December 4, 2020

BCA Implements THC Quantitation

The Bureau of Criminal Apprehension Forensic Science Services (BCA FSS) has completed validation activities and went online this week with a testing procedure for determining the delta-9-Tetrahydrocannabinol (THC) concentration in plant material and liquid samples (e.g. oils, “vape” cartridges, etc.). The procedure utilizes High Performance Liquid Chromatography (HPLC), which is a well-established technique for the separation of cannabinoids and the quantitation of THC.

As announced last month, this service will supplement the tests currently available for suspected marijuana and other liquids suspected of containing delta-9-THC and may assist the legal community in distinguishing between marijuana and hemp as defined by MN Statutes.

Starting immediately, THC quantitation results will be included in reports for felony level cases involving suspected marijuana and/or liquids suspected of containing THC. The THC concentration will be reported as one of the following:

- For THC concentrations below 0.13%, “not detected above the quantitative reporting limit of 0.13%”
- For THC concentrations between 0.13-10%, a percentage will be reported along with the appropriate uncertainty of measurement, “X ± y%”
- For THC concentrations above 10%, “greater than 10%”

At this time, the initial examination of non-felony level (<42.5g) plant material items identified as cannabis will not include THC quantitation. Plant material containing detectable THC will be reported as “cannabis containing delta-9-tetrahydrocannabinol (Quantitation not performed at this time.)” Quantitation may be available if needed in individual cases; however testing will be delayed.

The BCA anticipates a high demand for this additional testing service, which may result in delays in testing of all controlled substance evidence.

For specific questions relating to THC quantitation, please contact the BCA FSS Chemistry Management Team.

Allison Hursh, Assistant Laboratory Director
Allison.hursh@state.mn.us or 651-793-2873

Eric Grunwald, Chemistry Supervisor
Eric.Grunwald@state.mn.us or 651-793-2871

Violet Stephens, Chemistry Supervisor
Violet.Stephens@state.mn.us or 651-793-2862

Nat Pearlson, Bemidji Laboratory Supervisor
Nat.pearlson@state.mn.us or 218-755-6620