



MEMORANDUM

DATE: October 12, 2021
TO: The Marijuana Control Board
FROM: Glen Klinkhart, Director, AMCO
RE: THC Laboratory Testing Level Investigation

BACKGROUND:

At the Marijuana Control Board Meeting held in Nome, Alaska on August 18th – 19th, Board Chairman Nick Miller indicated he had been receiving calls from multiple cultivator's concerned they had been receiving extraordinarily low lab results for THC potency in their lab-submitted test samples and that the laboratories were the likely culprit of such low test results, not their plant samples. Chairman Miller requested that the Alcohol Marijuana Control Office to open up an inquiry into these claims. Additionally, the board chairman requested any cultivators who had called him about their concerns to please contact the AMCO office.

ACTION TAKEN:

The AMCO Director and the AMCO Enforcement Unit opened an investigation into the reported THC level concerns.

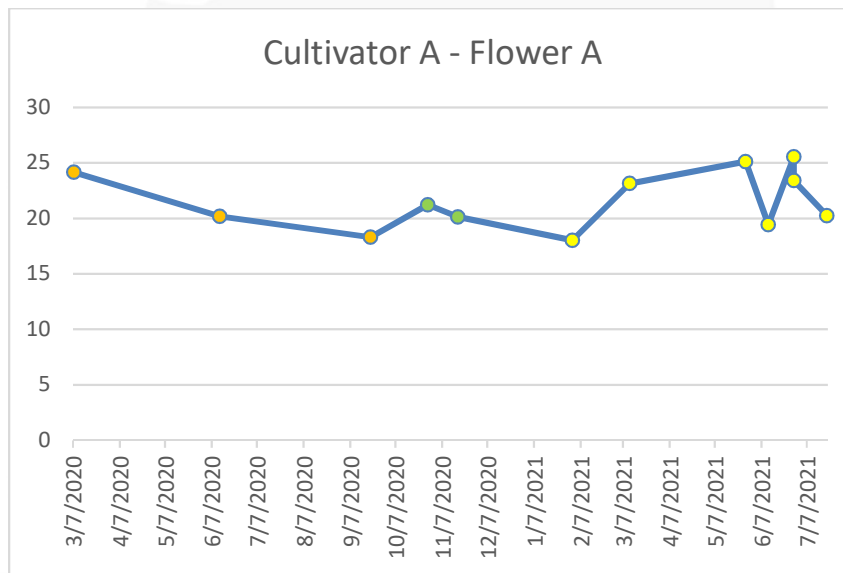
Unfortunately, even though it was reported 30-40 cultivators may have had this potential issue, only one or two cultivators ultimately reached out and voiced their specific concerns. Given the situation it was determined it would be better to perform a sweeping examination of test results using data from multiple cultivators using data directly from the SOA METRC database system.

Ten (10) standard and ten (10) limited cultivators' THC test result data between Jan 1, 2020 and Sept 1, 2021 were randomly selected by AMCO enforcement for review and reporting. Additionally, of those cultivators, multiple strains of their various plants were used for comparison and analysis purposes.

The data was extracted for each cultivator including the date of the test, THC test result, and which laboratory performed the analysis.

Our METRC representative and AMCO Investigator Joe Bankowski then constructed graphical charts showing the METRC data each of the cultivators, selected flower strain they produced for testing and the results. Additionally, a color-coded dot representing one of the four possible laboratories conducting the specific the test is also represented on the chart. The details of the cultivator, their flowers, and the name of the laboratory is not included as it is confidential and not necessary for the purposes of this investigation at this time.

For example, Cultivator A, one of their first flower strains, and the laboratory conducting the tests (as noted with different colored dots on the dates of the test) is shown below:



This chart shows the test results for Cultivator A – Flower strain A from March 7, 2020 to their last known testing on or about July 7, 2021.

This process was repeated for all 20 cultivators and their various flower strains. In all approximately 62 different sets of Flower strains were charted and reviewed (see **Attachment A - Final Results Summary for all of the charted results**).

OTHER INFORMATIONAL SOURCES:

In addition to the charted data from a wide section of cultivators, AMCO investigators attempted to obtain additional information from other sources as part of the ongoing investigation.

INTERVIEW WITH ALASKAN MARIJUNANA LABORATORY REPRESENTATIVES:

On or about September 3, 2021 at a recent meeting of Alaskan based marijuana testing facility laboratories, an AMCO representative asked the active laboratory licensees present if they have observed any recent or low trends in THC test results from their laboratories. Both of laboratory representatives stated that no, they have not seen any downward trends.

INTERVIEW WITH SUBJECT MATTER EXPERTS: SOA Dept. of Natural Resources

We contacted the State of Alaska Department of Natural Resources (DNR) and their staff of well-respected Alaskan experts in soil management and crop production personnel. DNR has extensive experience in using in-state and out-of-state laboratories for obtaining THC test levels from crops. When asked by an AMCO representative if their office has observed any recent or abnormally low trends in THC test results they have submitted to the Alaskan-based laboratories they stated they have not seen any difference in THC potency nor any differences in lab to lab test results.

ADDITIONAL INFORMATION:

Additionally, using the same deliberative process as AMCO Investigator Bankowski, the AMCO director extracted and charted the data for the two (2) cultivators who reached out the AMCO office. By going back and reviewing the last two years of flower stain THC level test results from these cultivators, the results were that their data trends also appeared to be consistent with data from the other 62 flower strain test results.

ADDITIONAL FACTORS WHICH CAN EFFECT THC LEVEL TEST RESULTS:

Plants are, by their nature, prone to many variables which can affect their growth and maturity levels. Interviews with others experienced with Alaskan based marijuana cultivations have stated there are often many reasons why a specific flowered stain may test lower than expected and/or may see dramatic test result changes from time to time.

These can include, but are not limited to:

- The time of year/season the crop is grown in
- Outdoor versus indoor growing operations
- The overall health of the current crop to be tested
- The timing of plant's cycle and when/where the sample is taken

SUMMARY:

Upon reviewing the many datasets produced, statements of various sources, and various additional information obtained in this case, there does not appear to be any evidence to support a large or wide scale lowering of THC levels from Alaskan-base laboratory services. In addition, it appears that there are expected consistencies of historical test

results by many of the operating laboratories, many of which tested the same strains over time.

That is not to say a licensee may have gotten an occasional lower than expected THC test results (or even a higher than expected test result). Organic material such as this is, by its nature, variable and it is difficult if not impossible to draw conclusions based upon one data point/test result, which is why we chose to review a large-scale number of growers and numerous test results over time.

In those few cases where there may have appeared to be lower THC levels for any one particular flower, many strain test results were well within historical THC levels of that specific stain. In fact, many stains had, over time, shown an historical upward sloping increase in their THC levels, which can be expected as some growers may be learning, adapted, and becoming better at their craft.

In addition, there are many other factors that can affect a flower stain THC level, none of which are caused by laboratory testing processes or procedures (see **ADDITIONAL FACTORS WHICH CAN EFFECT THC LEVEL TEST RESULTS** above).

SPECIAL THANKS:

As the Director of the Alcohol & Marijuana Control Office I wish to thank AMCO Enforcement, specifically Investigator Joe Bankowski, for his work in putting this investigation together. Additionally I wish to thank the Marijuana Control Board (MCB) Chariman Nick Miller for bringing the potential issue to our attention and to the MCB for requesting AMCO look into the situation. I encourage the industry to bring concerns, especially in the areas of health and safety to AMCO and to the board so that we can look into such potential issues.



Glen Klinkhart

Director

Alcohol & Marijuana Control Office

550 W 7th Ave #1600, Anchorage, AK 99501

Office (907) 269-0350

Attachment A:

Final Results Summary for all of the charted results

Cultivators A – T

THC Test Results

January 1, 2020 – September 1, 2021

**AMCO METRC THC Data Results for Cultivators A – T
 January 1, 2020 - September 1, 2021
 Prepared by AMCO Investigations Unit**

