




ANANDIALABS

Certificate of Analysis

Client: Aurora
 Strain: Cannatonic - Sentinel
 (Cannatonic)
 Lot #: 17-009

Anandia Sample ID: ALPM-848

Authorized By: 
 John Coleman, PhD
 COO, QPIC and QC Head

CoA Prepared: 14-May-17

Potency Analysis (14 cannabinoids quantified)		wt %	mg/g
Total THC equivalents	($\Delta 9\text{-THC} + \Delta 9\text{-THCA} \times 0.877$)	0.61%	6.1
Total CBD equivalents	($\text{CBD} + \text{CBDA} \times 0.877$)	15.16%	151.6

Terpene Analysis

Ten most abundant of the 39 terpenes quantified

	wt %		wt %
beta-Myrcene	0.554	Linalool	0.052
alpha-Pinene	0.096	trans-Nerolidol	0.048
trans-Caryophyllene	0.087	alpha-Terpineol	0.047
Limonene	0.081	beta-Pinene	0.036
Guaiol	0.071	alpha-Humulene	0.028

Moisture Analysis 5.3%

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 Alfatoxin 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]

Loss On Drying

Loss on Drying testing adheres to United States Pharmacopoeia (USP) <731> Loss on Drying. [Anandia Method: AL-409 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]

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

