Montana Marijuana Product Testing M-001

April 2022

Stillwater Laboratories
service quality integrity

A2LA ACCREDITED
CERT #s 4961.01, 4961.02 & 4961.03

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Stillwater Laboratories Inc.

Stillwater Laboratories Inc. (SLI) is a 100% Montana-owned and operated business. We are committed to providing Montana's marijuana community with accurate, reliable, and fast-turnaround analytical services at a fair and sustainable cost.

With three fully-equipped laboratories in three counties, 23 employees including PhD and MSc-degreed scientists, and an eight-vehicle logistics team, SLI is Montana's largest and best-equipped laboratory ready to provide you with the most reliable results, the fastest turnaround, and best value, no matter your size and scale.

Services

SLI is certified by the State of Montana's Department of Revenue (licenses L-100060-001, L-100060-002, L-100060-003) and accredited to ISO/IEC 17025:2017 (A2LA Certificate #4961.01, 4961.02, and 4961.03) with ASA's Cannabis Testing Laboratory Accreditation Program's R243. We test cannabis products such as flower, trim, infusions, and extracts for therapeutic performance and safety to ensure confidence in your product.

Cannabis Reporting

There are many aspects to cannabis reporting, including:

- Inspection (Filth and Foreign Matter)
- Potency (cannabinoid content)
- Moisture
- Terpenes
- Residual Solvents
- Pesticides
- Mycotoxins
- Microbes and Molds
- Heavy Metals

Inspection (Filth and Foreign Matter)

SLI uses professional grade high-magnification imaging to check for seeds, stems, molds, insects, and any adjuncts to ensure that products are clean and unadulterated.

Potency (Cannabinoid Content)

There are over 150 cannabinoids (THC and CBD are two of the better known) whose concentrations vary by plant strain, the location in the plant, the environment, and the time of harvest. SLI's potency testing using high-performance liquid chromatography (HPLC) provides an eleven-panel cannabinoid profile that allows the patient to select the most appropriate product.

Moisture

Moisture in excess of 12% may lead to mold growth in plant material. SLI uses calibrated moisture meters to determine the moisture level in all biomass products.

Terpenes

Terpenes are the compounds that give cannabis its flavor and character and are also thought to modify the effects of cannabinoids. At SLI, terpene profiles are generated using gas chromatography with mass spectrometry (GCMS) to capture, identify, and quantify volatile and aromatic compounds.

Terpene analysis is optional under rule, but highly recommended.

Residual Solvents

Hydrocarbon solvents are used in some extraction methods. State rules require that extracted products have less than specified levels of these residual solvents. At SLI, GCMS is used to capture, identify, and quantify residual solvents.

Pesticides

Pesticides are agricultural tools that allow the grower to maximize yield and character of cannabis plants, but may be toxic if they remain in the product. SLI uses liquid chromato-graphy with tandem mass spectrometry (LCMSMS) to determine the amount of common pesticides in your sample, typically to the part-per-billion level.

Microbes and Molds

Microbes and molds are common in agricultural products due to their natural dispersal in our environment. Most of these are not of concern, but some may pose a health risk. SLI uses conventional plating and gene amplification (qPCR) methods to identify E. Coli, Salmonella sp., common molds, and Aspergillus sp.

Mycotoxins

Mycotoxins are Class 1 carcinogens produced by some fungi and molds. SLI uses LCMSMS to identify mycotoxins to the part-per-billion level.

Heavy Metals

Cannabis is a bio-accumulator plant, taking up heavy metals that may be present in the soil, fertilizer, or water through the root system. SLI uses inductively coupled plasma with mass spectrometry (ICPMS) to precisely determine concentrations of arsenic, cadmium, mercury, and and lead in samples.