



TESTING FAQs

**For Missouri Registered
Producers**

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Testing FAQs

HOW DO I SELECT A LABORATORY?



Selecting a Laboratory

Step One: Basic Qualifications

- Missouri Registered Producers may select any laboratory that is:
 - Registered with the **DEA** (Drug Enforcement Agency); or
 - **ISO 17025** accredited

Not required to be a Missouri lab

Selecting a Laboratory

- Is there a list of labs?
 - There is a list available of some **DEA**-registered labs
 - <https://www.ams.usda.gov/rules-regulations/hemp/dea-laboratories>
 - There is not a comprehensive list for **ISO 17025** laboratories, but labs will often have their accreditation status posted online or available upon request

Selecting a Laboratory

Step Two: Required Reporting

Prior to submitting a sample, ask your lab:

- Do they meet USDA reporting requirements?
 - All compliance test results under USDA State Plans must be reported directly to the USDA
 - It is *your responsibility* to select a lab that meets this requirement
 - More information about this requirement can be found on USDA's website at:
<https://www.ams.usda.gov/rules-regulations/hemp/information-laboratories>

Selecting a Laboratory

Step Three: Certificate of Analysis

- What information is on their test results?

Also known as a Certificate of Analysis or “COA”

- Required:

1. *Producer information (ex: 29_R03729 or name)

2. *Lot ID (ex: Lot A1, B2, etc.)

- COA must tie directly to your submitted Lot ID form

*Sample ID on the Chain of Custody form includes these two elements

3. Total THC test result (ex: 0.274% Total THC)

- May also be listed as Delta-9 THC and THCa separately

Selecting a Laboratory

Step Three: Certificate of Analysis

- What information is on their test results?

How do they show their
Measurement of Uncertainty “MU” ?



Testing FAQs

MEASUREMENT OF UNCERTAINTY

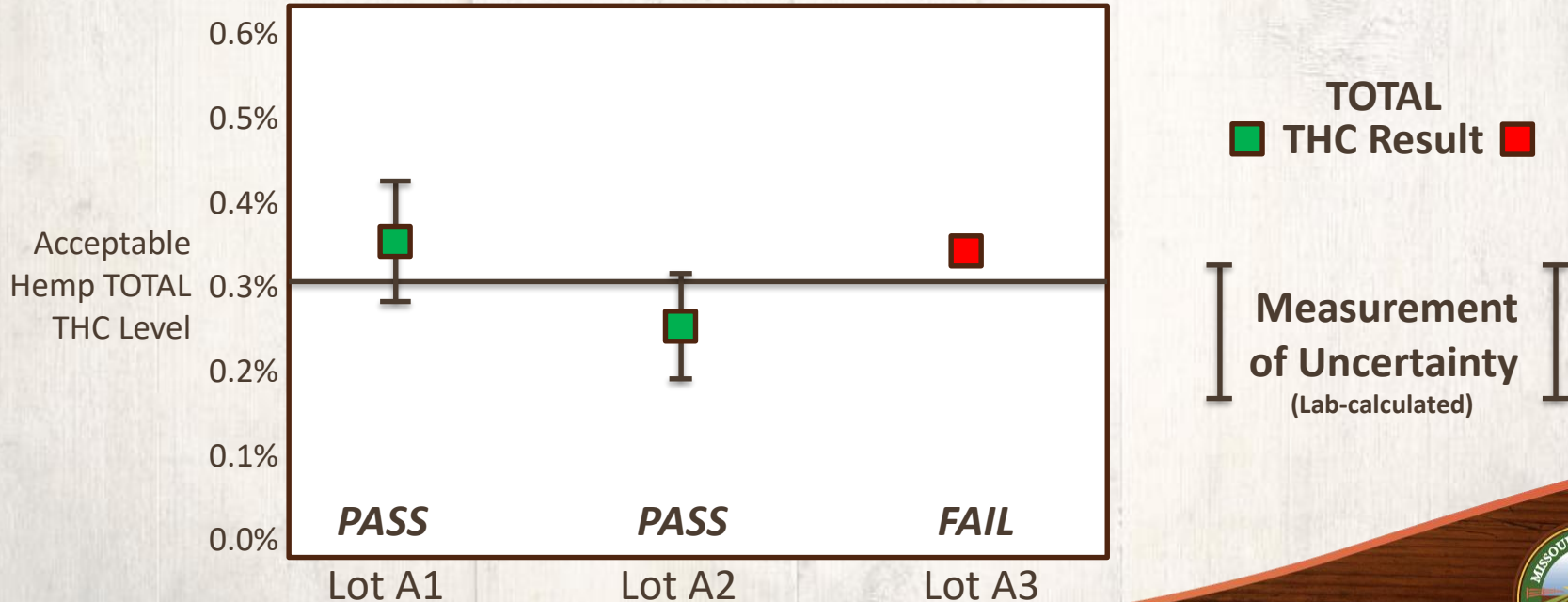


Measurement of Uncertainty

- The “MU” is a lab-calculated measurement, similar to a *margin of error*
- Creates a range
 - Ex: Total THC measurement = 0.29%
Range created with MU = 0.25% - 0.33%

Acceptable Hemp THC Level

Results that contain (or are below) the 0.3% Total THC threshold are compliant lots.



Measurement of Uncertainty

- MU may be presented in many ways—

1. Plus-or-minus figure

- Typically very small numbers (0.04, 0.09, 0.1, etc.)

Total THC measurement = 0.35%

MU listed as 0.06%

Range created by MU: 0.29% - 0.41%

PASS*

*Range contains or is below 0.3% threshold

Calculations

$$0.35\% - 0.06\% = 0.29\%$$

$$0.35\% + 0.06\% = 0.41\%$$

Measurement of Uncertainty

- MU may be presented in many ways—

2. Percentage of the measurement itself

- Often a larger percentage (2.6%, 4.5%, 8%, etc.)

Total THC measurement = 0.28%

MU listed as 9.1%

Range created by MU: 0.255% - 0.305%

PASS*

Calculations

$$9.1\% \text{ of } 0.28\% = 0.025\%$$

$$0.28\% - 0.025\% = 0.255\%$$

$$0.28\% + 0.025\% = 0.305\%$$

*Range contains or is below 0.3% threshold

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Measurement of Uncertainty

- MU may be presented in many ways—

3. Not presented or available

Calculations

None; no MU listed on the
Certificate of Analysis

Total THC measurement = 0.32%

MU **not** listed

Range created by MU: **N/A, read as-is; 0.32%**

FAIL*

*Entire range (or measurement without no MU) exceeds 0.3% threshold

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Measurement of Uncertainty

- MU may be presented in many ways—
 1. Plus-or-minus figure
 2. Percentage of the measurement itself
 3. Not presented or available

Ask before you select your lab!



Testing FAQs

ONCE A LAB IS SELECTED



Once a Lab is Selected:

- Ask the lab for any additional paperwork or requirements they may have:
 - Account set up?
 - Order forms?
 - Overnight shipping required?
 - Packaging requirements?

Shipping

- The producer is responsible for:
 - Contracting with a Certified Industrial Hemp Sampler to collect the sample(s)
 - List available online: <https://agriculture.mo.gov/plants/industrial-hemp/certified-industrial-hemp-samplers.pdf>
 - Shipping/delivery to the selected lab
 - Certified Samplers are authorized to do this for you, if contracted to do so
 - Review shipping carrier policies prior to shipment
 - **USPS** is most common; FedEx strictly prohibits all hemp shipments (as of 10/19)



Testing FAQs

AFTER TESTING



Submitting Results

- All *compliance** test results must be submitted
 - Send via email to reporting.hemp@mda.mo.gov
 - For ‘pass’ results: submit within 30 days
 - For ‘fail’ results: submit within 3 days
 - Also submit any retest results within 3 days, regardless of pass/fail determination

*Do not send preliminary “cannabinoid check” test results

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After Testing

- For lots that receive a **‘pass’** result:
 1. Submit test results to MDA **within 30 days**
Send via email to reporting.hemp@mda.mo.gov
 2. Then, once the lot is harvested and non-viable*:
 - It is considered “publicly marketable product”
 - Materials no longer regulated by MDA Industrial Hemp Program
 - May now move into commerce, sold, further processed, etc.

*Non-viable: not living, not growing, not capable of living or growing



After Testing


- For lots that receive a **‘fail’** result:
 1. Submit results to MDA **within 3 days**
Send via email to reporting.hemp@mda.mo.gov
 2. Retest?
 - If your laboratory still has a “retained specimen” (a portion of the original sample still available) on site, you can request a retest
 - Must notify MDA of intent to retest when you submit your initial ‘fail’ results
 - Any retest results (COAs) must be submitted to MDA within 3 days of receipt, regardless of pass/fail determination

After Testing

- For lots that receive a **‘fail’** result:
 3. If no retest is completed, or the retest is also a ‘fail’ result:
 - Order of Destruction will be issued for that particular lot
 - On-site destruction by producer with approved methods
 - Law enforcement certification
 - More details will be provided at the time of destruction

After Testing

- For all lots:
 - Record remaining applicable information in your Lot Report
 - Available online:
<https://agriculture.mo.gov/plants/industrial-hemp/lot-report.pdf>
 - Retain your Lot Report(s) for 3 years
 - Will be reviewed upon inspection & must otherwise be available upon request

 MISSOURI DEPARTMENT OF AGRICULTURE PLANT INDUSTRIES DIVISION INDUSTRIAL HEMP PROGRAM		LOT REPORT	
Registration #: _____			
PLANTING			
LOT IDENTIFICATION FORM MUST BE SUBMITTED WITHIN THIRTY (30) DAYS OF COMMENCEMENT OF PRODUCTION & ATTACHED TO THIS REPORT. THIS SECTION MUST BE COMPLETED WITHIN THIRTY (30) DAYS OF PLANTING IN THE FINAL PLANTING AREA.			
VARIETY		DATE(S) OF PLANTING	DATE OF REPORT
LOT ID (as listed on LOT ID form)		ORIGIN OF SEED OR PROPAGULES	
SIZE OF PLANTING <input type="checkbox"/> ACRE <input type="checkbox"/> SQ. FT.		<input type="checkbox"/> LABEL, COA, OR INVOICE ATTACHED	
ADDITIONAL NOTES (including any moves or replant, if applicable)			
SAMPLING			
SAMPLING MUST BE COMPLETED WITHIN FIFTEEN (15) DAYS PRIOR TO HARVEST AND FOLLOW MDA PROTOCOL.			
SAMPLE ID		CERTIFIED SAMPLER NAME	
DATE OF SAMPLE COLLECTION	TIME OF SAMPLE COLLECTION	SAMPLER CERTIFICATION #	
DATE OF DELIVERY/SHIP	TIME OF DELIVERY/SHIP	CARRIER ESTIMATE OF ARRIVAL	
IF COLLECTED, STORAGE LOCATION OF DUPLICATE SAMPLE			
TESTING			
ALL CERTIFICATES OF ANALYSIS FOR REGULATORY TESTING MUST BE INCLUDED WITH THIS REPORT, AND SUBMITTED TO MDA AS REQUIRED.			
NAME OF LABORATORY		<input type="checkbox"/> ISO 17025 <input type="checkbox"/> DEA	PHONE
ADDRESS		CITY	STATE
COMPLIANCE TEST RESULTS			

Harvest

- Harvest **may begin immediately** after the lot's compliance sample is collected
- Harvest of the entire lot **must be completed within 15 days** of the sample collection
 - If harvest is not completed in the allotted window, the remaining plants must be classified as a new lot (submit new Lot ID form), resampled, and tested

Harvested; Awaiting Results

- While awaiting test results, harvested material **may not be sold or further processed**
 - Keep lots separate and clearly labeled
 - Materials may be moved off site, such as to a drying facility, but:
 - The location of the new facility must be recorded in your Lot Report(s)
 - Have copies of applicable paperwork if transporting off site
 - Producer registration certificate, Lot Report(s), etc.

Commerce

Once harvested and non-viable

(not capable of living or growing)

AND

Compliant test results are received

Publicly Marketable Product

May move into commerce or further processing

Please note: MDA does not provide harvest or sales approvals