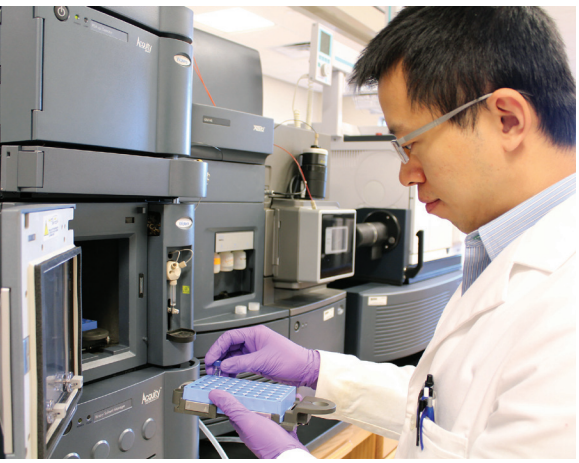
HEMP ANALYTICAL TESTING SERVICES

the INSTITUTE FOR ADVANCED LEARNING AND RESEARCH



ACCURATE, FLEXIBLE & TIMELY

The Institute for Advanced Learning and Research stands ready to assist hemp growers, processors, dealers and other stakeholders with high-quality testing services at an affordable rate. Our on-site analytical testing services lab uses state-of-the-art instruments and staff expertise to ensure accurate results.

Services:

Total THC and CBD test	$65
Cannabinoid Profile analysis *Includes the Total THC and Total CBD as well as Delta 9 THC, THCA, CBD, CBDA, CBG and THCV.*	$75
Growers located in the Virginia Tobacco Region Revitalization Commission footprint may be eligiable for a 25% discount.	

Benefits:

State-of-the-art analytical instruments, including the best LCMS system available—the Waters® UPLC TQXS, as well as the Waters® UPLC QToF, Agilent® GCMS and Agilent® ICPMS

Fast turnaround on quality sample analysis and data interpretation (available in three business days; all samples are air dried for two days)

Highly experienced, on-site lab staff, including an analytical chemist and lab manager with more than 10 years of expertise

Comprehensive services, including the total THC and CBD test, cannabinoid profile analysis, and custom method developmental service; future services include analysis of heavy metals, multi-pesticide residue, residual solvent, mycotoxins and terpenoids

Contact us today for premier testing and accurate results.



www.ialr.org hemptesting@ialr.org 150 Slayton Ave. | Danville, VA | 24540

HEMP ANALYTICAL TESTING GUIDELINES

Sample Preparation

For Virginia growers, field samples should be prepared in accordance with Virginia Department of Agriculture & Consumer Services (VDACS) **2018 VDACS/OPIS - Guidelines for Field Sampling of Industrial Hemp Stands**. To obtain a copy, contact nikeya.thomas@vdacs.virginia.gov.

Sample Size

IALR recommends providing us with 5-10 grams of material. In layman's terms, providing a "handful" of material is best.

Drying

Drying is not required by the grower. All samples are dried at room temperature until the sample weight has stabilized. We build in two days of the three-day lead time just for drying. Note that IALR does not use conventional or microwave ovens for sample drying.

Sample Submittal

1. Samples should be placed in a paper bag (typical lunch size bag), which is folded at the top with the completed Chain of Custody form stapled to it.
   (To avoid mold, samples should not be submitted in a plastic ziplock style bag.)
2. A completed IALR Chain of Custody form should be included. Forms are located online at **www.ialr.org/chain-of-custody** and are also available at the drop-off location listed below.
3. Samples should be delivered to:
   IALR (Main Facility), 150 Slayton Ave., Danville, VA 24540 from, 8:00 AM to 5:00 PM.
4. Results will be emailed to client immediately upon completion.
   Three-day maximum turn-around time. IALR will invoice at that time.

Questions? Please contact hemptesting@ialr.org.

Insist on Mass Spectrometry (MS) Detection

The detector is the single most critical component of an analytical instrument and is directly responsible for the accuracy and reliability of the analysis. However, not all analytical instruments are created equal. Most low-end instruments are paired with spectrophotometry detectors such as a UV/Vis detector.

The major disadvantage of spectrophotometry detectors is its inability to discriminate between the target analyte and other interferences, such as chromatographically co-eluting impurities. In addition, the low sensitivity of a spectrophotometry detector is often inadequate for trace-level quantification of analytes.

In contrast, mass spectrometry detectors, such as IALR's Waters® Triple Quadrupole detector and Quadrupole Time of Flight detector, provide unparalleled sample specificity and sensitivity. Our instruments are able to use an analyte-specific chemical fingerprint, known as a mass spectrum, to pinpoint and distinguish the target analyte from interferences, thereby allowing unequivocal identification and accurate analysis. Also, mass spectrometers provide much wider dynamic range, enabling accurate analysis of analytes across a wide concentration range.