



Client: The Hydrothecary

Anandia Sample ID: 2018012606-014

Lot #: 315THC2018

Authorized By:

Andrew Waye, PhD
Lead Scientist - Plant Analytics

CoA Prepared: 05-Feb-18

Potency Analysis (14 cannabinoids quantified)		wt %	mg/g
Total THC equivalents	($\Delta 9$ -THC + $\Delta 9$ -THCA x 0.877)	15.31%	153.1
Total CBD equivalents	(CBD + CBDA x 0.877)	BLQ	BLQ

Terpene Analysis

Ten most abundant of the 39 terpenes quantified

	wt %		wt %
beta-Myrcene	0.293	Linalool	0.048
trans-Nerolidol	0.130	alpha-Terpineol	0.042
Limonene	0.107	alpha-Humulene	0.038
trans-Caryophyllene	0.101	beta-Pinene	0.028
Guaiol	0.073	alpha-Bisabolol	0.020

Contaminant Analysis

Microbial

Total aerobic microbial counts (Limit: <500,000 CFU/g)	pass
Total yeast and mold counts (Limit: <50,000 CFU/g)	pass
Bile-tolerated Gram negative bacteria (Limit: <10,000 CFU/g)	pass
E. coli (Limit: absent in 1 g)	absent
Salmonella (Limit: absent in 25 g)	absent

Aflatoxin B1

Aflatoxin B1 (Limit 2 ppb)

pass

Heavy Metals

Arsenic (Limit 1.5 PPM)	pass	Lead (Limit 5.0 PPM)	pass
Cadmium (Limit 1.0 PPM)	pass	Mercury (Limit 0.1 PPM)	pass

Pesticides

None detected

Abbreviations: wt % = percentage of dry weight, CFU = colony forming unit, PPM = Parts Per Million, PPB = Parts Per Billion

Details of Testing

Cannabinoid Profile Test Results

Full spectrum 14 cannabinoid analysis utilizing Ultra High Performance Liquid Chromatography with Tandem Mass Spectrometry detection (UPLC-MS/MS). [Anandia Method: AL-401 v1, LOQ for all cannabinoids is 40 ng/mL or 0.04 PPM]

Terpene Test Results

Screening and profiling for 39 terpenes found in cannabis utilizing Gas Chromatography - Mass Spectrometry detection (GC-MS). [Anandia Method: AL-406 v1]

Residual Solvent Testing

Residual Solvent Testing for 10 solvents commonly found in cannabis extracts utilizing Head Space Gas Chromatography and Mass Spectroscopy Detection (HS-GC-MS). Limits for residual solvents are set by ICH Class 3 Q3C(R6). [Anandia Method: AL-410 v1]

Microbial Test Results

Microbiological testing adheres to the European Pharmacopoeia (EP) 5.1.8, EP methods 2.6.31 to ensure the safety of cannabis by identifying the type and level of microorganisms present in each sample. [Anandia Method: AL-402 v2]

Aflatoxin Test Results

Aflatoxin B1 testing is compliant with EP 2.8.18 (Aflatoxin B1 2.0 ppb Limit) and employs immunoaffinity column chromatography followed by UPLC-MS/MS analysis to quantify Aflatoxin B1. [Anandia Method: AL-405 v1]

Heavy Metal Analysis

Heavy metal testing uses microwave digestion and Inductively Coupled Plasma-Mass Spectrometry (ICP-MS) (USEPA 6020A R1 2007) detection to measure Arsenic, Cadmium, Lead and total Mercury. [Anandia Method: AL-404 v1]

Pesticide Analysis

Anandia Labs is the first lab in Canada to design a customized multi-residue analysis for pesticides and plant growth regulators (PGRs) commonly used on cannabis. This work was guided by the Oregon White Paper entitled "Technical Report: Oregon Health Authority's Process to Determine Which Types of Contaminants to Test for in cannabis Products, and Levels for Action". Anandia's pesticide screen is performed using LC-MS/MS and can screen down to below single digit ppb concentrations for most pesticides. Currently we analyze for 51 pesticides, fungicides, and plant growth regulators. [Anandia Method: AL-407 v1]

Pesticides and Plant Growth Regulators tested for:

Abamectin	Diazinon	Imidacloprid	Pyrethrin I
Acephate	Dichlorvos	Kresoxim-methyl	Pyrethrin II
Acetamiprid	Dimethoate	Malathion	Pyridaben
Aldicarb	Ethoprophos	Metalaxyl	Spinosad A
Azoxystrobin	Etofenprox	Methiocarb	Spinosad D
Bifenazate	Etoxazole	Methomyl	Spiromesifen
Boscalid	Fenoxycarb	Myclobutanil	Spirotetramat
Carbaryl	Fenpyroximat	Oxamyl	Spiroxamine
Carbofuran	Fipronil	Paclobutrazol	Tebuconazole
Chlorantraniliprole	Flonicamid	Phosmet	Thiacloprid
Chlorpyrifos (ethyl)	Fludioxonil	Piperonyl butoxide	Thiamethoxam
Clofentezine	Hexythiazox	Propiconazole	Trifloxystrobin
Daminozide	Imazalil	Propoxur	

