Nevada Cannabis Laboratory Association
601 S. 10th Street, Suite 106
Las Vegas, Nevada 89101
Phone (702) 384-0909
Fax (702) 384-2706
NVCLA.ORG

May 26, 2016

Mr. Chad Westom
Bureau Chief
Division of Public and Behavioral Health
4150 Technology Way, Suite 200
Carson City, NV 89706

Dear Mr. Westom

In response to the call by the DPBH for a preliminary round robin proposal, we have drafted the following procedure for implementing such a test. This initial analysis will be performed on at least three different strains of cannabis flower for cannabinoid potency. For the Department of Agriculture and DPBH, the round robin will consist of procurement of the product, homogenization, distribution, data collection, and data reporting. Each participating laboratory shall perform their own analytical method on the submitted sample and report results to the Department of Agriculture within 48 hours, who will then make the reports public after removing the identities of each lab from the report.

The initial goal of this is to understand the spread in the data from laboratories if everyone is given the same homogenized sample.

Variations in reference samples being used will not be addressed by this study, however, it will be a requirement to report the manufacturer and lot number of the reference standards being used. An optional step is listed for Department of Agriculture to also distribute the same lot of cannabinoid calibration standards with the plant material.

I Procurement of Product

a) Approximately 25g (+/- 1g) each of at least three different strains of cannabis flower will be obtained by the Department of Agriculture from a State approved source. The batch and lot numbers, strain information, and any other details about the sample shall be obtained by the Department of Agriculture and DPBH.

II Homogenization

a) The entirety of each strain of collected flower shall be frozen prior to homogenization, either via subfreezer (-20C) for 24h or liquid nitrogen instantly.

b) Once completely frozen, the entirety of the sample shall be homogenized by mechanical blender or mortar and pestle, until a fine powder is achieved. Additional

Nevada Cannabis Laboratory Association
601 S. 10th Street, Suite 106
Las Vegas, Nevada 89101
Phone (702) 384-0909
Fax (702) 384-2706
NVCLA.ORG

freezing and/or manual mixing may be needed if product adheres to the walls of the mixing vessel.

III Distribution

a) Once homogenized, each strain of flower shall be transferred, using a clean scoop, into 9 (currently 8 laboratories and Department of Agriculture) identical centrifuge tubes (15ml volume) each containing at least 2g of powdered flower. The remainder is to remain with the Department of Agriculture.
b) Each tube shall be labeled with a sequential numeric label and kept frozen until transportation. Only Department of Agriculture will be keeping track of which tube corresponds to which set. Randomization of the numbers is up to the Department of Agriculture.
c) Each of the 8 laboratories will receive one random tube from each of the three sets, for a total of three tubes received per laboratory. The Department of Agriculture will analyze the remaining tube from each of the strains.
d) The samples will be shipped cold to participating laboratories all within 24 hours, such that the time of arrival and temperature of sample do not differ greatly between participants. Ideally, arrival by Tuesday morning to allow sufficient time for the labs to run the samples within the prescribed 48 hours.
e) Optional: To address potential variation in the standards used, Department of Agriculture may acquire sufficient cannabinoid calibration standards of the same lot to be distributed to the participating laboratories at the same time as the sample. Currently, this would require 9 sealed vials, also shipped cold.

IV Data Collection

a) Each laboratory will submit results via email to the Department of Agriculture for the following analytes: delta 9 THC, THCA-A, CBD, CBDA, CBN. All results shall be reported in percent by weight of sample (as received). No drying of the samples shall take place prior to analysis.
b) In addition to numerical results, a brief description of the analysis performed shall be submitted, including: date and time of analysis, instrumentation, manufacturer and lot number of each analytical standard used for calibration.

V Data Reporting

a) The Department of Agriculture shall draft a document summarizing the results submitted by the participating laboratories. This document shall contain, at minimum, the following for each tested sample: the alpha numeric label, the reported values for each analyte, the method used to analyze, and the manufacturer of each standard used.
b) The report will also contain the following statistical data calculated for each analyte of each of the three tested strains: Mean, median, maximum, minimum, standard deviation, range expressed as percent deviation from the mean. Additional statistical methodologies (e.g., Student t-test, etc.) may also be employed as appropriate. Enough raw data will be provided for participating labs to perform additional statistics.

Sincerely,

James Dean Leavitt

President, NVCLA