



Houston Forensic Science Center

INTEROFFICE MEMO

To: Jami Reber, M.Sc., Forensic Scientist – Toxicology

From: Jessica Ayala, Ph.D., D-ABFT-FT, Supervisor - Toxicology

cc: Dayong Lee, Ph.D., F-ABFT, Manager – Toxicology
Quality Division

Date: April 18, 2023

Re: Authorization to perform technical review of LC-MS/MS analytical batches

This memo authorizes Ms. Reber to conduct batch technical reviews (TRs) in the toxicology section using the following methods:

- Amphetamines confirmation by liquid chromatography-tandem mass spectrometry (LC-MS/MS) [AMP]
- Benzodiazepines and zolpidem confirmation by LC-MS/MS [BNZ]
- Cannabinoids confirmation by LC-MS/MS [THC]
- Cocaine confirmation by LC-MS/MS [COC]
- Opioids confirmation by LC-MS/MS [OPI1 and OPI2]
- Phencyclidine confirmation by LC-MS/MS [PCP]

This is based upon her successful completion of Section 18.3.2 of the Toxicology Section Training Manual v.3.8, including:

- 1) Observing TR of batches OPI2_20221212B_JR and COC_20221206B_KMY conducted by qualified analysts; and
- 2) The evaluation of preliminary TRs conducted by her on the following casework batches generated by qualified analysts: BNZ_20221215B_CD, THC_20221214B_KMY, PCP_20221220B_KMY, AMP_20230131B_CD, BNZ_20230209B_EC, THC_20230216B_EC, THC_20230210B_KMY, COC_20230323B_CD, OPI2_20230323B_MH, and PCP_20230330B_CD.

Training manual v3.8 requires 4 full scan batches and 10 selective ion monitoring (SIM) batches to be reviewed for batch review training. However, clause 8.3.2.1 of the Training Manual v3.8 was written for GC-MS analysis. LC-MS/MS analyses utilize selective reaction monitoring (SRM) rather than full scan and SIM. SRM is similar to SIM; therefore, Ms. Reber completed 10 SRM batch reviews for her LC-MS/MS batch review training. The next version of the Training Manual v3.9 will require 10 SRM batches for completion of LC batch review training.