

How to Interpret the Test Results

Here's a look at the key elements of the lab tests performed on every batch of extracted cannabis oil in Compassionate Cultivation's line of CBD products, available only via prescription to Texas patients.



Certificate of Analysis



Report # 005

Potency: This is determined by the concentration of cannabinoid plant compounds in each tincture and is expressed in percentage by weight, milligrams/gram (mg/g). In adherence to state law, the production batch contains more than 10 percent cannabidiol (CBD) by weight (10.30%) and less than 0.5 percent tetrahydrocannabinol (THC) by weight (0.49%).

TX MME: Compassionate Cultivation
 TX MME ID: 0005
 Strain: Boax (Klick)
 Batch: MCT Cherry (I-0005)
 Lot: N/A

Third Party: Xabis
 Product: Oral Tincture (oil based)
 Collection Date: 03/09/2018 10:00 AM
 Received Date: 03/09/2018 10:30 AM

Visual Inspection: **PASSED**
 ND = Not Detected

Potency	Results (%wt)
CBDA	0.00
CBD	10.30
THCA	0.00
THC	0.49
CBN	0.00
Total CBD*	10.30
Total THC**	0.49
Total Cannabinoids	10.79

*CBD + (0.877 x CBDA)
 **THC + (0.877 x THCA)

Microbials: We test for microbes that can be dangerous for patients, including intestinal illness-causing *E. coli*, *Salmonella* and coliforms. We also test for *Aspergillus*, a genus of mold that can cause severe health problems in humans. Microbial testing is reported as the number of colony forming units (CFU) counted after the incubation of a tincture sample on organism-specific media for a specific time (24 hours for *E. coli* and *Salmonella*; 48 hours for *Aspergillus* and total coliforms). A value of ND (none detected) indicates no identifiable colony formations after the specified incubation time.

Microbial Screening	Results (CFU/g)*	Limits (CFU/g)
QA Microbial Screening	PASS	
- Yeast/Mold	ND	10,000
- Total Coliforms	ND	1,000
- Salmonella	ND	ND
- <i>E. Coli</i>	ND	ND

*CFU/g - Colony Forming Units per gram

Heavy Metal Screening	Results	Limits†
Heavy Metals	PASS	
- Arsenic	0.125 ppm	<10 ppm
- Cadmium	0.025 ppm	<4.1 ppm
- Lead	0.013 ppm	<6 ppm
- Mercury	0.575 ppm	<2 ppm

† Basis on a 1 g daily dose

Residual Solvent Screening	Results (ppm)	Limits† (ppm)
Solvent Testing	PASS	
Class 1 Solvents	ND	ND
Class 2 Solvents		Varies
- Acetonitrile	ND	410
- Hexane	ND	290
- Methanol	ND	3000
- Toluene	ND	890
- Xylenes	ND	2170
Class 3 Solvents		< 0.5%
- Acetone	ND	< 0.5%
- Butane	ND	
- Ethanol	ND	
- Heptane	ND	
- Pentane	ND	
- Propanol	ND	

† Basis is 1/10 of permissible daily exposure limits per gram. In ppm otherwise noted.

Pesticide Screening	Results	Limits
Pesticide Panel Testing	PASS	
Detected Pesticides†	ND	

† Any pesticides detected that are screened are noted here.

Heavy Metals: Many plants, including cannabis, are known as bioaccumulators: plants that absorb substances from their surroundings at a rate faster than they can excrete them. These substances may include the metals arsenic, cadmium, lead and mercury, which can be toxic to people at certain levels. Because Texas has not yet established accepted daily exposure limits for heavy metals in medical cannabis, the COA utilizes regulations outlined by the state of Colorado, levels which it has defined as parts per million (ppm).

Pesticides: No pesticides are used in our indoor cultivation facility, but just like residual solvents we still test for pesticides to ensure the medicine is free of pesticide contaminants and residues. Pesticide testing for identification and concentration is done simultaneously. If no pesticides are detected then the result is displayed as ND (none detected). In the event of a positive identification, the specific pesticide and its concentration will be displayed on the COA.

(Top right) Residual Solvents: These are volatile organic compounds resulting from the extraction or production of pharmaceuticals. Our extraction procedure is a solvent-free method, however, to ensure our medicine is free of chemical contaminants we test for Class 1, 2, and 3 solvents as outlined by the U.S. Pharmacopeia, a nonprofit that establishes standards for the production of medicine. If no residual solvents are identified, the test results are indicated as ND (none detected). However, in the event of a positive ID, the sample will then undergo additional testing to verify a positive ID and, ultimately, the concentration of said solvent would be reported on the Certificate of Analysis (COA).