



Quality Division Use Only

Quality Tracking #:	<input type="text" value="2018-069"/>	Classification:	<input type="text" value="Incident"/>
Non-Conformance Level:	<input type="text" value="N/A"/>	Section:	<input type="text" value="Biology/DNA"/>
Date of Discovery:	<input type="text" value="08/10/18"/>	Date of Incident:	<input type="text" value="08/09/18"/>

Forensic Case Number(s), if applicable:	Agency Case Number(s), if applicable:
2018-09440 2018-09439	080206018 080585018

Description of Non-conformance:

Low-level DNA activity was reproduced in the epithelial cell fraction of a differential extraction reagent blank.

Actions Taken:

DNA profiles were not generated from all the samples the reagent blank was processed with due to the laboratory's "stop at quant" policy. However, efforts were made to ensure that all potential DNA profiles from the samples that it was processed with were represented when attempting to source the contamination. Due to the low-level nature of this contamination data, all attempts to source it are predicated on the assumption that it is from one contributor. The DNA activity is not consistent with any of the samples it was processed with or any samples in the elimination database (which contains DNA profiles from HFSC staff and visitors). This profile was added to the elimination database and the laboratory's local CODIS database as a means by which to track the potential recurrence of this profile in the laboratory. The DNA profile was provided to three vendor laboratories to determine if consumable supplies used during analysis were the source of the contamination. However, the profile was not consistent with any profiles in their databases. The report for case 2018-09440 was issued with the following statement for the affected samples, "The reagent blank associated with this item was contaminated, and therefore did not meet quality assurance standards, see Quality Report 2018-069." The report for case 2018-09439 was issued with the following statement for the affected samples, "The reagent blank associated with this item was contaminated, and therefore did not meet quality assurance standards, see Quality Report 2018-069. No results will be reported for this item."



Summary of Root Cause Analysis:

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

Please see CAR 2018-078/ID #33283 for additional information, including root cause analysis.

Additional Information/Follow-Up:

2018-09440: No evidentiary items associated with this reagent blank were submitted to STRs due to a failure to detect sufficient male DNA or due to the detection of too much total human DNA relative to the male DNA detected. Because nothing was initially submitted for STRs, permission to consume will not be requested at this time. After the amplification of items 7.6.1 and 9.6.1 and further investigation to the cause of this contamination event, the qPCR screening results for this case were reported with an indication that the associated reagent blank is unacceptable. The results for items 7.6.1 and 9.6.1 are not consistent with the DNA profile in the reagent blank.

2018-09439: Permission to consume item 1.4 (fingernail swabs) for retesting was made on 8/15/18. Item 1.4 was the only item that was initially submitted for STRs based upon quantification results. On 8/15/18, Lt. Colburn provided permission to consume. The email communication with Lt. Colburn is included as an attachment in LIMS, as well as in the case file. A request for re-extraction was made by the DNA Technical Leader on 8/16/18. Given the lack of data in the sperm fraction of this item, it was requested that it be re-extracted as a non-differential.

Quant value: QC18-0266 EF: small target: 0.0005 large target: 0.0005 male target: undetermined

Section Manager: Courtney Head

Date: 11/19/18

Division Director: Amy Castillo

Date: 11/19/18

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

Technical Leader: Robin Guidry

Date: 11/01/2018

CODIS Administrator: Jennifer Clay

Date: 11/19/2018

Quality Director: Lori Wilson

Date Closed: 11/20/18



Houston Forensic Science Center
Incident/Corrective Action Report
Quality Division
