



Quality Division Use Only

Quality Tracking #:	2018-110	Classification:	Corrective Action
Non-Conformance Level:	Class I	Section:	Biology/DNA, Crime Scene
Date of Discovery:	11/28/18	Date of Incident:	07/03/17

Forensic Case Number(s), if applicable:	Agency Case Number(s), if applicable:
2017-13178	085142817

Description of Non-conformance:

The DNA profile developed from an item of evidence matched a Crime Scene Unit (CSU) officer when a search of previously-generated DNA profiles was conducted using the new SmallPond DNA profile searching software. The evidence in this case was collected on July 3, 2017, and the DNA report was issued on August 17, 2017. While there is no documentation as to the date of collection of the CSU officer's Elimination Database sample, records show that the testing of the officer's reference DNA sample did not begin until September 20, 2017 (more than a month after the DNA report was issued). Therefore, when the Forensic Biology staff member searched the evidence DNA profile against the Elimination Database (as is the laboratory's policy), the DNA profile was not identified as being from the CSU officer because the officer's profile had not yet been added to the database. Consequently, the DNA profile was then entered into CODIS.

Actions Taken:

Once it was determined that the DNA profile was from a CSU officer, the profile was removed from CODIS and the Forensic Biology report was amended to communicate the removal. This contamination could have prevented any potential DNA that may have been present on the evidence swabs from being properly detected. However, it is impossible to determine that with any certainty. All 605 Elimination Database profiles were searched in CODIS and one additional staff profile was found to have been inadvertently entered (2019-002/ID# 38771). This profile belonged to a current Biology staff member who performed an extraction on May 5, 2017, and whose profile was detected in one of the samples in that extraction set. This DNA profile was removed from CODIS and the DNA report was amended to communicate the removal. The Forensic Biology section has committed to searching future Elimination Database profiles in CODIS to determine if any others were inadvertently entered before being added to the Elimination Database. A revised version of the Elimination Database Procedure that incorporates this search was published on January 16, 2019.



Summary of Root Cause Analysis:

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

Historically, staff and visitor samples were added to the Elimination Database for the purposes of detecting future contamination events. The Forensic Biology laboratory did not have a practice of searching Elimination Database profiles in CODIS to determine if there was a previous, undetected contamination event. Furthermore, the Forensic Biology section was not aware of nor utilizing the searching functionality in the CODIS software which allows profiles to be searched without entering them into the database. This removes all concerns about the profile being uploaded to the State DNA Index System (SDIS) or National DNA Index System (NDIS). The CODIS Administrator who was employed at the time of the inception of the Elimination Database is no longer employed by HFSC and cannot be interviewed for further root cause analysis. The Elimination Database procedure described above should prevent a recurrence.

Additional Information/Follow-Up:

The CSU officer was a Houston Police Department (HPD) officer who is no longer assigned to HFSC. He was present at the scene as a trainer to evaluate a crime scene investigator (CSI) trainee. As such, he did not issue a report or take notes. While a memo dated October 28, 2016, was issued to the Crime Scene Unit requiring gloves and particle masks be worn when handling, packaging and/or processing evidence at a crime scene, there is no information available regarding this particular officer's use of personal protective equipment (PPE) while at this scene. Two previous nonconformances occurred involving DNA contamination of evidence by crime scene investigators (2017-092/ID# 19394 and 2018-013/ID# 21811) and the date of the crime scene in this nonconformance predates them both. CSU has since published an SOP requiring the use of PPE when handling, packaging and/or processing evidence at a crime scene. In addition, crime scene investigators must now wear gloves and masks when stocking their vehicles with evidence collection supplies in order to prevent contamination prior to processing crime scenes.

Section Manager: Courtney Head, Domingo Villarreal

Date: 01/31/19

Division Director: Amy Castillo, Jerry Pena

Date: 01/31/19

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

Technical Leader: Robin Guidry

Date: 01/23/2019

CODIS Administrator: Jennifer Clay

Date: 01/30/2019



Houston Forensic Science Center
Incident/Corrective Action Report
Quality Division

Quality Director: Lori Wilson

Date Closed: 01/31/19