

# Certificate of Analysis

Oct 21, 2020 | Zelios

Lexington, KY, 40511,



## **Kaycha Labs**

KY008102IHI

Matrix: Derivative



Sample: MO01015033-001 Harvest/Lot ID: KY008102IHF Seed to Sale #N/A

> Batch Date: 10/14/20 Batch#: 68

Sample Size Received: 10 gram

Retail Product Size: 1 gram

Ordered: 10/14/20

Sampled: 10/14/20

Completed: 10/21/20 Expires: 10/21/21 Sampling Method: SOP Client Method

## **PASSED**

Page 1 of 4

PRODUCT IMAGE

SAFETY RESULTS











Heavy Metals **PASSED** 



Microbials **PASSED** 



Mycotoxins PASSED



Residuals Solvents PASSED



Filth **PASSED** 



Water Activity **NOT TESTED** 



Moisture **NOT TESTED** 



MISC.

Terpenes **NOT TESTED** 

#### CANNABINOID RESULTS



**Total THC** 0.000%



**Total CBD** 99.467%



**Total Cannabinoids** 99,685%

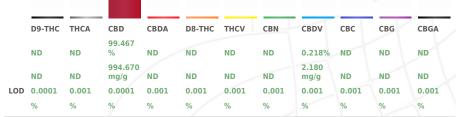


**PASSED** 

Weight Extraction date LOD(ppm) Extracted By 1g 10/16/20

Analysis Method -SOP.T.40.013 Analytical Batch -MO001283FIL Instrument Used : Microscope Running On:

Batch Date: 10/16/20 14:11:15 Reviewed On - 10/16/20 14:13:09



#### **Cannabinoid Profile Test**

Analyzed by Weight Extraction date : Extracted By: Reviewed On - 10/16/20 12:03:52 Analysis Method -SOP.T.40.020, SOP.T.30.050 Batch Date: 10/15/20 16:18:54 Analytical Batch -MO001277POT Instrument Used: HPLC Potency Analyzer Running On:

Reagent

Dilution

Full spectrum cannabinoid analysis utilizing High Performance Liquid Chromatography with UV detection (HPLC-UV). (Method: SOP.T.30.050 for sample prep and Shimadzu High Sensitivity Method SOP.T.40.020 for analysis. LOQ for all cannabinoids is 1 mg/L). Measurement of Uncertainty: 2.7%

This report shall not be reproduced, unless in its entirety, without written approval from Kaycha Labs. This report is This report shall not be reproduced, unless in its entirety, without written approval from Kaycha Labs. This report is an Kaycha Labs certification. The results relate only to the material or product analyzed. Test results are confidential unless explicitly waived otherwise. Void after 1 year from test end date. Cannabinoid content of batch material may vary depending on sampling error. IC=In-control QC parameter, NC=Non-controlled QC parameter, ND=Not Detected, NA=Not Analyzed, ppm=Parts Per Million, ppb=Parts Per Billion. Limit of Detection (LoD) and Limit Of Quantitation (LoQ) are terms used to describe the smallest concentration that can be reliably measured by an analytical procedure. RPD=Reproducibility of two measurements. Action Levels are State determined thresholds for human safety for consumption and/or inhalation. The result >99% are variable based on uncertainty of measurement (UM) for the analyte. The UM error is available from the lab upon request. The "Decision Rule" for the pass/fail does not include the UM. The limits are based on F.S. Rule 64-4.310.

#### **David Greene**

Lab Director

State License # 19-05-02P ISO Accreditation # 17025:2017 #97164



10/21/2020

Signed On Signature



#### **Kaycha Labs**

KY008102IH

Matrix: Derivative



**PASSED** 

**Zelios** 

2029 Buck Lane Lexington, KY, 40511, Telephone: (229) 225-8283 Email: joe.grimm@zelios.com Sample: MO01015033-001 Harvest/LOT ID: KY008102IHF

Batch#:68 Sampled: 10/14/20 Ordered: 10/14/20

**Certificate of Analysis** 

Sample Size Received: 10 gram Completed: 10/21/20 Expires: 10/21/21 Sample Method: SOP Client Method

Page 2 of 4



## **Pesticides**

# **PASSED**

PASSED

Pesticides	LOD	Units	Action Level	Result
ABAMECTIN B1A	0.020	ppm	0.5	ND
ACEPHATE	0.010	ppm	0.5	ND
ACEQUINOCYL	0.02	ppm	2	ND
ACETAMIPRID	0.010	ppm	0.2	ND
ALDICARB	0.020	ppm	0.4	ND
AZOXYSTROBIN	0.010	ppm	0.2	ND
BIFENAZATE	0.010	ppm	0.2	ND
BIFENTHRIN	0.010	ppm	0.2	ND
BOSCALID	0.005	ppm	0.4	ND
CARBARYL	0.010	ppm	0.2	ND
CARBOFURAN	0.010	ppm	0.2	ND
CHLORANTRANILIPROLE	0.010	ppm	0.2	ND
CHLORPYRIFOS	0.010	ppm	0.2	ND
CLOFENTEZINE	0.010	ppm	0.2	ND
COUMAPHOS	0.005	ppm	0.2	ND
CYPERMETHRIN	0.010	ppm	1	ND
DAMINOZIDE	0.010	ppm	1	ND
DIAZANON	0.010	ppm	0.2	ND
DICHLORVOS	0.050	ppm	0.1	ND
DIMETHOATE	0.010	ppm	0.2	ND
DIMETHOMORPH	0.005	ppm	0.1	ND
ETHOPROPHOS	0.010	ppm	0.2	ND
ETOFENPROX	0.010	ppm	0.4	ND
ETOXAZOLE	0.010	ppm	0.2	ND
FENHEXAMID	0.005	ppm	0.1	ND
FENOXYCARB	0.010	ppm	0.2	ND
FENPYROXIMATE	0.010	ppm	0.4	ND
FIPRONIL	0.020	ppm	0.4	ND
FLONICAMID	0.010	ppm	1	ND
FLUDIOXONIL	0.010	ppm	0.4	ND
HEXYTHIAZOX	0.010	ppm	1	ND
IMAZALIL	0.010	ppm	0.2	ND
IMIDACLOPRID	0.010	ppm	0.4	ND
KRESOXIM-METHYL	0.010	ppm	0.4	ND
MALATHION	0.010	ppm	0.2	ND
METALAXYL	0.010	ppm	0.2	ND
METHIOCARB	0.010	ppm	0.2	ND
METHOMYL	0.010	ppm	0.6	ND
MEVINPHOS	0.010	ppm	0.1	ND
MYCLOBUTANIL	0.010	ppm	0.2	ND
NALED	0.010	ppm	0.5	ND
OXAMYL	0.010	ppm	1	ND
PACLOBUTRAZOL	0.010	ppm	0.4	ND
PERMETHRINS	0.050	ppm	1	ND
PHOSMET	0.010	ppm	0.2	ND
PIPERONYL BUTOXIDE	0.010	ppm	3	ND

Pesticides	LOD	Units	Action Level	Result	
PRALLETHRIN	0.050	ppm	0.2	ND	
PROPICONAZOLE	0.010	ppm	0.4	ND	
PROPOXUR	0.010	ppm	0.2	ND	
PYRETHRIN I	0.010	ppm	1	ND	
PYRIDABEN	0.005	ppm	0.2	ND	
SPINETORAM	0.005	ppm	0.5	ND	
SPINOSAD (SPINOSYN A)	0.010	ppm	0.2	ND	
SPINOSAD (SPINOSYN D)	0.010	ppm	0.2	ND	
SPIROMESIFEN	0.010	ppm	0.2	ND	
SPIROTETRAMAT	0.020	ppm	0.2	ND	
SPIROXAMINE	0.010	ppm	0.4	ND	
TEBUCONAZOLE	0.010	ppm	0.4	ND	
THIACLOPRID	0.010	ppm	0.2	ND	
THIAMETHOXAM	0.010	ppm	0.5	ND	
TRIFLOXYSTROBIN	0.010	ppm	0.2	ND	

Analyzed by	Weight	Extraction date	Extracted By
9	0.504g	10/20/20 02:10:04	1

Analysis Method - SOP.T.30.060, SOP.T.40.060 , Analytical Batch - M0001298PES Instrument Used : LCMSMS 8060 P

Running On:

**Pesticides** 

Batch Date: 10/20/20 14:06:05

Reviewed On- 10/16/20 14:13:09

Consums, ID

Pesticide screen is performed using LC-MS which can screen down to below single digit ppb concentrations for regulated Pesticides. Currently we analyze for 57 Pesticides. (Method: SOP.T.30.060 Sample Preparation for Pesticides Analysis via LCMSMS and SOP.T40.060 Procedure for Pesticide Quantification Using LCMS).\*

This report shall not be reproduced, unless in its entirety, without written approval from Kaycha Labs. This report is an Kaycha Labs certification. The results relate only to the material or product analyzed. Test results are confidential unless explicitly waived otherwise. Void after 1 year from test end date. Cannabinoid content of batch material may vary depending on sampling error. IC=In-control QC parameter, NC=Non-controlled QC parameter, ND=Not Detected, NA=Not Analyzed, ppm=Parts Per Million, ppb=Parts Per Billion. Limit of Detection (LoD) and Limit of Quantitation (LoQ) are terms used to describe the smallest concentration that can be reliably measured by an analytical procedure. RPD=Reproducibility of two measurements. Action Levels are State determined thresholds for human safety for consumption and/or inhalation. The result >99% are variable based on uncertainty of measurement (UM) for the analyte. The UM error is available from the lab upon request. The "Decision Rule" for the pass/fail does not include the UM. The limits are based on F.S. Rule 64-4.310. This report shall not be reproduced, unless in its entirety, without written approval from Kaycha Labs. This report is

**David Greene** 

Lab Director

State License # 19-05-02P ISO Accreditation # 17025:2017 #97164

10/21/2020

Signature Signed On



#### **Kaycha Labs**

KY008102IHF

N/A



Matrix : Derivative

# **Certificate of Analysis**

**PASSED** 

**Zelios** 

2029 Buck Lane Lexington, KY, 40511, **Telephone:** (229) 225-8283 **Email:** joe.grimm@zelios.com Sample: M001015033-001 Harvest/LOT ID: KY008102IHF

Batch#:68 Sampled:10/14/20 Ordered:10/14/20 Sample Size Received: 10 gram
Completed: 10/21/20 Expires: 10/21/21
Sample Method: SOP Client Method

Page 3 of 4



#### **Residual Solvents**

### **PASSED**



#### **Residual Solvents**

**PASSED** 

Solvent	LOD	Units	Action Level (PPM)	Pass/Fail	Result
TRICHLOROETHENE	3	ppm	80	PASS	ND
CHLOROFORM	0.24	ppm	60	PASS	ND
1.2-DICHLOROETHENE	0.24	ppm	1870	PASS	ND
1.1-DICHLOROETHENE	2	ppm	8	PASS	ND
,	90				
PENTANES		ppm	2500	PASS	ND
BUTANES (N-BUTANE)	50	ppm	5000	PASS	ND
ACETONITRILE	7.2	ppm	410	PASS	ND
ACETONE	90	ppm	5000	PASS	ND
2-PROPANOL	60	ppm	5000	PASS	ND
HEXANES	6	ppm	290	PASS	ND
XYLENES	18	ppm	2170	PASS	ND
TOLUENE	18	ppm	1068	PASS	ND
PROPANE	80	ppm	5000	PASS	ND
METHANOL	30	ppm	3000	PASS	ND
HEPTANE	60	ppm	5000	PASS	286.000
XYLENES-P (1,4- DIMETHYLBENZENE)	18	ppm	2170	PASS	ND
ETHYLENE OXIDE	0.6	ppm	50	PASS	ND
XYLENES-M (1,3- DIMETHYLBENZENE)	18	ppm	2170	PASS	ND
ETHYL ETHER	60	ppm	5000	PASS	ND
XYLENES-O (1,2- DIMETHYLBENZENE)	18	ppm	2170	PASS	ND
ETHYL ACETATE	48	ppm	5000	PASS	ND
ETHANOL	120	ppm	5000	PASS	ND
DICHLOROMETHANE	15	ppm	600	PASS	ND

Analyzed by	Weight	Extraction date	<b>Extracted By</b>
10	0.005	10/10/20 00 10 10	10

18 0.025g 10/16/20 09:10:18 18

Analysis Method -SOP.T.40.032

Analytical Batch -M0001280SOL Instrument Used : GCMS2010

Reviewed On - 10/16/20 10:20:45

Running On:

Batch Date: 10/16/20 09:43:29

Reagent Dilution Con	sums. ID
----------------------	----------

Residual solvents screening is performed using GC-MS which can detect below single digit ppm concentrations. Currently we analyze for 33 Residual solvents. (Method: SOP.T.30.042 Residual Solvents Analysis via GC-MS).

This report shall not be reproduced, unless in its entirety, without written approval from Kaycha Labs. This report is an Kaycha Labs certification. The results relate only to the material or product analyzed. Test results are confidential unless explicitly waived otherwise. Void after 1 year from test end date. Cannabinoid content of batch material may vary depending on sampling error. IC=In-control QC parameter, NC=Non-controlled QC parameter, ND=Not Detected, NA=Not Analyzed, ppm=Parts Per Million, ppb=Parts Per Billion. Limit of Detection (LoD) and Limit Of Quantitation (LoQ) are terms used to describe the smallest concentration that can be reliably measured by an analytical procedure. RPD=Reproducibility of two measurements. Action Levels are State determined thresholds for human safety for consumption and/or inhalation. The result >99% are variable based on uncertainty of measurement (UM) for the analyte. The UM error is available from the lab upon request. The "Decision Rule" for the pass/fail does not include the UM. The limits are based on F.S. Rule 64-4.310.

**David Greene** 

Lab Director

State License # 19-05-02P ISO Accreditation # 17025:2017 #97164



10/21/2020

Signature Signed On



#### Kaycha Labs

KY008102IH

Matrix: Derivative



**PASSED** 

#### **Zelios**

2029 Buck Lane Lexington, KY, 40511, Telephone: (229) 225-8283 Email: joe.grimm@zelios.com Sample: MO01015033-001 Harvest/LOT ID: KY008102IHF

Batch#:68 Sampled: 10/14/20 Ordered: 10/14/20

Sample Size Received: 10 gram Completed: 10/21/20 Expires: 10/21/21 Sample Method: SOP Client Method

Page 4 of 4



#### **Microbials**

## PASSED

not present in 1 gram.

not present in 1 gram.

$\mathcal{Y}_{\infty}$
------------------------

**Result Analyte** 

not present in 1 gram. AFLATOXIN G2

not present in 1 gram. AFLATOXIN G1

not present in 1 gram. AFLATOXIN B2

## Mycotoxins

# **PASSED**

**Analyte** ASPERGILLUS TERREUS 1J2 ASPERGILLUS\_NIGER ASPERGILLUS\_FUMIGATUS ASPERGILLUS\_FLAVUS SALMONELLA SPECIFIC GENE

ESCHERICHIA\_COLI\_SHIGELLA\_SPP Analysis Method -SOP.T.40.043 Analytical Batch -NA Batch Date :

Instrument Used : Running On:

Analyzed	by
NA	

microbiological-impurity testing.

Weight

**Extraction date** 

**Certificate of Analysis** 

LOD

**Extracted By** 

Microbiological testing for Fungal and Bacterial Identification via Polymerase Chain Reaction (PCR) method consisting of sample DNA amplified via tandem Polymerase Chain Reaction (PCR) as a crude lysate which avoids purification. (Method SOP.T.40.043) If a pathogenic Escherichia Coli, Salmonella, Aspergillus fumigatus, Aspergillus figer, or Aspergillus terreus is detected in 1g of a sample, the sample fails the

			25
LOD	Units	Result	Action Level (PPM)
0.001	ppm	ND	0.02
0.001	nnm	ND	0.02

ND

not present in 1 gram. AFLATOXIN B1 0.001 ppm **OCHRATOXIN A+** ppm Analysis Method -SOP.T.30.060, SOP.T.40.060

0.001

Analytical Batch - | Reviewed On - 10/21/20 10:31:10 Instrument Used :

Running On: Batch Date :

Analyzed by

Weight

**Extraction date** 

**Extracted By** 

0.02

0.02

Aflatoxins B1, B2, G1, G2, and Ochratoxins A testing using LC-MS. (Method: SOP.T.30.060 for Sample Preparation and SOP.T40.060 Procedure for Mycotoxins Quantification Using LCMS. LOQ 1.0 ppb). Total Aflatoxins (Aflotoxin B1, B2, G1, G2) must be <20μg/Kg. Ochratoxins must be <20μg/Kg.



#### **Heavy Metals**

PASSED

#### Reagent

110119.52 110119.44 112519.01

110119.36

Metal	LOD	Unit	Result	Action Level (PPM)
ARSENIC	0.02	ppm	ND	10
CADMIUM	0.02	ppm	ND	4.1
LEAD	0.02	ppm	ND	10
MERCURY	0.02	ppm	ND	2

Analyzed by Weight **Extraction date Extracted By** 0.490g 10/16/20 09:10:20

Analysis Method -SOP.T.40.050, SOP.T.30.052

Analytical Batch -MO001279HEA | Reviewed On - 10/16/20 10:34:12

Instrument Used: ICP-MS 2030

Running On:

Batch Date: 10/16/20 09:20:20

Heavy Metals screening is performed using ICP-MS (Inductively Coupled Plasma – Mass Spectrometer) which can screen down to below single digit ppb concentrations for regulated heavy metals using Method SOP.T.30.052 Sample Preparation for Heavy Metals Analysis via ICP-MS and SOP.T.40.050 Heavy Metals Analysis via ICP-MS. \*Action Limits based on Colorado Regulations.

This report shall not be reproduced, unless in its entirety, without written approval from Kaycha Labs. This report is an Kaycha Labs certification. The results relate only to the material or product analyzed. Test results are confidential unless explicitly waived otherwise. Void after 1 year from test end date. Cannabinoid content of batch material may vary depending on sampling error. IC=In-control QC parameter, NC=Non-controlled QC parameter, ND=Not Detected, NA=Not Analyzed, ppm=Parts Per Million, ppb=Parts Per Billion. Limit of Detection (LoD) and Limit of Quantitation (LoQ) are terms used to describe the smallest concentration that can be reliably measured by an analytical procedure. RPD=Reproducibility of two measurements. Action Levels are State determined thresholds for human safety for consumption and/or inhalation. The result >99% are variable based on uncertainty of measurement (UM) for the analyte. The UM error is available from the lab upon request. The "Decision Rule" for the pass/fail does not include the UM. The limits are based on F.S. Rule 64-4.310. This report shall not be reproduced, unless in its entirety, without written approval from Kaycha Labs. This report is

#### **David Greene**

Lab Director

State License # 19-05-02P ISO Accreditation # 17025:2017 #97164



10/21/2020

Signature

Signed On