# Testing Equipment and Solutions for Cannabis Analysis

*By **D. Anderson, PhD.** & GenTech Scientific | July 2017*

**Instruments, expertise, and services aimed to alleviate the costs of cannabis start-up lab operations**

The cannabis industry is changing rapidly as acceptance of medicinal and recreational use grows and more states award licenses for processing and distribution. Cannabis for medicinal use is now legal in 29 states, all of which have distinct guidelines and regulations for licensing and testing. This has presented a number of challenges to those wishing to secure a license and start a successful cannabis operation. Although each state has a unique licensing process, a central theme is clear.

**To ensure success, a laboratory must have a sound plan, a qualified team, proper instrumentation and facilities, and steady financial support. These elements are absolutely necessary in running a successful operation after the licensing process is complete.**

A sound plan includes **instrumentation and methods** that are best suited for operations, while at the same time making financial sense. The equipment required for potency testing, pesticide analysis, contaminant detection, and other cannabis processing steps can be very expensive to purchase, run, and support.

**From a start-up perspective, quality refurbished instruments can maximize a lab's budget, as the proper equipment can be obtained at a fraction of the cost. This is particularly relevant in an industry in which guidelines for processing continue to evolve, and the equipment needs will continue to change to keep pace.**

GenTech Scientific is a superior refurbished instrument provider with a comprehensive catalog of instrumentation including:

- Mass Spectrometry (MS)
- Gas Chromatography (GC)
- Liquid Chromatography (LC)
- High Performance Liquid Chromatography (HPLC)
- Inductively Coupled Plasma (ICP)
- Atomic Absorption (AA)
- Instrument Accessories required for cannabis analyses.

States set their own programs for cannabis testing, and the instruments required are determined by each state's guidelines. **Refer to GenTech's state cannabis regulations page.**

- GenTech has the analytical testing systems required for residual solvents, cannabinoid characterization, and THC potency.
- GC systems & HPLC systems are used to quantify the potency of cannabis samples, including THC, THCA, CBD, CDBA and CBN components.
- MS systems are used in testing for residual solvents such as pesticides, water, butane, carbon dioxide, ethanol and other solvents used in cannabis processing.

- ICP-MS and AA Spectrometers are critical in testing for heavy metal contaminants such as lead, mercury, cadmium and arsenic, sometimes found in cultivation.

As a top-level refurbished equipment supplier, GenTech provides not only instrumentation, but expertise in the form of customized training, expert service, chemist support, professional installation, and repair -- in essence, a full-service support network to back the customer's needs.

**Training includes:**

- Hands-on and on-site instruction
- Testing theory of the instruments
- Equipment operation & how to effectively run samples
- Cannabis testing methods
- Troubleshooting & basic maintenance

**Installation and familiarization includes:**

- Set-up of the system in the location provided
- Basic performance verification of the equipment
- Familiarization training for the operator

**Additional services offered with installation (additional fees):**

- Optional delivery, unpacking, and removal of packaging materials
- GenTech is also equipped to perform OQ
- GenTech is also equipped to provide in-depth training

**Warranty Options:**

- Standard warranty (1 year with install)
- Parts-only warranty
- In-house repair warranty
- Labor and travel warranty
- Extended warranty

**Financing Options:**

- Flexible lending services for leases, rentals, and loans
- Fast approval
- Low financing rates
- Flexible payment options

The reputation of the equipment and service provider undoubtedly plays a significant role in not only securing the license but establishing the credibility of the operation. GenTech has been in the business for 21 years and has worked with thousands of satisfied customers. This reputation goes well beyond sales to include superior customer service and product warranty offerings.

**Above all is commitment. GenTech is in business to see customers succeed. By providing top level service and support, GenTech aims to create customers for life. It is of utmost importance to have a capable, reliable, and reputable supplier like**

**GenTech Scientific to provide the instrumentation and expertise necessary to ensure success.**

*This article was written by LabX in conjunction with GenTech Scientific.*

GenTech Scientific was built on the foundation of reliable - yet affordable - instrument service and repair. Since 1996, the GenTech team has exceeded customer expectations by providing: service, repair, preventative maintenance (PM), and instrument qualification (OQ/PQ) for GC, LC, MS, ICP, AA systems and on accessories, from their skilled technicians.

For over 20 years, GenTech has provided its services to thousands of satisfied customers. The company offers instruments required to test cannabis at a fraction of the cost of new instruments. Let GenTech help alleviate the cost of starting up your cannabis lab, with our instrument expertise and warranties.

Reliability Assured:

- Over 20 Years Serving the Scientific Community
- Supplies Refurbished GC, HPLC, MS, LC/MS, AA & ICP/MS Instrumentation
- Guarantee Manufacturers Standards
- Superior Customer Service
- 1 Year Warrantied Systems
- Financing Options

GenTech is serious about being a team with a consistent focus - 100% customer satisfaction! The team assists customers in gaining the most value from their analytical instruments. To extend instrument life, it maintains the industry's largest inventory of hard to find and obsolete parts. GenTech also conducts customized, hands-on instrument training on a wide variety of analytical instruments from most major manufacturers, covering topics such as theory, operation, maintenance, and troubleshooting.