265319
2019-09763	064250019
2019-08071	051640119
2018-09992	086622918
2019-15621	120138319
2016-00725	006335716
2015-05394	036532415
2014-14591	081222514
2015-01161	006904115
2015-13918	122198215
2015-00203	162998114
2015-08755	075471615
2018-05000	036187118
2015-00990	004319315

Associations to new individuals were made as a result of rework (cont.)	
Forensic Case Number	Agency Case Number
2015-01978	014904315
2015-04623	026512115
2018-04980	038832618
2018-06823	055928218
2016-11032	065584616
2014-15039	079513914
2014-14629	079936614
2016-09664	056834816
2014-16039	091303614
2016-16922	111390916
2017-16575	113661017
2015-13481	126296215
2018-15843	128991018
2015-13921	130282515

Additional associations made to individuals previously associated in the case	
Forensic Case Number	Agency Case Number
2019-09245	063547519
2019-13194	099999619
2016-07548	051106815
2019-03895	012154719
2018-06825	056125718
2019-12166	089843719
2019-17207	133756319

Additional associations made to individuals previously associated in the case (cont.)	
Forensic Case Number	Agency Case Number
2016-18157	120212116
2018-00519	003091518
2018-16127	130700618
2015-09664	085276015
2016-03117	020598716
2017-11190	011703517
2018-02700	018721218

No new associations but other changes made to the previously reported conclusions	
Forensic Case Number	Agency Case Number
2019-18916	153120719
2019-10453	074298319
2017-05161	017804417
2019-00470	001494619
2019-03791	010750319
2019-08013	012641719
100443501	100443501

No new associations but other changes made to the previously reported conclusions (cont.)	
Forensic Case Number	Agency Case Number
2019-08336	046076519
2016-09531	054044815
2015-07483	060914315
2019-09725	068112719
2018-08261	069509018
2017-10948	070631317
2014-13971	076230914

2019-13634	103973619
2019-14984	111442919
2019-15863	123917819
2015-05133	026480415
2015-05134	026530615
2016-21959	145269616
2015-13961	129996115
2016-09273	000585915
2019-15224	116397019
2019-13101	098891619
2015-08539	062524115
2014-20502	124757314
2016-08693	004492915
2015-00559	004833015
2019-03718	010035119
2018-02123	014297918
2015-05063	036131615

2019-10722	077093219
2019-11766	079931419
2019-11987	082434819
2018-09664	083584618
2016-13667	089481416
2015-12264	111619115
2016-18980	126363016
2016-19147	127684116
2014-21551	128976514
2015-14132	130615415
2016-20009	133739116
2017-20084	134705717
2017-20192	134873917
2016-20565	136551016
2014-23174	144945214
2017-21794	145907217
2018-01326	159493917

No new associations or changes made to the previously reported conclusions	
Forensic Case Number	Agency Case Number
2016-03166	013670316
2015-04835	031890415
2018-04264	032079418
2018-06704	054182918
2019-14012	106547119
2019-15665	120384319
2019-15469	120611819
2019-16049	125675019
2017-21907	147330017
2016-00332	158852815
2018-20477	160002718
2015-08932	078492315
2015-09620	075845615
2016-03169	023006316
2015-12754	118033315
2014-15024	084696014
2017-19964	108963517
2014-24622	099044014

No new associations or changes made to the previously reported conclusions (cont.)	
Forensic Case Number	Agency Case Number
2017-19534	131004017
2015-00933	006805815
2017-02100	013116117
2018-02133	015322618
2017-03136	019517417
2017-04213	025485717
2017-11188	072073917
2014-14590	080446114
2017-14303	092085617
2014-16459	093138914
2017-15983	104060917
2016-16254	105503616
2018-12871	109131518
2016-09219	113896615
2017-21090	142042417
2016-22055	143618816
2015-16459	151747115

Examiner 2:

Associations to new individuals were made as a result of rework	
Forensic Case Number	Agency Case Number
2019-00923	007606719
2020-05657	055204020
2018-09518	081608318
2020-13931	135056420
2015-09610	086032715
2016-05449	053439515
2017-06801	041801917
2017-02737	015634217
2014-23848	148787214
2017-14999	095850617
2014-09738	044584714
2015-10780	099643315
2018-11303	095169218
2015-15077	142670015

Associations to new individuals were made as a result of rework (cont.)	
Forensic Case Number	Agency Case Number
2015-05506	040931015
2017-21822	144750317
2014-09461	043535014
2013-34554	160640213
2013-17303	059091213
2018-10150	087247018
2018-10327	088219618
2015-11248	102097115
2016-16576	109985316
2014-21567	132565014
2016-08809	134996514
2013-30685	135802613
2014-22751	138213814

Additional associations made to individuals previously associated in the case	
Forensic Case Number	Agency Case Number
2017-11648	074485817
2017-15690	104350517

No new associations but other changes made to the previously reported conclusions	
Forensic Case Number	Agency Case Number
2016-02562	020886116
2020-05833	057452320
2016-13165	084883916
2016-08667	105554414
2019-14578	109973319
2018-13378	114464318
2020-04920	046629320
2018-10258	085419018
2018-11977	104091918
2015-13870	129068815
2014-24776	156626914
2016-15642	102750316
2017-05270	032347117

No new associations but other changes made to the previously reported conclusions (cont.)	
Forensic Case Number	Agency Case Number
2015-14163	132159015
2017-07807	047871917
2018-13446	115909218
2016-21616	143766916
2016-20060	133832316
2016-00007	001221616
2013-17601	059382713
2015-16929	157565915
2017-14952	097592617
115313599	115313599
2014-00541	002865314
2013-05028	010083613
013108884	013108884

2013-26536	112896513
2020-01957	017745620
2017-19525	130914017
2017-12754	083458317
2012-26833	118583612
2019-13896	105190919
025247800	025247800
13-25489	107135113
2016-19143	122932416
2017-00136	152557816
2015-17699	166609715
2014-22892	142425414
2018-01351	009773218
2017-10898	067922817

2014-08807	037974614
2014-10665	053877114
2014-12647	067003914
2016-12063	067818516
2014-13656	072490514
2013-22696	084718013
2015-10048	088999215
2016-16921	112002016
2016-18302	121144216
2013-28409	123904813
2015-13423	124057615
2015-15848	132292115
2016-19999	133431116
2017-00589	164417716

No new associations or changes made to the previously reported conclusions	
Forensic Case Number	Agency Case Number
2019-03533	008382119
2017-07357	046394517
2012-17361	100512412
2018-16531	134528418
2019-19602	159368119
2015-15008	137915215
2015-15278	133574415
2015-17082	152746415
2016-03547	020869316
2016-03002	022459216
2014-07062	030976714
2016-20683	134772416
2016-08582	029964016
2018-06886	056517318

No new associations or changes made to the previously reported conclusions (cont.)	
Forensic Case Number	Agency Case Number
2015-02159	014008615
2017-07889	050875717
2017-14953	098615317
2010-19445	139055410
2017-00494	162139816
2015-05128	035105815
2019-04840	001091319
2014-07063	030128914
2014-07031	030609914
2016-04880	036651916
2017-08168	049559617
2013-26008	109030913
2016-19466	130233416
2015-14372	133948715