



Quality Division Use Only

Quality Tracking #:	<input type="text" value="2018-070"/>	Classification:	<input type="text" value="Corrective Action"/>
Non-Conformance Level:	<input type="text" value="Class II"/>	Section:	<input type="text" value="Biology/DNA"/>
Date of Discovery:	<input type="text" value="08/06/18"/>	Date of Incident:	<input type="text" value="07/17/18"/>

Forensic Case Number(s), if applicable:	Agency Case Number(s), if applicable:
2018-10190	18-5704-U2588A

Description of Non-conformance:

A Forensic Biology staff member examined known reference samples prior to examining the evidence samples in a proficiency test which is not in accordance with the laboratory's SOP. This was discovered because one of the evidence items exhibited evidence of contamination that was consistent with one of the known reference samples, some of which was reproduced upon re-amplification.

Actions Taken:

The evidence item was re-portioned and there was no evidence of contamination in the results. The report was issued with the following statement with regard to the first portion "This item exhibited evidence of contamination; therefore it did not meet quality assurance standards. No results will be reported for this item. See Corrective Action Report 2018-070." A review of the cases processed independently by this staff member was performed. It was determined that there were only three instances in which a suspect reference sample was provided to the laboratory at the same time as the case evidence. In two of these instances, the suspect reference was processed at a later date than the evidence thus eliminating the concern for contamination due to a mishandling of evidence. In the third instance, the suspect reference sample was processed on the same date as the evidence however the evidence was returned/examination was completed prior to the suspect reference sample being placed into the staff member's custody. Additionally, the evidence in that case was determined to be negative for male DNA, thus further eliminating the concern for contamination due to a mishandling of evidence. The importance of examining evidence samples prior to known reference samples was emphasized to staff. The laboratory also communicated that items must be documented in the order in which they are processed in casework and in proficiency tests. Documenting examination notes in this way will provide transparency regarding the order in which items are processed.



Summary of Root Cause Analysis:

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

The Biology SOP section 2.4.2.9 currently reads "To prevent contamination of other standards or evidence, handle each piece of evidence one at a time. Evidence items shall be handled prior to reference/known samples." and it was determined that this language sufficiently instructs staff as to the proper order by which to perform their examinations in both casework and proficiencies. The staff member was interviewed and could not provide a strong explanation as to why she had examined the items in this order. Fundamentally she understood why it is best practice to examine evidence samples prior to known references and knew that the laboratory's SOP required it. She stated that she had processed her two previous proficiency tests in accordance with laboratory policy. She also recalled that one time when she was in training, she discovered that a casework evidence swab was mislabeled as a known reference and she relocated to a different workstation prior to processing that swab since she had just processed known references at her own workstation. Upon reviewing her two previous proficiencies, it was not possible to confirm the order in which the items were examined because it was the staff member's practice to list the items numerically, regardless of examination order. It was determined that this practice was not unique to just this staff member. In addition, the staff member's first portion of the questioned stain was on the periphery of the reddish/brown staining in order to optimize the potential semen "halo". When interviewed the staff member recognized that by limiting the portion area, she was also limiting the potential DNA profiles that would be generated from the portion and that in a proficiency test (where there is an expected outcome), this is not best practice. This staff member is no longer employed by HFSC.

Additional Information/Follow-Up:

Empty box for additional information or follow-up.

Section Manager: Courtney Head

Date: 10/12/18

Division Director: Amy Castillo

Date: 10/22/18

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

Technical Leader: Robin Guidry

Date: 10/18/2018

CODIS Administrator: Jennifer Clay

Date: 10/18/2018



Houston Forensic Science Center
Incident/Corrective Action Report
Quality Division

Quality Director: Lori Wilson

Date Closed: 10/22/18