



**Quality Division Use Only**

Quality Tracking #:	<input type="text" value="2018-058"/>	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="06/29/18"/>	Date of Incident:	<input type="text" value="05/23/18"/>

Forensic Case Number(s), if applicable:	Agency Case Number(s), if applicable:
2018-06676 2018-06863	053353118 055337118

**Description of Non-conformance:**  
DNA activity was reproduced in both fractions of a differential extraction reagent blank. The DNA activity appears consistent between both fractions but is much more prevalent in the sperm fraction (SF) reagent blank. Upon investigating this contamination event, it was discovered that the extraction worksheet had the initials of the staff member performing the extraction as the tube order verifier although the initials do not appear to be his handwriting. See 2018-098/ID# 35072 for more information.

**Actions Taken:**  
The DNA activity is not consistent with any of the samples that it was processed with or in the elimination database (which contains DNA profiles from HFSC staff and visitors). 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. 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. Reports were issued with the following statement for the affected samples, "The reagent blanks associated with this item were contaminated, and therefore did not meet quality assurance standards. See Quality Report 2018-058. No results will be reported for this item(s)." The statement "Retesting will require the consumption of this item(s), which may not be conducted until a consumption order is received." was added where applicable.

**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:**

2018-06676: Due to the uncertainty of the alleged assault, all positive items were submitted to STRs. Evaluation of the STR results indicated that only one foreign male DNA profile was obtained across all items. Item 1.1.1 (portion of vaginal swabs) yielded a mixture of DNA with a major male component and a quantification value of 59.1958 ng/ul of male DNA. Given the highly probative and positive nature of this sample, the DNA Technical Leader (TL) recommended that this item be re-extracted, only consuming half of the remaining swabs, to minimize the unnecessary consumption of evidence. An internal request for re-extraction of item 1.1 was submitted by the TL on 8/16/18. Should legal action ever be taken on this case, retesting of additional items may be requested in which case permission to consume may be required. However, if retesting on all items is requested at a future date, evaluation of original STR results, along with the original quantification data, may aid in determining which items need to be fully consumed at retesting versus which items may be strong candidates for only consuming half of the remaining evidence. Item 1.1 was re-extracted consuming only half of the available sample and yielded a similarly full and CODIS-eligible DNA profile. 2018-06863: One of two items was submitted for STRs (item 1.2.1-portion of anal swabs). Permission to consume this item for retesting was made on 8/15/18. On 8/15/18, Lt. Colburn indicated that he was unwilling to provide permission at this time, given a suspect is named in this case. Depending on the outcome of further investigative efforts, permission to consume may be granted in the future. The email communication with Lt. Colburn is included as an attachment in LIMS, as well as in the case file. Item 1.1.1 (portion of vaginal swabs) did not proceed to STRs and was reported as not suitable for STRs due to excessive female DNA, with a notation that the associated reagent blank is unacceptable, to prevent any future requests for STR testing on this item. Item 1.2.1 (portion of anal swabs) was reported as samples with contaminated reagent blanks are reported, in that "no results" will be provided due to a contaminated reagent blank. A request for permission to consume was included in the report for this item. Quant values: RB1\_QC18-0193 SF small target: 0.0006 large target: 0.0009 male target: 0.001 RB1\_QC18-0193 EF small target: 0.0003 large target: 0.0004 male target: 0.0006

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.



**Houston Forensic Science Center**  
**Incident/Corrective Action Report**  
Quality Division

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**Technical Leader:** Robin Guidry

**Date:** 11/19/2018

**CODIS Administrator:** Jennifer Clay

**Date:** 11/19/2018

**Quality Director:** Lori Wilson

**Date Closed:** 11/20/18